#### 1 Introduction

On November 15, 2007, the Securities and Exchange Commission (SEC) unanimously voted to eliminate the requirement that foreign private issuers filing Form 20-Fs reconcile their accounting information to U.S. GAAP if the firm prepares its home country financial statements in accordance with IFRS. Since then, the literature has examined the consequences of this deregulation, finding mixed evidence or virtually no changes. We add to the prior literature by taking into consideration two important aspects of this setting that have gone overlooked in prior studies: the *substitute* role of home country filings as a source of information to U.S. investors and the *timeliness* of the 20-F filings in the U.S. relative to the home country information releases. We argue that for IFRS firms following the reconciliation elimination, Form 20-Fs become more redundant to home country filings, and investors are less keen to acquire them if the filings happen with greater delays.

Typically, a firm cross-listed in the U.S. releases earnings and files an annual report in the home country first, and then it files its 20-F with the SEC, usually with a significant delay. Cross-listed firms have up to 180 days after fiscal year end to file their 20-Fs with the SEC, and this deadline did not change immediately following the elimination of the reconciliation requirement.<sup>2</sup> Many firms will typically release earnings in the home country much earlier in accordance with home market requirements.

Before 2007, all Form 20-Fs contained U.S. GAAP reconciliations. Thus, an U.S. investors would use the 20-F filings to compare the cross-listed firms with other U.S. companies. After 2007, IFRS firms could file 20-Fs without reconciling to U.S. GAAP, enhancing the similarity between the filings in the two markets.<sup>3</sup> Hence, we would expect investors to start allocating less attention to *delayed* 20-Fs, because they could acquire the same IFRS infor-

<sup>&</sup>lt;sup>1</sup>See Islam (2017) for a review. We discuss more in the following section.

<sup>&</sup>lt;sup>2</sup>The deadline was shortened from 180 days to 120 days in 2012. However, our sample period focuses on the time frame surrounding the 2007 SEC ruling; hence, our sample period is only from 2005 to 2009 and is unaffected by the new regulation. Furthermore, we are interested in the effects of a filing delay *in conjunction* with a shock to the information content of Form 20-Fs.

<sup>&</sup>lt;sup>3</sup>We use the term "IFRS firms" to represent firms that file their annual reports in accordance with IFRS.

mation in more timely reports (local earnings announcements, Form 6-Ks, or annual reports). In other words, the longer the filing delay of the Form 20-F for IFRS firms following reconciliation elimination, the less likely we would expect investors to wait to acquire the 20-Fs, which contain minimal additional information. Prior studies focused solely on the 20-F filings without taking into consideration another information market in the home country or the filing delay with respect to information released in the other market. Our analyses provide evidence that this delay, in conjunction with reconciliation, or the lack thereof, plays an important role in investors' information acquisition decisions.<sup>4</sup>

We start by examining firms' disclosure timing. Following prior studies, we use a difference-in-differences design in which the treated group consists of IFRS firms and the control group contains non-IFRS firms, before and after the 2007 reconciliation elimination (i.e., Kim et al. (2012)). Our results suggest that the 20-F filing delay relative to the local earnings announcement decreases for IFRS firms after 2007. Nevertheless, a nontrivial delay still exists, even for IFRS firms following the change in regulation. This is because reconciliation is one of numerous other costs firms face when preparing their Form 20-Fs (Fanto and Karmel, 1997), which includes costs of disclosure (not related to reconciliation), costs of U.S. listing (i.e., filing, legal, and accounting fees), and liability (from the listing process). Hence, while reconciliation elimination undoubtedly reduces a huge cost in preparing 20-Fs, it does not eliminate all reasons why a firm may still file a Form 20-F with a delay.

Next, we examine changes in investor attention. Ideally, we would examine downloads of every accounting report across all markets. However, data limitations allow us to examine

<sup>&</sup>lt;sup>4</sup>We measure the 20-F filing delay as the difference between the home country earnings announcement and the 20-F filing date. We define it as such for several reasons. First, while the local annual report is the best substitute for Form 20-Fs, many countries lack a user-friendly disclosure database like EDGAR in the U.S., and it is very difficult to track down many foreign firms' annual reports. In addition, there are a number of other sources investors can choose to acquire information from, including home market earnings announcements and Form 6-Ks. Of all the sources, the earnings announcement is the first event in which information that would be disclosed in a Form 20-F becomes publicly available to investors. Usually, both the Form 6-K and local report are filed within days of the earnings announcement, so the earnings announcement date becomes a viable proxy for the local filing date; furthermore, earnings announcements are also known to contain a nontrivial amount of information content.

only the downloads of Form 20-Fs using EDGAR, the SEC system that archives reports from publicly listed firms on the U.S. markets, including cross-listed firms. We use this information to compile our measures of investor attention, namely the *number of Form 20-F downloads* following its filing date, using different time windows.<sup>5</sup>

We show that for IFRS firms after 2007, investors download significantly less 20-Fs each day the 20-F filing is delayed beyond the local earnings announcement. We also find that if 20-Fs are filed with no delay, IFRS firms experience an increase in downloads following SEC deregulation. Hence, these results highlight that the end of the reconciliation requirement affected the complementary role of information released in the two markets (home country and the U.S.), together with timeliness of 20-F filings, in affecting investors' information acquisition decisions. Our results indicate that increased redundancy of unreconciled 20-Fs by itself does not negatively impact investor attention; the filing delay of these 20-Fs is another critical factor that cannot be ignored.<sup>6</sup>

We next examine how language distance from English (i.e. Lewis et al. (2009); Brochet et al. (2016)) affects investor attention on 20-F filings. Language distance increases the cost of acquiring and processing information produced in a foreign market. Intuitively, we expect ADR investors to have an easier time understanding U.K. financial reports than a Brazilian or Chinese report. We find evidence supporting this conjecture as investors download fewer delayed unreconciled 20-F filings of IFRS firms in countries that speak languages similar to English. In other words, investors shift attention away from unreconciled 20-Fs when there is low acquisition cost of using home country information and as the 20-Fs are filed with greater

<sup>&</sup>lt;sup>5</sup>In untabulated analyses, we find that download patterns of Form 6-Ks around the time of earnings announcements do not significantly change for IFRS firms in the post-reconciliation period. The information content of 6-Ks are not expected to change after the 2007 SEC ruling and are not nearly as detailed as Form 20-Fs would be, so it is hard to imagine that investors would rely as heavily on 6-Ks as they would on annual reports, before or after 2007.

<sup>&</sup>lt;sup>6</sup>As mentioned, the literature has been inconclusive on other effects of reconciliation elimination. However, prior literature has largely focused solely in the U.S. ADR market and has neither examined the effects of information released in the local country nor the timeliness of 20-F disclosures relative to home country information releases.

#### delays.7

Consistent with an increase in the information transfer across markets, we also find that the returns comovement between the two markets (home and U.S.) increases for IFRS firms in the post-reconciliation elimination period. The increased returns comovements is more pronounced during the month in which the local earnings announcement occurs. Moreover, there are higher price and volume reactions in the ADR market surrounding the home-country earnings announcements for IFRS firms in the post-reconciliation elimination period. Taken together, we provide evidence that not only are ADR investors downloading fewer 20-Fs after the information shock, but they are acquiring more information from the home country earnings releases, indicative of an increased shift in investor attention from the ADR market to the local market, once 20-Fs no longer provide reconciliations but continue to be filed with delays.

Finally, we examine if there can be any benefits resulting from firms filing unreconciled 20-Fs after the 2007 SEC deregulation. The decreased attention on 20-Fs only occurs if they are filed with significant delays. Hence, firms that file their 20-Fs in a timely manner could experience positive market benefits. We find results consistent with this hypothesis as IFRS firms that file their unreconciled 20-Fs with short delays have lower bid-ask spreads in the week following the 20-F filing date, but these liquidity benefits are reversed if the filing delay exceeds even 10 days following the local earnings announcement. Thus, IFRS firms can not only experience the benefits of decreased costs of not having to reconcile, but they can also experience higher liquidity when filing their 20-Fs. However, these market benefits only exist if the delay in filing 20-Fs following the home country information release is virtually zero; otherwise, ADR investors of IFRS firms choose to rely on the more timely and more similar home country information releases after 2007.

<sup>&</sup>lt;sup>7</sup>It is true that firms in countries that speak very different languages still file 6-Ks in English. Again, 6-Ks typically cover a much smaller breadth of information than what is included in annual reports. However, some foreign countries speaking different languages also have firms that provide English disclosures in their annual reports filed with home countries. If anything, these would work against us finding such results.

Our paper brings several new insights relevant to both academics and practitioners. We contribute to the literature on cross-listed firms and the 2007 SEC ruling to eliminate the reconciliation requirement for IFRS firms by being, to the best of our knowledge, the first paper to examine investor attention and information acquisition behavior with respect to this setting. While the literature has focused on various capital markets and earnings quality effects (e.g. Hansen et al. (2010), Byard et al. (2016), Kim et al. (2012), Islam (2017)), it has failed to reach a consensus and has not directly examined the behavior of investors. However, studying investor behavior is very important, as a 2007 speech made by John W. White, Director of the Division of Corporate Finance for the SEC, noted: "Investors have already learned to evaluate IFRS financial statements and do not particularly use the reconciling information. At the same time, they recognize the benefits that reconciliation has brought to financial reporting...." In our paper, we make our best attempt to directly test for investor attention by examining download patterns of Form 20-Fs and market reactions to home country information releases, which can shed light on how investors use unreconciled and reconciled information surrounding the change in the SEC requirements.

Second, we add to the literature on timely disclosures. John W. White also noted in his 2007 speech that "The timeliness of information is critical to investors and to the extent reconciliation slows the availability of information to U.S. investors, it operates counter to their interests." Our results indeed suggest that foreign filings by IFRS firms became timelier relative to local filings following deregulation (by around 10 days on average). However, we still observe a significant filing delay across markets. Policymakers might find value in our results, to the extent that disclosure timeliness is relevant to financial markets and to the extent that such a filing gap could give unfair advantages to a group of investors. We also find that investors will in fact download more 20-Fs of unreconciled IFRS 20-Fs, if the 20-Fs are filed with little to no delay. Furthermore, we document liquidity benefits experienced by IFRS firms who file their 20-Fs with no delay, even without reconciliations to U.S. GAAP. Hence, this is

the first paper to our knowledge to consider the important role that the 20-F *filing delay* plays on investor attention and market liquidity *in conjunction* with *reconciliation elimination*. Our results could be of interest to policymakers who could consider eliminating this requirement for all cross-listed firms or shortening the 20-F filing deadlines significantly.<sup>8</sup>

Finally, our findings contribute to the literature on accounting information produced and used across multiple markets. Although the literature has examined certain characteristics of multi-market trading for cross-listed firms, such as volume-return relations and arbitrage opportunities (e.g. Gagnon and Karolyi [2009, 2010]), we are the first to incorporate multimarket trading in a 20-F reconciliation elimination setting and how investors use information from both markets before and after the 2007 SEC ruling. We find significant increases in returns comovement between IFRS firms home equity and ADRs following reconciliation elimination, and especially in months of the local earnings announcement. We also document greater return and volume reactions in the ADR market to home country earnings announcements. Taken together, these results suggest greater instances of information released in the home country being used in the ADR market. More importantly, we demonstrate the importance of considering the information produced in *both* markets when studying cross-listed firms, which has largely been left unexamined in prior literature.

Section 2 provides background information and discusses prior research. Section 3 describes our research design. Results of empirical tests are presented in Section 4, and robustness tests are shown in Section 5. We conclude in Section 6.

<sup>&</sup>lt;sup>8</sup>Again, since the end of the sample period, the SEC has shortened the deadline by 60 days. However, since positive effects, such as greater liquidity, only apply to firms with very short delays relative to *home country earnings releases*, not fiscal year end, the SEC could consider making the deadline even shorter, or at least relative to when the firm releases earnings in the home country. Furthermore, such timely reporting is only viable when the firm does not have to reconcile, which is where the possibility of eliminating the reconciliation requirement for all firms using all accounting standards would come into play.

#### 2 Background and Prior Research

Foreign firms that cross-list onto U.S. exchanges experience many benefits, including increased visibility, access to external financing, liquidity, increased firm value, and lower cost of capital (i.e. Karolyi (1998), Karolyi (2006); Lang et al. (2003); Doidge et al. (2009)). They can then take advantage of the stringent standards and enforcement in the United States, which may be stronger than in their home country, as a signal that they are committed to disclosure, transparency, and investor protection. Since 1982, the SEC has required cross-listed firms to provide these reconciliations in Form 20-F, which is filed every year with the SEC. However, the reconciliation process has undoubtedly served as a huge cost for cross-listed firms and also as a barrier for other foreign firms interested in listing on U.S. exchanges (Edwards et al. (1993), Fanto and Karmel (1997)).

In November 2007, the SEC ruled that it would allow foreign cross-listed firms to file Form 20-Fs prepared under IFRS without having to disclose reconciliations to U.S. GAAP. This would go into effect for any IFRS filers with fiscal years ending after November 15, 2007. From the perspective of the firms, the costs of reconciliation far outweigh the benefits, as no IFRS firms have voluntarily disclosed reconciliations to U.S. GAAP after this requirement was lifted (Kim et al. (2012)). However, the decision by the SEC was not popular with everyone. For instance, the CFA Institute argued that the U.S. GAAP reconciliation served as an important tool in allowing investors to correctly compare companies in different countries using numbers based on the same accounting standards (CFA Institute, (2007); Jiang et al. (2010)).

This debate has paved the way for the literature to examine the benefits and costs of the elimination of the U.S. GAAP reconciliation requirement in 20-F filings. Overall, there is mixed evidence. Some papers argue that the reconciliation elimination had positive effects on earnings quality characteristics such as persistence, lower analyst forecast dispersion, conser-

<sup>&</sup>lt;sup>9</sup>For example, Denis Duverne, CFO of French insurance company AXA, reported that the annual reconciliation for AXA's Form 20-F cost the company approximately 25 million dollars.

vatism, and timeliness (Kang et al. (2012); Hansen et al. [2010]). Other papers suggest that the unreconciled 20-F forms are more informative than the U.S. GAAP reconciliations (Hansen et al. (2010); Chakrabarty and Shaw (2012)). The literature also finds negative effects from 20-F reconciliation elimination, including decreased comparability (Byard et al. (2016)) and greater cost of bank loans (Chen et al. (2013)). Some argue that although reconciliation can be informative, the costs of preparing such disclosures outweigh potential benefits (Chen and Khurana (2014)). Furthermore, many papers fail to find any significant effect on various capital market consequences, such as liquidity, cost of equity, and information content of 20-F filings (Kim et al. (2012); Yu (2011); Jiang et al. (2010)). Thus, the literature is inconclusive on the capital market effects of reconciliation elimination.

Another reason why we may not see conclusive effects from reconciliation elimination is that investors can acquire similar information up to several months earlier in time. A common component that has been overlooked in many studies on the effects of reconciliation elimination is the timing and information contained in home country earnings releases. Cross-listed firms are simultaneously listed in their home country exchange as well as in the U.S. <sup>10</sup> After the fiscal year-end, these foreign firms typically announce earnings, file an annual report with the home country, and then days, weeks, or months later file a Form 20-F. Thus, investors are faced with a choice of waiting for the Form 20-F or acquiring and processing the local information in advance. The literature has examined multimarket trading (i.e., Gagnon and Karolyi (2009) Gagnon and Karolyi (2010); Chowdhry and Nanda (1991) ) but not in the context of this 2007 disclosure shock; nor has the literature exploited the dates of the sequential release of information in the two different markets.

The financial information included in the local and 20-F filings become more similar for IFRS firms once they no longer have to disclose U.S. GAAP reconciliations. Appendix B provides two examples of the home country annual report and the Form 20-F. The first is Ger-

<sup>&</sup>lt;sup>10</sup>We do not examine foreign companies that are only listed in the United States, as Form 20-F is their only disclosure and there are no other sources of information that would have to be reconciled or left unreconciled. We also exclude Canadian companies as they file Form 40-Fs instead of 20-Fs.

dau S.A., a Brazilian company cross-listed in the United States that uses IFRS. The financial statements shown are for fiscal year 2008, which is after the SEC-initiated reconciliation elimination. We can see that the 20-F was filed in July 2009, nearly 5 months after the annual report was filed in Brazil. From the financial information displayed in these two reports, we can see that the 2007 and 2008 net income numbers are identical. Essentially, U.S. investors would have to wait until July 2009 to obtain the 2008 Form 20-Fs, yet the information in these forms was already disclosed in Brazil back in February. The second example is for Embraer, another Brazilian firm cross-listed in the U.S. These reports are for fiscal year 2012. Local earnings were released on March 12, 2013, while the 20-F was filed two weeks later on March 26, 2013. Again, when we compare the income statement in the 20-F with that in the Brazilian annual report (published in Portuguese), the numbers are again identical.

We also read through several sets of Form 20-Fs and the associated annual reports for IFRS firms filed in the local market and found that aside from a few minor differences in section organization, the contents, both quantitative and qualitative, are exactly the same.<sup>13</sup> Prior to 2007, the 20-F would contain the U.S. GAAP reconciliations not present in home market annual reports (or in 6-Ks), including a discussion of material variations between the accounting principles, practices, and methods used in preparing financial statements and a tabular reconciliation between IFRS net income and shareholder's equity (or balance sheet) and what would be reported had the company used U.S. GAAP (Jiang et al., 2010). Different countries have different requirements regarding what needs to be disclosed in the country's

<sup>&</sup>lt;sup>11</sup>We were unable to track down the exact filing date of this annual report, indicating the difficulty of collecting exact filing dates in the home country. However, we do know that the earnings announcement occurred on March 12, 2013, and the Form 6-K filing was on March 13, 2013. We can speculate that the annual report in Brazil was also filed within days of these events, justifying the use of the earnings announcement date (first date in which pertinent information was released) as a viable proxy for the local filing date.

<sup>&</sup>lt;sup>12</sup>We see that numbers in Form 20-Fs are in U.S. dollars, while Embraer produces both Brazilian real and U.S. dollars in the Brazilian annual report. Both sets of financial statements contain IFRS numbers, and the 20-F has no reconciliation information disclosed.

<sup>&</sup>lt;sup>13</sup>For example, BP's 2009 20-F contains a separate section on condensed consolidating information on certain U.S. subsidiaries while the UK annual report contains a separate section on directors' responsibilities with respect to parent company financial statements. Other than that, the rest of the content provided exactly the same numbers and even words (since BP's UK annual report would also be in English).

annual reports and thus may not be perfect substitutes for 20-Fs. However, the 2007 ruling undoubtedly made the reports produced in the two markets more similar than reconciling firms. The aforementioned examples suggest that at least the quantitative information becomes virtually the same, and while the qualitative information can vary depending on the home country, in certain countries (such as the UK) even the text can be very similar.

We study the circumstances in which investors stop paying attention to 20-F filings to acquire information about cross-listed firms. We examine 1) whether the time it takes to file a 20-F decreases when firms no longer have to provide reconciliations and 2) whether a significant delay still exists. Looking at changes in filing delay helps us examine and confirm the costs of preparing U.S. GAAP reconciliations to the firm. Next, we ask whether investors are less likely to pay attention to 20-F filings when they no longer provide reconciliations or any material information that cannot already be found in the local earnings reports and when they are filed with a delay. We also attempt to make inferences about investor responses to home-country earnings reports by studying returns correlations across the two markets and reactions in the ADR market to home-country earnings announcements. The research design and results are described in detail in the subsequent sections.

### 3 Research Design

#### 3.1 Sample and Data

We compile Level II and Level III ADRs from firms cross-listed on major U.S. exchanges from JP Morgan ADR Analytics and the Bank of New York. We gather financial and market information between 2005 and 2009 by matching these firms with Thomson Reuters Datastream, which contains Worldscope (hereafter referred to as just Datastream). We require firms to have at least one observation before and one observation after 2007, the year in which the U.S. GAAP reconciliation requirement was eliminated for IFRS firms. Thus, we have an

unbalanced panel, but we mitigate concerns about new firms listed after 2007 and firms that delisted prior to the SEC ruling. Local earnings announcement dates from a firm's home country are collected from a combination of Datastream, Bloomberg and I/B/E/S. This process is described in detail when we discuss Table 4. 20-F filing dates are collected by scraping 20-F reports from EDGAR using PERL. All our continuous variables are winsorized at the 1% and 99% levels.

We explore a recent deregulation by the SEC that allows cross-listed IFRS-reporting firms to disclose accounting information via 20-F filings without having to reconcile to U.S. GAAP. The end of this reconciliation requirement likely makes the two information sets more similar. We employ a difference-in-differences design to compare changes in 20-F download patterns and other outcomes for IFRS cross-listed firms before and after the elimination of the reconciliation requirement, relative to the same changes for cross-listed firms that do not use IFRS.

We exploit three characteristics of the research design that help our identification strategy. First, the deregulation affected only a subsample of cross-listed firms (IFRS reporters). Thus we can use non-IFRS filers as the counter-factual. This design allows for proper control of potential confounding factors that present patterns around this same time period. Second, many countries underwent mandatory adoption of IFRS at the beginning of the sample period, allowing us to potentially disentangle alternative firm-specific endogeneity regarding the accounting standard adopted. Finally, some countries did not implement mandatory IFRS adoption and thus allowed firms to file according to IFRS but continue using local GAAP. We expect the deregulation to have no effect on such firms, allowing us to perform a valid placebo analysis, strengthening the internal validity of our results.

Appendix A summarizes the design of our research setting. The timelines are broken down for the treatment and control groups before and after 2007, the year the U.S. GAAP reconciliation requirement was eliminated. This depicts the difference-in-differences design for our analyses. First, we see that for the treatment group, before 2007, the local information

was presented in accordance with IFRS, and the 20-Fs had to be filed in IFRS and reconciled to U.S. GAAP. After 2007, both the local and 20-F information are released using just IFRS. For the control group, before 2007 these firms filed in the home country using local GAAP, and in the 20-F they disclosed local GAAP along with U.S. GAAP reconciliations. After 2007, they continue to provide U.S. GAAP reconciliations in the Form 20-Fs. Because of this non-change in reconciliation disclosure, this set of non-IFRS cross-listers serve as an appropriate control group against the IFRS reporters.

#### 3.2 20-F Filing Delay

The SEC ruling in 2007 that allowed IFRS firms to stop reconciling with U.S. GAAP saved these firms significant preparation costs. Hence, it is likely that these firms required less time to produce and file Form 20-Fs. We examine three different measures of filing delay: 1) the number of days it takes a firm to file their 20-F report following fiscal year end  $(dif\_filing\_fyend)$ , 2) the number of days it takes a firm to announce earnings in the local market relative to fiscal year end  $(dif\_reporting\_fyend)$ , and 3) the number of days between local earnings announcement and 20-F filing  $(dif\_filing\_fyend)$ . Since the elimination of reconciliation applied to 20-F filings, we do not expect much change in the timing of the home market announcement  $(dif\_reporting\_fyend)$ .

Our primary explanatory variable is I(After)\*I(IFRS), which is an indicator that equals one if the firm uses IFRS and has fiscal year ending after November 15, 2007. Other control variables that could also affect disclosure timing include logged total assets (Size), leverage ratio of total liabilities over total assets (Lev), net income before extraordinary items scaled by total assets (ROA), analyst coverage from IBES (Coverage), institutional ownership from the Thomson Reuters 13-F Institutional Holdings dataset (Instown), and ADR age (Age). Each regression contains firm- and year- fixed effects. If IFRS firms' costs of preparing

 $<sup>^{14}</sup>$ We include calendar-year fixed effects because whether an observation is in the post-reconciliation period depends on the fiscal year end date in 2007. Hence year fixed effects do not subsume the effect of After.

20-Fs decrease following the elimination of the reconciliation requirement, we would predict the coefficient on I(After)\*I(IFRS) to be negative, which indicates greater acceleration in filing 20-Fs.

#### 3.3 Investor Attention

Our measure of investor attention is the number of downloads of a given Form 20-F around its release. Specifically, we focus on the average daily number of downloads during the week of the 20-F filing  $(InfAcqui[0,7]_{it})$  and until 10 days after the filing  $(InfAcqui[0,10]_{it})$ .<sup>15</sup> Prior studies have used the number of downloads as a measure of investors' information acquisition (i.e. Drake et al. (2015) ). The data is provided by the SEC, which maintains server logs of every public filing request on EDGAR. Users can acquire information dating back to 2003 regarding what reports users are downloading (i.e., 10-Q, 20-F, 8-K) and when. EDGAR contains a unique identifier related to the person acquiring the information, the date of the request, the filing requested and the CIK identifier of the firm. Thus, to compute our measures of information acquisition, we aggregate all requests for a Form 20-F on a daily basis.<sup>16</sup> Next, we compute a moving average of the number of downloads for a given number of days after the filing date. Filing dates are collected by scraping EDGAR using PERL.

This setup allows us to study the main question of this paper: How does the 2007 elimination of the reconciliation requirement affect investors' attention of IFRS firms' unreconciled Form 20-F fillings, given the length of the 20-F filling delay relative to local information releases? We examine this question by using the aforementioned reported downloads,  $(InfAcqui[0,7]_{it})$  and  $(InfAcqui[0,10]_{it})$ , as our dependent variables in a multivariate regression. If investors can acquire the same IFRS information when firms announce

Similarly, we include firm fixed effects, which do not subsume the effect of IFRS because there are a few firms in our sample that switch from local GAAP to IFRS in the middle of the sample period.

<sup>&</sup>lt;sup>15</sup>We obtain similar inferences if we expand our window to 15 or 30 days following the 20-F filing date.

<sup>&</sup>lt;sup>16</sup>We follow prior literature such as Drake et al. (2015) in eliminating likely web crawlers from the downloads sample, to ensure that we are capturing downloads made by individual investors.

earnings in the home country, investors would have fewer incentives to wait a long time for an unreconciled and arguably more redundant 20-Fs. Our main explanatory variable is I(After) \* I(IFRS) \* Delay, where Delay represents the number of days in between the local earnings announcement date and the 20-F filing date. We expect the coefficient on this triple interaction term to be negative if the results are consistent with investors choosing not to pay attention to a delayed and redundant filing. Control variables include lagged logged total assets (Size), leverage ratio (Lev), profitability (ROA), analyst coverage (Coverage), institutional ownership (Instown), and ADR age (Age). Firm- and year- fixed effects are also included in each specification.

# 3.4 Returns Comovement and Home Country Earnings Announcement Reactions

We want to demonstrate that the ADR investors of IFRS firms who download fewer 20-Fs after 2007 use home country earnings information instead, which is timelier than the 20-Fs that contain more similar information with no reconciliations. Ideally, we would examine download patterns of filings in foreign markets; however, this data is not readily available and likely does not even exist in most countries. However, we use other methodologies to make inferences about investors using information in the home country. First, we investigate returns comovements for a cross-listed firm's two stocks: the stocks on the local exchange and the ADRs on the U.S. exchange.

A change in comovement is indicative of a shift in investors' information-acquisition behavior. Theory papers have shown (i.e., Veldkamp (2006)) that when information is costly, rational investors only buy information about a common subset of the assets. Hence, news about one asset would affect other assets' prices, leading to comovement. After the end of U.S. GAAP reconciliation, investors are subject to the same subset of signals about the fun-

<sup>&</sup>lt;sup>17</sup>When discussing Table 3 results, we explain why we choose the filing gap between home market earnings announcement and 20-F filing as our measure of delay rather than the gap between fiscal year end and 20-F filing.

damentals. Therefore, we should expect higher price comovements. Our dependent variable is the monthly comovement between a cross-listed firm's ADR shares and home exchange shares using daily returns for firm i in month t,  $Y_{it}$ . Return data is taken from Datastream. We run monthly regressions, with the main explanatory variable being I(After) \* I(IFRS). Furthermore, to mitigate concerns that the source of information transfer is the U.S. market rather than the home market, we test whether returns comovement increases even more in the months of the local earnings announcement. We interact I(After) \* I(IFRS) with an indicator variable, I(Same), which equals 1 if  $Y_{it}$  refers to a month in which the local earnings announcement for the cross-listed firm occurred and 0 for all other months of the year.

In addition, we not only test for increased return comovement, but we also test for market reactions directly to home country information events. If ADR investors are using information produced in the home country and trading in the ADR market, then we expect there to be enhanced return and volume reactions to the local earnings announcements (i.e., Beaver (1968); Kim and Verrecchia (1991)). We test for changes in 3-day unsigned cumulative market-adjusted return (CAR[-1,1]) and the logged 3-day average daily trading volume (Log(Vol)) for the ADR equities around the home-country earnings announcement. We run yearly regressions, with the main explanatory variable being I(After) \* I(IFRS). Control variables in both the returns comovement and ADR reaction to home-country earnings announcement tests include lagged logged total assets (Size), leverage ratio (Lev), profitabi-

<sup>&</sup>lt;sup>18</sup>One can think of removing the reconciliation requirement as removing information frictions across markets. Now, U.S. prices might become more sensitive to foreign news because investors no longer have the reconciled U.S. GAAP information in the 20-F filings and use information released abroad.

<sup>&</sup>lt;sup>19</sup>Daily closing prices from Datastream for the home and U.S. market are unlikely to be synchronous for some countries. Because of the different times on which markets across countries operate, we follow papers such as Gagnon and Karolyi (2009) and Gagnon and Karolyi (2010) and use the NYSE Trade and Quote (TAQ), which allows us to match the home market closing price with the price recorded at the same (or similar) time for the ADR in the U.S. market, as a robustness test, and results are not sensitive to adjusting for time zone synchronicity.

<sup>&</sup>lt;sup>20</sup>We can make the same qualitative inferences if we use a price parity model that sets one market's daily return as the dependent variable and the other market's return as an independent variable, whose coefficient can indicate the direction and magnitude of information spillover, and market and currency returns as controls. However, we choose to use the correlation measure on the left-hand side because of the many interaction terms on our right-hand side. Moreover, results remain similar after we include controls for comovement with market returns and with exchange rate returns.

lity (ROA), analyst coverage (Coverage), institutional ownership of the firm (Instown), the market to book ratio (MTB) and net income growth  $(NI_Growth)$ .

#### 3.5 Descriptive Statistics and Correlations

In Table 1, Panel A, we compile descriptive statistics for our sample of cross-listed firms. We break down the statistics into three sections: the full sample, non-IFRS firms, and IFRS firms. The average number of daily downloads of Form 20-F within the first seven days of their filing is 18.4 downloads, and just over 15 daily downloads over the first ten days of their filing. It is not surprising to see the average  $InfAcqui[0,7]_it$  being higher than  $InfAcqui[0,10]_it$ , as most downloads should occur right after they become available and taper off over time. Furthermore, more 20-Fs of IFRS firms are downloaded (21.35 downloads over the first seven days, and 17.34 downloads over the first ten days) on average than 20-Fs of non-IFRS firms (17.24 downloads over the first seven days, and 14.25 downloads over the first ten).

The median firm files its Form 20-F with an 82-day delay relative to the home-country earnings announcement, and 140 days following fiscal year end. The median firm also takes about 64.5 days from fiscal year end to make its earnings announcement in its home country. Across all these measures, we also find that IFRS firms announce earnings and file 20-Fs in a more timely fashion than non-IFRS firms. 29% of our sample uses IFRS to produce accounting information in the home country. The median firm has a language distance of 5 (out of a scale from 1-5), with a mean of nearly 4, suggesting that most observations come from countries with languages quite different from English, making interpretation of local earnings reports costly and arduous. The average company is slightly profitable and has total assets of around \$4.5 million. IFRS firms tend to be slightly bigger and more profitable and are domiciled in countries that speak more similar languages to English, on average.

Correlations among the variables in our analyses are presented in Table 1, Panel B. Some interesting findings are that the 20-F filing lag is negatively correlated with the number of

downloads over a seven-day or ten-day window following their filing, suggesting that investor attention is greatest when filings are timely. IFRS firms generally have less reporting lag and a higher number of 20-F downloads, although from these correlations we cannot infer anything about the changes pre-2007 and post-2007, when the U.S. GAAP reconciliation requirement was dropped. Furthermore, profitable firms tend to attract more attention from investors, but the correlations are statistically insignificant. Larger firms and firms with greater analyst coverage, unsurprisingly, appear to attract greater investor attention.

Table 1, Panel C presents the home countries of the cross-listed firms in our sample, and the number of observations from each country. 32 total home countries are represented in our sample, and there is a well dispersed distribution of the number of observations across countries. China is the most represented country at around 15.7% of our sample, which is a significant but not overwhelming amount.

#### 4 Results

#### 4.1 20-F Filing Delay

We start our analyses by examining disclosure timing for cross-listed firms around the elimination of the U.S. GAAP reconciliation requirement. In Table 2, Panel A, we provide a 2x2 matrix indicating the number of days between home country earnings announcement and 20-F filing date for IFRS/non-IFRS firms before/after the 2007 SEC ruling. For non-IFRS firms, the filing delay drops from 92.13 days to 80.57 days. However, we see that there is a much greater decrease in filing delay for IFRS firms, from 84.17 days down to 65.42 days.

In Panel B, we continue to investigate differences between IFRS and non-IFRS firms before and after 2007. Here we are interested in examining what percentage of firms in a particular subgroup file their 20-Fs within 30, 60, and 90 days of home-country earnings announcement. Prior to reconciliation elimination, both non-IFRS and IFRS firms had about 12%

of firms file within 30 days of home country earnings announcement. After 2007, while the percentage of non-IFRS firms filing within 30 days rises to 18%, IFRS firms more than double to 27%. The percentage of non-IFRS firms also increases from 23% and 42% filing within 60 and 90 days of earnings announcement, respectively, to 34 and 53%. For IFRS firms, before 2007, 32 and 45% filed within 60 and 90 days, respectively, but those numbers increased to 52 and 69%. This provides additional evidence that, across various buckets of delay lengths, IFRS firms experience greater increases in timely filers compared to non-IFRS firms.

We use three different databases to identify the date of the home market earnings announcement: Bloomberg, Datastream, and IBES. In many U.S. studies, earnings announcement dates are determined as the earlier date of Compustat and that of I/B/E/S. For international firms, however, the accuracy of the earnings announcement dates in I/B/E/S has been under question. Bloomberg also contains earnings announcement dates for both U.S. and international firms, and thus, the primary source for our earnings announcement dates is the earlier of Datastream and Bloomberg local earnings release dates. If we lack the earnings announcement date for a firm in our sample in Bloomberg and in Datastream, we then supplement the data with dates gathered from I/B/E/S. To ensure that data errors do not drive our results, we present in Panel C the average number of days between the home-country earnings announcement date and the 20-F filing date (Delay) after 2007 using each of the three databases, as well as the lag when using the earlier of Bloomberg and Datastream as our home market earnings release date. The four numbers all range between 61 and 65 days and are not significantly different from one another, but are all significantly different from zero days. Thus, we can assume that reliance on any one of the three databases does not lead to considerable differences in calculating filing delays, and any data errors that may be present in our sample can be considered noise. More importantly, although IFRS firms' 20-F filings have become more timely in the post-reconciliation elimination period, there are still significantly positive delays, and our subsequent tests take these delays under heavy consideration.

Furthermore, it is possible that the timing of home market earnings announcements and Form 20-F filings are affected by factors besides the year and accounting standard used. Thus, we present results of multivariate regressions in Table 3. The three models across the three columns in Table 3 represent different disclosure lag variables. In Column 1, we find that the coefficient of I(After) \* I(IFRS) is positive but insignificant when the dependent variable is dif\_reporting\_fyend, the timeliness of home country earnings announcements relative to fiscal year end. This suggests that IFRS firms do not change the timing of their local earnings announcements compared to non-IFRS firms after the reconciliation requirement is dropped, which is unsurprising given that the SEC deregulation would not affect the costs of announcing earnings in the home country. In Column 2, we find that the coefficient on I(After) \* I(IFRS) is negative when the dependent variable is  $dif_-filing_-fyend$ , the filing gap between fiscal year end and 20-F filing date. This is consistent with our predictions, since the costs of reconciliation that are eliminated should lead to shorter delays in filing the 20-F reports. However, this coefficient is statistically insignificant. Nonetheless, we find in Column 3 that the coefficient on I(After) \* I(IFRS) is negative and significant when the dependent variable is dif\_filing\_reporting, the gap between home country earnings announcement and 20-F filing date. This confirms our conjecture that this is the most appropriate measure of filing delay, as the time it takes to produce the information for the local earnings release could be a confounding factor that undermines the length of the 20-F filing delay if measured relative to fiscal year-end. We are measuring this delay relative to the first date at which information that will appear in the filed 20-Fs is released in the home country, potentially rendering the 20-F information as stale, especially if the 20-F is filed late and does not offer much material information beyond what was released in the local market.

#### 4.2 Information Acquisition Analysis

In this section, we examine information acquisition patterns: do investors rely on Form 20-F filings for information even after the reconciliation requirement is eliminated? Results are presented in Table 4. The dependent variable in Columns 1 and 2 is the average daily number of downloads for a given 20-F filing between the filing date to seven days following the filing date  $(InfAcqui[0,7]_{it})$ , and the dependent variable in Columns 3 and 4 is the average daily number of 20-F downloads from the filing date to ten days after the filing date  $(InfAcqui[0,10]_{it})$ . In Columns 1 and 3, we find evidence that, overall, investors do not download fewer 20-F reports even after the U.S. GAAP reconciliation requirement is eliminated. The increased redundancy in 20-F information does not appear to change investor attention, but timeliness relative to the home-country information release is not considered in either column.

In columns 2 and 4, which include interactions with Delay, we present interesting results. The coefficients of I(After)\*I(IFRS) are now significantly positive. This suggests that investors download incrementally more 20-Fs of IFRS firms after the reconciliation requirement is dropped conditional on no delay between home country and U.S. information releases. There could be several forces behind this result. First, if the 20-Fs are filled hours (or minutes) before the local disclosures, then the 20-F becomes the primary source of information for all investors. Furthermore, it is possible that some investors found the Form 20-Fs with reconciliations long and complex. After 2007, when IFRS firms removed reconciliations from their 20-Fs, these same investors would be keen to acquire more of these firms 20-Fs. Also, whereas prior to the SEC's deregulation it would be very rare for a company to issue a 20-F in a timely fashion, it would not be so unfeasible to do so after reconciliation is eliminated. Investors now place greater weight on timely disclosures, and we investigate one implication of this in Table 8 with the liquidity test.  $^{21}$ 

<sup>&</sup>lt;sup>21</sup>From Table 4 we notice that the total effect is negative, by taking the sum of the interaction with the main effect coefficients. Thus, investors download fewer 20-Fs for reasons including increasing globalization and investors familiarity with other accounting standards leading to substitutability of 20-Fs. However, our interest in this paper is on the incremental effects of IFRS firms' delayed disclosures following reconciliation elimination.

More importantly, the coefficient on I(After)\*I(IFRS)\*Delay is significantly negative in both Columns 2 and 4. In other words, the longer the firm delays filing the Form 20-Fs relative to when the firm announced earnings in the home country, the lower the daily number of 20-F downloads. When investors are not able to obtain the cross-listed company's 20-F information in due time, they are less likely to wait to download the unreconciled 20-Fs. For the average IFRS firm in the post-reconciliation elimination period, which has a Delay of 65.4 days, this indicates an approximate average daily decrease of five downloads in the seven days following the 20-F filing date compared to releasing both earnings in the local market and the 20-F on the same day. This is an economically significant magnitude given that the median value of  $(InfAcqui[0,7]_{it})$  is approximately 12.6 downloads per day for IFRS firms; having the median length of filing delay would cut the number of potential downloads by nearly 40% compared to when the firm has zero filing delay. Thus, investors of cross-listed IFRS firms are incrementally less willing to wait to download a Form 20-F every day that it is filed late compared to investors of other cross-listed firms that continue to provide U.S. GAAP reconciliations, and this effect is statistically and economically significant. This indicates that investors do not wish to wait for information that is already available, albeit in a different country.

Cross-listed firms are domiciled in foreign countries, where the official language is unlikely to be English. Language perhaps serves as the biggest barrier to processing home-country earnings releases, so if the language is very different from English, acquisition costs of the home country information is likely to be very high. ADR investors may then decide it is worth waiting for delayed and unreconciled 20-Fs. To examine the differential effects of languages that are closer to and further from the English language, we use a measure of language distance. This measure was designed by Lewis et al. (2009) and has been used in papers such as Jeanjean et al. (2010) and Brochet et al. (2016) as a measure of language barriers. It is based on a language classification system that groups languages into families, branches, and

sub-branches. English is grouped in the Indo-European family, the Germanic branch, and the Western sub-branch. Thus, German, which is in the same Germanic branch as English, is deemed much closer to English than a language like Chinese, which is in a different family altogether.

We split the sample based on the median value of language distance and create an indicator variable, LowDist, which equals 1 if the firm is domiciled in a country with below median language distance and zero otherwise. We interact LowDist with I(After)\*I(IFRS)\*Delay, and if the coefficient is negative, this confirms our conjecture that investors behave as if the information released in the home country and in the Form 20-Fs are substitutes in the post-reconciliation period, and moreso when the substitute home country information comes with low acquisition costs (low language distance from English).

Table 5 provides evidence consistent with language affecting investors' decisions to acquire information about a cross-listed firm via the Form 20-F filing. We find that for both the seven-day and ten-day average daily number of downloads, the coefficient on I(After) \* I(IFRS)\*Delay\*I(LowDist) is negative and significant. Meanwhile, I(After)\*I(IFRS)\*Delay becomes insignificant. Therefore, we can infer that when the local earnings reports are produced in a language very different from English, investors are not necessarily less likely to wait for the 20-F filings to acquire information about the firm: the costs of interpreting a different language are greater than the benefits of acquiring timely information. However, if the local earnings are disclosed in a language similar to English, the costs of translating and interpreting foreign earnings releases are low and do not outweigh the costs of waiting for a delayed and unreconciled Form 20-F, so investors are likely to download less 20-Fs.

Overall, Tables 4 and 5 provide results that speak to the importance of the 20-F filing delay and language with respect to how investors use the Form 20-Fs. Given that the IFRS firms' 20-Fs filed in November 2007 or later provide less incremental information beyond

<sup>&</sup>lt;sup>22</sup>Control variables are not tabulated for parsimony, but the same controls presented in Table 4 were also used in these regressions.

what was released in the home country, investors become less likely use the Form 20-Fs if they become more delayed relative to the local earnings announcement. However, downloads of 20-Fs do not necessarily decrease when they are filed in a timely manner, even if they do not provide reconciliations. Thus, the results highlight the importance of taking the reconciliation elimination under consideration in conjunction with the timeliness of disclosure to see the effects on investor behavior. Futhermore, we see a significant decrease in the number of downloads of 20-F filings when local annual reports are in a language that is closer to English. We do not see such decrease if the home country language is very different from English, even when these 20-F filings are delayed. Translation costs also appear to be factors in investors' 20-F acquisition decisions. Furthermore, these results provide initial evidence that investors may view the more timely information released in the home country as viable substitutes for Form 20-Fs, especially if the home country speaks a similar language to English.

## 4.3 Returns Comovement and Home-Country Earnings Announcement Reactions

In Tables 4 and 5, we find evidence of investors relying less on Form 20-Fs of IFRS firms after the elimination of the reconciliation requirement, especially when they are filed with long delays and when investors can easily access the same information released in the home country (lower language barriers). This hints at the possibility that investors will turn to substitute sources of information if it is available sooner. Since we do not have data on how much investors are downloading annual reports filed in foreign countries, we first investigate how prices impound new information across markets by examining the comovement in returns between the home market and the ADR market. This can help us make inferences about which markets information is being used (home country) to trade in a given market (the U.S.).

Results are presented in Table 6. In the first two columns, we find that the coefficient on I(After) \* I(IFRS) is significant and positive when the dependent variable is a measure of

monthly correlations between the home market returns and the ADR market returns for a given cross-listed firm,  $Y_{it}$ . The results suggest that there is an increase in the returns correlation between the two markets, implying increased spillover from one market to another for IFRS firms once they stop reconciling to U.S. GAAP. This result is consistent with theory predictions (i.e. Veldkamp [2006]), that when investors pay attention to a common information subset (local earnings releases), prices comove more.

To provide evidence of the direction in which information flow changes, we specifically examine changes in price comovements during local earnings announcement months (i.e., a month in which a Brazilian cross-listed firm announces its local earnings in Brazil). We include interactions with I(Same), which equals one if the monthly correlation is for the same month of the local earnings announcement and zero otherwise. If investors are paying more attention to foreign news, then we should expect prices to comove even more in months where there is a foreign earnings release. We find in columns 3 and 4 that the coefficient on I(After) \* I(IFRS) remains positive and significant, but the coefficient on the triple interaction term, I(After) \* I(IFRS) \* I(Same), is also positive and significant. This suggests that the returns correlation effect is more pronounced in the month of local earnings announcement, consistent with the hypothesis that the increased returns correlation is because of information transfer from one market where an information event takes place (home country) to the other market (U.S. ADR), rather than vice versa.<sup>23</sup>

To more directly capture evidence of ADR investors paying attention to home country earnings releases, we study return and volume reactions in the ADR market to earnings announcements in the home country. Results are provided in Table 7. Columns 1 and 2 estimate

 $<sup>^{23}</sup>$ It is possible that for some firms, the home-country earnings announcement and 20-F filing happen in the same month. This possibility biases against our results. Furthermore, we found evidence earlier in the paper that investors of IFRS firms post-2007 may only turn to the home market for information if the 20-Fs are filed with delays, not when the 20-Fs are filed in a timely manner. Firms that file 20-Fs with significant delays will likely file in a different month than the earnings announcements in the home country, making the triple interaction term I(After)\*I(IFRS)\*I(Same)s significantly positive coefficient more consistent with our story. Furthermore, we are able to find results suggesting that the comovement is not significantly more pronounced in months of the 20-F filing (untabulated).

regressions with the ADR return reaction, CAR[-1,1], as the dependent variable with and without control variables, respectively. Columns 3 and 4 estimate regressions with the ADR volume reaction, Log(Vol) as the dependent variable with and without controls, respectively. In all four columns, the coefficient of I(After)\*I(IFRS) is positive and significant, suggesting increased return and volume reactions around the home country earnings announcement in the ADR market. These results add further evidence that once IFRS firms no longer issue reconciliations after 2007, investors are shifting attention away from the less timely and unreconciled 20-Fs and towards the home country information releases, and trading in the ADR market on that information.<sup>24</sup>

#### 4.4 Liquidity Analysis

In the previous sections, we documented a potential shift in investor attention away from Form 20-Fs for IFRS firms towards home country information releases in the post-reconciliation elimination period conditional on the length of 20-F filing delay. We also discovered that when 20-Fs are filed with little to no delay, there is increased investor attention for IFRS firms 20-Fs post-2007. Hence, unreconciled Form 20-Fs may not be completely useless when they are filed in a timely manner. Thus, we investigate liquidity implications of timely filings of Form 20-Fs in the ADR market. If firms provide investors with timely disclosures, they should experience more positive market outcomes than if they provide delayed disclosures. We study liquidity effects, as theory and empirical literatures suggest disclosure is associated with higher liquidity, which in turn is associated with lower cost of capital (Lang et al. (2012), Amihud and Mendelson (1986), Amihud and Mendelson (2008)). We use the average daily

<sup>&</sup>lt;sup>24</sup>These outcome variables are at the time surrounding the home-country earnings announcements; as a result, it is likely that the Form 20-Fs have not yet been filed, with no indication of when they will be filed. Thus, we do not include *Delay* in these regressions, as *Delay* is not known at the time of the home country information event. However, we wish to capture some indication in these results that there are ADR investors who are increasingly relying on home country earnings releases for information to trade on the ADR market for IFRS firms after reconciliation elimination, while speculating based on prior results in this paper that the decision is being driven by a combination of increased redundancy and staleness in the 20-F disclosures.

bid-ask spread of cross-listed firms immediately following the 20-F filing date as our measure of liquidity.<sup>25</sup>. We then take the average daily bid-ask spread over the seven days following the 20-F filing to calculate our liquidity reaction variable,  $Bid - ask \ Spread_{it}$ . The main explanatory variables are I(After) \* I(IFRS) and I(After) \* I(IFRS) \* Delay. Control variables include lagged logged total assets (Size), leverage ratio (Lev), profitability (ROA), analyst coverage (Coverage), institutional ownership of the firm (Instown), the market value of equity to book value of equity ratio (MTB) and firm age (Age).

In Table 8, we present results for  $Bid - ask\ Spread_{it}$ . In Column 1, the coefficient on I(After)\*I(IFRS) is insignificant, suggesting that the average daily bid-ask spread of IFRS adopting ADRs does not change in the week following 20-F filing after the reconciliation requirement is dropped relative to the control sample of non-IFRS cross-listers. These results are consistent with prior studies that found no systematic change in market outcomes, including liquidity, following the end of the reconciliation requirement (i.e. Kim et al. (2012)).

In Column 2, we take the length of the 20-F filing lag into consideration. When an interaction with Delay is included, the coefficient on I(After)\*I(IFRS)\*Delay is positive but statistically not different from zero. This indicates that the bid-ask spread increases, but not incrementally with significance, for each day the 20-F is delayed. However, the coefficient on I(After)\*I(IFRS) is negative and significant, indicating that timely 20-F disclosures lead to positive liquidity reactions.

In Column 3, rather than interact I(After) \* I(IFRS) with a continuous daily variable for the filing delay, we interact it with a dummy variable,  $I(Above_10)$ , which equals one if the 20-F filing delay is more than ten days long and zero otherwise. We presume that firms that file 20-Fs within ten days of the home-country earnings announcement are considered sufficiently timely disclosers and could experience the most positive benefits. We find that the coefficient on I(After) \* I(IFRS) continues to be significantly negative. However, the coefficient on

<sup>&</sup>lt;sup>25</sup>The daily bid-ask spread for a given firm is calculated as (Ask - Bid)/[(Ask + Bid)/2]. We find qualitatively similar results if we use the log of bid-ask spread instead such as in (Daske et al. (2008), Lang et al. (2012))

the triple interaction,  $I(After)*I(IFRS)*I(Above\_10)$ , is positive and significant, and the sum of the coefficients of  $I(After)*I(IFRS)*I(After)*I(IFRS)*I(Above\_10)$  is nearly zero. In other words, when IFRS firms who stop reconciling file their 20-Fs with a delay exceeding ten days after the home country earnings announcement, there are no longer any liquidity benefits from the 20-F filings. Since ten days of delay is not very long given that the median firm has around 80 days of delay (and 60 days for IFRS firms in the post-2007 period), only a few firms with very timely 20-F filings experience any liquidity benefits at all. As such, investors still value disclosure of unreconciled 20-Fs if they are timely, but the amount of delay they are willing to wait to value such disclosures is not very long. Moreover, as past studies of reconciliation elimination documented no significant changes in liquidity, we have identified an important correlated omitted variable for studies in this setting: the timeliness of 20-Fs relative to the same information releases in the home country.

#### 5 Robustness

#### **5.1** Placebo Test

To ensure the robustness of our main results, we conduct a placebo analysis for our Table 4 results. In our paper, the treatment group consists of firms that file in IFRS. As such, when the shock to the reconciliation requirement occurred, these firms underwent a change in disclosure methodology, as they no longer were required to provide reconciliations to U.S. GAAP in their 20-F filings. These firms are generally those domiciled in countries that implemented mandatory IFRS adoption in 2005, which also coincides with the beginning of our sample period. For the placebo test, we adjust the treatment sample so that it consists of firms that are not in IFRS adopting countries, but allow for voluntary adoption of IFRS and use local GAAP. The control sample consists of firms in countries that have no voluntary IFRS adopters during

<sup>&</sup>lt;sup>26</sup>We find qualitatively similar results if we use an indicator for delays lasting more than five days and delays lasting more than 15 days instead of ten days (untabulated).

the sample period.

Results of the placebo analyses are presented in Table 9. We find that for neither dependent variable are the coefficients of I(After)\*I(IFRS) or I(After)\*I(IFRS)\*Delay statistically significant. This suggests that our main results are robust to a placebo test. In other words, the shift in number of 20-F downloads is the result of changes in cross-listed IFRS firms' disclosure (from providing reconciliations to U.S. GAAP to not), rather than some other confounding random effect. This strengthens the internal validity of our research design and interpretation of our results.

#### **5.2** Other Investor Attention Windows

Furthermore, we use two other time frames in measuring investor attention. In the main tests, we used two windows: one week and ten days following the 20-F filing date. Although it is likely that investors would download relevant firm disclosures within a week or ten days of the filing date, it is possible that investors may be downloading 20-F reports for up to a month after the filing date. To ensure that our results are not just a short-window phenomenon, we rerun the Table 4 regressions, in which our dependent variables are the average daily number of 20-F downloads within 15 and 30 days of the 20-F filing date.

Results are presented in Table 10. Overall, we find similar results as we did in Table 4. Most importantly, the coefficients on I(After)\*I(IFRS)\*Delay remain negative and significant. Thus, even for up to one month after the 20-F filing date, daily investor attention incrementally decreases significantly for IFRS firms that no longer have to disclose reconciliations to U.S. GAAP, as the 20-F filing delay gets longer.

#### 6 Conclusion

The literature has presented mixed evidence regarding consequences of U.S. GAAP reconciliation elimination. In this paper, we examine the effects of the SECs ruling on investor attention and information acquisition behavior. More importantly, we study how these effects vary with the amount of delay in filing Form 20-Fs relative to the first release of this information (in the home country), an important aspect that has not been incorporated in prior literature.

We find that although Form 20-Fs are filed with less delay for IFRS firms following reconciliation elimination, the amount of delay is still significantly different from zero. Moreover, we show that when Form 20-F filings get delayed, and costs of translation and interpretation are relatively low, investors in the ADR market opt not to wait to acquire potentially stale information about the firm through Form 20-Fs that no longer provide U.S. GAAP reconciliations. These results confirm the importance of considering both the increased substitutability and timeliness of unreconciled 20-Fs in shaping investor information acquisition behavior.

Consistent with an increase in the information transfer across markets, we find that the returns comovement between the two markets (home and U.S.) increases for IFRS firms in the post-reconciliation elimination period. The increased returns comovements is more pronounced during the month in which the local earnings announcement occurs. Moreover, there are higher price and volume reactions in the ADR market surrounding the home-country earnings announcements for IFRS firms in the post-reconciliation elimination period. These results suggest a potential shift in U.S. investors attention towards local markets.

Lastly, we find that if IFRS firms in the post-reconciliation elimination period file their 20-Fs in a timely manner, they experience market liquidity benefits through decreased bid-ask spreads. However, if the filing delay exceeds 10 days, all liquidity benefits are essentially reversed. Thus, the increased investor attention on unreconciled 20-Fs implies that firms can benefit from timely disclosure; however, any value investors place on these disclosures and liquidity benefits that IFRS firms can experience are only applicable if firms file with virtually

no delay, or within ten days of home-country earnings announcements.

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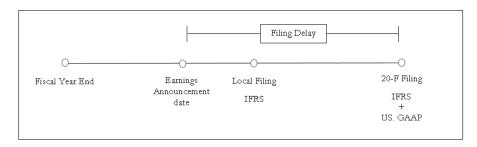
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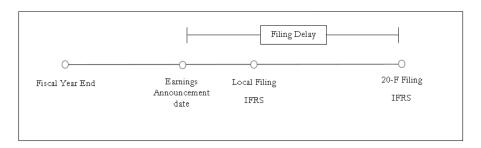
## Appendix A

#### TREATMENT GROUP

BEFORE

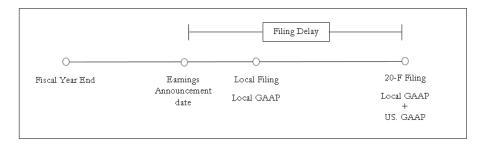


#### AFTER

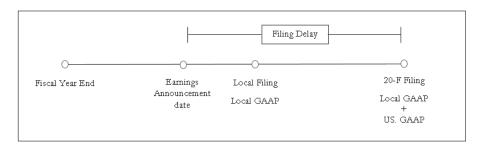


#### CONTROL GROUP

BEFORE



#### AFTER



### Appendix B

GERDAU - S/A (2008)

20-F filing date: 07/15/2009

https://www.sec.gov/Archives/edgar/data/1073404/000110465909043268/a09-18172 120f.htm

Annual Report: 02/19/2009

 $\frac{http://ri.gerdau.com/enu/4105/2008.12RelatriodaAdministraoGerdauConsolidadoIngls\_html/2008.12RelatriodaAdministraoGerdauConsolidadoIngls\_html$ 

https://article.wn.com/view/2009/02/16/Notice of Gerdau Ameristeel 2008 Year End conference call/

#### 20-F filing:

The summary financial data prepared in accordance with IFRS and U.S. GAAP is not comparable.

TERS Summary Einspeial and Operating Data

|               |            | (Expressed in thousands of Brazilian Keais - K5 except<br>quantity of shares and amounts per share) |              |  |  |
|---------------|------------|---|--------------|--|--|
|               | 2008       | 2007  | 2006         |  |  |
| et sales      | 41,907,84  | 30,613,528  | 25,883,911   |  |  |
| Cost of sales | (31,018,94 | 5) (23,133,902)   | (19,039,266) |  |  |
|               |            |   |              |  |  |
| tincome       | 4 944 5    | 98 4 302 966  | 4.261.478    |  |  |

#### Annual Report:

| Net Income<br>(R\$ million)  |       | Year  | Year  | Variation |
|------------------------------|-------|-------|-------|-----------|
|                              |       | 2008  | 2007  | 2008/2007 |
| Brazil 1                     |       | 3,499 | 1,814 | 92.9%     |
| North America                |       | 1,057 | 985   | 7.3%      |
| Latin America                |       | 454   | 345   | 31.6%     |
| Specialty Steel              |       | 618   | 682   | -9.4%     |
| Subtotal                     |       | 5,628 | 3,826 | 47.196    |
| Foreign Exchange Translation | (683) |       | 477 - |           |
| Total                        |       | 4,945 | 4,303 | 14.9%     |

#### Form 20-F - Annual and transition report of foreign private issuers [Sections 13 or 15(d)]:

Filing Date 2013-03-26 Accepted 2013-03-26 1 Period of Report 2012-12-31

Accepted 2013-03-26 17:30:44 Documents 6



| ABOUT EMBRAER | GOVERNANCE              | FINANCIAL INFORMATIO |
|---------------|-------------------------|----------------------|
| 3/13/2013     | 4Q12 CONFERENCE CALL    |                      |
| 3/12/2013     | 4Q12 EARNINGS RESULTS R | RELEASE              |

|  | <br>Year ended December 31, |           |           |          |
|--|-----------------------------|-----------|-----------|----------|
| Consolidated Statements of Income Data             | 2012                        | 2011      | 2010      | 2009     |
| P  | (in USS millions)           |           |           | 5,497.8  |
| Revenue  | 6,177.9                     | 5,803.0   | 5,364.1   |          |
| Cost of sales and services                         | (4,683.0)                   | (4,495.9) | (4,338.1) | (4,428.4 |
| Gross profit                                       | 1,494.9                     | 1,307.1   | 1,026.0   | 1,069.4  |
| Operating income (expense)                         |                             |           |           |          |
| Administrative                                     | (280.5)                     | (262.5)   | (197.5)   | (191.3)  |
| Selling  | (482.0)                     | (419.3)   | (374.1)   | (304.6)  |
| Research   | (77.3)                      | (85.3)    | (72.1)    | (55.6)   |
| Other operating (expense) income, net              | (42.8)                      | (221.5)   | 9.4       | (138.5)  |
| Equity in losses of associates                     | <br>(0.2)                   | (0.3)     | _         | _        |
| Operating profit before financial income (expense) | 612.1                       | 318.2     | 391.7     | 379.4    |
| Financial income (expense), net                    | (6.8)                       | (90.7)    | 17.5      | 10.2     |
| Foreign exchange gain (loss), net                  | 8.8                         | 20.0      | (1.1)     | (68.8)   |
| Profit before taxes on income                      | 614.1                       | 247.5     | 408.1     | 320.8    |
| Income tax (expense) benefit                       | (265.5)                     | (127.1)   | (62.7)    | 158.1    |
| Net income   | 348.6                       | 120.4     | 345.4     | 478.9    |
| Attributable to:                                   |                             |           |           |          |
| Owners of Embraer                                  | 347.8                       | 111.6     | 330.2     | 465.2    |
| Noncontrolling interest                            | 0.8                         | 8.8       | 15.2      | 13.7     |

#### DEMONSTRAÇÕES CONSOLIDADAS DO RESULTADO

|  | 31.12.                   | 2012                     | 31.12                    | .2011                    | 31.12                    | 2010                     |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| RECEITAS LÍQUIDAS  | 6.177.924                | R\$<br>12.201.715        | 5.802.953                | 9.858.055                | 5.364.068                | 9.380.625                |
| Custo dos produtos e serviços vendidos<br>LUCRO BRUTO                | (4.682.955)<br>1.494.969 | (9.248.569)<br>2.953.146 | (4.495.858)<br>1.307.095 | (7.638.825)<br>2.219.230 | (4.338.122)<br>1.025.946 | (7.582.662)<br>1.797.963 |
| RECEITAS (DESPESAS) OPERACIONAIS<br>Administrativas                  | (280.502)                | (547.886)                | (262.521)                | (440.044)                | (197.487)                | (346.061)                |
| Comerciais   | (481.992)                | (946.773)                | (419.312)                | (702.866)                | (374.089)                | (657.010)                |
| Pesquisas Outras receitas (despesas) operacionais, líquidas          | (77.334)<br>(42.832)     | (152.310)<br>(88.325)    | (85.252)<br>(221.430)    | (143.557)<br>(410.411)   | (72.133)<br>9.416        | (126.102)<br>16.730      |
| Equivalência patrimonial   | (234)                    | (421)                    | (340)                    | (624)                    |                          |                          |
| RESULTADO OPERACIONAL<br>Receitas (despesas) financeiras, líquidas   | 612.075<br>(6.769)       | 1.217.431<br>(11.398)    | 318.240<br>(90.716)      | 521.728<br>(172.509)     | 391.653<br>17.573        | 685.520<br>30.885        |
| Variações monetárias e cambiais, líquidas<br>LUCRO ANTES DO IMPOSTO  | 8.813<br>614.119         | 16.824<br>1.222.857      | 20.024<br>247.548        | 32.809<br>382.028        | 408.146                  | (1.350)<br>715.055       |
| Imposto de renda e contribuição social<br>LUCRO LÍQUIDO DO EXERCÍCIO | (265.530)                | (523.849)<br>699.008     | (127.124)<br>120.424     | (210.774)<br>171.254     | (62.714)                 | (114.877)<br>600.178     |
| Lucro atribuído aos:   |                          |                          |                          | 1/1.254                  | 345.432                  |                          |
| Acionistas da Embraer<br>Acionistas não controladores                | 347.824<br>765           | 697.792<br>1.216         | 111.608<br>8.816         | 156.297<br>14.957        | 330.265<br>15.167        | 573.592<br>26.586        |
|  | , 00                     | 1.210                    | 3.010                    | -4.507                   | 23.107                   | 20.000                   |

## Appendix C

| Variable                 | Construction of Variable   |
|--------------------------|--|
| $InfAcqui[0,7]_{it}$     | Average number of downloads of Form 20-Fs for firm i , up to 7 days after the filing date.   |
| $InfAcqui[0,10]_{it}$    | Average number of downloads of Form 20-Fs for firm i , up to 10 days after the filing date.  |
| Delay                    | Number of days between local earnings announcement and 20-F filing. Local earnings release dates are extracted from Bloomberg, Datastream, and IBES.   |
| I(IFRS)                  | Indicator variable equals to one for firms that report in IFRS, zero otherwise.  |
| I(After)                 | Indicator variable equals to one after November 2007, zero otherwise.  |
| CAR                      | 3-days cumulative unsigned market-adjust return on the U.S. market for firm 'i' around local earnings announcement date. Specifically, $\sum_{t=1}^{t+1}  abs(R_{it}-mktUS_{it}) $   |
| Log(Vol)                 | Logarithmic of the 3-days average trading volume on the U.S. market for firm 'i' around the local earnings announcement date.  |
| I(LowDist)               | Indicator variable that equals to one for firms from countries with low language distance relative to English. Language distance is a five-point scale classification system. See Lewis (2009) for details at http://www.ethnologue.com/web.asp. |
| $Bid-askSpread_{it} \\$  | 7-days average of the daily bid-ask spread for firm i on day t. Bid-ask spread is measured as (Ask - Bid)/[(Ask + Bid)/2].   |
| $Y_{it}$                 | Monthly correlations of daily market returns across the home market and U.S. ADR market for firm $i$ at month $t$ .  |
| $dif\_reporting\_filing$ | Number of days between the local earnings announcement date, collected from Worldscope, Bloomberg, and $I/B/E/S$ , and the 20-F filing date, scraped from EDGAR using PERL. This is also the same as $Delay$                                     |
| $dif\_reporting\_fyend$  | Number of days between the fiscal year end date and the local earnings announcement date.  |
| $dif\_filing\_fyend$     | Number of days between the fiscal year end date and the 20-F filling date.   |
| Size                     | Log of lagged total assets in USD, from Worldscope   |
| Lev                      | Annual leverage ratio, calculated by dividing total liabilities by total assets, from Worldscope   |
| Coverage                 | Number of analysts following the company, from I/B/E/S   |
| InstOwn                  | Institutional ownership in percentage, from Thomson Reuters Institutional (13f) Holdings   |
| Age                      | Firms age  |
| ROA                      | Return on assets, calculated by dividing net income before extraordinary items by total assets, from Worldscope  |
| MTB                      | Market to Book ratio, calculated by dividing market value of equity by book value of equity, from Worldscope   |
| CurrencyReturn           | Monthly average currency return at month 't' for a given currency relative to the Dollar (in percentage).  |
| $NI\_growth$             | Net income growth for firm 'i' at year 't' (in percentage). Specifically, $ni\_growth$ is calculated as current net income minus lagged net income divided by lagged net income.   |

Table 1: Descriptive statistics

|                           | N   | Mean   | Std   | Q1     | Q2     | Q3     |
|---------------------------|-----|--------|-------|--------|--------|--------|
| All                       |     |        |       |        |        |        |
| InfAcqui[07]              | 630 | 18.42  | 19.82 | 7.13   | 12.63  | 22.25  |
| InfAcqui[010]             | 630 | 15.14  | 16.24 | 5.82   | 10.36  | 17.73  |
| 20-F - Local Date (Delay) | 630 | 81.53  | 46.58 | 45.00  | 87.00  | 122.00 |
| 20-F - FYE date           | 630 | 140.07 | 42.87 | 99.00  | 153.00 | 180.00 |
| Local - FYE date          | 630 | 64.49  | 34.03 | 42.00  | 57.00  | 78.00  |
| I(IFRS)                   | 630 | 0.29   | 0.45  | 0.00   | 0.00   | 1.00   |
| language_distance         | 564 | 3.99   | 1.62  | 2.00   | 5.00   | 5.00   |
| ROA                       | 629 | 0.06   | 0.14  | 0.01   | 0.06   | 0.12   |
| Leverage                  | 615 | 0.33   | 0.26  | 0.06   | 0.33   | 0.49   |
| Size                      | 627 | 15.29  | 2.35  | 13.74  | 15.31  | 16.61  |
| Age                       | 630 | 31.77  | 8.59  | 29.00  | 33.00  | 39.00  |
| Coverage                  | 630 | 45.80  | 55.93 | 7.00   | 28.50  | 63.00  |
| InstOwn                   | 630 | 0.14   | 0.57  | 0.00   | 0.00   | 0.05   |
| non-IFRS                  |     |        |       |        |        | -      |
| InfAcqui[07]              | 448 | 17.24  | 20.38 | 6.56   | 11.50  | 20.00  |
| InfAcqui[010]             | 448 | 14.25  | 16.95 | 5.45   | 9.64   | 16.45  |
| 20-F - Local Date (Delay) | 448 | 85.44  | 47.55 | 53.00  | 92.00  | 124.00 |
| 20-F - FYE date           | 448 | 145.15 | 39.74 | 109.50 | 164.50 | 180.00 |
| Local - FYE date          | 448 | 66.28  | 38.00 | 40.00  | 56.00  | 87.00  |
| I(IFRS)                   | 448 | 0.00   | 0.00  | 0.00   | 0.00   | 0.00   |
| language_distance         | 391 | 4.43   | 1.35  | 5.00   | 5.00   | 5.00   |
| ROA                       | 447 | 0.06   | 0.15  | 0.02   | 0.05   | 0.12   |
| Leverage                  | 437 | 0.27   | 0.23  | 0.02   | 0.28   | 0.44   |
| Size                      | 445 | 14.66  | 2.00  | 13.14  | 14.73  | 16.17  |
| Age                       | 448 | 32.44  | 8.91  | 29.00  | 34.00  | 39.00  |
| Coverage                  | 448 | 43.14  | 52.41 | 5.00   | 26.00  | 58.50  |
| InstOwn                   | 448 | 0.19   | 0.67  | 0.00   | 0.00   | 0.05   |
| IFRS                      |     |        |       |        |        |        |
| InfAcqui[07]              | 182 | 21.35  | 18.11 | 9.13   | 16.06  | 26.88  |
| InfAcqui[010]             | 182 | 17.34  | 14.16 | 7.55   | 13.14  | 21.36  |
| 20-F - Local Date (Delay) | 182 | 71.92  | 42.73 | 34.00  | 65.50  | 113.00 |
| 20-F - FYE date           | 182 | 127.55 | 47.60 | 84.00  | 130.00 | 177.00 |
| Local - FYE date          | 182 | 60.10  | 20.76 | 45.00  | 58.00  | 67.00  |
| I(IFRS)                   | 182 | 1.00   | 0.00  | 1.00   | 1.00   | 1.00   |
| language_distance         | 173 | 2.98   | 1.74  | 1.00   | 2.00   | 5.00   |
| ROA                       | 182 | 0.07   | 0.11  | 0.01   | 0.06   | 0.12   |
| Leverage                  | 178 | 0.46   | 0.27  | 0.27   | 0.43   | 0.72   |
| Size                      | 182 | 16.86  | 2.41  | 15.51  | 16.50  | 18.43  |
| Age                       | 182 | 30.13  | 7.51  | 28.00  | 31.00  | 35.00  |
| Coverage                  | 182 | 52.35  | 63.47 | 12.00  | 33.00  | 76.00  |
| InstOwn                   | 182 | 0.04   | 0.11  | 0.00   | 0.00   | 0.02   |

Panel B: Correlation Matrix

|              | InfAqui[0,7]  | InfAqui[0,7] InfAqui[0,10] Delay | Delay     | I(IFRS)  | LangDistance   | ROA          | Leverage | Size     | NIgrowth | NIgrowth Coverage InstOwn | InstOwn |
|--------------|---------------|----------------------------------|-----------|----------|----------------|--------------|----------|----------|----------|---------------------------|---------|
| InfAqui[07]  | 1             |                                  |           |          |                |              |          |          |          |                           |         |
| InfAqui[010] | 0.99***       | 1                                |           |          |                |              |          |          |          |                           |         |
| Delay        | -0.237***     | -0.239***                        | 1         |          |                |              |          |          |          |                           |         |
| I(IFRS)      | 0.0763        | 0.0691                           | -0.123**  | 1        |                |              |          |          |          |                           |         |
| LangDistance | -0.0559       | -0.0547                          | 0.170***  | -        | 1              |              |          |          |          |                           |         |
| ROA          | 0.0418        | 0.0401                           | 0.0680    |          | 0.0892*        | 1            |          |          |          |                           |         |
| Leverage     | 0.0754        | 0.0768                           | 0.0149    | 0.327*** | $-0.240^{***}$ | -0.164***    | 1        |          |          |                           |         |
| Size         | $0.246^{***}$ | 0.253***                         | -0.0625   |          | -0.223***      | $0.0830^{*}$ | 0.521*** | _        |          |                           |         |
| NIgrowth     | -0.00893      | -0.00488                         | 0.0180    |          | -0.0492        | $0.111^{**}$ | -0.0722  | *96/0.0  | 1        |                           |         |
| Coverage     | 0.353***      | 0.357***                         | -0.242*** |          | -0.00524       | 0.183***     | -0.0675  | 0.181*** | 0.0339   | 1                         |         |
| InstOwn      | -0.0492       | -0.0476                          | 0.00462   |          | 0.121**        | -0.0151      | 0.0588   | -0.0803* | 0.0210   | -0.0165                   | П       |

Panel C: Number of Observations by Country

| Country            | Number of Observations | Percentage | Cumulative Percentage |
|--------------------|------------------------|------------|-----------------------|
| ARGENTINA          | 37                     | 5.87       | 5.87                  |
| AUSTRALIA          | 5                      | 0.79       | 6.67                  |
| BRAZIL             | 38                     | 6.03       | 12.70                 |
| CHILE              | 35                     | 5.56       | 18.25                 |
| CHINA              | 99                     | 15.71      | 33.97                 |
| DENMARK            | 8                      | 1.27       | 35.24                 |
| FINLAND            | 5                      | 0.79       | 36.03                 |
| FRANCE             | 23                     | 3.65       | 39.68                 |
| GERMANY            | 22                     | 3.49       | 43.17                 |
| GREECE             | 14                     | 2.22       | 45.40                 |
| HONG KONG          | 12                     | 1.90       | 47.30                 |
| HUNGARY            | 4                      | 0.63       | 47.94                 |
| INDIA              | 20                     | 3.17       | 51.11                 |
| INDONESIA          | 5                      | 0.79       | 51.90                 |
| IRELAND            | 14                     | 2.22       | 54.13                 |
| ISRAEL             | 20                     | 3.17       | 57.30                 |
| ITALY              | 8                      | 1.27       | 58.57                 |
| JAPAN              | 68                     | 10.79      | 69.37                 |
| KOREA (SOUTH)      | 13                     | 2.06       | 71.43                 |
| LUXEMBOURG         | 12                     | 1.90       | 73.33                 |
| MEXICO             | 48                     | 7.62       | 80.95                 |
| NETHERLANDS        | 11                     | 1.75       | 82.70                 |
| PERU               | 3                      | 0.48       | 83.17                 |
| PHILIPPINES        | 5                      | 0.79       | 83.97                 |
| RUSSIAN FEDERATION | 18                     | 2.86       | 86.83                 |
| SINGAPORE          | 3                      | 0.48       | 87.30                 |
| SOUTH AFRICA       | 7                      | 1.11       | 88.41                 |
| SPAIN              | 9                      | 1.43       | 89.84                 |
| SWITZERLAND        | 6                      | 0.95       | 90.79                 |
| TAIWAN             | 18                     | 2.86       | 93.65                 |
| TURKEY             | 4                      | 0.63       | 94.29                 |
| UNITED KINGDOM     | 36                     | 5.71       | 100.00                |
| Total              | 630                    | 100.00     |                       |

## Table 2: Filing Delay Descriptive Statistics.

This table exhibits descriptive statistics for the number of days between the local earnings announcement and the 20-F filing date. panel A exhibits the average filing delay by group and by sample period; panel B exhibits the proportion of firms in a given group and a given period that have delay under 30, 60 or 90 days; panel C tests whether the average filing delay equals zero for IFRS filers after the 2007 deregulation.

Panel A: Average Filing Delay

|                              | Before | After                   | Mean  |
|------------------------------|--------|-------------------------|-------|
| non-IFRS filer<br>IFRS filer | 84.17  | 80.57<br>65.42<br>76.11 | 72.69 |

Panel B: Distribution analysis

|                |            | Before     |            |            | After      |            |
|----------------|------------|------------|------------|------------|------------|------------|
|                | Delay < 30 | Delay < 60 | Delay < 90 | Delay < 30 | Delay < 60 | Delay < 90 |
| non-IFRS filer | 12%        | 23%        | 42%        | 18%        | 34%        | 53%        |
| IFRS filer     | 12%        | 32%        | 45%        | 27%        | 52%        | 69%        |
| All            | 12%        | 26%        | 43%        | 21%        | 39%        | 58%        |

Panel C: Is filing Delay equal to zero?

| Filing Delay: Days between Local announcement and 20-F filing |              |        |         |  |  |
|---|--------------|--------|---------|--|--|
|   | Average days | F-test | p-value |  |  |
| Min(Bloomberg, Datastream)                                    | 65           | 8.32   | 0.00    |  |  |
| Bloomberg dates   | 61           | 9.23   | 0.00    |  |  |
| Datastream dates  | 62           | 8.24   | 0.00    |  |  |
| I/B/E/S dates   | 61           | 9.23   | 0.00    |  |  |

Table 3: Filing Delay Analysis.

This table displays the results of regressing various measures of information delay on firm characteristics and indicators for IFRS filers and post-reconciliation elimination period. The three measures of delay examined are the gap between fiscal year-end date and local earnings announcement date, the gap between the fiscal year-end date and 20-F filing date, and the gap between local earnings announcement date and 20-F filing date and are reported in the first three columns, respectively. We include firm and year fixed effects in all specifications. Standard errors are clustered by firm. All variables are defined in Appendix C. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                  | Local - FYE date | 20-F - FYE date | 20-F - Local date |
|------------------|------------------|-----------------|-------------------|
| I(After)*I(IFRS) | 4.563            | -4.326          | $-10.289^*$       |
|                  | (1.39)           | (-0.96)         | (-1.97)           |
| I(IFRS)          | -8.629           | 3.827           | 2.760             |
|                  | (-1.03)          | (0.49)          | (0.34)            |
| I(After)         | -3.105           | -9.484          | -4.824            |
|                  | (-0.76)          | (-1.27)         | (-0.60)           |
| Size             | -4.664           | -3.097          | -0.324            |
|                  | (-0.79)          | (-0.50)         | (-0.04)           |
| ROA              | 11.971           | 15.841          | 16.313            |
|                  | (0.84)           | (0.86)          | (0.92)            |
| Coverage         | 0.022            | -0.064          | -0.052            |
|                  | (0.33)           | (-0.93)         | (-0.82)           |
| InstOwn          | -2.867           | -3.179          | 1.094             |
|                  | (-1.12)          | (-1.07)         | (0.56)            |
| Age              | 0.332            | 0.443*          | -0.608**          |
|                  | (1.52)           | (1.90)          | (-2.57)           |
| $\overline{N}$   | 627              | 627             | 627               |
| adj. $R^2$       | 0.55             | 0.71            | 0.65              |
| Firm FE          | Yes              | Yes             | Yes               |
| Year FE          | Yes              | Yes             | Yes               |

Table 4: Information Acquisition Analysis.

This table displays the results of regressing measures of information acquisition (downloads of 20-Fs for the first seven days and ten days) on firms' characteristics and treatment and post-2007 deregulation indicator variables. I(IFRS) is an indicator variable that equals one if the firm files their financial statements under IFRS and zero otherwise. I(After) is an indicator variable that equals one after the 2007 deregulation and zero otherwise. X is a vector of controls including the firm and year fixed effects, ROA, size, Coverage, InstOwn, and Age. Delay is a measure of days between 20-F filing and local earnings announcement day. All specifications include firm and year fixed effects. Standard errors are clustered by firm. All variables are defined in Appendix C. \*\*\*\*, \*\*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                        | [0,7]     | [0,7]       | [0,10]         | [0,10]    |
|------------------------|-----------|-------------|----------------|-----------|
|                        | [0,7]     | [0,7]       | [0,10]         | [0,10]    |
| I(After)*I(IFRS)       | 2.643     | 10.406**    | 1.522          | 7.431**   |
|                        | (1.23)    | (2.55)      | (0.87)         | (2.25)    |
| I(After)*I(IFRS)*Delay |           | -0.111***   |                | -0.085**  |
|                        |           | (-2.61)     |                | (-2.46)   |
| Delay                  |           | $0.047^{*}$ |                | 0.035     |
|                        |           | (1.67)      |                | (1.54)    |
| I(After)*Delay         |           | -0.019      |                | -0.017    |
|                        |           | (-0.66)     |                | (-0.74)   |
| I(IFRS)*Delay          |           | 0.004       |                | 0.006     |
|                        |           | (0.09)      |                | (0.19)    |
| I(IFRS)                | -5.646**  | -4.635      | -4.390**       | -3.883    |
|                        | (-2.06)   | (-1.00)     | (-2.00)        | (-1.03)   |
| I(After)               | -8.209*** | -6.230*     | -6.206***      | -4.440*   |
|                        | (-3.81)   | (-1.96)     | (-3.66)        | (-1.69)   |
| Size                   | 8.157**   | 8.458**     | 6.581**        | 6.805**   |
|                        | (2.26)    | (2.36)      | (2.15)         | (2.24)    |
| ROA                    | 11.128**  | 11.828**    | 8.234*         | 8.734**   |
|                        | (2.19)    | (2.26)      | (1.94)         | (2.03)    |
| Coverage               | 0.046     | 0.041       | 0.037          | 0.033     |
|                        | (1.00)    | (0.89)      | (0.93)         | (0.83)    |
| InstOwn                | -2.779**  | -2.957**    | -2.141*        | -2.287*   |
|                        | (-2.10)   | (-2.19)     | (-1.87)        | (-1.95)   |
| Age                    | -1.623*** | -1.711***   | $-1.310^{***}$ | -1.380*** |
|                        | (-10.10)  | (-10.36)    | (-10.02)       | (-10.27)  |
| N                      | 627       | 627         | 627            | 627       |
| adj. $R^2$             | 0.50      | 0.50        | 0.49           | 0.50      |
| Firm FE                | Yes       | Yes         | Yes            | Yes       |
| Year FE                | Yes       | Yes         | Yes            | Yes       |

Table 5: Cross-Sectional Tests for Information Acquisition Analysis.

This table displays the results of regressing measures of information acquisiton (downloads of 20-Fs for the first seven days and ten days) on firms' characteristics and treatment and post-2007 deregulation indicator variables. *Delay* is a measure of days between 20-F filing and local earnings announcement day. *I(Low Dist)* is an indicator variable that equals one if the firm is from a country with low language distance (below the median sample) and zero otherwise. Controls include the firm and year fixed effects, *ROA*, *size*, *Coverage*, *InstOwn*, *Age* and the main effects. Standard errors are clustered by firm. All variables are defined in Appendix C. \*\*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                                    | (1)                 | (2)                      |
|------------------------------------|---------------------|--------------------------|
|                                    | [0,7]               | [0,10]                   |
| I(After)*I(IFRS)*I(Low Dist)       | 20.541***<br>(2.74) | 16.898***<br>(2.83)      |
| I(After)*I(IFRS)*Delay*I(Low Dist) | -0.193** (-2.52)    | $-0.162^{***}$ $(-2.62)$ |
| I(After)*I(IFRS)                   | -3.641 $(-0.78)$    | -3.958 $(-1.04)$         |
| I(After)*I(IFRS)*Delay             | 0.027<br>(0.44)     | 0.029<br>(0.60)          |
| $\overline{N}$                     | 627                 | 627                      |
| adj. $R^2$                         | 0.50                | 0.50                     |
| Firm FE                            | Yes                 | Yes                      |
| Year FE                            | Yes                 | Yes                      |
| Controls                           | Yes                 | Yes                      |

## Table 6: Returns Comovement Analysis.

This table displays the results of the following regression:  $Y_{it} = \beta_1 I(IFRS) * I(After) + \beta_2 I(IFRS) + \beta_3 I(After) + X\beta + \eta_{it}$ , where  $Y_{it}$  is the monthly correlation between daily returns for firm i across the home market and U.S. ADR market. Our variables of interest are I(After)\*I(IFRS) and I(After)\*I(IFRS)\*I(Same). In Columns 3 and 4, I(Same) is an indicator that equals one if the observation month is the month of local earnings announcement and zero otherwise. All specifications include firm and year-month fixed effects. All variables are defined in Appendix C. Standard errors are clustered by firm. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                           | Corr               | Corr             | Corr                    | Corr             |
|---------------------------|--------------------|------------------|-------------------------|------------------|
| I(After)*I(IFRS)          | 0.039***           | 0.036***         | 0.035**                 | 0.032**          |
|                           | (3.03)             | (2.77)           | (2.60)                  | (2.38)           |
| I(After)*I(IFRS)*I(Same)  |                    |                  | 0.070*                  | 0.073*           |
|                           |                    |                  | (1.72)                  | (1.78)           |
| I(After)*I(Same)          |                    |                  | -0.049                  | -0.048           |
|                           |                    |                  | (-1.44)                 | (-1.37)          |
| I(IFRS)*I(Same)           |                    |                  | 0.036                   | 0.033            |
|                           |                    |                  | (1.46)                  | (1.20)           |
| I(Same)                   |                    |                  | -0.002                  | -0.002           |
|                           |                    |                  | (-0.09)                 | (-0.06)          |
| I(IFRS)                   | -0.044** $(-2.11)$ | -0.032 (-1.48)   | $-0.046^{**}$ $(-2.16)$ | -0.033 $(-1.53)$ |
|                           | (-2.11)            | , ,              | (-2.10)                 | , ,              |
| CurrencyReturn            |                    | 2.816<br>(0.88)  |                         | 2.822<br>(0.86)  |
| Size                      |                    | $-0.032^*$       |                         | $-0.032^*$       |
| Size                      |                    | -0.032 $(-1.78)$ |                         | -0.032 $(-1.79)$ |
| ROA                       |                    | -0.082           |                         | -0.082           |
| 11011                     |                    | (-1.51)          |                         | (-1.52)          |
| Coverage                  |                    | 0.000***         |                         | 0.000**          |
| · ·                       |                    | (2.67)           |                         | (2.62)           |
| InstOwn                   |                    | -0.074           |                         | -0.075           |
|                           |                    | (-1.64)          |                         | (-1.67)          |
| MTB                       |                    | -5.066*          |                         | -5.029*          |
|                           |                    | (-1.87)          |                         | (-1.85)          |
| ni_growth                 |                    | -0.001           |                         | -0.001           |
|                           |                    | (-0.74)          |                         | (-0.74)          |
| N                         | 5407               | 5130             | 5407                    | 5130             |
| adj. $R^2$                | 0.52               | 0.53             | 0.52                    | 0.53             |
| Firm FE                   | Yes                | Yes              | Yes                     | Yes              |
| Year-Month FE<br>Controls | $Yes \ No$         | $Yes \ Yes$      | $Yes \ No$              | Yes $Yes$        |
|                           | 110                | 1 03             | 110                     | 1 03             |

Table 7: Information Content of Local Announcement on ADR Market

This table examines market reactions in the ADR market around local earnings announcements. Our dependent variables are the three-day cumulative unsigned market-adjusted return (columns 1 and 2) and the three-day average trading volume (columns 3 and 4) around local earnings announcements. Our main variable of interest is I(After)\*I(IFRS). I(After)\*I(IFRS) is equal to one for IFRS-filers after November 2007 and zero otherwise. Our control variables include *ROA*, *size*, *Coverage*, and *InstOwn*. All variables are defined in Appendix C. Standard errors are clustered by firm. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                  | CAR[-1,1] | CAR[-1,1] | Log(Vol) | Log(Vol) |
|------------------|-----------|-----------|----------|----------|
| I(After)*I(IFRS) | 0.006*    | 0.008**   | 0.506*** | 0.473**  |
|                  | (1.89)    | (2.49)    | (2.75)   | (2.50)   |
| I(IFRS)          | 0.001     | -0.004    | -0.121   | -0.232   |
|                  | (0.20)    | (-0.73)   | (-0.37)  | (-0.70)  |
| I(After)         | 0.003     | 0.003     | 0.136    | -0.190   |
|                  | (0.93)    | (0.90)    | (0.54)   | (-0.86)  |
| ROA              |           | 0.035**   |          | -0.424   |
|                  |           | (2.23)    |          | (-0.45)  |
| Coverage         |           | -0.000    |          | -0.002   |
|                  |           | (-1.65)   |          | (-0.65)  |
| InstOwn          |           | 0.023***  |          | 0.291*   |
|                  |           | (8.73)    |          | (1.91)   |
| Size             |           | -0.007    |          | 0.566**  |
|                  |           | (-1.54)   |          | (2.24)   |
| ni_growth        |           | -0.001**  |          | 0.036    |
|                  |           | (-2.20)   |          | (1.44)   |
| MTB              |           | 0.751     |          | 5.192    |
|                  |           | (1.07)    |          | (0.15)   |
| N                | 627       | 495       | 609      | 477      |
| adj. $R^2$       | 0.19      | 0.26      | 0.87     | 0.89     |
| Firm FE          | Yes       | Yes       | Yes      | Yes      |
| Year FE          | Yes       | Yes       | Yes      | Yes      |
| Controls         | No        | Yes       | No       | Yes      |

Table 8: Bid-Ask Spread Analysis.

This table displays analyses of bid-ask spread around the 20-F filing date. Specifically, we examine the average daily bid-ask spread over the seven days following Form 20-F filing. *Delay* is a measure of days between 20-F filing and local earnings announcement day. We include the same controls as in Table 4. *Above\_10* is an indicator variable that equals to one if delay is bigger or equal than 10 days, zero otherwise. All variables are defined in Appendix C. Standard errors are clustered by firm. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                              | Bid-Ask Spread | Bid-Ask Spread | Bid-Ask Spread |
|------------------------------|----------------|----------------|----------------|
| I(After)*I(IFRS)             | -0.496         | -1.209**       | -2.317***      |
|                              | (-0.95)        | (-2.44)        | (-3.64)        |
| I(After)*I(IFRS)*Delay       |                | 0.011          |                |
|                              |                | (1.07)         |                |
| I(After)*I(IFRS)*I(Above_10) |                |                | 2.258**        |
|                              |                |                | (2.57)         |
| Delay                        |                | -0.006         | $-0.017^*$     |
|                              |                | (-1.10)        | (-1.90)        |
| I(IFRS)*Delay                |                | 0.001          | 0.014          |
|                              |                | (0.24)         | (1.39)         |
| I(After)*Delay               |                | 0.004          | $0.010^{*}$    |
|                              |                | (1.14)         | (1.90)         |
| $\overline{N}$               | 491            | 491            | 491            |
| $R^2$                        | 0.87           | 0.88           | 0.88           |
| Firm FE                      | Y              | Y              | Y              |
| Year FE                      | Y              | Y              | Y              |
| Controls                     | Y              | Y              | Y              |

Table 9: Placebo Information Acquisition Analysis.

This table displays the results of regressing measures of information acquisition on firms' characteristics and placebo treatment and post variables. *Delay* is a measure of days between 20-F filing and local earnings announcement day. *IFRS* is an indicator variable that equals one for firms that don't file in IFRS but are from countries that allow IFRS filing (i.e. Japan) and zero otherwise. We include the same controls as in Table 4. All variables are defined in Appendix C. Standard errors are clustered by firm. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                        | [0,7]   | [0,10]  |
|------------------------|---------|---------|
| I(After)*I(IFRS)       | -5.837  | -4.268  |
|                        | (-1.03) | (-0.89) |
| I(After)*I(IFRS)*Delay | -0.044  | -0.036  |
|                        | (-0.87) | (-0.84) |
| Delay                  | 0.067*  | 0.052*  |
|                        | (1.88)  | (1.78)  |
| N                      | 258     | 258     |
| $R^2$                  | 0.63    | 0.63    |
| Firm FE                | Y       | Y       |
| Year FE                | Y       | Y       |
| Controls               | Y       | Y       |

**Table 10: Other Investors' Attention Measures** 

This table displays the results of regressing measures of information retrieval (downloads of 20-Fs for the first 15 and 30 days after filing) on firms' characteristics and treatment and post variables. *Delay* is a measure of days between 20-F filing and local earnings announcement day. We include the same controls as in Table 4. All variables are defined in Appendix C. Standard errors are clustered by firm. \*\*\*, \*\*, \* indicates significance at the 0.01, 0.05, 0.10 level, respectively.

|                        | [0,15] | [0,15]   | [0,30] | [0,30]         |
|------------------------|--------|----------|--------|----------------|
| I(After)*I(IFRS)       | 1.322  | 5.500**  | 0.467  | 4.177**        |
|                        | (0.98) | (2.09)   | (0.47) | (2.19)         |
| I(After)*I(IFRS)*Delay |        | -0.062** |        | $-0.052^{***}$ |
|                        |        | (-2.35)  |        | (-2.68)        |
| Delay                  |        | 0.022    |        | 0.014          |
|                        |        | (1.20)   |        | (1.11)         |
| I(After)*Delay         |        | -0.021   |        | -0.015         |
|                        |        | (-1.09)  |        | (-1.03)        |
| I(IFRS)*Delay          |        | 0.006    |        | 0.011          |
|                        |        | (0.23)   |        | (0.59)         |
| N                      | 627    | 627      | 613    | 627            |
| $R^2$                  | 0.69   | 0.70     | 0.67   | 0.68           |
| Controls               | Y      | Y        | Y      | Y              |
| firm FE                | Y      | Y        | Y      | Y              |
| Year FE                | Y      | Y        | Y      | Y              |