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22 December 2010

Elizabeth M. Murphy
Secretary
U.S. Securities and Exchange Commission
100 F. Street NE
Washington, DC 20549-1090

RE: Release No 33-9133, File No. 4-607: Notice of Solicitation of Public Comment on Consideration of Incorporation of IFRS into the Financial Reporting System for U.S. Issuers ('Notice')

Dear Ms. Murphy:

I am pleased to have the opportunity to provide comments on the Notice of Solicitation of Public Comments on Consideration of Incorporating IFRS into the Financial Reporting System for U.S. Issuers Release No. 33-9133; (the "Notice"). Please find enclosed copies of two recent academic studies I have co-authored which, I believe, may provide evidence relevant to the Commission in its deliberations regarding File No. 4-607. Both studies are summarized as follows:

Byard, Li and Yu (Forthcoming, the Journal of Accounting Research)
This study examines the change in the quality of analysts' information environment (forecast errors, dispersion etc) following mandatory IFRS adoption. In this study, my co-authors and I use a sample of European firms subject to mandatory IFRS adoption in 2005. We find that analysts' absolute forecast errors and forecast dispersion decrease following mandatory IFRS adoption, indicating an improvement in the quality of analysts' information environment. However, we find these results only for those mandatory IFRS adopters domiciled in countries with both strong enforcement regimes and domestic accounting standards that differ significantly from IFRS. Further, for mandatory adopters domiciled in countries with both weak enforcement regimes and domestic accounting standards that differ significantly from IFRS, we find that forecast errors and dispersion decrease more for firms with stronger incentives for transparent financial reporting. These results suggest that the benefits of mandatory IFRS adoption (in this case the improvement in firms' information environment) are not uniformly distributed across firms; the results highlight the important roles of enforcement regimes and firm-level reporting incentives in determining the impact of mandatory IFRS adoption.

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Byard, Mashruwala and Suh (Working paper, Baruch College, 2010)
This study examines the effects of the SEC's elimination of the requirement that IFRS-reporting Foreign Private Issuers (FPIs) cross-listed on U.S. exchanges reconcile their IFRS information to U.S. GAAP in their annual form 20-F filing. This rule change became effective in November 2007. In this study, my co-authors and I examine if this rule change affected the comparability of these FPIs and similar U.S. firms. To test for a change in comparability, we test for a reduction in "information transfer" between IFRS-reporting FPIs and similar U.S. firms following this rule change. Information transfer is the phenomenon whereby investors update their beliefs about one firm following a news release by a different firm, typically in the same industry. In this study, we examine how investors update their beliefs about U.S. firms following the earnings announcements of IFRS-reporting FPIs; we test for a reduction in the degree of such "information transfer" following the suspension of the U.S. GAAP reconciliation requirement for IFRS-reporting FPIs. Such a decrease in information transfer would signal a decrease in comparability, suggesting that investors face more difficulty comparing these firms following the rule change.

Consistent with this expectation, we find a statistically significant decrease in such information transfer from FPIs to similar U.S. firms following the rule change that suspended the US GAAP reconciliation requirement for IFRS-reporting FPIs. We find no evidence of a similar decrease in information transfer for other FPIs that do not report in IFRS. These results suggest a decrease in comparability between IFRS-reporting FPIs and U.S. firms following the rule change, as investors find it harder to compare IFRS-reporting FPIs with U.S. firms.

The latter study may be relevant to Part II of Release 33-9133 in that the results of this study suggest that investors face greater difficulty comparing IFRS-reporting FPIs with similar U.S. firms following the suspension of the U.S. GAAP reconciliation requirement for these firms.

Sincerely,

SCHOOL OF Zicklin BUSINESS

The Economic Consequences of Eliminating the Reconciliation of IFRS to U.S. GAAP: An Information Transfer Analysis

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November, 2010

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The Economic Consequences of Eliminating the Reconciliation of IFRS to U.S. GAAP: An Information Transfer Analysis

ABSTRACT

In November 2007, the SEC eliminated the requirement that IFRS-reporting Foreign Private Issuers (FPIs) cross-listed on U.S. exchanges reconcile their IFRS information to U.S. GAAP in their annual form 20-F filing. To provide evidence on whether this rule change affected the comparability of these FPIs and similar U.S. firms, we test for a reduction in information transfer between IFRS-reporting FPIs and similar U.S. firms following this rule change. Consistent with a decrease in comparability between IFRS-reporting FPIs and U.S. firms, we find that around FPIs' earnings announcements, information transfer from FPIs to similar U.S. firms decreased significantly, on average, after the rule change. We find no evidence of a similar decrease in information transfer for other FPIs that do not report in IFRS. Thus, in the absence of a U.S. GAAP reconciliation, investors appear to find it harder to compare IFRS-reporting FPIs with U.S. firms, leading to less information transfer from these FPIs to similar U.S. firms.

I. INTRODUCTION

Prior to November 2007, all Foreign Private Issuers (hereafter "FPIs") cross-listed on U.S. exchanges and subject to Securities and Exchange Commission (SEC) regulation were required to reconcile their domestic financial statements to U.S. GAAP as part of their annual form 20-F filing. However, in December 2007, the SEC issued a rule change eliminating this reconciliation requirement for the subset of FPIs that report in IFRS as issued by the International Accounting Standards Board (IASB) (hereafter "the rule change"). To provide evidence on whether the U.S. GAAP reconciliation enhanced investors' ability to compare IFRS- and U.S. GAAP-reporting firms, we examine whether the suspension of the U.S. GAAP reconciliation requirement for IFRS-reporting FPIs affected how investors use these firms' IFRS information to value similar U.S. firms, i.e., whether the rule change affected 'information transfer' from these FPIs to similar U.S. firms.

To examine this issue, we follow the prior literature on information transfer (e.g., Foster, 1981; Ramnath, 2002) and test if the effect of FPIs' earnings announcements on the stock prices and trading volume of similar U.S. firms − i.e., information transfer − decreased after the rule change. If the lack of a U.S. GAAP reconciliation makes it more difficult for investors to interpret FPIs' IFRS information and understand its implications for similar U.S. firms reporting in U.S. GAAP – i.e., if the rule change reduces comparability – one would expect information transfer between these FPIs and U.S. firms to decrease following the rule change (all else equal). This is because information transfer depends, at least in part, on the comparability of accounting data across firms (Schipper, 1990).

Suspending the U.S. GAAP reconciliation requirement for IFRS-reporting FPIs was controversial. As noted by the SEC, the primary purpose of the reconciliation is to enhance

comparability:

> "The current reconciliation requirements are designed to make financial statements prepared under non-U.S. GAAP more comparable to those prepared under U.S. GAAP." (SEC, 2000; p. 18)[1]

Thus, much of the debate preceding the rule change centered on whether IFRS and U.S. GAAP were sufficiently converged so that suspension of the reconciliation requirement would not impede comparability.[2] On the one hand, those in favor of the rule change argued that the two standards are already sufficiently similar such that doing away with the reconciliation would result in minimal loss of comparability. These respondents also tended to believe that users already have sufficient experience with IFRS to adequately understand any differences from U.S. GAAP. On the other hand, those opposed to the rule change cited the potential loss of information, given insufficient convergence to date between the two standards. These respondents also questioned the overall quality of IFRS and defended the U.S. GAAP reconciliation requirement as a potentially useful quality control mechanism for U.S. auditors when there are concerns about inconsistent application of IFRS by FPIs (SEC, 2007). In issuing its final rule change, the SEC argued that, on balance, the ability of investors to compare IFRS and U.S. GAAP information would not be compromised if the reconciliation were eliminated:

> "We believe that investors can understand and work with both IFRS and U.S. GAAP and that these two systems can co-exist in the U.S. public capital markets in the manner described in this rule making, even though convergence between IFRS and U.S. GAAP is not complete and there are differences between reported results under IFRS and U.S.

[1] On this issue, see also the speech by Richard Breeden, former Chairman of the SEC (Breeden, 1994).

[2] For example, in a comment letter responding to the SEC's original proposal to suspend the U.S GAAP reconciliation requirement for IFRS-reporting FPIs, the New York State Society of CPAs observed: "Until convergence of U.S. GAAP and IFRS is achieved substantially, the reconciliation should be retained. Many users of financial information will continue to need comparable information which can only be obtained by use of the reconciliation" (see NYSSCPA, 2007; p. 2). On the other hand, in their comment letter, KPMG observed "we believe that the IASB and the FASB have achieved an adequate degree of convergence of U.S. GAAP and IFRSs, so that it is possible for an informed user to understand the significant differences between the two sets of GAAPs and the likely effects of differences between IASB IFRSs and U.S. GAAP" (KPMG, 2007; p. 9).

GAAP." (SEC, 2007; p. 17-18)

Prior research on whether the U.S. GAAP reconciliation is useful to investors is inconclusive. Some studies find little difference in the value-relevance of IFRS and U.S. GAAP accounting numbers (e.g., Leuz and Verrecchia, 2000) and no stock price reaction around the 20-F filing date (e.g., Plumlee and Plumlee, 2007), suggesting that the reconciliation may well be redundant. On the other hand, some studies find that U.S. GAAP amounts are generally more value-relevant than IFRS amounts (Barth et al., 2010), as well as incrementally value-relevant after controlling for IFRS amounts (e.g., Henry et al., 2009). Moreover, abnormal trading volume is both higher around the 20-F filing date and appears to increase with the absolute value of the reconciliation amount (e.g., Chen and Sami, 2008). These findings suggest that the reconciliation may in fact be useful to investors. Given these conflicting prior results, the rule change suspending the U.S. GAAP reconciliation requirement offers an interesting natural experiment for testing the usefulness of the reconciliation. Unlike prior studies on the 20-F reconciliation, however, we examine this question from the standpoint of information transfer (comparability), because enhancing comparability across accounting standards is the primary purpose of the reconciliation (see Breeden, 1994; SEC, 2000).

The suspension of the reconciliation requirement may reduce information transfer from IFRS-reporting FPIs to similar U.S. firms if investors find it harder to compare FPIs and U.S. firms after the rule change. This could occur if investors are insufficiently conversant with the differences between IFRS and U.S. GAAP. Respondents' comments to the SEC's proposal (SEC, 2007), as well as prior evidence consistent with investors' preference for U.S. GAAP-type accounting policy choices among foreign firms (e.g., Bradshaw et al., 2004; Plumlee and

Plumlee, 2007), both suggest that this could be the case.[3] Investor uncertainty regarding these FPIs' accounting policies under IFRS may also increase following the rule change, further compromising their ability to compare these FPIs and similar U.S. firms. This is because FPIs no longer have an incentive to make their IFRS accounting policy choices similar to U.S. GAAP (e.g., Lang et al., 2006).[4,5]

Using a test sample of 374 quarterly earnings announcements of 34 IFRS-reporting FPIs during the period January 2006 through December 2009, we find positive information transfer on average between these FPIs and similar U.S. firms around FPIs' earning announcements. That is, an FPI's abnormal stock return or trading volume around its own earnings announcement – our proxies for the new information released by an FPI's earnings announcement – are positively correlated with the concurrent market reactions of similar (non-announcing) U.S. firms. (Following Ramnath's (2002) information transfer study, we define similar U.S. firms for each FPI as domestic U.S. firms that are followed by at least two stock analysts who also follow the FPI.) This finding is consistent with prior information transfer research (e.g., Foster, 1981; Ramnath, 2002). Moreover, the degree of information transfer between IFRS-reporting FPIs and similar U.S. firms falls significantly after the suspension of the reconciliation requirement for these FPIs. We find no evidence of a similar decrease in information transfer for our primary control sample of U.S. firms or for alternative control samples consisting of FPIs unaffected by the rule change (i.e., FPIs not reporting in IFRS). These findings are consistent with investors

[3] Bradshaw et al. (2004) find that foreign firms with more U.S. GAAP conformity have higher levels of U.S. investment, while Plumlee and Plumlee (2007) show that U.S. trading volume is much higher for ADRs reporting in U.S. GAAP than it is for those reporting in non-U.S. GAAPs.

[4] Lang et al. (2006) document that, after cross-listing in the U.S., FPIs tend to select domestic accounting policy choices that minimize the U.S. GAAP reconciliation items in their annual 20-F filing.

[5] In a comment letter to the SEC, the New York State Society of CPAs observed that "there may be more comparability and consistency among IFRS financial statements of current SEC registrants than in the greater pool of world-wide adopters of IFRS, since IFRS accounting policy choices of current U.S. filers are influenced by the requirement to reconcile to U.S. GAAP. This likely will not be the case if the reconciliation is eliminated, thereby introducing greater variability in accounting policies of foreign private issuers" (NYSSCPA, 2007; p. 3).

finding it more difficult to compare IFRS and U.S. GAAP information in the absence of a U.S. GAAP reconciliation.

We use a differences-in-differences approach and a number of different control samples (for example, U.S. firms and FPIs unaffected by the rule change) to control for potential changes in information transfer that may be unrelated to the SEC's rule change (for example, those arising from a macroeconomic shock affecting all firms in the economy). Our inferences are also robust to using different event windows, to using alternative measures of abnormal returns and trading volume, to using an FPI's earnings surprise rather than its abnormal stock return or trading volume as the proxy for new information (albeit with weaker results), to the exclusion of earnings announcements that coincide with significant confounding events such as merger announcements, and to using alternative control samples. We also rule out changes in investor mispricing (e.g., under-reaction) as a plausible explanation for our results (e.g., Ramnath, 2002; Thomas and Zhang, 2008).

This paper makes several contributions. First, unlike prior research, our findings shed light on the usefulness of the 20-F reconciliation from the perspective of comparability. The fact that the rule change reduces information transfer from IFRS-reporting FPIs to similar U.S. firms suggests that the reconciliation makes it easier for investors to compare IFRS and U.S. GAAP information. This finding also implies that, at least from the point of view of investors, IFRS and U.S. GAAP are not as yet fully comparable. Thus, while the rule change is likely to benefit FPIs by eliminating the direct cost of preparing a U.S. GAAP reconciliation (as suggested by the results of van Oost (2010)), the indirect costs or negative externalities stemming from reduced IFRS-U.S. GAAP comparability – such as reduced information transfer between FPIs and U.S. firms – are a potentially important consideration when judging the overall costs and benefits of

this rule change. Given the ongoing convergence between U.S. GAAP and IFRS as well as the policy debate on the adoption of IFRS for domestic U.S. firms (e.g., see SEC, 2008; Hail et al., 2009), these findings may be of interest to regulators and academics interested in the broader issue of comparability between IFRS and U.S. GAAP reporting.

Second, consistent with the arguments of Dye (1990) and Admati and Pfleiderer (2000), we show that an exogenous reduction in mandatory disclosure affects how investors value other firms, thereby providing evidence of an externality or spillover effect of mandatory disclosure regulation. With a few notable exceptions (e.g., Bushee and Leuz, 2005), empirical evidence of such externalities associated with disclosure regulation is limited (see Leuz and Wysocki (2008) for a review).

Third, we extend the information transfer literature by showing how information transfer changes in response to a change in disclosure regulation. Schipper (1990) argues that for information transfer studies to generate more useful insights, researchers should use information transfer to investigate specific accounting policy questions, rather than merely documenting the existence and causes of information transfers. To our knowledge, ours is the first study to have taken up Schipper's (1990) call.

The rest of the paper is organized as follows. Section II provides some institutional background and discusses related research. Sections III and IV describe the data and research design, respectively. Section V discusses our main findings. Additional analyses follow in section VI and section VII concludes.

II. BACKGROUND AND RELATED RESEARCH

2.1 Institutional Background and Research Question

All FPIs that are cross-listed on U.S. exchanges are required to file an annual form 20-F with the SEC. This form is similar to the annual 10-K filed by domestic U.S. firms and must be filed within six months of an FPI's fiscal year end.[6] Prior to the SEC's rule change in November 2007, all FPIs that did not report in U.S. GAAP had to reconcile their non-U.S. GAAP financial statements with U.S. GAAP in a separate section of their annual form 20-F (items 17 and 18 of this form). In this reconciliation, FPIs are required to identify, quantify, and report any material differences between their non-U.S. GAAP financial statements and U.S. GAAP.[7] The purpose of the reconciliation is to ensure that FPIs provide disclosures that are substantially similar to, or comparable with, those provided by U.S. firms, thus promoting comparability (see Breeden, 1994; SEC, 2000, p. 18).

In November 2007, the SEC abolished this U.S. GAAP reconciliation requirement for the subset of FPIs that fully comply with IFRS as issued by the IASB (see SEC, 2007). FPIs reporting in other versions of IFRS, in U.S. GAAP, or in domestic GAAPs other than IFRS were not affected by this rule change and must continue to provide a U.S. GAAP reconciliation.[8] The SEC issued this rule change with the broader goal of fostering the global convergence of IFRS

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[6] Some Canadian FPIs are subject to different SEC requirements, however. These Canadian FPIs report under the Multi-Jurisdictional Disclosure System (MJDS) which permits eligible Canadian firms to use their domestic Canadian disclosure documents in their filings with the SEC. These firms are therefore not required to file form 20-F with the SEC. We exclude these firms from our sample.

[7] Specifically, FPIs are required to provide a narrative discussion of reconciling differences (Item 17(c)(1)), a reconciliation of net income for each year and any interim periods (Item 17(c)(2)(i)), a reconciliation of major balance sheet captions for each year and any interim periods (17(c)(2)(ii)), and a reconciliation of cash flows for each year and any interim periods (17(c)(2)(iii)). FPIs are also required to provide all information required by U.S. GAAP and Regulation S-X (Item 18) (see SEC, 2007a).

[8] The one exception to this rule is that FPIs using IFRS as endorsed by the E.U. (i.e., IFRS as issued by the IASB but using the IAS 39 "carve-out") are also permitted to discontinue their U.S. GAAP reconciliation in their form 20-F filing so long as they: (1) otherwise comply with IFRS as issued by the IASB; and (2) provide a reconciliation between IFRS as endorsed by the E.U. and IFRS as issued by the IASB (SEC, 2007).

and U.S. GAAP. While respondents to the SEC's original proposal seemed to be in agreement with this broader policy goal, the suspension of the reconciliation requirement was controversial among investors and practitioners (as discussed earlier).

Prior research on the usefulness of the 20-F reconciliation seems inconclusive, offering no clear support for the notion that the reconciliation is valuable to investors (see discussion in section 2.2.1 below). The elimination of the reconciliation therefore provides an interesting opportunity to shed more light on its informativeness. To do so, we take a different tack from prior research and examine whether the reconciliation's suspension affected the comparability of, and therefore information transfer between, IFRS-reporting FPIs and similar U.S. firms. We focus on the idea of comparability because the primary purpose of the reconciliation is to enhance the comparability of non-U.S. GAAP and U.S. GAAP accounting information (as noted earlier).

On one hand, the rule change may reduce information transfer from IFRS-reporting FPIs to comparable U.S. firms if it impedes investors' ability to compare these FPIs and U.S. firms. As discussed in section I above, the lack of a reconciliation may hinder comparability if investors are insufficiently familiar with the differences between IFRS and U.S. GAAP and/or if investor uncertainty regarding FPIs' IFRS information increases following the rule change. Note that, under this view, FPIs reporting in standards other than IFRS should experience no decrease in comparability – and hence information transfer – because these FPIs are not affected by the new rule. (Section 6.1 examines the case of non-IFRS-reporting FPIs. We also use this subset of FPIs as an alternative control sample in section 6.3.)

On the other hand, however, it is also possible that the suspension of the U.S. GAAP reconciliation has little or no impact on investors' ability to compare IFRS-reporting FPI and

U.S. firms' accounting information. This could be the case, for example, if the reconciliation is not very useful to investors, as is suggested by some prior evidence (discussed in the next section). If so, one would expect no change in information transfer from IFRS-reporting FPIs to similar U.S. firms following the rule change.

2.2 Related Research

2.2.1 Usefulness of the 20-F Reconciliation

A fairly large literature compares the properties and value-relevance of accounting numbers produced by various foreign accounting standards (including IFRS) and U.S. GAAP. In the interest of tractability, we confine our discussion to two strands of this literature that bear directly on our research question: studies that examine the comparability of IFRS and U.S. GAAP accounting numbers, and studies that examine whether the 20-F reconciliation for cross-listed firms is value-relevant. The overall evidence on both these issues appears mixed and inconclusive.

Regarding the broader issue of whether IFRS accounting amounts are comparable to U.S. GAAP, Leuz and Verrecchia (2000) and Leuz (2003) find little evidence of differences in bid-ask spreads, trading volume, and stock return volatility among German firms that use IFRS versus those that use U.S. GAAP. Also, Barth et al. (2010) find that the value-relevance of IFRS and U.S. GAAP earnings and book values is similar for firms that mandatorily adopt IFRS or for IFRS firms based in common law countries. This suggests that investors consider U.S. GAAP and IFRS numbers to be comparable, implying that any reconciliation from IFRS to U.S. GAAP may not be very useful to investors.

However, Bartov et al. (2005) find that earnings response coefficients are higher for German firms applying U.S. GAAP relative to those using IFRS, while Barth et al. (2010) find

that, generally speaking, the earnings and book values of U.S. GAAP firms are more value-relevant than for IFRS firms (unless IFRS adoption was mandatory or the IFRS firm is based in a common-law country). Similarly, for cross-listed firms that file IFRS to U.S. GAAP reconciliations, Gordon et al. (2008) find that U.S. GAAP earnings are incrementally value-relevant to IFRS earnings, even though earnings quality is comparable across the two standards. These findings suggest that, at least from the point of view of investors, U.S. GAAP accounting numbers may not be completely comparable to those produced by IFRS. If so, mandating that cross-listed firms reconcile their IFRS numbers to U.S. GAAP may indeed be useful to investors.

Several studies also directly examine the informativeness of the 20-F reconciliation using either stock prices or trading volume.[9] The results, once again, are mixed and inconclusive. In particular, it is not clear whether the reconciliation from IFRS to U.S. GAAP is useful to investors. Short-window event studies using stock returns, such as Meek (1983) and Plumlee and Plumlee (2007), find that investors react to FPIs' domestic earnings announcements but not to the subsequent 20-F filing, suggesting that the 20-F is uninformative. However, event studies using trading volume reactions around 20-F filing dates (e.g., Olibe, 2001; Hora et al., 2004; Chen and Sami, 2008) do find evidence of a market reaction, suggesting that investors find the 20-F reconciliation to be useful. In particular, Chen and Sami (2008) find that trading volume reactions around 20-F filing dates are increasing in the absolute difference between IAS and U.S. GAAP earnings, suggesting that the IAS to U.S. GAAP reconciliation amounts are informative.

More consistent are results of long-window studies that focus directly on the information content of the IFRS to U.S. GAAP reconciliation itself. Harris and Muller (1999) and Henry et al. (2009) find that the difference between IFRS and U.S. GAAP earnings − i.e., the

[9] The 20-F filing could be informative even though it can be filed up to 6 months after an FPI's fiscal year-end. One reason for this is that the 20-F may contain disclosures that go beyond an FPI's home country disclosures, for example, additional disclosures required to comply with the SEC's Regulation S-X.

reconciliation amount − is incrementally value-relevant after controlling for IFRS earnings. Similarly, as already mentioned above, Gordon et al. (2008) find that U.S. GAAP earnings are incrementally informative to IFRS earnings, but that the reverse is not true. These findings suggest that reconciling IFRS to U.S. GAAP appears to be useful to investors.

In summary, the evidence above indicates that the comparability of IFRS and U.S. GAAP accounting numbers, and thereby the usefulness of the 20-F reconciliation, are issues that remain unsettled. Our analysis of information transfer from FPIs to similar U.S. firms sheds light on these two issues by examining the usefulness of the U.S. GAAP reconciliation from the standpoint of comparability. Our main finding – that information transfer from IFRS-reporting FPIs to similar U.S. firms falls following the elimination of the U.S. GAAP reconciliation – suggests not only that IFRS and U.S. GAAP are not as yet fully comparable from the point of view of investors, but that the 20-F reconciliation plays an important role in enhancing their comparability.

2.2.2 Information Transfer

Prior information transfer studies measure the degree to which the information released by a firm's earnings announcement is informative to investors regarding the valuation of other non-announcing firms that are similar or comparable to the announcing firm (e.g., Foster, 1981; Han and Wild, 1990; Freeman and Tse, 1992; Ramnath, 2002). That is, these studies examine the effect of a particular firm's earnings announcement on the share prices of other non-announcing firms that have not yet announced their earnings for the same fiscal quarter. The new information released during the earnings announcement is typically proxied by either the announcing firm's stock return around its earnings announcement date or its earnings surprise. These studies generally find positive information transfer on average, i.e., a positive correlation between the

stock return or earnings surprise of the announcing firm and the stock returns of other similar non-announcing firms. On average, therefore, the market seems to interpret good (bad) news for the announcing firm as being good (bad) news for the comparable non-announcing firms too. We follow the general event-study methodology of these prior studies and test whether information transfer from IFRS-reporting FPIs to similar U.S. firms (i.e., U.S. firms that are followed by at least 2 analysts who also follow the FPI) changes after the abolition of the U.S. GAAP reconciliation requirement for these firms.[10]

III. DATA

3.1 Selecting the Test Sample of IFRS-Reporting FPIs

Since the SEC rule change is applicable to fiscal periods ending after November 15, 2007, our sample period extends from January 2006 to December 2009, i.e., a total of 16 calendar quarters, 8 each before and after the rule change. The final sample of IFRS-reporting FPIs that are affected by the rule change comprises 34 FPIs that fully comply with IFRS as issued by the IASB during the sample period (i.e., report in IFRS both before and after the rule change), have American Depositary Receipts (ADRs) trading on the NYSE/AMEX/NASDAQ prior to January 2006, do not voluntarily provide any U.S. GAAP information after November 2007, and have all the required data for our empirical tests. ADR data are obtained from J.P. Morgan's ADR website (www.adr.com), quarterly earnings announcement dates are from Compustat or IBES, analyst and quarterly EPS data are from the unadjusted IBES detail files, accounting data are from the quarterly Compustat file, stock return and volume data are from

[10] Researchers have also studied intra-industry information transfers in response to management forecasts (e.g., Baginski, 1987; Han et al., 1989), sales announcements (e.g., Olsen and Dietrich, 1985), equity offerings (e.g., Szewczyk, 1992), bankruptcy announcements (e.g., Lang and Stulz, 1992), and a nuclear accident (e.g., Bowen et al., 1983).

CRSP, and home country data for FPIs are from Datastream.[11]

< Insert Table 1 here >

Our final sample of 34 FPIs is arrived at as follows. We begin with the 404 FPIs trading as ADRs as of January 2010 and with available earnings announcement dates on Compustat/IBES and returns data on CRSP. FPIs that cannot be matched to any comparable U.S. firms (i.e., U.S. firms that are followed by the same analysts, see section 3.2 below) are then dropped, resulting in 209 FPIs. Since we want to examine whether information transfer from IFRS-reporting FPIs to similar U.S. firms changes due to the suspension of the U.S. GAAP reconciliation requirement, we also require that each FPI have at least one quarterly observation both before and after the new regulation. This further reduces the sample to 149 FPIs. Finally, we only retain FPIs that were cross-listed as ADRs prior to 2006, follow IFRS for their domestic reporting during the entire sample period, and do not voluntarily provide any U.S. GAAP data following the rule change.[12] This yields a final test sample of 374 quarterly earnings announcements for 34 FPIs (Table 1, Panel A).

3.2 Selecting Comparable U.S. Firms

To test for information transfer between FPIs and U.S. firms, we need to match each FPI to similar or comparable U.S. firms. As prior information transfer studies point out (e.g., Foster, 1981; Schipper, 1990; Ramnath, 2002), using SIC codes to identify similar or comparable firms could be very misleading when testing for information transfer. This is because SIC codes classify firms into industries based upon production processes or products rather than on business linkages. But it is business linkages that likely determine the degree of information

[11] We use the IBES earnings announcement date only if the earnings announcement date is missing on Compustat. When the two dates differ, we use the one from Compustat. All earnings announcement dates were also hand-checked for accuracy.

[12] For the post-rule change period, we hand-checked firms' form 20-Fs in order to identify firms that continue to provide U.S. GAAP information on a voluntary basis.

transfer between firms.[13] For example, Nokia (SIC code 3663) and Verizon (SIC code 4813) are classified into different SIC codes. However, from the point of view of information transfer, it would be appropriate to use Verizon as a comparable U.S. firm for Nokia (an FPI in our sample). This is because their business operations are partly linked – Nokia being a supplier to Verizon – making new information about Nokia potentially relevant for Verizon.

To better identify comparable firms based on business linkages, we follow the analyst-based method used by Ramnath (2002) in his study of information transfer. Each of the 374 FPI quarterly earnings announcements in our test sample is matched with all domestic U.S. firms that: (1) are followed by at least 2 analysts who also follow the FPI; and (2) have the same fiscal quarter end as the FPI. The idea is that an IFRS-reporting FPI and a U.S. firm that are followed by the same analyst are likely to be comparable from a business, and information transfer, perspective, and are therefore designated to be similar or comparable firms. Since the firms are followed by the same analysts, they are also likely to be comparable from the standpoint of investors, a relevant concern in our context because we examine information transfer using stock prices. We also require that these similar U.S. firms announce their quarterly earnings at least 3 trading days after the FPI's earnings announcement date (since we use a 3-day event window around the earnings announcement date); otherwise, the price (or volume) reaction to the U.S firm's earnings will confound any information transfer from the announcing FPI to the non-announcing U.S. firm.

Using this method, each of the 374 FPI quarterly earnings announcements in our test sample is matched with 13.4 similar U.S. firms on average (see Table 1, Panel A). This results in a final matched test sample of 4,977 (4,966) firm-quarter observations with all of the required

[13] More generally, Clarke (1989) finds that SIC codes do a poor job of identifying firms that are similar on various dimensions, while Bhojraj et al. (2003) criticize the use of SIC codes to define industries in capital markets research.

data for our stock returns (trading volume) tests. We refer to this matched sample as the test sample or the "FPI-U.S. firm" sample.

3.3 Selecting the Control Sample

We use a control sample and a differences-in-differences research design (see section 4.2 below) to capture any changes in information transfer that may be unrelated to the SEC rule change. Our control sample consists of all domestic U.S. firms that: (1) use U.S. GAAP both before and after the new regulation; (2) are the first announcers in their industry in the quarter; (3) have at least one quarterly observation both before and after the new regulation; and (4) can be matched to a similar U.S. firm following the Ramnath (2002) method, as discussed above. Because domestic U.S. firms are unaffected by the rule change, we expect that any change in information transfer from these firms to other comparable U.S. firms is not attributable to the effects of the rule change. We also require that the market capitalization of the control firms be greater than the smallest market capitalization across all FPI observations in our test sample (at the beginning of the sample period). This market capitalization cutoff is included to better match the test and control firms on firm size, since our FPI sample mostly consists of very large firms (Table 2, Panel C).[14] After imposing these data requirements, the control sample consists of 1,160 quarterly earnings announcements for 179 domestic U.S. firms (Table 1, Panel B).

As with our test sample, each quarterly earnings announcement observation for our control firms is matched with comparable U.S. firms using the Ramnath (2002) method. That is, for each control firm, comparable firms are defined as those U.S. firms that are followed by at least 2 stock analysts who also follow the control firm. Using this method, each of the 1,160 quarterly earnings announcements for the control firms is matched with 14.7 comparable U.S.

[14] However, our inferences are unaffected if we do not impose such a restriction.

firms on average, a similar multiple to that for the test sample. This results in a final matched control sample of 17,016 (16,988) firm-quarter observations with all of the required data for our stock returns (trading volume) tests. We refer to this matched sample as the control sample or the "U.S. firm-U.S. firm" control sample. For robustness, we also test the sensitivity of our results to using alternative control samples; our inferences are unaffected (see section 6.3 below).

IV. VARIABLES AND RESEARCH DESIGN

4.1 Information Proxies

Prior studies of information transfer around earnings announcements use both abnormal returns (e.g., Foster, 1981; Ramnath, 2002) and earnings surprises (e.g., Han and Wild, 1990; Freeman and Tse, 1992; Ramnath, 2002) as proxies for the new information released by earnings announcements. We opt to use abnormal returns as one of our two primary information proxies. We do this because firms often release non-earnings and non-financial information with their quarterly earnings announcements – for example, balance sheet and cash flow information, sales and product information, etc. – which could be value-relevant for comparable non-announcing firms (e.g., Francis et al., 2002).[15] If so, stock returns will better capture the total amount of new information released during an earnings announcement than the earnings surprise. In a reasonably efficient stock market, market-based measures are forward-looking and quickly reflect all new information, whether it is earnings-related or not. For robustness, however, we also repeat our analysis using earnings surprises to proxy for the new information released by

[15] For example, airline Ryanair Holdings PLC, one of our sample FPIs, often includes comprehensive financial statements in its quarterly earnings release (income statement, balance sheet and statement of cash flows), in addition to non-financial data such as passenger traffic, etc.

firms' earnings announcements (see section 6.2 below).[16]

In addition to stock returns, we also use trading volume as an information proxy. There are two potential advantages to using trading volume. First, an unsigned measure such as trading volume captures changes in information even if such changes do not move the stock price (see Bamber et al., 2010). Second, the results of prior research comparing returns- and volume-based metrics of information content (e.g., Cready and Hurtt, 2002) suggest that volume-based tests are more powerful, especially in small samples. Thus, our main analysis uses both returns and volume as proxies for new information.

As is common in event studies, we define the cumulative abnormal return around earnings announcements (*ABRET*) as the cumulative raw return for a firm over the event window less the cumulative return of the value-weighted CRSP market index over the same window.[17] To be consistent with the prior literature on information transfer, we use both 2-day ([-1, 0]) and 3-day ([-1, +1]) event windows centered on the earnings announcement date (day 0). To compute the cumulative abnormal trading volume (*ABVOL*) around earnings announcements, we follow the prior trading volume literature (e.g., Bamber et al., 1997, 1999, 2010) and define *ABVOL* as the cumulative trading volume of a firm over the event window less the same firm's median cumulative trading volume over the non-event period. The non-event period runs from 60 trading days prior to the earnings announcement date to 10 trading days prior to the earnings announcement date, i.e., [t-60, t-10]. Using different non-event windows does not affect our inferences. Daily trading volume is the number of shares traded scaled by the number of outstanding shares at the end of the fiscal quarter.

[16] Consistent with such reasoning, information transfer studies using stock returns rather than earnings surprises as the information proxy generally find significantly stronger information transfer effects. In fact, Ramnath (2002) documents that information transfer via returns completely subsumes information transfer via earnings surprises when both measures are included as information sources in the same model.

[17] Our inferences are unchanged using an equally-weighted return index.

4.2 Methodology

To test whether information transfer from IFRS-reporting FPIs to U.S. firms changes as a result of the suspension of the U.S. GAAP reconciliation for these firms, we use a control sample and a differences-in-differences research design. By helping absorb any changes in information transfer that occur due to shocks having nothing to do with the regulatory change (for example, extraneous macroeconomic shocks during our sample period that affect all firms), this methodology allows us to better identify changes in information transfer due to the rule change. In what follows, we discuss our research design using abnormal returns as the information proxy; the specifications using abnormal trading volume are identical, with *ABVOL* substituting for *ABRET*.

We begin by separately estimating the following cross-sectional OLS specification for both our "FPI-U.S. firm" test sample and our "U.S. firm-U.S. firm" control sample:

$$ABRET_{NA,ijt} = \beta_0 + \beta_1 POST_{it} + \beta_2 ABRET_{ANN,it} + \beta_3 ABRET_{ANN,it} * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \quad (1)$$

where $ABRET_{NA,ijt}$ is the abnormal return for the matched non-announcing U.S. firm *j* (that is followed by the same analysts as the announcing firm *i*) around the earnings announcement date *t* of the announcing firm *i* (an FPI for the test sample or a U.S. firm for the control sample); $ABRET_{ANN,it}$ is the announcing firm *i*'s abnormal returns around date *t*, its own earnings announcement; and *POST* is an indicator variable equal to one for all earnings announcements after March 4, 2008 (the effective date of the new regulation), and zero otherwise. To control for calendar quarter effects and mitigate the effect of residual cross-correlation (within calendar quarters) on the estimated standard errors, equation (1) also includes fixed effects (QTR_q) for the 16 calendar quarters in our sample. When equation (1) is estimated using the test (control)

sample, the estimated coefficient β_2 indicates the average level of information transfer between FPIs (control firms) and similar U.S. firms prior to the rule change. Based on prior research, we expect β_2 to be positive, indicating positive information transfer between firms on average. Moreover, for the test sample, if the elimination of the U.S. GAAP reconciliation requirement decreases information transfer from IFRS-reporting FPIs to comparable U.S. firms, the estimated coefficient β_3 will be negative.

To test the difference in the change in information transfer between the test and control samples, we pool the test and control samples together and estimate the following cross-sectional OLS specification:

$$\begin{aligned} ABRET_{NA,ijt} = {} & \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 ABRET_{ANN,it} + \beta_4 TEST_i * POST_{it} \\ & + \beta_5 ABRET_{ANN,it} * TEST_i + \beta_6 ABRET_{ANN,it} * POST_{it} \\ & + \beta_7 ABRET_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \end{aligned} \quad (2)$$

In equation (2), the indicator variable *TEST* equals one for an observation from the test sample and zero for an observation from the control sample. All other variables are defined as in equation (1) above. Equation (2) also includes quarterly fixed effects (QTR_q) for the 16 calendar quarters in our sample. The coefficient β_7 picks up the difference in the change in information transfer between the test and control samples. If, relative to the control sample, the rule change reduces information transfer from IFRS-reporting FPIs to U.S. firms, we expect the estimated coefficient β_7 to be negative. This assumes, of course, that our control sample adequately controls for concurrent trends in information transfer that are unrelated to the rule change. While we find that our inferences are unaffected using alternative control samples (see section 6.3 below), we cannot completely rule out the possibility that our control samples do not fully capture the effect of all concurrent events that may affect information transfer for our test

sample.

V. RESULTS

5.1 Descriptive Statistics

Panel A of Table 2 lists the IFRS-reporting FPIs in our test sample. These 34 FPIs represent 16 countries, the most heavily represented being the U.K. (8 firms). No other single country has more than 4 firms. The FPIs span 15 2-digit SIC codes, with Metal Mining (SIC code 10, 6 firms), Chemicals (SIC code 28, 7 firms), and Petroleum Refining (SIC code 29, 5 firms) having the most FPIs. As Panel C of Table 2 shows, the test and control firms differ in terms of both size and book-to-market ratio, on average. Because of this, we also check the robustness of our findings using an alternative control sample matched on size and book-to-market ratio (see section 6.3 below).[18]

Prior to matching with comparable U.S. firms, the FPI sample is fairly well-balanced across the pre- and post-rule change periods. Of the 374 quarterly FPI observations, 202 (172) belong to the pre-period (post-period).[19] Note also that, across all the FPIs, the average number of comparable U.S. firms matched with an FPI does not change from the pre- to the post-rule change period: on average, each FPI is matched with about 13 firms in both the pre- and post-periods. Thus, the observed decrease in information transfer following the rule change is unlikely to be due to a change in the number of matched U.S. firms per FPI from the pre-period to the post-period.

< Insert Table 2 here >

[18] The fall in market capitalization of the test and control firms in the post-rule change period (Table 2, Panel C) occurs due to the stock market crash during our sample period (January 2006 to December 2009).

[19] Restricting the sample to FPIs with an observation in every calendar quarter of the sample period yields qualitatively similar results.

5.2 Main Results

Tables 3 and 4 present the results of estimating equations (1) and (2) using abnormal returns (Table 3) and abnormal trading volume (Table 4) as information proxies. Panel A of each table shows the results for equation (1), estimated separately for the "FPI-U.S. firm" test sample and the "U.S. firm-U.S. firm" control sample, while Panel B shows the results for the differences-in-differences specification, equation (2). Since our FPI sample is relatively small, we also report results using rank regressions (with decile ranks scaled between 0 and 1for the independent variables) for robustness. In what follows, we discuss results for the [-1, +1] event window; results for the [-1, 0] event window are similar (also shown in the tables). Also, the rank regression results are discussed only when they differ from those of the primary regressions. Unless otherwise mentioned, statistical significance is evaluated at the 0.05 level using a two-sided test.

< Insert Table 3 here >

Using abnormal returns as the information proxy, Panel A of Table 3 shows positive information transfer between IFRS-reporting FPIs and similar U.S. firms prior to the rule change. The estimated coefficient on $ABRET_{ANN}$ is positive and statistically significant at the 0.01 level (*t*-stat = 4.32), indicating that good (bad) news for the announcing FPI has a positive (negative) effect on similar non-announcing U.S. firms, on average. This result is consistent with prior studies of information transfer using abnormal returns as the proxy for new information released during earnings announcements (e.g., Foster, 1981; Han and Wild, 1990; Ramnath, 2002). Moreover, the coefficient on $ABRET_{ANN}$*$POST$ is negative and statistically significant at the 0.10 level (*t*-stat = -1.86), consistent with a decrease in information transfer after the rule change. (The fall in information transfer is statistically stronger for the [-1, 0] event window.) However,

information transfer from FPIs to comparable U.S. firms continues to exist in the post-rule change period: the sum of the estimated coefficients on $ABRET_{ANN}$ and $ABRET_{ANN}$*$POST$ is positive and statistically significant at the 0.01 level (F-stat = 13.67). Thus, the suspension of the U.S. GAAP reconciliation requirement seems to reduce, but not eliminate, information transfer between IFRS-reporting FPIs and similar U.S. firms.

Like the test sample, the control sample consisting of U.S. firms also shows significant positive information transfer in the pre-rule change period, on average: the estimated coefficient on $ABRET_{ANN}$ is positive and statistically significant at the 0.01 level (t-stat = 5.97). However, unlike the decline in information transfer observed for the test sample, the control sample exhibits an *increase* in information transfer between the pre- and post-rule change periods: the estimated coefficient on $ABRET_{ANN}$*$POST$ is positive and statistically significant at the 0.01 level (t-stat = 4.69). Thus, the decrease in information transfer for the test sample does not appear to be driven by trends in information transfer that are unrelated to the SEC's rule change (assuming such trends are adequately picked up by our control sample).

To test this formally, Panel B of Table 3 shows the results of estimating the differences-in-differences specification, equation (2), using the pooled test and control samples. Recall that in this specification, the variable of interest is $ABRET_{ANN}$*$TEST$*$POST$, the coefficient of which picks up the *difference* in the change in information transfer (from the pre- to the post-rule change period) between the test and control samples. This difference between the test and control samples identifies the effect of the rule change. Consistent with the results in Panel A, the estimated coefficient on $ABRET_{ANN}$*$TEST$*$POST$ is negative and statistically significant at the 0.01 level (t-stat = -3.14), indicating that, after the rule change, the test sample exhibits a decrease in information transfer relative to the control sample. Again, this suggests that the

decrease in information transfer between the pre- and post-rule change periods is driven by the rule change and not by a general, economy-wide decrease in information transfer.

< Insert Table 4 here >

We find even stronger results using abnormal trading volume around the announcing firm's earnings announcement as our information proxy. Panel A of Table 4 shows that the test sample exhibits positive information transfer in the pre-rule change period, the estimated coefficient on $ABVOL_{ANN}$ being statistically significant at the 0.01 level (t-stat = 4.23). However, information transfer from FPIs to U.S. firms not only decreases, but is no longer statistically significant, after the rule change: the sum of the estimated coefficients on $ABVOL_{ANN}$ and $ABVOL_{ANN}$*$POST$ is insignificantly different from zero (F-stat = 0.68). For the control sample, on the other hand, we observe no change in information transfer between the pre- and post-rule change periods; the estimated coefficient on $ABVOL_{ANN}$*$POST$ is positive but statistically insignificant (t-stat = 1.23). The differences-in-differences specification in Panel B of Table 4 confirms that the decrease in information transfer for the test sample is not attributable to extraneous trends in information transfer unrelated to the rule change: the estimated coefficient on $ABVOL_{ANN}$*$TEST$*$POST$ is negative and significant at the 0.01 level (t-stat = -4.75).

To summarize our main results, we find strong evidence that the suspension of the U.S. GAAP reconciliation requirement significantly reduced information transfer between IFRS-reporting FPIs and comparable U.S. firms. These results indicate that the SEC's elimination of the U.S. GAAP reconciliation requirement appears to have reduced investors' ability to compare IFRS-reporting FPIs with similar U.S. firms.

VI. ADDITIONAL ANALYSES

To explore the robustness of our results, we conduct several additional tests. Overall, the results of these tests are generally similar to those discussed above and do not change our primary inferences.

6.1 Do FPIs Unaffected by the Rule Change Also Exhibit a Fall in Information Transfer?

Recall that the suspension of the U.S. GAAP reconciliation requirement applies only to the subset of FPIs that report in IFRS as issued by the IASB. To test whether FPIs unaffected by the rule change experience a similar decrease in information transfer between the pre- and post-rule change periods, we re-estimated equations (1) and (2) for two alternative samples of FPIs unaffected by the rule change: (1) FPIs that use accounting standards other than IFRS (including U.S. GAAP) during the sample period, and (2) FPIs from the European Union and Australia that use U.S. GAAP instead of IFRS during the sample period. Apart from the accounting standard they follow, FPIs in this latter sample are similar (on average) to the majority of our test FPIs in terms of firm characteristics (such as size and book-to-market) and institutional/legal backgrounds. (This sample is discussed further in section 6.3 below.) In untabulated results, we find that neither of these two alternative FPI samples exhibits a fall in information transfer in the post-period. These findings further support the argument that the observed decrease in information transfer from IFRS-reporting FPIs to similar U.S. firms is due to the elimination of the U.S. GAAP reconciliation requirement for this subset of FPIs. (In section 6.3 below, we also use these alternative FPI samples as alternative control samples.)

6.2 Using Earnings Surprise as the Source of Information Transfer

Despite the disadvantages of using the announcing firm's earnings surprise as the source of new information around earnings announcements (as discussed previously), to both confirm

our earlier results as well as facilitate comparison with prior studies (e.g., Han and Wild, 1990; Freeman and Tse, 1992; Ramnath, 2002), we repeat our analysis using the earnings surprise as an alternative proxy for the new information released by announcing firms. The tests in Tables 3 and 4 are repeated, replacing the independent variables $ABRET_{ANN}$ (or $ABVOL_{ANN}$) in equations (1) and (2) with the announcing firm's earnings surprise (*SURP*). In the interest of brevity, we only report the results of estimating the differences-in-differences specification:

$$\begin{aligned} ABRET_{NA,ijt} = {} & \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 SURP_{ANN,it} + \beta_4 TEST_i * POST_{it} \\ & + \beta_5 SURP_{ANN,it} * TEST_i + \beta_6 SURP_{ANN,it} * POST_{it} \\ & + \beta_7 SURP_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \end{aligned} \quad (3)$$

The dependent variable in equation (3) is either $ABRET_{NA}$ or $ABVOL_{NA}$. Note that in the regression with abnormal volume ($ABVOL_{NA}$) as the dependent variable, the unsigned earnings surprise (|*SURP*|) is used in order to be consistent with the unsigned dependent variable. For the announcing firm, *SURP* is defined as the actual EPS for the fiscal quarter less the mean analyst EPS forecast for the same quarter, scaled by the fiscal quarter end stock price. Equation (3) also includes quarterly fixed effects (QTR_q) for the 16 calendar quarters in our sample. To mitigate outlier problems due to low stock prices, we delete *SURP* observations with a stock price of less than \$1 in addition to winsorizing the variable at the 0.01 level.[20] All other variables are as defined previously.

< Insert Table 5 here >

Table 5 reports the results of estimating equation (3). Panel A (Panel B) uses the abnormal return (abnormal volume) of the non-announcing firms as the dependent variable. In both Panels A and B of Table 5, when we use the continuous variable *SURP*, there is no evidence

[20] Inferences are similar if we do not impose any stock price constraint.

of a decrease in information transfer for the test sample relative to the control sample (the estimated coefficient on $SURP_{ANN}$*$TEST$*$POST$ is either insignificantly different from zero or marginally positive). However, when using decile ranks for *SURP*, we always observe a pronounced decrease in information transfer for the test sample relative to the control sample (the estimated coefficient on $SURP_{ANN}$*$TEST$*$POST$ is always negative and statistically significant at the 0.01 level), which is consistent with our main results. This difference between the two sets of results appears to be due to outliers. For example, when *SURP* is winsorized at the 0.05 level instead of the 0.01 level, the continuous variable and rank regression results are similar. The rank regression results may therefore be more reliable. Thus, overall, the findings using earnings surprise tend to confirm our primary results documenting a decrease in information transfer from IFRS-reporting FPIs to comparable U.S. firms.

6.3 Using Alternative Control Samples

Due to the importance of the control sample in a differences-in-differences design, we replicate our tests using three alternative control samples consisting of firms unaffected by the rule change: (1) FPIs from the European Union and Australia that use U.S. GAAP instead of IFRS during the sample period; (2) all FPIs that use a non-IFRS accounting standard (including U.S. GAAP) during the sample period; and (3) U.S. firms matched to the test sample FPIs based on firm size and book-to-market ratio. We find generally similar results using all three alternative control samples. For brevity, we report and discuss the results using only the first of these alternative control samples.

This control sample consists of 11 U.S. GAAP-reporting FPIs that are similar (on average) to our IFRS-reporting test FPIs in terms of firm size and book-to-market ratio. Like the majority of the test FPIs, these control FPIs are European Union and Australian firms, and

therefore share a similar institutional and legal background. This helps control for the potential influence of geographical, institutional, and/or legal factors on changes in information transfer during the sample period. Moreover, using FPIs rather than U.S. firms as a control sample may also help control for macroeconomic factors that could be relevant for information transfer from foreign to U.S. firms, for example, changes in U.S./home country exchange rates or changes in trade patterns between the U.S. and the home country. (Because of its limited size, however, we do not use this control sample in our main analysis.)

<Insert Table 6 here>

Our inferences from the main analysis continue to hold using this alternative control sample. Table 6 shows the results of estimating equation (2). Panel A (Panel B) shows the results using abnormal returns (abnormal trading volume) as the information proxy. In Panel A (Panel B), the estimated coefficient on the interaction term $ABRET_{ANN}$*TEST*POST ($ABVOL_{ANN}$*TEST*POST) is significantly negative (*t*-stat = -3.36 and -3.43 in Panels A and B, respectively), indicating that following the rule change, information transfer in our test sample falls relative to this alternative control sample. Since the test and control FPIs are generally similar except for the accounting standard they follow (IFRS or U.S. GAAP), this result also suggests that it is the suspension of the U.S. GAAP reconciliation for IFRS-reporting FPIs that is driving the decrease in information transfer we observe.

6.4 The Role of Market Mispricing in Information Transfer

Prior studies find evidence, albeit conflicting, that investors and analysts systematically misprice the valuation implications of an announcing firm's earnings for other firms that subsequently announce their earnings (e.g., Ramnath, 2002; Thomas and Zhang, 2008). Ramnath (2002) finds that investors appear to under-react, while Thomas and Zhang (2008) find that

investors appear to over-react.

In light of this evidence, a possible interpretation of our findings is that, due to the greater difficulty of interpreting IFRS information without a U.S. GAAP reconciliation, investors simply become more sluggish in their reaction to the information released by FPIs' earnings announcements. That is, investors become more prone to under-react (or less prone to over-react) to FPIs' earnings announcements in the post-rule change period. Under this interpretation, the total magnitude of information transfer would be the same both before and after the rule change, but information transfer would be slower in the post-period, occurring over a longer time horizon. Any such change in investor mispricing would imply that our tests are mis-specified as the short event windows we use around FPIs' earnings announcements would not completely capture all of the information transfer from FPIs to similar U.S. firms, thereby understating information transfer in the post-rule change period. Or equivalently, the drift (or greater drift) in information transfer after the rule change could potentially explain our finding of lower information transfer within the short event window we use. Note that this interpretation of our findings is not inconsistent with our hypothesis. Nonetheless, we explore this alternative interpretation in order to better understand whether the rule change reduces the magnitude of information transfer, its speed, or both.

In untabulated tests, we find no evidence that information transfer from FPIs to similar U.S. firms reflects mispricing, either before or after the new regulation. Similar U.S. firms exhibit no price drift (on average) from FPIs' earnings announcement dates to their own earnings announcement dates (recall that in our sample, all the matched similar U.S. firms announce their earnings after the FPI). That is, FPIs' earnings announcement returns or U.S. firms' returns around FPIs' earnings announcements have no predictive power for either: (1) U.S. firms'

returns around their own future earnings announcements; or (2) U.S. firms' cumulative returns from FPIs' earnings announcements up to their own future earnings announcements. Thus, the decrease in information transfer that we document does not seem to occur because the lack of a U.S. GAAP reconciliation simply slows down investors' response to FPIs' IFRS information. Rather, our findings indicate that the overall magnitude of information transfer between FPIs and comparable U.S. firms decreased in the post-rule change period. This suggests that, without a U.S. GAAP reconciliation, investors find it harder to compare FPIs' IFRS information with U.S. firms' U.S. GAAP information.[21]

VII. CONCLUSION

In November 2007, the SEC eliminated the requirement that IFRS-reporting Foreign Private Issuers (FPIs) cross-listed on U.S. exchanges reconcile their IFRS information to U.S. GAAP in their annual form 20-F filing. To inform the ongoing debate about the usefulness of the 20-F reconciliation from a different angle, that of comparability, we test if this rule change reduced information transfer from IFRS-reporting FPIs to similar U.S. firms. All else equal, information transfer between an FPI and similar U.S. firms would be lower, or at least more sluggish, if the rule change reduces the comparability of IFRS and U.S. GAAP numbers for investors.

Consistent with this argument, following the rule change, we find a significant decrease in information transfer from IFRS-reporting FPIs to similar U.S. firms around FPIs' earnings announcements. This result is robust to using alternative measures of the information generated

[21] Our finding of no mispricing differs from Ramnath (2002) and Thomas and Zhang (2008). There could be several reasons for this difference. First, we examine information transfer from FPIs to U.S. firms, not between U.S. firms. Second, and perhaps more importantly, our sample consists mostly of large, multinational FPIs whose information is less likely to be mispriced by investors (given the general finding in prior research that larger firms exhibit less mispricing). Finally, our sample size is much smaller than that in the above studies which examine information transfer among U.S. firms.

around earnings announcements and to using alternative control samples. The reduction in information transfer does not simply reflect a slower investor response to FPIs' IFRS information in the absence of a U.S. GAAP reconciliation; rather, it appears to reflect the fact that the magnitude of information transfer itself has decreased in the post-rule change period. Additionally, we find no evidence of a similar decrease in information transfer among FPIs that were unaffected by the rule change, for example, FPIs reporting in a non-IFRS accounting standard (including U.S. GAAP) or FPIs that are very similar to our test FPIs but follow U.S. GAAP instead of IFRS. Taken together, these results suggest that investors find it harder to compare IFRS and U.S. GAAP accounting numbers without a U.S. GAAP reconciliation.

Our study makes several contributions. First, it contributes to the ongoing debate about the usefulness of the 20-F reconciliation. Our results suggest that a U.S. GAAP reconciliation makes it easier for investors to compare FPIs' IFRS information with the U.S. GAAP information of similar U.S. firms. This implies that, from the point of view of investors, FPIs' IFRS information is not as yet fully comparable with U.S. GAAP. Second, our evidence of a decrease in information transfer following the elimination of the reconciliation also points to an externality or spillover effect associated with this change in disclosure regulation. While theory hypothesizes that disclosure regulation may lead to externalities (e.g., Dye, 1990; Admati and Pfleiderer, 2000), prior empirical evidence of such effects is limited (e.g., Bushee and Leuz, 2005; see also Leuz and Wysocki, 2008). Finally, our analysis extends the information transfer literature by showing how disclosure regulation affects information transfer.

We conclude with several caveats. First, our small sample size may limit the external validity of our results. Second, despite the use of various control samples, it is difficult to completely rule out all potential covariates that might affect information transfer between FPIs

and U.S. firms, for example, changes in relative economic growth between the U.S. and FPIs' home countries during our sample period. Finally, although our results using cross-listed FPIs imply that IFRS and U.S. GAAP are not entirely comparable from the point of view of investors, this inference may not be generalizable to the broader issue of IFRS and U.S. GAAP comparability. This is because the financial reporting incentives, as well as the auditing, regulation, and litigation environments, of cross-listed firms differ from those of other firms (e.g., Lang et al., 2003; Barth et al., 2010).

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TABLE 1
Sample Selection (Test and Control Samples)

We begin with the 419 FPIs on J.P. Morgan's ADR website (as of January 2010) with available Compustat data. Excluding firms with missing earnings announcement dates and/or missing CRSP data reduces the sample to 404 FPIs. These FPIs are then matched to similar U.S. firms using Ramnath's (2002) analyst-based method. We also require that similar U.S. firms release their earnings after the FPI they are matched with. After matching FPIs and deleting similar U.S. firms with missing CRSP data, the sample consists of 209 FPIs. Next, only FPIs with at least one quarterly matched observation in both the pre- and post-regulation periods are retained. This further reduces the sample to 149 FPIs. Finally, all FPIs cross-listed after January 2006 are dropped, as are those that do not report in IFRS (and are therefore not subject to the rule change). This results in our final sample of 34 FPIs with 374 quarterly observations during the sample period (January 2006-December 2009). Matching each of these quarterly FPI observations with similar U.S. firms results in a final matched FPI sample of 4,977 (4,966) quarterly observations using returns (trading volume). This constitutes our "FPI-U.S. firm" test sample.

Our control sample of U.S. firms is similarly constructed, with two differences. First, a control firm must announce its earnings before the similar firms it is matched with. Second, its market capitalization must be at least as large as the smallest FPI (at the beginning of the sample period). The resulting control sample consists of 1,160 quarterly observations for 179 U.S. firms. Matching each of these quarterly earnings announcements with data for similar U.S. firms (using Ramnath's (2002) method) results in a final matched control sample of 17,016 (16,988) quarterly observations using returns (trading volume). We refer to this sample as our "U.S. firm-U.S. firm" control sample.

Panel A: Sample Selection (Test Sample of FPIs)

	No. of FPIs	No. of FPI-qtrs	Mean similar U.S. firms per FPI-qtr
FPIs with abnormal returns around earnings announcement date	404	4,745	
FPIs with matchable similar U.S. firms (U.S. firms followed by at least 2 analysts who follow the FPI)	209	1,700	9.2
FPIs with observations over both pre- and post-period	149	1,540	10.0
FPIs that are listed before 2006 and report in IFRS	34	374	13.4

Panel B: Sample Selection (Control Sample of U.S. Firms)

	No. of control firms	No. of control firm-qtrs	Mean similar U.S. firms per control firm-qtr
U.S. firms with abnormal returns around earnings announcement date	6,425	78,452	
U.S. firms with matchable similar U.S. firms (other U.S. firms followed by at least 2 common analysts)	4,621	58,589	43.6
U.S. firms that are the first announcers in their industry	579	2,014	13.9
U.S. firms with observations over both pre- and post-period	239	1,464	12.4
U.S. firms with higher market value than the minimum market value across all FPIs (at the beginning of the sample period)	179	1,160	14.7

TABLE 2
Descriptive Statistics

Panel A: Test Sample FPIs by Country

Country	No. of FPIs	No. of FPI-qtrs
Argentina	1	13
Australia	2	9
Denmark	1	12
Finland	1	15
France	3	40
Germany	2	19
Ireland	3	37
Italy	1	13
Netherlands	2	22
Norway	1	6
Papua New Guinea	1	6
South Africa	4	42
Sweden	1	15
Switzerland	2	22
Turkey	1	10
United Kingdom	8	93
Total	34	374

Panel B: Test Sample FPIs by Industry

2-digit SIC code	Industry	No. of FPIs	No. of FPI-qtrs
10	Metal Mining	6	47
13	Oil & Gas Extraction	1	15
26	Paper Products	1	10
28	Chemicals	7	78
29	Petroleum Refining	5	60
33	Primary Metal Industries	2	27
35	Computer Equipment	1	11
36	Electrical Equipment	3	44
38	Measuring & Controlling Instruments	1	15
44	Water Transportation	1	12
45	Transportation By Air	1	12
48	Communications	2	17
67	Holding & Other Investment Offices	1	5
70	Hotels	1	13
99	Nonclassifiable Establishments	1	8
	Total	34	374

Panel C: Descriptive Statistics for Test and Control Samples ($ in millions)

	Test Sample (FPIs)				Control Sample (U.S. Firms)			
	Pre-period		Post-period		Pre-period		Post-period	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Market value ($)	50,057	24,049	26,248	5,657	15,123	1,006	9,314	811
Market-to-book	2.17	2.11	1.51	1.25	1.97	1.42	1.63	1.24

TABLE 3
Main Results Using Abnormal Returns

This table reports the results of estimating equations (1) and (2) using abnormal returns (*ABRET*) as the information proxy. Panels A and B show the results for equations (1) and (2), respectively. *ABRET* is the cumulative daily return less the cumulative value-weighted CRSP market index around the FPI's earnings announcement. $ABRET_{ANN}$ ($ABRET_{NA}$) is the abnormal return for the announcing (matched non-announcing) firm. *POST* is a dummy variable equal to one (zero) for the post-regulation (pre-regulation) period. *TEST* is a dummy variable equal to one (zero) for observations in the test (control) sample. All specifications include calendar-quarter fixed effects. *ABRET* is winsorized at the 1% level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. All significance tests are two-sided.

$$ABRET_{NA,ijt} = \beta_0 + \beta_1 POST_{it} + \beta_2 ABRET_{ANN,it} + \beta_3 ABRET_{ANN,it} * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \qquad (1)$$

Panel A: Estimating Equation (1) Separately for Test and Control Samples

	Test Sample		***Control Sample***	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	-0.002	0.001	0.001	-0.001
	(-0.77)	(0.39)	(0.88)	(-0.44)
POST	0.050*	0.064*	-0.004	-0.004
	(1.77)	(1.81)	(-0.76)	(-0.69)
$ABRET_{ANN}$	0.082***	0.101***	0.028***	0.050***
	(3.98)	(4.32)	(3.95)	(5.97)
$ABRET_{ANN}$ * *POST*	-0.053**	-0.050*	0.071***	0.051***
	(-2.22)	(-1.86)	(7.80)	(4.69)
F-test: $\beta_2 + \beta_3 = 0$	0.029**	0.051***	0.099***	0.101***
	(5.29)	(13.67)	(309.74)	(215.72)
Adjusted R^2	2.30%	3.98%	2.81%	3.29%
Observations	4,977	4,977	17,016	17,016

$$ABRET_{NA,ijt} = \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 ABRET_{ANN,it} + \beta_4 TEST_i * POST_{it} + \beta_5 ABRET_{ANN,it} * TEST_i + \beta_6 ABRET_{ANN,it} * POST_{it} + \beta_7 ABRET_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \qquad (2)$$

Panel B: Estimating Equation (2) for the Pooled Sample

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.001	0.000	-0.002	-0.004**
	(0.76)	(0.01)	(-1.12)	(-2.47)
TEST	-0.002**	-0.001	-0.006***	-0.005**
	(-2.03)	(-1.00)	(-3.11)	(-2.33)
POST	-0.001	0.000	-0.010*	-0.008
	(-0.18)	(0.00)	(-1.92)	(-1.30)
*TEST * POST*	0.006***	0.008***	0.018***	0.014***
	(4.92)	(5.09)	(7.26)	(4.75)
$ABRET_{ANN}$	0.028***	0.049***	0.005***	0.009***
	(3.93)	(5.77)	(3.48)	(5.05)
TEST * $ABRET_{ANN}$	0.053**	0.057**	0.009**	0.009**
	(2.45)	(2.35)	(2.51)	(2.34)
POST * $ABRET_{ANN}$	0.072***	0.057***	0.018***	0.016***
	(7.87)	(5.19)	(9.58)	(6.84)
*TEST * POST* * $ABRET_{ANN}$	-0.108***	-0.089***	-0.025***	-0.015***
	(-4.29)	(-3.14)	(-5.60)	(-2.78)
Adjusted R^2	2.20%	2.40%	2.27%	2.49%
Observations	21,993	21,993	21,993	21,993

TABLE 4
Main Results Using Abnormal Trading Volume

This table reports the results of estimating equations (1) and (2) using abnormal trading volume (*ABVOL*) as the information proxy. Panels A and B show the results for equations (1) and (2), respectively. *ABVOL* is the cumulative trading volume over the event window less the median cumulative trading volume over the non-event period. The non-event period is the 51-day interval from 60 trading days before the earnings announcement to 10 trading days before the announcement. $ABVOL_{ANN}$ ($ABVOL_{NA}$) is the abnormal trading volume for the announcing (matched non-announcing) firm. *POST* is a dummy variable equal to one (zero) for the post-regulation (pre-regulation) period. *TEST* is a dummy variable equal to one (zero) for observations in the test (control) sample. All specifications include calendar-quarter fixed effects. *ABVOL* is winsorized at the 1% level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. All significance tests are two-sided.

$$ABVOL_{NA,ijt} = \beta_0 + \beta_1 POST_{it} + \beta_2 ABVOL_{ANN,it} + \beta_3 ABVOL_{ANN,it} * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \qquad (1)$$

Panel A: Estimating Equation (1) Separately for Test and Control Samples

	Test Sample		***Control Sample***	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.021***	0.030***	0.013***	0.020***
	(8.02)	(8.11)	(13.15)	(14.20)
POST	-0.013	-0.023	0.002	0.002
	(-0.47)	(-0.58)	(0.41)	(0.32)
$ABVOL_{ANN}$	0.105***	0.118***	0.124***	0.140***
	(4.08)	(4.23)	(14.58)	(14.21)
$ABVOL_{ANN}$ * *POST*	-0.112***	-0.130***	0.010	0.015
	(-3.92)	(-4.13)	(0.97)	(1.23)
F-test: $\beta_2 + \beta_3 = 0$	-0.007	-0.012	0.134***	0.155***
	(0.35)	(0.68)	(423.30)	(460.65)
Adjusted R^2	1.70%	1.79%	5.96%	6.56%
Observations	4,966	4,966	16,988	16,988

$$ABVOL_{NA,ijt} = \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 ABVOL_{ANN,it} + \beta_4 TEST_i * POST_{it} + \beta_5 ABVOL_{ANN,it} * TEST_i + \beta_6 ABVOL_{ANN,it} * POST_{it} + \beta_7 ABVOL_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \qquad (2)$$

Panel B: Estimating Equation (2) for the Pooled Sample

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.013***	0.019***	0.010***	0.015***
	(12.83)	(13.64)	(8.85)	(10.17)
TEST	0.011***	0.017***	0.011***	0.018***
	(10.38)	(11.06)	(9.21)	(10.20)
POST	0.005	0.005	0.002	0.002
	(1.17)	(0.90)	(0.53)	(0.32)
*TEST * POST*	-0.001	-0.001	0.002	0.002
	(-0.38)	(-0.31)	(1.29)	(0.79)
$ABVOL_{ANN}$	0.121***	0.134***	0.016***	0.023***
	(13.29)	(12.88)	(14.23)	(14.09)
TEST * $ABVOL_{ANN}$	-0.012	-0.024	-0.002	-0.005
	(-0.52)	(-0.95)	(-0.92)	(-1.41)
POST * $ABVOL_{ANN}$	0.014	0.022*	0.007***	0.010***
	(1.21)	(1.68)	(4.29)	(4.31)
*TEST * POST* * $ABVOL_{ANN}$	-0.124***	-0.137***	-0.017***	-0.022***
	(-4.70)	(-4.75)	(-5.13)	(-4.80)
Adjusted R^2	4.79%	5.42%	5.14%	5.64%
Observations	21,954	21,954	21,954	21,954

TABLE 5
Using Earnings Surprise as Proxy for New Information

This table reports the results of estimating equation (3) using either *ABRET* (Panel A) or *ABVOL* (Panel B) for the matched non-announcing U.S. firms as the dependent variable. The independent variable is the earnings surprise of the announcing FPI (*SURP* in Panel A and |SURP| in Panel B). *ABRET* is the cumulative daily return less the cumulative value-weighted CRSP market index around the FPI's earnings announcement. *ABVOL* is the cumulative trading volume over the event window less the median cumulative trading volume over the non-event period. The non-event period is the 51-day interval from 60 trading days before the earnings announcement to 10 trading days before the announcement. *SURP* is defined as the FPI's actual EPS less the mean analyst EPS forecast, scaled by stock price at the end of the current quarter. *POST* is a dummy variable equal to one (zero) for the post-regulation (pre-regulation) period. *TEST* is a dummy variable equal to one (zero) for observations in the test (control) sample. All specifications include calendar-quarter fixed effects. *ABRET*, *ABVOL*, and *SURP* are winsorized at the 1% level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. All significance tests are two-sided.

$$\begin{aligned} ABRET_{NA,ijt} = {} & \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 SURP_{ANN,it} + \beta_4 TEST_i * POST_{it} \\ & + \beta_5 SURP_{ANN,it} * TEST_i + \beta_6 SURP_{ANN,it} * POST_{it} \\ & + \beta_7 SURP_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \end{aligned} \quad (3)$$

Panel A: Estimating Equation (3) Using ABRET as the Dependent Variable

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.001	0.000	0.000	-0.001
	(0.53)	(0.05)	(-0.07)	(-0.58)
TEST	-0.002*	-0.001	-0.003**	-0.001
	(-1.66)	(-0.62)	(-1.99)	(-0.78)
POST	0.006	0.005	0.000	-0.001
	(1.06)	(0.81)	(0.09)	(-0.22)
*TEST * POST*	0.004***	0.004**	0.011***	0.013***
	(2.65)	(2.24)	(5.46)	(5.44)
$SURP_{ANN}$	-0.026	0.116	0.000	0.001
	(-0.29)	(1.06)	(0.39)	(0.86)
*TEST * $SURP_{ANN}$*	0.018	-0.266	0.002	0.001
	(0.06)	(-0.76)	(0.91)	(0.21)
*POST * $SURP_{ANN}$*	0.206**	0.021	0.010***	0.013***
	(2.17)	(0.18)	(5.97)	(6.26)
*TEST * POST * $SURP_{ANN}$*	-0.213	0.391	-0.014***	-0.020***
	(-0.70)	(1.05)	(-4.38)	(-5.01)
Adjusted R^2	0.89%	1.28%	1.29%	1.83%
Observations	19,530	19,530	19,530	19,530

$$ABVOL_{NA,ijt} = \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 |SURP|_{ANN,it} + \beta_4 TEST_i * POST_{it}$$
$$+ \beta_5 |SURP|_{ANN,it} * TEST_i + \beta_6 |SURP|_{ANN,it} * POST_{it} \quad (3)$$
$$+ \beta_7 |SURP|_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt}$$

Panel B: Estimating Equation (3) Using ABVOL as the Dependent Variable

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.018***	0.026***	0.018***	0.027***
	(17.80)	(18.70)	(15.95)	(16.86)
TEST	0.011***	0.018***	0.012***	0.017***
	(11.25)	(12.20)	(7.45)	(7.57)
POST	0.013***	0.016**	0.006	0.007
	(2.83)	(2.56)	(1.35)	(1.14)
*TEST * POST*	-0.009***	-0.014***	-0.002	-0.004
	(-6.43)	(-7.26)	(-0.85)	(-1.20)
$\|SURP\|_{ANN}$	0.053	-0.003	-0.001	-0.002
	(0.63)	(-0.02)	(-0.57)	(-1.05)
TEST * $\|SURP\|_{ANN}$	-0.782**	-1.052**	-0.004	-0.003
	(-2.55)	(-2.42)	(-1.41)	(-0.77)
POST * $\|SURP\|_{ANN}$	0.118	0.223*	0.016***	0.022***
	(1.32)	(1.77)	(8.92)	(8.78)
*TEST * POST* * $\|SURP\|_{ANN}$	0.557*	0.842*	-0.012***	-0.017***
	(1.73)	(1.85)	(-3.17)	(-3.28)
Adjusted R^2	2.47%	2.93%	3.03%	3.43%
Observations	19,496	19,496	19,496	19,496

TABLE 6
Using Alternative Control Sample of FPIs Unaffected by the SEC Regulation

This table reports the results of estimating equation (2) using an alternative control sample of FPIs from the European Union and Australia that use U.S. GAAP instead of IFRS. These FPIs are therefore unaffected by the rule change. Panels A and B show the results of estimating equation (2) using *ABRET* and *ABVOL* as the information proxies, respectively. *ABRET* is the cumulative daily return less the cumulative value-weighted CRSP market index around the FPI's earnings announcement. *ABVOL* is the cumulative trading volume over the event window less the median cumulative trading volume over the non-event period. The non-event period is the 51-day interval from 60 trading days before the earnings announcement to 10 trading days before the announcement. *POST* is a dummy variable equal to one (zero) for the post-regulation (pre-regulation) period. *TEST* is a dummy variable equal to one (zero) for observations in the test (control) sample. All specifications include calendar-quarter fixed effects. *ABRET* and *ABVOL* are winsorized at the 1% level. T-statistics are in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively. All significance tests are two-sided.

$$ABRET_{NA,ijt} = \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 ABRET_{ANN,it} + \beta_4 TEST_i * POST_{it} + \beta_5 ABRET_{ANN,it} * TEST_i + \beta_6 ABRET_{ANN,it} * POST_{it} + \beta_7 ABRET_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \quad (2)$$

Panel A: Estimating Equation (2) Using ABRET

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	-0.002	0.003	-0.005*	-0.004
	(-0.89)	(1.14)	(-1.93)	(-1.12)
TEST	0.002	0.002	-0.001	0.001
	(1.64)	(1.53)	(-0.29)	(0.16)
POST	0.048*	0.060*	0.041	0.053
	(1.75)	(1.77)	(1.48)	(1.54)
*TEST * POST*	0.000	0.001	0.012***	0.010**
	(0.20)	(0.35)	(3.29)	(2.25)
$ABRET_{ANN}$	0.050***	0.069***	0.007**	0.013***
	(3.06)	(3.14)	(2.06)	(3.15)
*TEST * $ABRET_{ANN}$*	0.038	0.045	0.006	0.005
	(1.46)	(1.42)	(1.37)	(0.91)
*POST * $ABRET_{ANN}$*	0.064***	0.074***	0.015***	0.016***
	(2.87)	(2.60)	(3.14)	(2.72)
*TEST * POST * $ABRET_{ANN}$*	-0.122***	-0.131***	-0.023***	-0.020***
	(-3.77)	(-3.36)	(-3.78)	(-2.60)
Adjusted R^2	2.70%	3.82%	2.40%	3.79%
Observations	7,357	7,357	7,357	7,357

$$ABVOL_{NA,ijt} = \beta_0 + \beta_1 TEST_i + \beta_2 POST_{it} + \beta_3 ABVOL_{ANN,it} + \beta_4 TEST_i * POST_{it} + \beta_5 ABVOL_{ANN,it} * TEST_i + \beta_6 ABVOL_{ANN,it} * POST_{it} + \beta_7 ABVOL_{ANN,it} * TEST_i * POST_{it} + \sum_{q=2}^{16} QTR_q + \varepsilon_{ijt} \quad (2)$$

Panel B: Estimating Equation (2) Using ABVOL

			Rank Regressions	
	(-1, 0)	*(-1, +1)*	*(-1, 0)*	*(-1, +1)*
Intercept	0.025***	0.036***	0.023***	0.035***
	(10.46)	(10.88)	(8.17)	(9.06)
TEST	-0.004**	-0.006**	-0.006**	-0.007**
	(-2.20)	(-2.25)	(-2.25)	(-2.18)
POST	-0.021	-0.036	-0.020	-0.035
	(-0.77)	(-0.94)	(-0.72)	(-0.91)
*TEST * POST*	0.005*	0.010**	0.006	0.011**
	(1.86)	(2.51)	(1.61)	(1.97)
$ABVOL_{ANN}$	0.043***	0.045***	0.008***	0.011***
	(3.28)	(2.90)	(2.69)	(2.70)
*TEST * * $ABVOL_{ANN}$	0.067**	0.074**	0.008*	0.010*
	(2.40)	(2.40)	(1.89)	(1.80)
*POST * * $ABVOL_{ANN}$	-0.007	0.008	-0.002	0.003
	(-0.28)	(0.32)	(-0.32)	(0.41)
*TEST * POST * * $ABVOL_{ANN}$	-0.109***	-0.135***	-0.012*	-0.018**
	(-2.99)	(-3.43)	(-1.88)	(-2.07)
Adjusted R^2	1.52%	1.70%	1.66%	1.83%
Observations	7,341	7,341	7,341	7,341

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Byard, Donal, Ying Li, and Yong YU. "The Effect of Mandatory IFRS Adoption on Financial Analysts' Information Environment." *Journal of Accounting Research* (2010). Print.