

When do investors pay attention to foreign filings? *

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Abstract

This paper studies consequences of the SEC's 2007 decision to eliminate U.S. GAAP reconciliation requirements for cross-listed firms that follow IFRS. We conjecture that following this elimination, Form 20-Fs filed with the SEC become more similar to information released in the home country, hence affecting investors' information acquisition activities. First, we document a significant delay between information released in the home country and in the U.S. for the same firm, although the magnitude of the delay decreases significantly following elimination of reconciliation for IFRS reporting firms. Next, we present novel evidence that investors download incrementally fewer IFRS firms' unreconciled Form 20-Fs *each day* that they are filed with a delay. This shift in investor attention is more pronounced for firms with lower information acquisition costs from local earnings reports (similar language to English). Moreover, IFRS firms that file 20-Fs within ten days of the local earnings announcements after the end of the reconciliation requirement experience an increase in liquidity (lower bid-ask spreads), but these benefits are reversed when the delay exceeds more than 10 days. Finally, we provide evidence of increased information transfer between markets through increased return comovements between the home market and the U.S. ADR market for a given firm. Our results bring novel and important insights regarding the implications of *timeliness* and *information integration* of Form 20-Fs on investor attention, liquidity and market integration.

Keywords Attention, Market Integration, Accounting Standards, IFRS

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1 Introduction

On November 15, 2007 the Securities and Exchange Commission (SEC) unanimously voted to eliminate the requirement that foreign private issuers should reconcile their accounting information to U.S. GAAP if the firm prepares its financial statements in accordance with IFRS. Since then, studies have examined capital market consequences to such change in regulation, finding mixed evidence or virtually no changes in liquidity, informational content of 20-F filings, cost of capital, and others.¹ We add to the prior literature by taking into consideration two important aspects of the cross-listed setting that have gone overlooked in prior studies and can explain the mixed results: 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 following the change in regulation, foreign U.S. filings (Form 20-Fs) became more redundant to local home country filings, and investors may be less keen to acquiring these redundant filings in the U.S. the more delay there is in filing the 20-Fs.

Typically, a firm cross-listed in the U.S. releases earnings in the home country, files its annual report with the local market, and then files its 20-F with the SEC, usually with a 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 following elimination of the reconciliation requirement. Many firms will release earnings in the home country much earlier than 180 days following fiscal year-end in accordance with home market requirements.

Before 2007, all Form 20-Fs contained U.S. GAAP reconciliations. Therefore, information released in the home country worked as imperfect substitutes for 20-Fs. As such, U.S. investors would optimally allocate their attention between both reports by focusing mainly on the reconciliation information disclosed in 20-F filings, for comparability with other firms listed in U.S. markets. After 2007, IFRS firms can file 20-Fs without reconciling to U.S. GAAP, increasing

¹See [Islam, 2017] for a review.

the similarity between local and foreign filings.² Hence, *all else equal*, we would expect investors to allocate less attention to delayed 20-Fs, since they could get similar unreconciled information in more timely reports (local earnings announcements, Form 6-Ks, or local filings).³ In other words, the longer the filing delay of the Form 20-F for IFRS firms in the post-reconciliation period, the less likely investors would pay attention to the 20-Fs that 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 release in the home country. Our analyses provide evidence that this delay plays an important role on investors' information acquisition decisions.⁴

We start our analyses 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. This result is consistent with evidence suggesting that the 20-F reconciliation was costly and likely to affect firms' reporting decisions([Jiang et al., 2010]). Nevertheless, a nontrivial delay still

²We use the term "IFRS firms" to represent firms that file their annual reports in accordance to IFRS.

³Our conjecture holds even if U.S. GAAP and local GAAP have similar information quality (precision), as long as processing the local information is more costly to U.S. investors than processing the 20-F information. Before, investors would be indifferent between waiting for the reconciled 20-F or acquiring information released in the home country. The end of the reconciliation requirement would increase the cost of interpreting the unreconciled 20-F information for IFRS firms, *increasing* the net cost to waiting for delayed 20-Fs of IFRS firms.

⁴We measure the 20-F filing delay as the difference between the home country earnings announcement and the Form 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, there are a number of sources investors can choose to acquire information from, including home market earnings announcements or Form 6-Ks that foreign firms cross-listed in the U.S. file with the SEC to disclose material information. The earnings announcement, despite containing summary numbers rather than the full set of information that an annual report would provide, is the first event in which information that would be disclosed in a Form 20-F becomes publicly available to investors. Also, because many countries lack a disclosure database like EDGAR in the U.S., it is very difficult to track down many foreign firms' annual reports and the date in which they were filed. 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.

exists, even for IFRS firms following the change in regulation.⁵

Next, we examine changes in investor attention. Ideally, we would like to have data on downloads of every accounting report across all markets. However, data limitations allow us to examine only the downloads of Form 20-F filings in the U.S. As such, we can investigate information acquisition decisions of investors of cross-listed firms in the U.S. ADR (American Depository Receipts) market who rely on EDGAR as their main information source. EDGAR is the SEC system that archives reports from publicly listed firms on the U.S. markets, including cross-listed firms.⁶ In 2003, EDGAR started to provide information on the users of financial reports; for example, what reports they are downloading (i.e., 10-Q, 20-F, 8-K) and when. We use such information to compile our measures of investor attention, namely the *number of Form 20-F downloads* following its filing date, using different time windows.⁷

Our results highlight the importance of the Form 20-F filing delay to investors. Specifically, we show that for IFRS firms after 2007, investors incrementally acquire more Form 20-Fs *conditional* on having *no delay* between the local earnings announcement and the 20-F filing date. This result is consistent with investors using the 20-F as a timely source of information. However, investors become significantly less prone to acquiring unreconciled 20-Fs the longer the delay between the local announcement and the 20-F filing. These results suggest that investors might shift attention towards 20-Fs if filed in a timely manner, but shift attention away from 20-F filings if they are filed with a significant delay. At a minimum, these results highlight that the end of the reconciliation requirement affected the complementary role of information released in the two

⁵This result is robust to using different databases to collect foreign earnings announcements dates.

⁶To the best of our knowledge, EDGAR is also one of the few websites that convey machine-readable information of firms from several countries.

⁷We can examine downloads of Form 6-K filings that pertain to earnings announcements, but because the 6-K is not the only major source of information investors have access to, we cannot make conclusions about investor behavior. Furthermore, 6-Ks, if filed, are not annual reports but are more summaries of the year's financials, which will be presented in the local annual reports. In untabulated analyses, we find that download patterns of such Form 6-Ks do not significantly change for IFRS firms in the post-reconciliation period, and that investors could be relying on other sources of information released at that time.

markets (home country and the U.S.), which ultimately affected investors' information acquisition decisions. These results also indicate the importance of the Form 20-F filing delay and that not considering this delay can lead to erroneous inferences.

We also examine how language distance from English (i.e. [Lewis et al., 2009]; [Brochet et al., 2016]) affects investor attention on 20-F filings. We conjecture that language distance increases the cost of acquiring and processing information produced in a foreign market. Intuitively, we expect U.S. investors to understand U.K. financial reports more easily than they could understand a Brazilian or Chinese local financial report. We find evidence supporting this conjecture as investors download even fewer unreconciled 20-F filings of IFRS firms domiciled in countries that speak languages similar to English, as the 20-F filing delay gets longer. In other words, investors' attention shifts away from unreconciled 20-Fs when the home country uses a language more similar to English (low acquisition cost of home country information) and as the 20-Fs are filed with greater delays (high acquisition cost of the 20-F containing little nor no new information).⁸

If the Form 20-F filing delays are really important determinants of investors information acquisition behavior, then it is possible that firms that file their 20-Fs with virtually zero delays experience positive market benefits. We find results consistent with this story as we find that 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 becomes longer than 10 days. Thus, IFRS firms can experience not only benefits of decreased costs of not having to reconcile their 20-Fs to U.S. GAAP, but they can also experience market benefits of higher liquidity when filing their 20-Fs. However, these market benefits only exist if the delay in filing 20-Fs is virtually zero, or less than ten days following the earnings announcement in the home

⁸It is true that firms in countries that speak very different languages still file 6-Ks in English. Again, 6-Ks contain no more than summary information, so the emphasis would be on local 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.

country.

Finally, based on the rational inattention literature (see [Veldkamp, 2006]), we examine how the new regulation changed returns comovement across markets. [Veldkamp, 2006] shows that investors form portfolios by rationally allocating their attention on multiple signals. In an information market equilibrium, we may observe high returns comovement among assets because investors decide to acquire similar signals. If removing the U.S. reconciliation leads to U.S. investors acquiring the same signals as local investors, then we expect to find greater returns comovement between the equities listed in each market (for IFRS firms, after the change in regulation). Consistent with this prediction, we observe that IFRS firms display higher monthly returns comovement between the home and U.S. markets following reconciliation elimination. Furthermore, the increased returns comovements are more pronounced during the months in which the home country earnings announcement occurs. This suggests increased information spillovers from the home market to the ADR market, resulting from investors who choose to acquire information from the local market following reconciliation elimination.

Our paper brings several new insights relevant for both academics and practitioners. We contribute to the literature on cross-listing 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 cross-listed firms around the 20-F reconciliation requirement elimination ruling. While the literature has focused on 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 behavior of investors other than indirect proxies such as abnormal volume or volatility around the 20-F filing date. However, studying investor behavior effects is very important, as a speech made by John W. White, Director of the Division of Corporate Finance for the SEC, noted in a speech in 2007: “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, which can shed light on how investors use unreconciled and reconciled information surrounding the change in regulation.

Secondly, and perhaps more importantly, we add to the literature on reporting lags and timely disclosures. Prior studies examining the consequences of the 2007 reconciliation requirement elimination did not consider the role of home country earnings releases or the length of the delay between local and foreign filings. 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 became timelier relative to local filings (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 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 they are filed with little to no delay. Furthermore, we also document market benefits of timely disclosure through higher liquidity experienced by IFRS firms who file their 20-Fs with zero delay with respect to home country earnings announcements, even though these 20-Fs provide no 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. Our results could be of interest to policymakers who consider eliminating this requirement for all cross-listed firms or shortening the 20-F filing deadlines.

Finally, our findings contribute to the literature on accounting information produced in international markets. Although 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 multi-market trading in a 20-F reconciliation elimination setting and how investors use information from both markets before and after the 2007 ruling. We find that investors of cross-listed IFRS firms' ADRs are less likely to rely on Form 20-Fs for information once the 20-F filings in the U.S. stop disclosing reconciliation information and are filed with a delay. We also find significant evidence of increased returns comovement between IFRS firms home country equity and ADRs following reconciliation elimination. Furthermore, this increase is more pronounced in months during which cross-listed firms home country earnings releases occur. These results provide evidence of greater use of information released in the home country and using that information in the ADR market, which makes sense given that delayed Form 20-Fs are less likely to be used when investors can obtain the same information in a more timely fashion elsewhere. More importantly, we demonstrate the importance of considering the *other* market when studying cross-listed firms and 20-F disclosures, 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 in Section 5. We conclude in Section 6.

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, firm value, and lower cost of capital (i.e. [Karolyi, 1998], [Karolyi, 2006]; [Lang et al., 2003]; [Dojidge et al., 2009]). They can take advantage of stringent standards and enforcement in the United States that may not be as strong in their home country as a signal that they are committed to disclosure, transparency, and investor

protection by cross-listing. This commitment entails costs as well, however, and one major cost for cross-listing firms is reconciliation of financial disclosures from home country accounting standards to U.S. GAAP ([Fanto and Karmel, 1997]). 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. 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]).⁹

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-reporting cross-listed firms has since voluntarily disclosed reconciliations to U.S. GAAP after this requirement was lifted ([Kim et al., 2012]). However, the decision by SEC was not a popular one with everyone. For instance, the CFA Institute argued that the U.S. GAAP reconciliation had 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 for IFRS firms. Overall, there is mixed evidence in the literature. Some papers argue that the reconciliation elimination had positive effects on earnings quality characteristics such as persistence, lower analyst forecast dispersion, conservatism, 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 emanating from 20-F reconciliation elimination, including decreased comparability

⁹For 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.

([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 an effect with respect to various capital market consequences, such as liquidity and cost of equity ([Kim et al., 2012]; [Yu, 2011]) and information content of the 20-F filings ([Jiang et al., 2010]). Combined with the fact that even the positive effects on certain earnings quality and informativeness documented in [Hansen et al., 2010] were only for firms that had reconciled the most in the pre-elimination period, the literature at best comes to inconclusiveness on the capital market effects of reconciliation elimination. Overall, this could suggest that IFRS and U.S. GAAP are of comparable quality and/or the 20-F reconciliation information is not very useful or relevant for investors ([Islam, 2017]).

Another reason why we may not see many capital market effects after reconciliation is eliminated is that investors can acquire the same 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 local earnings releases. Cross-listed firms are simultaneously listed in their home country exchange as well as in the U.S. ADR market.¹⁰ 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. This means that investors are faced with a choice of waiting for the Form 20-F to get filed or acquire and process the local earnings information in advance of the 20-F filings. 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 and exploiting dates of the first release of information (local earnings announcement) and the next release of the same information (with potential differences in language and other minor differences) in

¹⁰We do not examine foreign companies that are only listed in the United States, as the Form 20-F is their only disclosure and there are no other sources of information that would have to be reconciled or left unreconciled.

another market (ADR market Form 20-F filings), and the potential lag between the two near substitute sources of information.

The financial information included in the local and 20-F filings are generally the same for IFRS firms once they no longer have to disclose U.S. GAAP reconciliation in their 20-Fs. Appendix B provides two examples of the home country annual report and the Form 20-F. The first example is Gerdau 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 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, in which the information was already disclosed in Brazil back in February. The second example is for Embraer, another Brazilian IFRS reporting 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, 2013.¹¹ This suggests that firms use their discretion to release 20-F reports with shorter or longer delays relative to the local earnings announcements. 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.¹² 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 content, both quantitative and qualitative, are exactly the

¹¹We were unable to track down the exact filing date of this annual report, indicating the difficulty of collecting exact filing dates. 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, using the earnings announcement date (first date in which pertinent information was released) as our proxy for local filing date.

¹²We 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, as the fiscal year was 2012. What is important is to notice the same numbers in U.S. dollars in both income statements.

same.¹³ Prior to 2007, however, 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]).

As such, it is important to consider the fact that investors have access to the same information that would be disclosed in Form 20-Fs days, weeks, or even months earlier through the earnings announcements and annual reports in the home market, especially after 2007. The literature that has studied effects of reconciliation elimination has not considered this other medium of information. We are the first to investigate how investor attention is affected by reconciliation and to consider the interactive effect of the length of the 20-F filing delay relative to the local earnings announcement, which is the first event in which the same information becomes public.

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 to examine the costliness of U.S. GAAP reconciliations. Next, we ask whether investors are less likely to pay attention to 20-F filings when they are delayed and don't provide reconciliations or any material information that cannot already be found in the local earnings reports, and whether this effect depends on the language spoken in the home country (i.e., information acquisition costs resulting from translation issues). We then further examine the role of filing delay by investigating whether firms can experience higher liquidity benefits from filing Form 20-Fs if they provide more timely disclosures

¹³For 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).

than if they file with longer delays. Finally, we examine returns correlations to see whether and under what circumstances investors potentially acquire information from the local market (where information is first released) and trade on the U.S. ADR market (where information would be released with a delay). The research design and results are described in detail in the subsequent sections.

3 Research Design

3.1 Sample and Data

We start by compiling 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 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 shock in 2007.

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 from scraping 20-F reports from EDGAR using PERL. All our continuous variables are winsorized at the 1% and 99% levels and are defined in Appendix C.

We explore a recent regulation by the SEC that allowed 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 would likely change the complementary role of home country earnings releases and 20-F filings. We employ a difference-in-differences design to compare changes in 20-F download patterns and other outcomes for cross-listed firms that use IFRS 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 specific characteristics of the research design that helps our identification strategy. First, the regulation affected only a subsample of cross-listed firms (IFRS reporters). Thus we can use non-IFRS filers as the counter-factual (control group). This design allows for proper control for potential confounding factors that present patterns around this same time period. Unlike IFRS firms, non-IFRS users continue reconciling to U.S. GAAP after 2007, and this lack of change in disclosure make them appropriate controls. Second, many countries mandatorily adopted IFRS in the sample period, allowing us to potentially disentangle alternative firm-specific endogeneity regarding the accounting standard adopted. Finally, some countries adopted IFRS but allowed firms to file according to other accounting standards, such as U.S. GAAP. We expect the regulation to have no effect on such firms, allowing us to perform a valid placebo analysis, strengthening the internal validity of our design.

Appendix A summarizes the design of our research setting. The first timeline shows the typical trend of events for a cross-listed firm. After fiscal year-end, firms take time to prepare earnings announcements in their country of domicile, and either simultaneously or shortly thereafter file their financials with the local market. Afterwards, these firms file the Form 20-Fs with the SEC. This timeline is broken down for the treatment and control group before and after 2007, the year the U.S. GAAP reconciliation requirement was eliminated. This depicts the difference-in-difference design for our analyses. First, we see that for the treatment group (IFRS firms), 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, with no reconciliation to U.S. GAAP. For the control group (non-IFRS reporters), before 2007 these firms filed in the home country using local GAAP, and for the 20-F they disclosed using local GAAP and the U.S. GAAP reconciliation information. After 2007, they disclose the same way, still providing 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 regulation in 2007 that allowed IFRS firms to not reconcile anymore with U.S. GAAP saved these firms costs of reconciliation that they had incurred prior to 2007. If such costs decreased for IFRS firms, it is likely that these firms required less time to produce and file Form 20-Fs. As such, we investigate the change in delay in filing 20-Fs before and after the 2007 regulation relative to a control sample of non-IFRS cross-listers.

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. Thus, we expect to see no change in *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 if the observation has fiscal year end November 15, 2007 or later. Other control variables that could also affect disclosure timing include firm size as measured by logged total assets (*Size*), leverage, measured by taking the ratio of total liabilities over total assets (*Lev*), ROA, an accounting performance measure calculated by dividing net income before extraordinary items by total assets (*ROA*), analyst coverage collected from IBES (*Coverage*), institutional ownership collected from the Thomson Reuters 13f Institutional Holdings dataset (*Instown*), and ADR age (*Age*). Each regression contains firm and year fixed effects.¹⁴ If IFRS firms' costs of preparing 20-Fs decrease following the elimination of the reconciliation requirement, we

¹⁴We 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*.

would predict the coefficient on $I(After)*I(IFRS)$ to be negative, which would indicate 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 for up to 10 days after the filing ($InfAcqui[0,10]_{it}$).¹⁵ Prior studies have used 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. The database contains a unique identifier related to the person acquiring the information, the date of the request, the filing requested and the CIK of the firm. Thus, to compute our measures of information acquisition, we aggregate all requests for a given filing on a daily basis. 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's website using PERL.

Despite cost savings potentially leading to shorter delays in 20-F filings, ADR firms still have 180 days to file a Form 20-F, so some delay is likely to persist. Hence, this leads to the main question of this paper: How does the 2007 elimination of the reconciliation requirement affect investors' attention of IFRS firms' Form 20-F filings, and does this effect depend on the how delayed these unreconciled 20-Fs are being filed?

We examine this question by using the aforementioned downloads measures, ($InfAcqui[0,7]_{it}$) and ($InfAcqui[0,10]_{it}$), as our dependent variables in a multivariate regression. Our main explanatory variable is again $I(After)*I(IFRS)$. Control variables include lagged logged total assets ($Size$), leverage ratio (Lev), profitability (ROA), analyst coverage ($Coverage$), institutional ownership of

¹⁵We obtain similar inferences if we expand our window to 15 or 30 days following the 20-F filing date.

the firm (*Instown*), and firm age (*Age*). Firm and year fixed effects are also included in each specification.

If investors can get the same IFRS information around the home market earnings announcement date, investors would have less incentives to wait for an unreconciled 20-F. This would likely become truer the longer investors have to wait for the 20-F filing. To examine this relation, we include an interaction term, $I(After) * I(IFRS) * Delay$, where *Delay* represents the number of days in between the local earnings announcement date and the 20-F filing date.¹⁶ If delay makes investors incrementally less willing to wait to download an unreconciled 20-F report, we expect the coefficient on this triple interaction term to be negative.

However, this is unlikely to be the case when home country information does not act as a good substitute for Form 20-Fs. Cross-listed firms are domiciled in foreign countries, where the official language is unlikely to be English. Language can serve as a cost of acquisition of imperfect substitutes for ADR investors, who are most likely to be English speakers. 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. Germany will therefore have a lower language distance score than China.

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

¹⁶When 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.

a country with below median language distance, and zero otherwise. We interact $LowDist$ with $I(After) * I(IFRS) * Delay$ to create a quadruple interaction term. Our goal is to see if the investors who end up paying less attention to delayed 20-F filings of IFRS firms in the post-reconciliation period are driven by firms from a country with an official language that is close to, or is English. This implies it is less costly for the investors to translate and interpret earnings releases in foreign languages similar to English, so it is even less necessary for these investors to have to wait for a delayed, unreconciled 20-F filing. If this were true, we would expect to see $I(After) * I(IFRS) * Delay * I(LowDist)$ to be negative, and this would confirm 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.

3.4 Liquidity and Returns Comovement

In addition to direct measures of investor attention, we examine market outcomes that can imply importance of timely disclosure and changes in investor behavior. First, we investigate liquidity implications of timely filings of Form 20-Fs. 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 wide empirical literature suggest disclosure is associated with higher liquidity, which is associated with lower cost of capital. ([Lang et al., 2012], [Amihud and Mendelson, 1986], [Amihud and Mendelson, 2008])

We use the average daily bid-ask spread of cross-listed firm immediately following the 20-F filing date as our measure of liquidity. The daily bid-ask spread for a given firm is calculated as $(Ask - Bid) / ((Ask + Bid) / 2)$.¹⁷ We then take the average daily bid-ask spread over the seven days following the 20-F filing to calculate our liquidity reaction variable, $Bid - ask Spread_{it}$. As in prior tests, the main explanatory variables are $I(After) * I(IFRS)$ and

¹⁷We 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])

$I(After)*I(IFRS)*Delay$. 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).

Furthermore, while we acknowledge that as unreconciled 20-F filing delays get longer, investors are incrementally less keen to acquire and use the 20-Fs as a source of the firms information, we want to demonstrate that these investors rather use home country earnings information, which is timelier than the 20-Fs that contain virtually the same information. Ideally, we examine download patterns of filings in foreign markets; however, this data is not readily available and might not even exist in most countries. However, we use other methodologies to make inferences about investors using information in the home country, and we do so by investigating 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 the U.S. GAAP reconciliation, investors are subject to the same subset of signals about the fundamentals. Therefore, we should expect higher price comovements.¹⁸

To mitigate concerns that the source of information transfer is the U.S. market rather than the home country market, we conjecture that returns comovement should be greatest in the month of the *local* earnings announcement. If comovement is greater in this month, this would indicate increased information spillovers from the country in which an event occurred (home country) into which information has been transferred (the U.S.).

¹⁸One 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.

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.¹⁹ We run monthly regressions with the main explanatory variable being $I(After) * I(IFRS)$. To see if any result we find regarding information spillover is more pronounced in the month 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. Control variables include lagged logged total assets ($Size$), leverage ratio (Lev), profitability (ROA), analyst coverage ($Coverage$), institutional ownership of the firm ($Instown$), the market to book ratio (MTB) and firm age (Age).²⁰

3.5 Descriptive Statistics and Correlations

In Table 1, we compile descriptive statistics for our sample of cross-listed firms. The average number of daily downloads of Form 20-Fs 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.

The median firm files its Form 20-F with an 86 day delay relative to the home country earnings announcement, and 152 days following fiscal year end.

The median firm also takes 57 days from fiscal year end to make its earnings

¹⁹Daily 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 this time zone synchronicity.

²⁰We 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.

announcement in its home country. 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.

Correlations among the variables in our analyses are presented in Table 2. 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 lower reporting lags and 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. IFRS firms are also correlated positively with profitability (although insignificant), leverage, and size. 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.

4 Results

4.1 20-F Filing Delay

We start our analyses by examining disclosure timing trends for cross-listed firms around the elimination of the U.S. GAAP reconciliation requirement. Figure 01 plots the average trend for each of the filing delay variables for the treatment group (firms that report in IFRS and stop providing U.S. GAAP reconciliations from 2007 onwards) and for the control group (firms that did not adopt IFRS and thus continue to reconcile to U.S. GAAP beyond 2007).

In Panel A, we find that for fiscal year 2007, the year in which the recon-

ciliation requirement for IFRS firms was eliminated, the difference between the 20-F filing date and the fiscal year end (*dif_filing_fyend*) drops to 120 days for IFRS firms (from over 150 days just two years earlier) while for non-IFRS firms the lag is around 150 days both before and after 2007. In Panel B, we examine the lag between the fiscal year end date and the earnings announcement in the home market (*dif_reporting_fyend*). The graph depicts a moderate increase in the difference of *dif_reporting_fyend* between IFRS and non-IFRS firms in 2007 through 2009. This suggests that IFRS firms demonstrate a shorter lag between fiscal year end and the local earnings announcement than that of non-IFRS firms once they are no longer required to reconcile their 20-Fs. However, a closer look suggests that the increasing differences between the two groups seem to be more the result of an increasing lag time for non-IFRS firms rather than a decreasing lag time for IFRS firms. In Panel C, we provide trends of the lag between the local earnings releases and 20-F filings (*dif_filing_reporting*). We find a similar trend of an increasing gap between *dif_filing_reporting* of IFRS firms and that of non-IFRS firms in 2007. The gap narrows somewhat by 2009 but we still find evidence consistent with cost savings from not having to reconcile to U.S. GAAP for IFRS firms, as Form 20-F filings have become timelier in 2007 and sustained through 2009.

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 the different disclosure lag variables we examined in Figure 1. In Column 1, we find that the coefficient of $I(After) * I(IFRS)$, the interaction term representing firms that used IFRS accounting in the post-2007 period (non-reconcilers), is positive but insignificant when the dependent variable is *dif_reporting_fyend*. 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 this regulation change should 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*. 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 IFRS firms become more timely in filing the Form 20-Fs relative to the local earnings release date, as the coefficient on $I(After) * I(IFRS)$ is negative and significant when the dependent variable is *dif_filing_reporting*. Thus, 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. The 20-F filing delay relative to local earnings announcement controls for the home country earnings announcement lag and makes for a better measure of delay (*Delay*) in our context considering the SEC's decision to drop the reconciliation requirement for 20-Fs, without any effect on local earnings announcements.

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, if they exist. To ensure that data errors do not drive our results, we present 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 in between 61 and 64 days, 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 into heavy consideration.²¹

4.2 Information Acquisition Analysis

In this section, we examine information acquisition patterns - specifically, do investors rely on Form 20-F filings for information even after the reconciliation requirement is eliminated? Results are presented in Table 5. 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 less 20-F reports even after the U.S. GAAP reconciliation requirement is eliminated.

However, Columns 2 and 4, which include interactions with *Delay*, 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. market information releases*. There could

²¹Despite the regulation, firms were not required to file their unreconciled 20-Fs any sooner, and continue to have 180 days to file their 20-Fs. This variation in 20-F filing delays provides for interesting analyses, as some firms choose to file their Form 20-Fs sooner without the burden of having to reconcile to U.S. GAAP, while other firms choose to take their time because they still have 180 days to file their 20-Fs. Again, this delay in releasing what is otherwise similar information already released in the home country has been overlooked in prior literature.

be several forces behind this result. First, removing the reconciliation could alter several stakeholders' decisions (e.g. contract renegotiations, future contracts or trading strategies) as there will no longer be U.S. GAAP numbers in the reports. Moreover, if the 20-Fs are filed hours (or minutes) before the local disclosures, then the 20-F becomes the primary source of information for all investors. Furthermore, it is also possible that some investors found the Form 20-Fs with reconciliation information long and complex. After 2007, when the Form 20-Fs for IFRS firms removed reconciliations, these same investors were keen to acquiring more of these firms 20-Fs. In later tests we show that such increase in information acquisition activities is not driven by firms that had already been filing their Form 20-Fs with zero delay prior to the 2007 regulation change, mitigating any concerns about the endogeneity of characteristics of pre-2007 zero-delay firms.²²

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 median firm, which has a *Delay* of 86 days, this indicates an average daily decrease of 6.4 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 12.6 downloads per day; having the median length of filing delay would cut the number of potential downloads by more than half 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

²²From Table 5 we notice that the total effect is negative, by taking the sum of the interaction with the main effect coefficients. So as a whole, investors download less 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 following reconciliation elimination.

it is filed late compared to investors of other cross-listed firms that continue to provide U.S. GAAP reconciliations. This indicates that investors may not be willing to wait for information that is already available, albeit in a different country.

Next, we run cross-sectional tests to study how the cost of acquiring and processing information affects investors' attention. Specifically, we focus on the language distance between English and the firms' home language. Language is perhaps the biggest barrier to processing home country earnings releases. Instead, investors might decide to wait for the Form 20-F filing. Intuitively, we expect U.S. (ADR) investors to understand U.K. financial reports more easily than they could understand a Brazilian or Chinese local financial report. Therefore, investors could be more prone to shift their attention away from 20-Fs the lower the language distance to English.

Table 6 provides evidence consistent with language affecting investors' decisions to acquire information about a cross-listed firm via the Form 20-F filing.²³ 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 use the more timely information released in the home country instead.

Overall, Tables 5 and 6 provide results that speak to the importance of the 20-F filing delay and language of the home country with respect to how investors

²³Control variables are not tabulated for parsimony, but the same controls presented in Table 5 were also used in these regressions.

use the Form 20-Fs. Given that the IFRS firms' 20-Fs filed in November 2007 or later provide little to no incremental information beyond what was released in the home country, investors are more likely use the Form 20-Fs if they are made available at the same time as local earnings releases. However, we find that as the Form 20-F filing becomes more delayed relative to the local earnings announcement, investors become less likely to wait for the delayed 20-F, and the average number of downloads incrementally decreases. Furthermore, we see no decrease in the number of downloads of 20-F filings when local annual reports are in a language much different from English, even when these 20-F filings are delayed. Investors are less likely to wait to download a delayed 20-F filing only when the local earnings information is disclosed in a language more similar to English, perhaps because it is easier and less costly for them to acquire the same but timelier information presented in the home country. These results provide initial evidence that investors may view 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 Liquidity Analysis

In the previous section, we document a potential shift in investor attention away from Form 20-Fs for IFRS firms 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. To explore whether there could be market benefits for IFRS firms to file their unreconciled 20-Fs in a timely manner, we investigate whether liquidity, as measured by average daily bid-ask spreads, increases following the 20-F filing. We also examine if as the 20-F filing delay gets longer, the liquidity benefits become incrementally muted.

In Table 7, we present results for average daily bid-ask spread ($Bid - ask Spread_{it}$) patterns over the seven days following the 20-F filing date. In Column 1, the coefficient on $I(After)*I(IFRS)$ is insignificant, suggesting that

the bid-ask spread of IFRS adopting ADRs does not change in 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 slightly positive but statistically not different from zero. This indicates that the bid-ask spread does not increase incrementally for each day the 20-F is being delayed. However, the coefficient on $I(After) * I(IFRS)$ is negative and significant, indicating that timely 20-F disclosures can lead to positive liquidity reactions.

In Column 3, rather than interact $I(After) * I(IFRS)$ with a continuous variable for the filing delay in number of days, 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 is considered timely disclosure that can experience the most positive benefits. We find that the coefficient on $I(After) * I(IFRS)$ continues to be significantly negative. However, the coefficient on the triple interaction, $I(After) * I(IFRS) * I(Above_{10})$, is positive and significant, and the sum of the coefficients of $I(After) * I(IFRS)$ and $I(After) * I(IFRS) * I(Above_{10})$ is nearly zero. In other words, when firms file their 20-Fs with a delay exceeding ten days after the home country earnings announcement, any 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 86 days of delay (and 60-65 days in just the post-2007 period), only firms with very timely 20-F filings can experience any liquidity benefits at all relative to a control sample of non-IFRS filers.²⁴

²⁴We find qualitatively similar results if we use an indicator for delays lasting more than 5 days and delays lasting more than 15 days instead of ten days.

4.4 Returns Comovement

In Tables 5 and 6, 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 investigate 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 8. 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 further explore how price comovement changes with the end of the U.S. GAAP reconciliation and provide evidence of the direction in which information flow changes, we examine changes in price comovements during local earnings announcement months (i.e. a month in which Brazilian cross-listed firm announces its local earnings in Brazil). Specifically, 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).²⁵

5 Robustness

5.1 Removing old-zero delay filers

Across our tables, we observe a positive average treatment effect conditional on zero delay, meaning that there is an increase in investors' attention towards 20-F filings. One could argue that there should be no average treatment effect for firms that were already filing with zero delay before the change in regulation. Furthermore, the zero delay results could be undermined by endogeneity of pre-2007 zero-delay firms. In order to address this concern, we identify the zero-delay firms before the reconciliation eliminations (only six observations) and remove them from our sample. Hence, we decide for eliminating such observations from our sample because we cannot guarantee any desired statistical properties for coefficients estimated with such few observations. Table 9 displays our results for this new sample. The results are consistent with our prior tables, suggesting that the positive average treatment effect is not entirely due to old zero-delay filers and characteristics of such firms.

²⁵It 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).

5.2 Placebo Test

To ensure the robustness of our main results, we conduct a placebo analysis for our Table 5 results. In our paper, the treatment group consists of firms that were filing in IFRS prior to and following the reconciliation requirement elimination. 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. The control sample consists of firms in countries that have no voluntary IFRS adopters during the sample period.

Results of the placebo analyses are presented in Table 10. 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.

5.3 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 5 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 11. Overall, we find similar results as we did in Table 5. 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, investor attention incrementally decreases significantly for IFRS firms such that they no longer have to disclose reconciliations to U.S. GAAP as the 20-F filing delay gets longer.

6 Conclusion

Since 2007, when the SEC implemented a rule change to eliminate the Form 20-F reconciliation requirement for foreign firms that use IFRS and are cross-listed in the U.S, the literature has presented mixed evidence regarding the informativeness of 20-F filings, pre- and post-reconciliation elimination. In this paper, we examine the effects of the SEC's ruling on investor attention. 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 market), an important aspect that has not been incorporated in prior literature. First, 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. We then investigate whether investor attention shifts away from unreconciled 20-Fs, and how that shift is affected by the delay. The delay is important because with a positive delay, it implies that the same information was made available days, weeks, or months earlier, albeit in a different country.

Specifically, we find that on average, investors do not download incrementally fewer Form 20-Fs of IFRS firms following reconciliation elimination. When we incorporate the filing delay into our model, however, we observe that when there is no delay in between the local earnings announcement and the 20-F filing, more investors download the 20-Fs. This implies that the informativeness of un-

reconciled 20-Fs has not necessarily declined. However, for every day the 20-F filing of an IFRS firm post-2007 gets delayed, investors download less 20-Fs. Thus, when the 20-F is filed with a delay relative to the local earnings announcement, investors' preferences for unreconciled 20-Fs incrementally decrease. At this point, the cost of waiting outweighs the benefits of ease of interpretation, and investors may be shifting their attention away from the less timely 20-Fs towards substitute sources of information.

We also find that the incrementally decreasing downloads of unreconciled 20-Fs are driven by firms domiciled in countries with an official language that is similar to English. Thus, when the costs of translation and interpretation are not as high, investors are more likely to forego waiting for the 20-F filing and rather paying attention to the local earnings reports. This also provides supporting evidence that investors may use local filings as a substitute source of information when 20-Fs are filed with delays.

Furthermore, 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 imply that firms can benefit from timely disclosure; however, any 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.

Moreover, we find that the returns comovement between the two markets (home and U.S.) increases for IFRS firms in the post-reconciliation elimination period, as investors now pay more attention to a common information subset (local earnings) rather than on separate information media (local and U.S. filings). This is confirmed by the increased returns comovements being more pronounced during the month in which the local earnings announcement occurs (the common information subset). This indicates increased information spillovers from the home market to the ADR market, suggesting increased use of information

substitutes for IFRS firms in the post-reconciliation elimination period.

While the literature has shown relatively mixed evidence regarding the value of the SEC's 2007 decision to eliminate the reconciliation requirement for IFRS firms, prior studies have not considered the fact that information is also released in the home market nor the delay that 20-Fs are usually filed with. We show in this paper 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 less timely information about the firm through Form 20-Fs that no longer provide U.S. GAAP reconciliations. We show trends and changes in patterns following the SEC decision, but we do not make claims about whether the reconciliation elimination was a good or bad idea. However, given that benefits of 20-F filings for IFRS firms in the post-reconciliation elimination period seem to exist when filed in a timely manner, the SEC could require these firms to shorten delays of filing Form 20-Fs. We leave it to future research could try to interact these changes in investor attention with informativeness of the 20-F disclosures, or study if investors can profit by translating and interpreting local earnings releases versus 20-Fs. Future research could also see why reconciliations seem to lack information content and why if unreconciled 20-Fs are filed with no delay, investor attention seems to increase. Nonetheless, this study should serve as interest to regulators, accountants, investors, academics, and even current and potential U.S. cross-listed firms in learning about where investors acquire information about a cross-listed firm, and how that has changed with respect to the 2007 SEC ruling.

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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

<http://ri.gerdau.com/enu/4105/2008.12RelatriodaAdministracaoGerdauConsolidadoIngls.html/2008.12RelatriodaAdministracaoGerdauConsolidadoIngls.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.
IFRS Summary Financial and Operating Data

	(Expressed in thousands of Brazilian Reals - R\$ except quantity of shares and amounts per share)		
	2008	2007	2006
Net sales	41,907,845	30,613,528	25,883,911
Cost of sales	(31,018,946)	(23,133,902)	(19,039,266)
Net income	4,944,898	4,302,966	4,261,478

Annual Report:

Net Income (R\$ million)	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	47.1%
Foreign Exchange Translation ²	(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 17:30:44
Documents
6

Period of Report
2012-12-31



ABOUT EMBRAER

GOVERNANCE

FINANCIAL INFORMATION

3/13/2013

4Q12 CONFERENCE CALL

3/12/2013

4Q12 EARNINGS RESULTS RELEASE

Consolidated Statement of Income Data	Year ended December 31			
	2012	2011	2010	2009
Revenue	6,177.9	5,803.0	5,364.1	5,497.8
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	(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	247.8	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	
	US\$	R\$	US\$	R\$	US\$	R\$
RECEITAS LÍQUIDAS	6.177.924	12.201.715	5.802.953	9.858.055	5.364.068	9.380.625
Custo dos produtos e serviços vendidos	(4.682.950)	(9.248.569)	(4.495.858)	(7.638.825)	(4.338.122)	(7.582.652)
LURO BRUTO	1.494.969	2.953.146	1.307.095	2.219.230	1.025.946	1.797.963
RECEITAS (DESPESAS) OPERACIONAIS						
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	(77.334)	(152.310)	(85.252)	(143.557)	(72.133)	(126.102)
Outras receitas (despesas) operacionais, líquidas	(42.832)	(88.325)	(221.430)	(410.411)	9.416	16.730
Equivalência patrimonial	(234)	(421)	(340)	(624)	-	-
RESULTADO OPERACIONAL	612.075	1.217.431	318.240	521.728	391.653	685.520
Receitas (despesas) financeiras, líquidas	(6.769)	(11.398)	(90.716)	(172.509)	17.573	30.885
Variacões monetárias e cambiais, líquidas	8.813	16.824	20.024	32.809	(1.080)	(1.350)
LURO ANTES DO IMPOSTO	614.119	1.222.857	247.548	382.028	408.146	715.055
Imposto de renda e contribuição social	(265.530)	(523.849)	(127.124)	(210.774)	(62.714)	(114.877)
LURO LÍQUIDO DO EXERCÍCIO	348.589	699.008	120.424	171.254	345.432	600.178
Lucro atribuído aos:						
Acionistas da Embraer	347.824	697.792	111.608	156.297	330.265	573.592
Acionistas não controladores	765	1.216	8.816	14.957	15.167	26.586

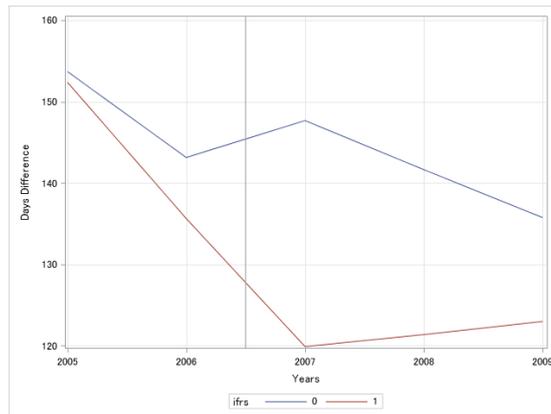
Appendix C

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.
$I(LowDist)$	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. 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 filing 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
$Instown_{perc}$	Institutional ownership in percentage, from Thomson Reuters Institutional (13f) Holdings
Age	Number of years since ADR first emission.
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

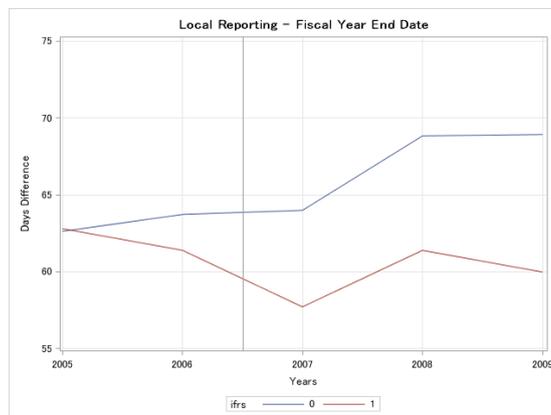
Figure 1: Average Dates Difference Between Reports

These figures display the average dates differences between local filings, 20-F filings and the fiscal-year end dates.

Panel A: 20-F Filing - FYE date



Panel B: Local Earnings Announcement - FYE date



Panel C: 20-F Filing - Local Earnings Announcement

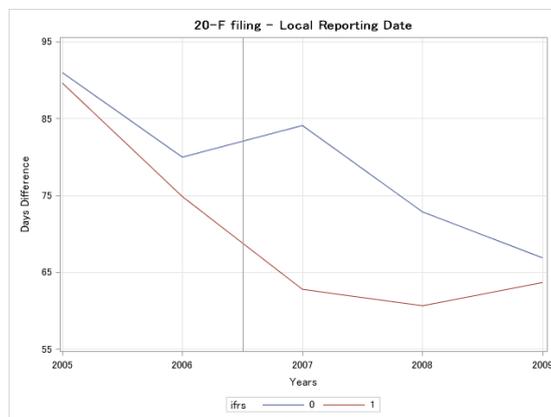


Table 1: Descriptive statistics

	N	Mean	Std	Q1	Q2	Q3
InfAcqui[07]	633	18.41	19.80	7.13	12.63	22.25
InfAcqui[010]	633	15.13	16.22	5.82	10.36	17.73
20-F - Local Date (Delay)	633	81.15	46.81	43.00	86.00	122.00
20-F - FYE date	633	139.76	43.01	99.00	152.00	180.00
Local - FYE date	633	64.55	33.97	42.00	57.00	78.00
I(IFRS)	633	0.29	0.45	0.00	0.00	1.00
language_distance	564	3.99	1.62	2.00	5.00	5.00
ROA	632	0.06	0.14	0.01	0.06	0.12
Leverage	618	0.33	0.26	0.06	0.33	0.49
Size	630	15.29	2.34	13.75	15.30	16.60
Coverage	633	46.38	56.22	7.00	29.00	64.00
Age	633	31.81	8.59	29.00	33.00	39.00
InstOwn	633	0.15	0.57	0.00	0.00	0.05

Table 2: Descriptive statistics

	InfAcqui[0,7]	InfAcqui[0,10]	Delay	I(IFRS)	LanguageDist	ROA	Leverage	Size	Coverage	Age	InstOwn
InfAcqui[07]											
InfAcqui[010]											
Delay	-0.239***	-0.241***	1								
I(IFRS)	0.0943*	0.0866*	-0.125**	1							
language_distance	-0.0691	-0.0680	0.188***	-0.413***	1						
ROA	0.0412	0.0398	0.0794*	0.0201	0.102*	1					
Leverage	0.0746	0.0757	0.00347	0.322***	-0.240***	-0.165***	1				
Size	0.264***	0.270***	-0.0688	0.427***	-0.233***	0.0775	0.516***	1			
Coverage	0.354***	0.358***	-0.234***	0.0727	-0.00503	0.190***	-0.0653	0.174***	1		
Age	-0.0512	-0.0677	0.00225	-0.125**	0.00551	-0.00291	-0.0908*	-0.389***	-0.00818	1	
instown_perc2	-0.0513	-0.0497	-0.00133	-0.122**	0.121**	-0.0122	0.0634	-0.0844*	-0.0115	0.0365	1

Table 3: Filing Delay analysis.

	Local - FYE date	20-F - FYE date	20-F - Local date
I(After)*I(IFRS)	2.153 (0.71)	-3.799 (-0.89)	-9.619** (-2.01)
Size	-5.431 (-0.82)	-0.921 (-0.15)	1.620 (0.22)
Leverage	1.668 (0.14)	-15.446 (-0.99)	-12.725 (-0.86)
ROA	9.960 (0.65)	13.601 (0.65)	14.380 (0.71)
Coverage	0.024 (0.35)	-0.063 (-0.91)	-0.047 (-0.75)
InstOwn	-2.407 (-0.95)	-3.047 (-1.09)	0.889 (0.47)
<i>N</i>	616	616	616
<i>R</i> ²	0.68	0.79	0.75
Firm FE	Y	Y	Y
Year FE	Y	Y	Y

Table 4: This table plots the filing delay for the IFRS filers after the 2007 elimination of reconciliation requirement. Filing delay refers to the number of days between the local announcement date and the 20-F filing. We use several sources to capture the local announcement date: Bloomberg, Datastream, IBES and the min(Bloomberg and Datastream).

Filing Delay: Days between Local announcement and 20-F filing			
	Average days	F-test	p-value
Bloomberg dates	61	9.23	0.00
Datastream dates	62	8.24	0.00
Min(Bloomberg,Datastream)	64	8.65	0.00
I/B/E/S dates	61	9.23	0.00

Table 5: Information Acquisition Analysis. This table displays results of regressing measures of information acquisition (downloads of 20-Fs for the first 7 days and 10 days) on firms' characteristics and treatment and postt variables. Specifically, we estimate $InfAcqui[0, 7] = a + bI(IFRS) * I(After) + X\Gamma + \eta_{it}$. X is a vector of firm characteristics and year and firm fixed effects. Delay is a measure of days between 20-F filing and local earnings announcement day. Standard errors are clustered by firm.

	[0,7]	[0,7]	[0,10]	[0,10]
I(After)*I(IFRS)	2.281 (1.05)	9.686** (2.49)	1.268 (0.72)	7.072** (2.24)
I(After)*I(IFRS)*Delay		-0.105*** (-2.64)		-0.082** (-2.53)
Delay		0.047* (1.66)		0.034 (1.48)
I(After)*Delay		-0.019 (-0.71)		-0.016 (-0.71)
I(IFRS)*Delay		0.003 (0.08)		0.007 (0.20)
I(IFRS)	-5.564** (-2.02)	-4.623 (-1.00)	-4.340* (-1.96)	-3.957 (-1.05)
I(After)	-8.297*** (-3.76)	-6.265** (-2.01)	-6.277*** (-3.60)	-4.616* (-1.78)
Size	8.220** (2.06)	8.333** (2.09)	6.506* (1.91)	6.613* (1.94)
Leverage	-1.143 (-0.12)	-0.142 (-0.01)	-0.334 (-0.04)	0.382 (0.05)
ROA	11.317** (2.07)	12.198** (2.18)	8.409* (1.84)	9.060* (1.95)
Coverage	0.050 (1.10)	0.046 (1.01)	0.040 (1.04)	0.037 (0.95)
InstOwn	-2.986** (-2.30)	-3.125** (-2.35)	-2.279** (-2.02)	-2.391** (-2.07)
<i>N</i>	616	616	616	616
<i>R</i> ²	0.63	0.64	0.63	0.63
Firm FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y

Table 6: Cross-sectional tests for Information Acquisition Analysis. This table displays results of regressing measures of information acquisition (downloads of 20-Fs for the first 7 days and 10 days) on firms' characteristics and treatment and post 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 to one if the firm is from a country with low language distance (below the median sample), zero otherwise. Standard errors clustered by firm.

	[0,7]	[0,10]
I(After)*I(IFRS)*I(Low Dist)	16.007*** (2.84)	13.255*** (2.91)
I(After)*I(IFRS)*Delay*I(Low Dist)	-0.131* (-1.79)	-0.114* (-1.91)
I(After)*I(IFRS)	-0.720 (-0.14)	-1.624 (-0.39)
I(After)*I(IFRS)*Delay	-0.020 (-0.30)	-0.008 (-0.14)
<i>N</i>	610	610
<i>R</i> ²	0.64	0.64
Firm FE	Y	Y
Year FE	Y	Y
Controls	Y	Y

Table 7: Average Bid-Ask Spread Analysis. This table displays analysis of bid-ask spread around the 20-F filing date. Specifically, we focus on the 7-days average bid-ask spread. Delay is a measure of days between 20-F filing and local earnings announcement day. We include the same controls as in Table 5. Above_10 is an indicator variable equals to one if delay is bigger or equal than 10 days, zero otherwise.

	Bid-Ask Spread	Bid-Ask Spread	Bid-Ask Spread
I(After)*I(IFRS)	-0.005 (-0.95)	-0.012** (-2.44)	-0.023*** (-3.64)
I(After)*I(IFRS)*Delay		0.000 (1.07)	
I(After)*I(IFRS)*I(Above_10)			0.023** (2.57)
Delay		-0.000 (-1.10)	-0.000* (-1.90)
I(IFRS)*Delay		0.000 (0.24)	0.000 (1.39)
I(After)*Delay		0.000 (1.14)	0.000* (1.90)
<i>N</i>	491	491	491
<i>R</i> ²	0.87	0.88	0.88
Firm FE	Y	Y	Y
Year FE	Y	Y	Y
Controls	Y	Y	Y

Table 8: Returns Comovement Analysis. This table displays the results of the following regression: $Y_{it} = \beta_{0I}(IFRS) * I(Post) + I(IFRS) + I(Post)$, where Y_{it} is the correlation between returns for firm 'i' at quarter 't' across-markets. Standard errors are clustered by firm-month.

	Corr	Corr	Corr	Corr
I(After)*I(IFRS)	0.039*** (3.03)	0.032** (2.57)	0.035** (2.60)	0.029** (2.20)
I(After)*I(IFRS)*I(Same)			0.070* (1.72)	0.065* (1.70)
I(IFRS)*I(Same)			0.036 (1.46)	0.033 (1.14)
I(After)*I(Same)			-0.049 (-1.44)	-0.045 (-1.29)
<i>N</i>	5407	5010	5407	5010
R^2	0.54	0.55	0.54	0.55
Firm FE	Y	Y	Y	Y
Year-Month FE	Y	Y	Y	Y
Controls	N	Y	N	Y

Table 9: Zero-delay result. This table restimates our information acquisition table removing firm-year observations that had zero delay before the change in the regulation (6 observations).

	New zero-delays [0,7]	New zero-delays [0,10]
I(After)*I(IFRS)	9.877** (2.40)	7.204** (2.17)
I(After)*I(IFRS)*Delay	-0.108*** (-2.61)	-0.084** (-2.51)
Delay	0.049* (1.70)	0.036 (1.53)
<i>N</i>	610	610
<i>R</i> ²	0.64	0.63
Firm FE	Y	Y
Year FE	Y	Y

Table 10: Placebo Information Acquisition Analysis. This table displays 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), zero otherwise

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

Table 11: Other Investors' Attention measures. This table displays results of regressing measures of information acquisition (downloads of 20-Fs for the first 7 days and 10 days) on firms' characteristics and treatment and post variables. Delay is a measure of days between 20-F filing and local earnings announcement day.

	[0,15]	[0,15]	[0,30]	[0,30]
I(After)*I(IFRS)	-0.582 (-0.40)	4.727* (1.67)	-0.207 (-0.22)	4.336** (2.28)
I(After)*I(IFRS)*Delay		-0.061** (-2.20)		-0.055*** (-2.89)
I(IFRS)*Delay		0.004 (0.14)		0.012 (0.67)
I(After)*Delay		-0.020 (-0.96)		-0.013 (-0.88)
<i>N</i>	616	616	616	616
<i>R</i> ²	0.62	0.62	0.66	0.67
Firm FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Controls	Y	Y	Y	Y