THE ROLE OF SIMILAR ACCOUNTING STANDARDS IN CROSS-BORDER MERGERS AND ACQUISITIONS*

JERE R. FRANCIS, University of Missouri-Columbia
SHAWN X. HUANG, Arizona State University
INDER K. KHURANA, University of Missouri-Columbia

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Abstract: This study investigates whether differences in accounting standards across countries create information costs that inhibit firms from investing in foreign markets. Using the frequency and dollar magnitude of cross-border mergers and acquisitions (M&A) from 32 countries over the period 1998-2004, we find that the aggregate volume of M&A activity across country pairs is larger for pairs of countries with similar Generally Accepted Accounting Principles (GAAP), and that this increased volume of M&A activity is driven by target countries that also have strong enforcement. We also find that the 2005 mandatory adoption of IFRS attracted more cross-border M&As among IFRS adopting countries, and that this increase in M&A activity within the IFRS countries is more pronounced for country pairs with low similarity in GAAP in the pre-IFRS adoption period. Overall, our results highlight the role of accounting standards and enforcement in shaping cross-border M&A activity.

Keywords**:** Accounting Standards, Cross-border Investments, Mergers and Acquisitions, Mandatory IFRS Adoption

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1. Introduction

Cross-border mergers and acquisitions (M&A) have grown rapidly since the 1990s (Erel et al. 2012). According to UNCTAD (2000), cross-border M&As constitute 78 percent of the worldwide foreign direct investments. Given the importance of cross-border M&As, academic research has placed increasing emphasis on investigating the barriers associated with cross-border M&A activities. In this paper, we examine whether differences in accounting standards act as an informational barrier that inhibits cross-border M&As by firms.

We argue that similar accounting standards impose less information cost on foreign acquirers and enable them to better value and monitor target firms.[1] Specifically, if Generally Accepted Accounting Principles (GAAP) for two countries are similar, then it would be easier for acquirers to identify value creation opportunities in the other country with less error because of lower information costs, and because of enhanced ability to evaluate the performance of the targets. Thus, the volume of M&A activity is predicted to be larger between pairs of countries with similar GAAP. We also test the role of enforcement in affecting this relation because prior research suggests that lax enforcement can result in limited compliance with accounting standards and less desirable financial reporting outcomes such as less timely and more opaque financial disclosures (e.g., Ball et al. 2003; Leuz et al. 2003; Burgsthaler et al. 2006; Holthausen 2009).

We use cross-sectional differences in accounting standards across countries for the period 1998-2004 to test our predictions. A unique feature of our research design is that we conduct our analysis at the country-pair level. This estimation technique – examining differences in

[1] Information costs include "the costs of becoming familiar with the financial statements of foreign companies, interpreting the information, and being able to compare the financial statements across companies" for M&A decisions (Beneish and Yohn 2008, p. 434). Our arguments are similar to those in recent research which documents that common accounting standards result in enhanced comparability of financial information across firms located in different countries (Barth et al. 2012; Yip and Young 2012).

accounting standards among pairs of countries rather than treating the individual country's accounting rules as a unit of analysis – provides a proxy for frictions on information flow. We then extend our cross-sectional evidence by examining how mandatory adoption of International Financial Reporting Standards (IFRS) by many countries in 2005 affected subsequent cross-border M&A activity. The orchestration of this large-scale, contemporaneous change led a large number of public companies around the world to stop using their countries' local accounting standards in 2005 and to simultaneously adopt a common set of reporting standards, which allows us to provide time-series evidence on the effect of harmonization of accounting standards on foreign acquisition decisions.

Our primary dependent variable of interest is the volume of cross-border M&A activity for each country pair. To compute the volume measures, we focus on both the total number and the total dollar value of mergers and acquisitions for each country pair. Specifically, we compute how acquirers from a given country allocate (at an aggregate country level) their investments in mergers and acquisitions of the targets in foreign markets. We then calculate the averages of the percentage allocation during the period 1998 - 2004 and relate them to pair-wise comparisons between the GAAP of the acquirers' country, and the GAAP of each of the other target countries in which the acquirers undertook mergers and acquisitions. We repeat this process for all countries in our sample for which we have mergers and acquisitions data.

To measure differences in accounting standards, we adopt Bae et al.'s (2008) approach which focuses on 21 important accounting rules based on their review of the past literature and a survey of GAAP differences in 2001. Specifically, we use these 21 accounting rules for each of the country pairs in our sample to derive a similarity index measuring the extent of similarity in

accounting standards across country pairs.[2] Higher values of this index reflect that both countries have more similar GAAP. Because this index is static and because it does not gauge differences in actual accounting practices or the quality of accounting standards across country pairs, we use the approach analogous to that used by Francis et al. (2014) to derive an alternative proxy that captures how comparable the accruals structure is between firms in two specific countries. This approach assumes that the accrual-difference metric primarily captures comparability, even though it may also capture other accrual properties. The results are robust to this alternative measure.

Our findings indicate that similarity in GAAP is positively related to the volume of cross-border mergers and acquisitions. In other words, we find that a smaller difference in GAAP between a country pair leads to more M&A activity in targets of a foreign country. These results hold after controlling for the effects of country-level characteristics including economic development, capital market development, and geographic and cultural proximity. Moreover, these relations are also economically significant. For example, controlling for other country characteristics, a one standard deviation increase in our comparability metric of an average country pair increases cross-border investment by 1.3 percent and 1.4 percent when cross-border investment allocation is estimated based on the frequency and the dollar value of mergers and acquisitions, respectively. This translates to about 0.10 standard deviation change in the frequency and dollar value of mergers and acquisitions following a one standard deviation change in our comparability metric. Moreover, we find that the positive relation between M&A activity and similar GAAP for country pairs is stronger when the target country has stricter enforcement, which underscores the importance of both standards and enforcement on the

[2] As discussed in more detail in the research design section, we use International Accounting Standards (IAS) as a framework to determine the closeness of each country's GAAP, i.e., the extent to which GAAP in the two countries require similar items as per Bae et al. (2008).

quality of accounting information (Ball 2001). Overall, these results indicate that both similarity in accounting standards and strictness of enforcement in target countries matter in cross-border mergers and acquisitions, and that the net benefits of similar accounting standards rely on the strength of the enforcement of those standards in target countries.

While our cross-sectional test points to a positive relation between similarities in GAAP and cross-border M&A activities, after controlling for multiple country-level characteristics, it is plausible that similarities in accounting standards may themselves be driven by cross-border interactions, thereby affecting our causal inferences with respect to the similarities in accounting standards. For example, Ding et al. (2007) find that a country's choice of GAAP is influenced by legal system and other institutions that protect investors. To address this identification issue, we examine an event involving an exogenous change in countries' accounting standards, the mandatory adoption of IFRS by many countries in 2005, and conduct time-series tests around this change.[3] The time series tests indicate that the widespread mandatory adoption of IFRS by countries in 2005 attracted more cross-border M&A activity among IFRS adopting countries in the post-2005 period. While there was an overall increase in M&A activity following the IFRS adoption, the increase was most pronounced for country pairs with low degree of similarity in GAAP in the pre-IFRS adoption period. We also observe an increase in the volume of cross-border M&A of public (listed) firms, but not in the volume of cross-border M&A of private (unlisted) firms, who are not required to adopt IFRS, providing additional evidence that the

[3] We acknowledge that there could have been concurrent changes in governance around mandatory adoption of IFRS. For example, the European Union (EU) adopted governance recommendations in an EU directive (8th Directive on Company Law) in June 2006, whereby EU member states were instructed to "improve accounting enforcement." But the EU approach was "comply or explain" rather than mandatory adoption. Given that the provisions of the 8thDirective were required to be implemented by September 2008 (IFC 2008), and given the "comply or explain" approach, it is very hard to know if such governance recommendations affect the 2006 financial reports. Nevertheless, we cannot disentangle the effect of mandatory IFRS adoption from all other developments occurring around the same time. For example, Christensen et al. (2013) find that the liquidity effects around IFRS introduction are limited to five EU countries that concurrently made substantive changes in reporting enforcement.

increase is due to IFRS creating greater GAAP similarity. Moreover, countries adopting IFRS reduce their M&A activity in non-IFRS countries during the post-IFRS regime. We also observe IFRS adopting countries increase their cross-border M&A activity only in targets of other IFRS adopting countries with strong enforcement. Collectively, these results are consistent with the notion that adoption of uniform accounting standards (along with strong enforcement) reduces information processing costs and enhances better evaluation of firm performance, thereby contributing to more cross-border mergers and acquisitions.

Our paper makes several important contributions to prior research. Recent research has been directed at understanding the forces which shape cross-border investments and has led to the identification of country-level legal institutions. Rossi and Volpin (2004) find that the volume of M&A activity is significantly larger in countries with more disclosure and stronger shareholder protection. Bris and Cabolis (2008) show that that the better the shareholder protection and governance in the acquirer's country, the higher the merger premium in cross-border mergers relative to domestic acquisitions. Our study differs from these studies in that we focus on the extent of similarity in GAAP between country pairs. We argue that to the extent that similar accounting standards benefit foreign acquirers by reducing information costs and facilitating better performance evaluations, they should facilitate more cross-border M&A activity. Our results show that GAAP similarities are positively related to the volume of M&A activity over and above a multitude of other country characteristics (including enforcement) and factors shown to be important in prior cross-country investment literature. Our paper, by focusing on a very large global universe of completed mergers and acquisitions, complements Chen et al. (2013), who examine cross-border spillover effects of mandatory IFRS adoption on

corporate investments and find that the difference in a firm's return-on-assets versus its foreign peers reduces under- and over- investment more in the post-IFRS adoption period.[4]

Our findings also add to the literature on the consequences of differences in accounting standards around the world. For example, Ali and Hwang (2000) show that value relevance of financial reports is lower where accounting practices follow the Continental model as opposed to the British-American model. In a similar vein, Bae et al. (2008) find that the extent to which GAAP differs between the two countries is negatively related to both analyst following and forecast accuracy. More recently, Hong et al. (2014) provide evidence that mandatory IFRS adoption reduces the information asymmetry between firms and their foreign participants in the IPO process and, as a result, it helps IPO firms raise more proceeds from foreign markets following mandatory IFRS adoption. We extend this line of inquiry by examining whether improved access to external funds due to similar accounting standards translates into higher firm-level investments in the form of cross-border merger and acquisitions.

Our study is also distinct from prior studies that show institutional owners and mutual fund managers increased their holdings of foreign securities after the mandatory adoption of IFRS (DeFond et al. 2011; Florou and Pope 2012; Khurana and Michas 2011; Yu and Wahid 2014). We focus on the effects of similarities in accounting standards on cross-border M&A decisions by firms seeking to enhance shareholder wealth. The potential gains of mergers and acquisitions are determined by the synergies arising from integrating economic resources, operations, and management. In contrast, investment decisions of institutional investors and mutual fund managers are about the allocation of their equity portfolios. These types of investments are undertaken mainly for capital gains and do not generate synergies typical of

[4] An advantage of focusing on mergers and acquisitions instead of the level of investments is that it sidesteps the interpretational issues involved with the sensitivity of investment-performance relations (See e.g., Alti 2003; Cleary 1999; Kaplan and Zingales 1997).

M&A activities. Moreover, institutional investors and mutual fund managers can diversify their investment risk by allocating their investments in different sectors and countries. However, very few firms can make multiple mergers and acquisitions in a year. Shareholders of the acquiring firm ultimately bear all the costs if the M&A deal turns out to be a failure. Thus, M&A decisions by firms vis-à-vis financial investment decisions of investors differ in their objectives, process, duration, and costs. We also show that the increase in M&A activity among IFRS adopting countries in the post-IFRS period was larger for country pairs with less similar accounting standards in the pre-IFRS period, which suggests that harmonization of accounting standards is beneficial, although a full assessment would also need to consider the costs of harmonization.

The rest of the paper is organized as follows. Section 2 describes the related literature and develops our testable hypotheses. Section 3 discusses the sample and details the empirical methods, and Section 4 reports descriptive statistics. Empirical results using cross-sectional and time-series tests are presented in sections 5 and 6, respectively. Section 7 concludes the paper.

2. Prior Research and Hypotheses Development

Prior research indicates that the cost to investors of acquiring information about foreign equity markets is a significant barrier to international capital mobility (Brennan and Cao 1997). Merton (1987) develops an analytical model in which investors do not have equal information, and hence rational investors prefer assets they are better informed about. He posits that incomplete information affects investors' stock trading behavior and consequently the related stock price. In related research, Gordon and Bovenberg (1996) show analytically that information disadvantages of foreign investors can result in less foreign investment.

A key element of the information environment in a country is its accounting standards. Prior research notes that differences in accounting standards can impede free capital flows. Barth et al. (1999) demonstrate analytically that harmonization of international accounting standards reduces the information costs associated with foreign investment expertise, which in turn, facilitates greater international investment. Several empirical studies provide indirect evidence on the importance of information costs for foreign investment decisions. Young and Guenther (2003) find countries that enforce higher levels of disclosure of accounting information exhibit higher international capital mobility, and Bradshaw et al. (2004) find that U.S. ownership increases in companies that adopt accounting standards that conform more closely to U.S. standards. In a similar vein, Covrig et al. (2007) show that average foreign mutual fund ownership is significantly higher in those non-U.S and non-Canadian companies that voluntarily adopted International Accounting Standards.

More recently, several studies document positive capital market outcomes around the mandatory IFRS adoption. Studies show an increase in market liquidity and a decrease in cost of capital (Daske et al. 2008, 2013; Li 2010), higher information content of IFRS earnings (Landsman et al. 2012), a reduction in insiders' ability to exploit private information (Brochet et al. 2013), and improvements in financial analysts' information environment (Byard et al. 2011; Tan et al. 2011; Horton et al. 2013).[5] Studies also find that cross-border investments by the institutional investors and foreign mutual funds increased in those countries that mandated IFRS adoption (DeFond et al. 2011; Florou and Pope 2012; Khurana and Michas 2011; Shima and Gordon 2011; Yu and Wahid 2014). Overall, the evidence indicates that accounting

[5] Evidence on the changes in financial reporting quality around mandatory IFRS adoption is mixed with Yip and Young (2012) showing that mandatory IFRS adoption improves cross-country information comparability by making similar things look more alike without making different things look less different, while Lang et al. (2010) find no effects on cross-country comparability.

harmonization by the mandatory IFRS adoption improved the transparency and comparability of financial statements, and thus reduced information costs for investors such as mutual funds and other institutional investors.

In this paper, we examine a similar question with regard to corporate investment policy: What are the effects of similarities in accounting standards on firm-level investment decisions, specifically, cross-border mergers and acquisitions? A fundamental role of cross-border mergers and acquisitions is to help acquiring firms to improve the use of firm assets by expanding their investment opportunity set (Stulz 1981; Caves 1982; Doukas and Travlos 1988).[6] Empirical research provides evidence on how differences in disclosures, governance, laws, and regulations across countries affect cross-border M&A activities. Rossi and Volpin (2004) show that in cross-border deals, the acquirers tend to come from countries that have higher investor protection than that of targets' countries.[7] Starks and Wei (2013) and Kuipers et al. (2003) analyze how differences in investor protection determine the announcement effect of cross-border acquisition of U.S. companies. Starks and Wei (2013) find that the takeover premium is decreasing in the quality of the corporate governance in the acquiring country, and Kuipers et al. (2003) find that the returns to targets of cross-border deals in the U.S. is positively related to the quality of the investor protection in the acquirer's country. In a similar vein, Bris and Cabolis (2008) find that the better the shareholder protection in the acquirer's country, the higher the merger premium in

[6] Different from mutual funds and institutional investors' foreign investment allocation decisions, cross-border M&As are firm-level investment decisions, which typically require acquiring firms to be directly involved in foreign target firms' operation and management. Shareholders of the acquiring firm ultimately bear all the costs, if the cross-border M&A deal turns out to be a failure. For example, eBay (a US company) acquired Skype (a Luxembourg-based company) for $2.6 billion in 2005. After the acquisition, eBay's stock price experienced a steep decline in 2006 and in 2007, eBay announced a large goodwill write-off of $1.43 billion related to the Skype acquisition, which is approximately 55% of the acquisition price.

[7] Rossi and Volpin (2004) focus on the number of cross-border deals as a percentage of all completed deals in a target country. In our study, we argue that cross-border M&A activity is a type of investment activity that helps acquiring firms to channel their assets towards their best possible use. As a result, we examine how acquiring firms from a country allocate their investments in various foreign markets.

cross-border mergers relative to domestic acquisitions. In terms of the role of accounting in cross-border mergers, Black et al. (2007) find that international acquirers pay lower premiums for target firms based in countries where accounting data are less value relevant.

Overall, the evidence indicates that high information costs, poor governance mechanisms, and low transparency exacerbate information asymmetry in international equity markets, thus increasing the risk of acquirers making bad decisions when engaging in cross-border M&As. Ball (2006) states that "if firms and/or countries use different accounting techniques – even if unambiguously disclosed to all users – they can impose costs on others (in the language of economics, create negative externalities) due to lack of comparability." As the differences in accounting standards increase, assets can become more difficult to price, subsidiaries' managements may be more difficult to control, and M&A negotiations may fail. In other words, to the extent that differences in accounting standards impose information costs on acquirers and make it difficult to evaluate the performance of the targets, the acquisitions of a particular firm in a foreign country will be negatively affected by the extent to which GAAP differs between the two countries. In our context, acquirers are expected to respond more quickly to growth opportunities in a foreign country if accounting standards in the country where investment is being considered are similar to those of the acquirer's country. In other words, familiarity with the target country's GAAP benefits the foreign acquirers and facilitates more M&A activity. Formally stated, our first hypothesis is as follows:

HYPOTHESIS 1: M&A activity is greater for country-pairs with more similar GAAP, ceteris paribus.

Hypotheses 1 is based on the maintained assumption that similarity in accounting standards can effectively enable foreign acquirers to identify value creation opportunities in the other country with less error because of lower information costs and because of enhanced ability

to evaluate the performance of the targets. However, this assumption may not be true. In particular, there are uncertainties regarding non-compliance and proper enforcement. Ball (2001) argues that, in the absence of effective enforcement mechanisms, higher-quality standards by themselves do not necessarily produce desirable economic outcomes. Consistent with Ball's argument, recent studies by Francis et al. (2005), Burgstahler et al. (2006), and Daske et al. (2008) provide corroborating evidence. One common interpretation of this evidence is that strict enforcement ensures that accounting standards are properly implemented and enforced. Thus, the net benefit to foreign acquirers of having similar accounting standards depends on the strength of the enforcement of standards in target countries. All else being equal, foreign acquirers are likely to undertake more mergers and acquisitions of targets in countries with both similar accounting standards and stricter enforcement regimes and institutional structures that provide strong reporting incentives.

The implication is that the increased M&A activity in another country, when the two countries have similar GAAP, is more likely to be observed when targets are from countries with strong enforcement than when they are from countries with weak enforcement, because GAAP implementation is better. Formally stated, our second hypothesis is as follows:

HYPOTHESIS 2: The positive relation between M&A activity and similar GAAP for country-pairs is stronger when the target country has stricter enforcement.

3. Research Design and Sample

Research design

We test hypothesis 1 using a cross-sectional dataset with observations at the country-pair level. Specifically, we examine the relation between the volume of mergers and acquisitions and the similarities in GAAP across country-pairs d and f by estimating the following model:

$$VOL_{d,f} = \alpha_0 + \beta_1 Similarity_{d,f} + \gamma_j \sum CNT_{d,f} + \varepsilon_{d,f} \quad (1)$$

where

VOL = Extent to which acquirers in a domestic country d undertake mergers and acquisitions in a foreign market f.

Similarity = Index measuring the extent of GAAP similarities between each country-pair d and f.

CNT = Country-level control variables.

Details of the variables used in the study including definitions, measurement, and data sources are described in Appendix 1. For testing hypothesis 1, the coefficient on the *Similarity* variable in model (1) is of primary interest. Hypothesis 1 predicts acquirers to have more investments in foreign markets when the foreign (target) country has similar GAAP relative to that of the acquirer's country. Therefore, we expect the coefficient on *Similarity* to be positive under hypothesis 1.

Because our regression model uses country pairs as the unit of analysis, ordinary least squares (OLS) estimation of the model will produce unbiased coefficient estimates, but may have understated standard errors due to non-independent sample observations in which an acquirer country is paired one at a time with each of the other countries in which acquiring firms have investments in M&A activity. Therefore, all regressions are estimated with hetroskedasticity-robust standard errors which are clustered by the country making acquisitions in the foreign country.

To test hypothesis 2, we partition target countries into strong and weak enforcement groups based on median values of two target countries' enforcement metrics: public enforcement and securities regulation. Public enforcement index is based on La Porta et al. (2006) and captures the strictness, investigative powers, and sanctions the main government agency or official authority has in supervising securities markets. It is the mean of (1) supervisor

characteristics index; (2) rule-making power index; (3) investigative powers index; (4) orders index; and (5) criminal index. The securities regulation index is developed by Hail and Leuz (2006) and reflects the effectiveness of a country's securities regulation. It is calculated as the mean of the disclosure requirements index, the liability standard index, and the public enforcement index created by La Porta et al. (2006). We re-estimate model (1) for groups of country pairs where the first group covered the target countries with strong legal enforcement and the second group covered target countries with weak legal enforcement, and use F-statistics to test for the difference in the coefficients on *Similarity* for the two groups.[8]

Dependent variables: We use the volume of M&A activity for each country pair as the dependent variable in our regressions. To compute the volume measures, we focus on both the total number and the total dollar value of merger and acquisitions for each country pair. Specifically, we compute the percentage of a country d's total number and total value of annual cross-border M&A activity that occurred in a foreign country f, and designate these variables as $Pct\_M\&A\_NUM_{d,f}$ and $Pct\_M\&A\_VALUE_{d,f}$, respectively. We then obtain the averages of the percentage allocation over the sample period 1998-2004.[9] By construction, higher values of these variables indicate that investors in an acquirer's country undertake more activity in a foreign market in their cross-border merger and acquisition decisions.

Table 1 shows the data on cross-border mergers and acquisitions by acquirer countries. It also lists the frequency and value of merger and acquisitions in foreign markets for two acquirer countries (US and Austria). Several points are noteworthy. First, different countries play

[8] Separate subsample estimations allow all right-hand side variables to affect the response variable differentially across enforcement regimes. As a sensitivity test, we estimate our models on a pooled sample by including the main effect for the enforcement variable and its interaction with the *Similarity* (or *Comparability*) variable. Untabulated results using this approach yield similar inferences.

[9] As a sensitivity test, we include country-pairs with zero volume in our regression estimations and find that our inferences remain unchanged when we include such observations in the regression estimations.

different roles in the cross-border M&A market. For example, the U.S. exhibits the largest number of cross-border M&A, while the UK has the largest dollar value of cross-border M&A during our sample period.[10] Second, there is a substantial cross-sectional variation with respect to where the targets belong. For example, Austria does not have mergers and acquisitions in 12 of the foreign markets included in our sample. In contrast, the U.S. has M&A activity in every country. Third, there are differences in the size of M&A allocation across the same set of countries. For example, the number of mergers and acquisitions U.S. investors have in the Canadian market is 19.15 (1,935/10,106) percent compared to Austria's 1.56 (7/449) percent in Canada.

[Insert Table 1]

*GAAP similarity***:** We use the country-level data reported in Bae et al. (2008, Table 1) to derive the similarity in accounting standards for each country pair in our sample. Bae et al. (2008) focus on 21 key accounting items and rely on a comprehensive survey (Nobes 2001) to identify differences in these 21 accounting items between each country pair.[11] Following Bae et al. (2008), a pair of countries is deemed to have similar GAAP for an item if both countries conform to IAS for that item or if both countries differ from IAS for that item.[12] We then assign the country pair a "GAAP similar" score of one for that item. Otherwise, we assign the country pair

[10] To rule out the possibility that the observations from the US or UK were driving the results, we repeated all analyses by excluding observations from these two countries and untabulated results yield inferences similar to those reported in the paper.

[11] Bae et al. (2008) imposed three criteria for identifying the 21 items. First, the item must have been compiled in prior work by Comprix et al. (2003), Bradshaw et al. (2004), and Basu et al. (1998). Second, data in the comprehensive survey must contain enough information to determine that countries with GAAP that does not conform to IAS have GAAP that are similar to one another. Third, there are at least five countries in the sample that are different from the sample countries that conform to IAS for that item but are similar to one another.

[12] It is possible that two countries that diverge from IAS on an accounting item may have adopted dissimilar non-IAS accounting standard. To examine the sensitivity of our results to this possibility, we recoded our test variables by defining a pair of countries to have similar GAAP for an item listed in Appendix B if both countries conform to IAS for that item. Our results using this narrower definition are qualitatively similar to those reported in the paper.

a "similarity" score of zero for that item. This procedure is repeated for all 21 accounting items used by Bae et al. (2008) and the ratio formed by the sum of the "GAAP similar" scores for that specific country pair across all 21 items, scaled by 21, constitutes an index, which we denote as "*Similarity*." This index is our measure of the extent of similarity in accounting standards across country pairs and has a theoretical range from zero to one.[13] By construction, higher values of this variable reflect more similarity in GAAP between the two countries.

Appendix 2 illustrates how we construct the similarity variable for three country pairs: US and Austria, Austria and Canada, and Canada and US. Panel A focuses on a country pair in which the US is the country of the acquirer and Austria is the target country. An examination of Panel A reveals that there are 8 accounting items where both US GAAP and Austrian GAAP conform to IAS and 3 items where the two GAAPs both differ from IAS, resulting in a similarity score of 0.524 (11 out of 21). Panel B examines our similarity measure for Austria and Canada, in which Austria is the country of the acquirer and Canada is the target country. Approximately 57% of the 21 accounting items are similar between Austria and Canada. In Panel C, Canada represents the acquirer country and the US is the foreign country, and there are 86% of the 21 GAAP items that are similar between two countries' GAAP.

Our similarity variable is subject to several limitations. First, it does not gauge differences in actual accounting practices or the quality of the accounting standards across any country pair. Rather, it measures differences in standards themselves. In other words, a higher

[13] As a sensitivity test, we use an alternative measure of *Similarity* for a country pair's GAAP based on the Nobes (2000) survey conducted by the large accounting firms to study national accounting rules in 53 countries. This survey provides an overview of the differences between national accounting rules and IAS for a total of 63 key accounting practices (including 19 in the area of disclosure). The construction of the country-pair similarity based on Nobes (2000) mirrors the procedures followed for the *Similarity* measure based on Bae et al. (2008). Untabulated results continue to indicate a significant increase in cross-border M&A activity as our alternative measure of *Similarity* of GAAP increases, suggesting that the reduced comprehensiveness of accounting items in computing the *Similarity* measure is not crucial for our results on the relation of cross-border mergers and acquisitions with similarity of GAAP.

value of the similarity variable for a country pair does not imply that the two countries exhibit similar accounting quality. Second, it is a static measure over our sample period. To the extent that there was a run-up to IFRS adoption in several countries during our sample period, it ignores the dynamic nature of accounting standards. Third, it assumes equal-weighting of the 21 accounting differences in their impact on mergers and acquisitions.[14]

Given that similarity in accounting standards is one of the key channels we examine, we validate this measure with an alternative proxy that captures how comparable or similar the accruals structure is between firms in the same industry in two specific countries. The approach we use is analogous to that used by Francis et al. (2014) who measure accounting comparability by examining differences in year-specific total accruals between pairs of firms in the same industry. For each two-digit SIC industry-year, we conduct pairwise comparisons of firms in one country relative to the other country to obtain accruals comparability at the firm-pair level, which is computed as the absolute value of the difference between signed total accruals, scaled by beginning of year total assets. We repeat the same procedure for all industries that are common to the country pair and then average the accrual comparability measure for all firm-pairs in the country-pair over the sample period. For ease of interpretation, we multiply the accrual comparability measure by -1 and denote it as "*Comparability*." As such, a specific country-pair will have a more comparable accruals/earnings structure when the accruals comparability metric is large.

The correlation between the variables, *Similarity* and *Comparability*, is 0.58. The two measures are tested in our regression models, one variable at a time, due to potential collinearity between the two variables.

[14] We use an equal weighting method because there is no well-defined theory for other weighting methods. It is possible that certain reporting elements (e.g., capitalization of research & development expenditures) could be more relevant in the context of mergers and acquisitions. But we see no reason that equal weighting will bias the results.

Control variables: The purpose of the country-level control variables is to capture important elements of a country's institutions that affect cross-border M&A activity. While these institutions create protection for investors, they also enhance the payoffs of the acquirers and therefore affect the incentives of the acquirers to engage in the cross-border M&A activity. We draw on past literature to identify a wide range of control variables for institutions and categorize them into the following groups: (1) economic development; (2) capital market development; (3) cultural familiarity; (4) tax incentives; and (5) investor protection, which includes legal enforcement.[15] The proxies used to capture these country-level variables are defined in Appendix 1.[16]

We also control for the target country's financial reporting quality. Prior research finds that higher financial reporting quality allows investors to better monitor managers and to prevent them from taking actions that are contrary to shareholder interests (Bushman and Smith 2003; Biddle and Hilary 2006). To the extent that lower accounting quality can impose agency costs on acquirers, we expect acquirers to avoid targets in a foreign country if the country's financial reporting is of a lower quality. The accounting quality variable is constructed based on the

[15] For all economic and capital market development variables (except GDPGR and inflation), we compute a ratio by dividing the value for a target country by that of the acquirer's country. Ratios closer to one indicate that country pairs are closer with respect to a specific country characteristic. For example, a ratio of 1 based on GDP per capita indicates that GDP per capita for a country pair is the same. In contrast, a ratio of GDP per capita below (above) one indicates that a target's country is relatively less (more) developed compared to the acquirer's market. For GDPGR and inflation, we use the difference form because it can take negative values. As a sensitivity test, we also included all country-level controls in the form of country-pair differences in these variables. Unreported results yielded inferences similar to those reported in the paper.

[16] Although we control for a wide range of country-level differences that can potentially affect cross-border M&As, it is possible that there are still some other omitted correlated variables. For example, a firm can signal its availability for acquisition and maximize share price through reporting/governance decisions that increase quality relative to what domestic standards (on average) would be. We know that firms could voluntarily adopt IAS/IFRS in some countries to improve the quality of accounting standards they use and mitigate the effect of differences in GAAPs. While using country-level data as the unit of analysis can obviate this problem, we examine this issue further. Using the Global Vantage database, we compute the value-weighted percentage of firms in each country that voluntarily adopt IAS/IFRS and include this variable as an additional control. The additional data requirements further reduce the sample to 523 country pairs. Our inferences with respect to our *test* variable remain unaffected by the inclusion of this additional control variable.

descriptive information on three earnings opacity metrics for years 1984-1998 for each sample country provided in Bhattacharya et al. (2003). The three earnings opacity metrics in Bhattacharya et al. (2003) are intended to capture three attributes of earnings numbers that are associated with earnings opacity: earnings aggressiveness, loss avoidance, and earnings smoothing.[17] Using the data reported in Bhattacharya et al. (2003), we rank the earnings aggressiveness metrics across countries, with smaller ranks associated with greater earnings aggressiveness; similarly, the loss avoidance ratios are ranked across countries, with smaller ranks associated with greater loss avoidance; and finally, we rank the earnings smoothing across countries, with smaller ranks associated with greater earnings smoothing. Hence, each dimension of earnings transparency in a country is assigned a rank**,** where higher ranks denote higher earnings transparency. We then average the three separate rankings per country to obtain an overall earnings transparency rank (AQ) for each country. Higher values of this rank (*AQ*) imply higher earnings quality in the foreign (target) country.

We also include three proxies to capture the absolute level of target country's openness: foreign direct investment, the extent of exports and imports, and the cost of entry imposed on new entrants. Prior research in the strategy literature indicates that less openness in the target country may distort the economic and financial environment and reduce the efficiency of business. In addition, less openness can hinder acquisition negotiations and increases the risk of operating in these target countries. Therefore, we control for the absolute level of the target country's openness. Lastly, we include both acquirer and target country fixed effects in all our models to capture any unobserved attributes in these countries.

[17] Specifically, earnings aggressiveness is measured as accruals (scaled by lagged assets), loss avoidance as the ratio of the number of firms with small positive earnings (firms with net income scaled by lagged total assets between 0 and 1 percent) minus the number of firms with small negative earnings (firms with net income scaled by lagged total assets between 0 and -1 percent) divided by their sum, and earnings smoothing as the cross-sectional correlation between the change in accruals and the change in cash flows, scaled by lagged assets.

Given the extensive array of control variables in our estimations, we diagnose multicollinearity in the regressions using variance inflation factors (VIFs). The highest VIF for our regressions is 4.48, indicating that collinearity is not likely to be a problem in interpreting the regression results.

Sample and data

To empirically test our predictions, we use Security Data Corporation's (SDC) Mergers and Acquisitions database and obtain all cross-border mergers and acquisitions announced over the time period 1998 through 2004.[18] We focus on this period because our GAAP measure is constructed based on local GAAP in 2000. To be included in our sample, merger and acquisition deals need to be completed. In providing a full picture of cross-border M&A activity, we include partial acquisitions as well.[19] Following prior research (e.g., Rossi and Volpin 2004; Bris and Cabolis 2008), we exclude mergers and acquisitions involving leverage buyouts, spinoffs, recapitalizations, self-tender offers, exchange offers, repurchases, acquisitions of minority interest, and privatizations because these type of acquisitions differ from regular mergers and acquisitions in that they do not typically involve synergy in the operations of the acquirer and the target.

Next we merge the data on cross-border M&A activity at the country-pair level with the differences in GAAP measures obtained from Bae et al. (2008).[20] Additional data requirements for the control variables restrict our sample to 643 country pairs, representing 32 acquirer

[18] We use 2004 as the cut-off year to avoid confounding effects with the mandatory adoption of IFRS in several countries as of 2005.

[19] The SDC database does not provide details with regard to the actual control obtained by acquiring firms. Furthermore, partial acquisitions with less than 50% ownership only constitute 11% of our sample M&As. In an untabulated analysis, we exclude the partial acquisitions with less than 50% ownership and find our results are qualitatively similar to our primary findings.

[20] Bae et al. (2008) report differences between local GAAP and IAS for 49 countries.

countries and 32 target countries listed in Table 1.[21] Note that for some of the robustness tests, there are fewer country-pair observations due to additional data limitations.

We obtain two control variables, geographic distances in thousands of kilometers between acquirer countries and other target countries and official languages of these countries, from CEPII (2008). Other country-level control variables are retrieved from the World Bank's World Development Indicators Database (2009), and the investor protection measures come from La Porta et al. (1998, 2006).

4. Descriptive Statistics

Table 2 provides descriptive statistics for the dependent variables, the test variable, and several country-level control variables expressed in raw form or as ratios (or differences) across country pairs. The volume of M&A activity varies widely across country pairs. The mean (median) percentage allocation in terms of the number and dollar value of M&A activity are 6.37 percent (2.35 percent) and 8.16 percent (1.96 percent), respectively. The higher mean values than the median values for these variables suggest that a few observations with large values skew the distributions of these variables. On average, approximately 58 percent of the 21 accounting items in Bae et al. (2008) are similar across country pairs.

[Insert Table 2]

There is considerable variation in target country variables capturing earnings quality and openness to foreign businesses. The median value of the foreign direct investment (FDI) and international trade (Trade) in the target country is 3.1 percent and 65.94 percent of GDP. The mean value of principal component scores for the cost of entry into the target country's market

[21] Due to data availability to construct our control variables, seventeen countries (Argentina, Egypt, China, Czech, Estonia, Hungary, Israel, Luxembourg, New Zealand, Peru, Philippines, Poland, Russia, Singapore, Slovenia, Taiwan, and Venezuela) included in Bae et al. (2008) are not covered by our analysis. It is worth noting that some countries (e.g., Austria) do not have cross-border merger and acquisition activities in all 32 countries.

for foreigners (Cost of Entry) is -0.53. There is also substantial cross-sectional variation in the relative measures of economic and capital market development across country pairs.

About 18 percent of the country pairs share a major official language defined as the first official language listed in the CEPII (2008) database. The geographical distance (in raw form) across country pairs ranges from 173 to 18,070 kilometers. About half of the country pairs in our sample do not have the same religion as the target country. The mean ratio of corporate tax rates (Tax) is 1.06, suggesting that the foreign country has 6 percent more withholding tax than the host country in an average country-pair. There is also a substantial cross-sectional variation in the investor protection measures across country pairs as reflected in the range of the values of shareholder rights, creditor rights and legal enforcement across country pairs.

5. Regression Results

Test of hypothesis 1

Table 3 reports results of the OLS estimations of the model in equation (1) with the two measures of the M&A activity as dependent variables.[22] The tests of significance are based on two-tail p-values of robust t-statistics that are clustered by the country of the acquirer. The explanatory power of the models using total number and the total dollar amount of M&A activities are between 0.405 and 0.563.

[Insert Table 3]

Turning to the variables of primary interest, the coefficients on *Similarity* and *Comparability* are positive and statistically significant at the 0.05 and 0.01 level, respectively,

[22] Given that the dependent variable, the percentage of investment allocation, is censored at 0% and 100%, we re-estimate our equations with a TOBIT regression model in addition to the traditional OLS regression. Our results are robust to this alternative model specification. To further assess whether the use of percentages systematically creates a skew towards larger target economies, we re-estimated our models by including target country's GDP per capita as an additional control variable, and our inferences using this additional control variable remained the same as those reported in the paper.

when the frequency of mergers and acquisitions is used as the dependent variable. Moreover, the coefficients on *Similarity* and *Comparability* are positive and statistically significant at the 0.10 and 0.05 level, respectively, when the total dollar value of mergers and acquisitions is used as the dependent variable. Taken together, these results support hypothesis 1, providing evidence that acquirers engage in more M&A activity in countries that exhibit similar and comparable accounting standards, and these effects persist over and above the effects of country-level characteristics such as economic and capital market development, familiarity, investor protection, and other factors controlled in the models. These relations are also economically significant. Controlling for other country-level characteristics, a one standard deviation increase in the *Similarity* (*Comparability*) variable of an average country pair increases cross-border investment by 0.52 (1.3) percent and 0.94 (1.4) percent when cross-border investment allocation is estimated based on the frequency and the dollar value of mergers and acquisitions, respectively.[23] In other words, a one standard deviation increase in the *Similarity* (*Comparability*) variable leads to about 0.05 (0.12) and 0.10 (0.10) standard deviation change in the frequency and the dollar value of mergers and acquisitions, respectively. Overall, the results are consistent with the notion that cross-border M&A activity is greater in target countries that have similar GAAP, relative to that of the acquirer country.

Among the different categories of control variables, several variables exert an incremental effect on the volume of M&A activity. Results indicate that cross-border mergers and acquisitions occur more when the target's country has a relatively higher economic growth (*GDPGR*) and larger private bank credit (*BANKCREDIT*), shares a common language

[23] The magnitudes of 0.52 and 0.74 percent are computed by multiplying 3.490 and 4.957, respectively, (the coefficient on *Similarity* in columns (1) and (2) of Table 3) by 0.15 (the standard deviation of *Similarity* reported in Table 2). The magnitudes of 1.3 and 1.4 percent are computed by multiplying 21.737 and 23.327, respectively, (the coefficients on *Comparability* in columns (3) and (4) of Table 3) by 0.06 (the standard deviation of *Comparability* reported in Table 2).

(*DUMLANG*), and exhibits strong legal enforcement. Moreover, earnings quality (*AQ*) of firms in the target country, and openness of the target country, in the form of foreign direct investment and the cost of entry imposed on new entrants, affect the volume of cross-border M&As.

Test of hypothesis 2

Table 4 presents the regression results for testing hypothesis 2, which predicts that the positive relation between M&A activity and similar GAAP is stronger when the target country has stricter enforcement. Specifically, Panels A and B report the regression results of estimating equation (1) with one modification for the two subsamples based on target countries' enforcement metrics capturing public enforcement and securities regulation, respectively. Because low levels of enforcement in either country could result in standards that are not similarly implemented and therefore affect our test variables, we include an additional control variable to capture differences in enforcement in the country-pairs. For brevity, we do not report the coefficients on the control variables except for those relating to the differences in public enforcement and securities regulation. The coefficients on the control variables are similar to those in Table 3, and the additional control variable based on differences in enforcement is generally not significant. Since the results in the two panels are generally similar, we discuss the results in Panel A.

The coefficients on *Similarity* and *Comparability* are positive and the two-tail p-values are statistically significant at the 0.10 level for targets in strong public enforcement countries, suggesting that the similarity in GAAP between country pairs matter for mergers and acquisitions of targets in strong enforcement countries. In contrast, the coefficients on *Similarity* or *Comparability* are not statistically significant at the 0.10 level in columns (2), (4), (6), and (8), suggesting that the volume of mergers and acquisitions of targets in weak enforcement countries

do not increase just because accounting standards are similar. F-statistics to evaluate differences in the parameter estimates for the two subsamples are statistically significant at 0.05 level, which is consistent with hypothesis 2. Overall, these results indicate that both similarity in accounting standards and strictness of enforcement in target countries matter in cross-border mergers and acquisitions and that the benefits of similar accounting standards rely on the strength of the enforcement of those standards in target countries.

[Insert Table 4]

6. Additional Analysis

As a supplemental analysis, we examine the mandatory adoption of IFRS in 2005 on cross-border M&A activity. Again, for brevity, control variables are not reported as they are similar to those reported in Table 3.

Time-series tests of IFRS adoption

Mandatory adoption of IFRS in 2005, by 18 countries including some EU countries, Australia, Hong Kong, and South Africa, forced public firms in many jurisdictions to stop using their countries' local accounting standards in 2005 and to simultaneously adopt a common set of reporting standards. This shock creates a natural experimental setting to test the effects of accounting harmonization on cross-border M&A activity. If our arguments hold, then we should observe a significantly positive post-IFRS effect on the M&A activities in general in those countries that mandatorily adopt IFRS.

We focus on the change in the patterns of cross-border mergers and acquisitions in 2006, the year after IFRS was mandated relative to the pre-IFRS year 2004. We require country pairs

to have data available both pre and post IFRS adoption, which results in 546 country-pair year observations involving 28 acquirer countries and 30 target countries.[24]

Panel A of Table 5 presents univariate evidence on the change in cross-border M&A activity for the IFRS adopter country pairs and other country pairs around 2005. There is a significant increase in cross-border M&A activity measured as *Pct_M&A_NUM* and *Pct_M&A_Value* for IFRS adopter country pairs after IFRS adoption. However, for the pairs of non-IFRS adopter countries, there appears to be very little difference in the two metrics (*Pct_M&A_NUM* and *Pct_M&A_Value*) between the Pre- and Post- IFRS adoption periods. Thus, preliminary evidence suggests that firms in IFRS adopting countries invested more among themselves through M&A activity after the mandatory adoption of IFRS. These univariate results must be interpreted with caution because they do not control for other concurrent changes over time.

[Insert Table 5]

To test in a regression framework whether firms in pairs of IFRS adopting countries have more mergers and acquisitions in each other's market after the mandatory adoption of IFRS, we estimate the following model using data for the years 2004 and 2006:

$$VOL_{d\,f} = \alpha_0 + \beta_1 IFRS\ Adopter_{d,f} + \beta_2\, Post + \beta_3 IFRS\ Adopter_{d,f} * Post + \gamma_j \sum CNT_{d,f} + \varepsilon_{d,f} \qquad (2)$$

where *IFRS Adopter* is an indicator variable which takes on a value of 1 if both countries in a country pair mandatorily adopted IFRS in 2005, and 0 otherwise, and *Post* is an indicator variable which takes on a value of 1 for 2006 data and 0 for 2004 data. All other variables are as

[24] Twenty-eight acquirer countries are Australia, Austria, Belgium, Brazil, Canada, Chile, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Ireland, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Portugal, South Africa, Spain, Sweden, Switzerland, Thailand, UK, and US. Thirty target countries consist of Australia, Austria, Belgium, Brazil, Canada, Chile, Denmark, Finland, France, Germany, Greece, Hong Kong, India, Indonesia, Ireland, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, Portugal, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, UK, and US.

defined before. We expect the coefficient on the interaction term *IFRS Adopter*Post* to be positive because of the standardization of accounting policies.

Panel B of Table 5 reports the OLS regression results.[25] Columns (1) and (2) report the results from estimating model (2); the two columns differ in terms of the measures used to proxy for the volume of cross-border M&A activity. The adjusted-R^2s for these two models are 0.60 and 0.349, respectively. Turning to our variable of interest, the coefficients on the interaction of *IFRS Adopter*Post* are positive and statistically significant at the 0.10 level (two-tail) in column (1) and at the 0.01 level in column (2), indicating that IFRS adopter countries increase their foreign investments through M&A activity in other IFRS adopting countries in the post-IFRS adoption period. Controlling for other country characteristics, mandatory IFRS adopter country pairs increase their cross-border investments by 1.688 percent and 6.383 percent in the post-IFRS adoption period when cross-border investment allocation is estimated based on the frequency and the dollar value of mergers and acquisitions, respectively. This finding is consistent with the argument that the mandated IFRS adoption in the IFRS adopting countries reduced differences in GAAP among them, which contributed to reduced information processing costs and led to greater cross-border M&A activity within the set of IFRS adopting countries.

In the last two columns of panel B, we refine the interaction of *IFRS Adopter*Post* to capture the change in *Similarity* that accompanies IFRS adoption. We expect the increase in M&A activity to be greater where the change in *Similarity* that accompanies IFRS adoption is the largest. To compute the change in similarity (*Similarity_Change*) variable for our country-pairs, we deem the *Similarity* in GAAP during the post-IFRS adoption period to be 1 if both

[25] Since the volume of cross-border M&A activity is measured in 2004 and 2006, we exploit the World Bank database and update our control variables with values corresponding to the years 2004 and 2006.

countries adopt IFRS.[26] The *Similarity_Change* variable is calculated as the difference between the post- and pre-adoption similarity scores. By construction, larger values represent country-pairs experiencing greater improvement in GAAP similarity after IFRS adoption.

Consistent with our primary results, the coefficients on the interaction term, *Similarity_Change***Post*, are significantly positive at the 0.05 level, irrespective of how we measure the volume of merger and acquisitions. These results suggest that country-pairs with a greater change in similarity in the post-IFRS adoption period increased cross-border M&A activity reliably more.

Given the evidence that countries adopting IFRS increased M&A activity in IFRS adopting countries, it would be useful to know whether IFRS adopting countries had a reduction in their M&A activity in other markets that did not adopt IFRS. In other words, is there evidence of a shift away from non-IFRS adopting countries? To examine this issue, we first define a new indicator variable, $IFRS\ Adopter_{d}$,$Non\text{-}IFRS\ Adopter_{f}$, which takes a value of 1 if country d mandatorily adopted IFRS in 2005 and the other country f did not, and 0 otherwise. We then replace this new variable for IFRS $Adopter_{d,f}$ variable in equation (2) and re-estimate the regression model.

Untabulated results indicate that the coefficients on the interaction between $IFRS\ Adopter_{d}$,$Non\text{-}IFRS\ Adopter_{f,}$ and *Post* are negative and statistically significant at the 0.05 level, suggesting that IFRS adopting countries reduced their investments (M&A activity) in non-IFRS countries in the post-IFRS period. Collectively, the findings in this section are suggestive of a substitution effect in which IFRS adopter countries increased their foreign M&A activity in other

[26] If one of the country pair adopts IFRS but the other does not, then we compute the post-IFRS adoption *Similarity* as the similarity between the non-adopter's local GAAP and IFRS. Moreover, if both countries do not adopt IFRS, their GAAP *Similarity* in the post-adoption period will be the same as the *Similarity* in the pre-IFRS adoption period.

IFRS countries with a common GAAP, but decreased their foreign investments in the post-IFRS adoption period in non-IFRS adopting countries where such countries have more divergent GAAPs.

Analysis of IFRS adoptions by separating public and private targets

In this section, we examine whether our results of greater M&A activity in the set of IFRS adopting countries is driven by the volume of mergers and acquisitions of public targets. The reason is that IFRS is mandatory for public listed firms and not for unlisted firms. Thus observing an increase in the volume of cross-border M&As of public (listed) firms, but not in the volume of cross-border M&As of private (unlisted firms) would be additional evidence that the increase is due to IFRS creating greater GAAP similarity.

Table 6 reports the regression results from estimating the model in equation (2) by separately measuring cross-border M&As with public targets versus cross-border M&As with private targets. Consistent with our expectation, we find that M&As directed at public targets in IFRS adopting countries increased while M&As directed as private targets in IFRS adopting countries did not. This additional evidence adds confidence that IFRS adoption is driving the results.

[Insert Table 6]

Subsample analysis of IFRS adoption based on target countries' enforcement regime

In this section, we re-estimate equation (2) for groups of country pairs where the first group covered the target countries with strong legal enforcement and the second group covered target countries with weak legal enforcement. The two target countries' enforcement metrics we use are public enforcement and securities regulation defined earlier in the research design

section. We expect the increase in M&A activity after IFRS adoption to be stronger when the target country has stricter enforcement.

Table 7 presents the regression results of estimating equation (2) using the frequency and dollar value of M&A activity for the two partitions. For targets in strong legal enforcement countries, the coefficients on the interaction between *IFRS Adopter* and *Post* are always positive and statistically significant at the 0.10 level or lower. In contrast, the coefficients on *IFRS Adopter* and *Post* are not statistically significant at the 0.10 level for targets in weak enforcement countries. F-statistics to evaluate differences in the parameter estimates of the interaction variables for the two subsamples are statistically significant at 0.05 level, which is consistent with hypothesis 2. The results in Table 7 suggest that IFRS adopter countries increase their foreign investments through M&A activity only in targets of other IFRS adopting countries with strong enforcement. Overall, these results indicate that the effects of similarity in accounting standards on mergers and acquisitions are influenced by enforcement regimes in target countries.

[Insert Table 7]

7. Conclusion

We examine whether differences in accounting standards across countries create an informational barrier that inhibits firm-level investments (M&As) in foreign equity markets. We test this prediction using data from 32 countries over a seven year period from 1998 to 2004. As expected, we find that the volume of M&A activity across country pairs is larger for pairs of countries with greater similarity/comparability in GAAP, and that this increased volume of M&A activity is driven by target countries with strong enforcement, which makes GAAP implementation more reliable. Moreover, we find that mandatory IFRS adoption in the EU and other countries in 2005 attracted greater cross-border mergers and acquisitions within this group,

and that this increase in M&A activity in the post-IFRS period is larger for country pairs with a low degree of similarity in the pre-IFRS period. In other words, as the GAAP similarity increased more in the post-IFRS period, there was a larger effect on the volume of M&A activity. These results hold after controlling for the effects of several country-level characteristics including economic development, capital market development, and geographic and cultural proximity.

The results are consistent with the notion that similar accounting standards, combined with stronger enforcement, can reduce information frictions and lessen underinvestment in foreign markets. We recognize that firms make voluntary reporting choices that can increase financial reporting quality relative to what domestic accounting standards prescribe. While this could be an issue, it is less of a concern for our analysis which relies on aggregate country-level data that essentially averages across firms within a country. Overall, our analysis helps to understand the channel through which accounting standards facilitate cross-border mergers and acquisitions, which have grown rapidly since the 1990s. While our analysis suggests that there are informational advantages to accounting harmonization in the context of cross-border M&A activity, our evidence does not shed light on the total costs and benefits of harmonization.

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Appendix 1
Data Sources and Definitions

*Dependent Variable***:**
Pct_M&A_NUM$_{d,f}$: The average percentage of a country d's total number of mergers and acquisition activities occurred in a foreign country f over the sample period.

Pct_M&A_Value$_{d,f}$: The average percentage of a country d's total dollar amount of mergers and acquisition activities occurred in a foreign country f over the sample period.

*Test Variable***:**
Similarity$_{d,f}$: Index created to capture similarities in GAAP between country d and country f. Following Bae et al. (2008), we focus on 21 important accounting items listed in Appendix B. A pair of countries is deemed to have similar GAAP for an item if both countries conform to IAS (i.e., each has a score of zero) for that item. We then assign the country pair a "similarity" score of one for that item. Otherwise, we assign the country pair a "similarity" score of zero for that item. This procedure is repeated for all 21 accounting items listed in Appendix B and the ratio formed by the sum of the "GAAP similar" scores for that specific country pair across all 21 items, scaled by 21, constitutes an index, which we denote as "Similarity." This index is our measure of the extent of similarity in accounting standards across country pairs and has a theoretical range from zero to one. By construction, higher values of this variable reflect more similarity in GAAP between the two countries.

Comparability$_{d,f}$: The measure captures how comparable the accruals structure is between firms in the same industry in two specific countries. For each two-digit SIC industry-year, we conduct pairwise comparisons of firms in one country relative to the other country to obtain accruals comparability at the firm-pair level, which is computed as the absolute value of the difference between signed total accruals. We repeat the same procedure for all industries between the two countries and then aggregate the accrual comparability measure for all firm-pairs in the country-pair over our sample period. For ease of interpretation, we multiply the accrual comparability measure by -1. As such, a specific country-pair will have a more comparable accruals/earnings structure when the average accruals comparability metric is large.

*Control Variables***:**
Accounting Quality:
AQ$_f$: Overall average earnings quality rank based on Bhattacharya et al. (2003) for each target country. Higher values of AQ imply greater earnings quality in the target's country.

Economic Development:
GDPC$_{d,f}$: Ratio of country f's gross domestic product (GDP) per capita in U.S. dollars to country d's GDP per capita in U.S. dollars. Source: World Bank (2009).

GDPGR$_{d,f}$: The difference between country f's real GDP growth rate and country d's real GDP growth rate. Source: World Bank (2009).

$MTB_{d,f}$: The ratio of country f's value-weighted market-to-book to country d's valued-weighted market-to-book. Source: Datastream.

$Currency_{d,f}$: The ratio of country f's annual real bilateral U.S. dollar exchange rate return to country d's annual real bilateral U.S. dollar exchange rate return. Source: World Bank (2009).

$INFLATION_{d,f}$: The difference between country f's inflation rate and country d's inflation rate. Source: World Bank (2009).

$MKTRET_{d,f}$: The ratio of country f's value-weighted annual stock market return to country d's value-weighted annual stock market return. Source: Datastream.

Capital Market Development:
$MKTCAP_{d,\ f}$: The ratio of country f's GDP-scaled stock market capitalization to country d's GDP-scaled stock market capitalization. Source: World Bank (2009).

$Turnover_{\ d,f}$: The ratio of country f's stock turnover rate to country stock turnover rate. Source: World Bank (2009).

$BANKCREDIT_{d,f}$: The ratio of country f's GDP-scaled private bank credit to country d's GDP-scaled private bank credit. Source: World Bank (2009).

Familiarity:
$DUMLANG_{d,f}$: It is a dummy variable equal to 1 if country d and country f share a common language, 0 otherwise. Source: *http: / /www.cepii.fr /anglaisgraph/bdd/ distances.htm.*

$Log\_DIST_{d,f}$: The natural logarithm of geographic distance between country d and country f. Source: *http: / /www.cepii.fr /anglaisgraph/bdd/ distances.htm.*

$Crosslist_{\ d,f}$: The number of firms from country f that cross-listed in country d scaled by the number of total domestic firms in country f. Source: Sarkissian and Schill (2004) and World Bank (2009).

$Bilateral\ Trade_{d,f}$: The bilateral import and export between a country-pair scaled by the total import and export of the two countries. Source: International Trade Data, NBER-UN world trade data.

$Industry\ Structure_{d,f}$: The correlation of industry structure between a country-pair. We first compute the average weight of each one-digit industry for each country during 1998–2004 based on market capitalization. We then calculate the Pearson correlation of the industry weights for each country-pair. Source: Datastream.

$Religion_{d,f}$: An indicator variable equals 1 if both countries f and d's primary religion (Protestant, Catholic, Muslim, Buddhist, or Others) are the same, and 0 otherwise. Source: Stulz and Williamson (2003)

Tax Incentive:
$Tax_{d,f}$: Ratio of country f's corporate tax rate to country d's corporate tax rate. Source: Economic Freedom Index, *KPMG.*

Investor Protection:
Shareholder Rights$_{d,f}$: Ratio of country f's anti-director rights' index to country d's anti-director rights' index. The index is created by La Porta et al. (1997) with larger values indicating that minority shareholders are better protected against expropriation by management and large shareholders. Source: La Porta et al. (1997).

Creditor Rights$_{d,f}$: Ratio of country f's creditor rights' index to country d's creditor rights' index. The index is created by La Porta et al. (1997) with larger values indicating that creditors are better protected against expropriation by management and large shareholders. Source: La Porta et al. (1997).

Legal Enforcement$_{d\ f}$: Ratio of country f's enforcement of legal protection to country d's enforcement of legal protection. This enforcement index is the average score of three legal variables from La Porta et al. (1998): 1) the efficiency of the judicial system, 2) an assessment of rule of law, and 3) the corruption index. Source: La Porta et al. (1998).

Legal Origin$_{d\ f}$: The difference in legal origin between country d and country f based on a dummy variable that equals 1 if a country is of English common law origin, and 0 otherwise. Source: La Porta et al. (1998).

Target Country's Openness:
FDI_f: Country f's GDP-scaled foreign direct stock investment inward in U.S. dollars. Source: World Bank (2009).

$Trade_f$: The average of GDP-scaled exports and imports in country f. Source: World Bank (2009).

Cost of Entry$_f$: Country f's cost of entry imposed on new entrants and is a linear combination of three measures of the cost of entry into the country's markets, namely, (1) the number of procedures/steps that a start-up has to comply with in order to obtain legal status, (2) the time it takes to become operational (in business days) and (3) the cost of becoming operational as a share of per capita GNP. Weights for linear combination are calculated using principal components factor analysis. Source: Djankov et al. (2002).

*Other Variables***:**
Public Enforcement: An index capturing the strictness, investigative powers, and sanctions the main government agency or official authority has in supervising securities markets. It is calculated as the mean of (1) supervisor characteristics index; (2) rule-making power index; (3) investigative powers index; (4) orders index; and (5) criminal index created by La Porta et al. (2006). Source: La Porta et al. (2006).

Securities Regulation: An index reflecting the effectiveness of a country's securities regulation. It is calculated as the mean of the disclosure requirements index, the liability standard index, and the public enforcement index created by La Porta et al. (2006). Source: La Porta et al. (2006).

$Pub\_Enf_{d,f}$: Ratio of country f's public enforcement score to country d's public enforcement score.

$SEC\_REG_{d,f}$: Ratio of country f's securities regulation score to country d's securities regulation score.

$IFRS\ Adopter_{d,f}$: 1 if both countries in a country pair adopted IFRS, 0 otherwise.

Post: An indicator variable which takes on a value of 1 in 2006 and 0 otherwise.

Appendix 2
Examples for the Construction of Similarity Variables

Panel A: US is the acquirer country and Austria is the target country

Country	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20	I21	Total
Country d = US	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	4
Country f = Austria	1	0	1	0	0	0	0	1	1	0	1	1	1	0	1	1	0	0	1	1	1	12
Similarity $_{d,f}$	0	1	0	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	**0.524**

Panel B: Austria is the acquirer country and Canada is the target country

Country	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20	I21	Total
Country d = Austria	1	0	1	0	0	0	0	1	1	0	1	1	1	0	1	1	0	0	1	1	1	12
Country f = Canada	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	5
Similarity $_{d,f}$	1	1	0	1	1	1	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0	**0.571**

Panel C: Canada is the acquirer country and US is the target country

Country	I1	I2	I3	I4	I5	I6	I7	I8	I9	I10	I11	I12	I13	I14	I15	I16	I17	I18	I19	I20	I21	Total
Country d = Canada	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	5
Country f = US	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	4
Similarity $_{d,f}$	0	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	**0.857**

I1 –I21 are the 21 accounting items identified in Bae et al (2008; table 1). A country d or a country f is assigned a 0 (1) for an accounting item if the local GAAP of that country is similar to (different than) IAS. The variable, $Similarity_{d,f}$, for a country pair is assigned 1 for an accounting item if the local GAAP of both countries conforms to or is different from IAS, and 0 otherwise.

TABLE 1
Descriptive information of cross-border merger and acquisition (M&A) activities by acquirer country

Country	Total Frequency of M&A Activities	Total Value of M&A Activities ($ Mil)	US M&A Allocation		Austria M&A Allocation	
			Frequency	Value ($ Mil)	Frequency	Value ($ Mil)
Australia	726	83,336	525	24,408	3	151
Austria	449	6,605	50	387	-	-
Belgium	891	69,332	158	7,692	9	476
Brazil	41	10,379	332	13,260	3	88
Canada	3,076	179,729	1,935	105,785	7	566
Chile	33	1,088	109	5,649	-	-
Denmark	704	25,615	100	6,284	7	62
Finland	653	48,257	73	3,893	10	213
France	2,390	394,920	603	33,144	18	66
Germany	3,027	336,585	877	79,201	201	1,662
Greece	96	6,063	24	1,500	-	-
Hong Kong	491	25,213	212	6,024	-	-
India	264	3,368	406	5,078	4	8
Indonesia	24	1,746	45	1,519	-	-
Ireland	593	20,867	136	4,719	-	-
Italy	844	61,842	296	25,588	36	239
Japan	1,044	65,765	369	34,438	3	11
Korea	115	2,873	254	24,662	-	-
Malaysia	300	5,463	56	1,366	-	-
Mexico	108	14,165	308	25,138	2	52
Netherlands	1,893	245,668	296	25,565	14	184
Norway	509	18,151	111	4,330	-	-
Pakistan	7	79	8	10	-	-
Portugal	188	14,294	28	616	-	-
South Africa	300	13,976	94	1,619	2	10
Spain	704	113,631	222	5,727	7	17
Sweden	1,439	67,151	222	18,187	13	1,200
Switzerland	1,165	116,529	155	17,405	49	175
Thailand	49	1,399	92	2,265	-	-
Turkey	18	192	30	236	-	-
UK	5,137	897,104	1,980	174,575	30	587
US	10,106	660,271	-	-	31	837
Total	37,384	3,511,655	10,106	660,271	449	6,605

N.A. = Not applicable.

TABLE 2
Descriptive Statistics

	N	Minimum	Mean	Median	Maximum	Std. Dev.
Dependent variable:						
Pct_M&A_Num $_{d,f}$	643	0.09%	6.37%	2.35%	100.00%	10.79%
Pct_M&A_Value $_{d,f}$	643	0.0003%	8.16%	1.96%	100.00%	16.41%
Test Variable:						
Similarity $_{d,f}$	643	0.14	0.58	0.62	1.00	0.15
Comparability $_{d,f}$	643	-0.28	-0.16	-0.15	-0.05	0.06
Accounting Quality:						
AQ $_{f}$	643	4.00	18.19	19.67	28.67	6.42
Economic Development:						
GDPC $_{d,f}$	643	0.01	2.73	0.90	73.15	7.97
GDPGR $_{d,f}$	643	-16.49	-0.09	-0.08	13.74	2.57
MTB $_{d,f}$	643	0.11	1.34	0.97	11.59	1.24
Currency $_{d,f}$	643	0.79	1.01	1.01	1.26	0.06
Inflation $_{d,f}$	643	-93.87	1.43	0.51	75.48	11.01
MKTRET $_{d,f}$	643	0.03	2.38	0.97	34.91	1.24
Capital Market Development:						
MKTCAP $_{d,f}$	643	0.04	1.52	0.90	20.04	1.90
Turnover $_{d,f}$	643	0.05	1.41	0.96	20.52	1.64
BANKCREDIT $_{d,f}$	643	0.15	1.14	0.93	6.01	0.79
Familarity:						
DUMLANG $_{d,f}$	643	0	0.18	0	1.00	0.38
DIST $_{d,f}$	643	173	6314	6240	18070	4718
Crosslist (%) $_{d,f}$	643	0	0.37	0	62.97	2.67
Bilateral Trade $_{d,f}$	643	0	0.02	0	0.32	0.03
Industry Structure $_{d,f}$	643	-0.748	0.429	0.464	0.973	0.340
Religion $_{d,f}$	643	0	0.314	0	1	0.465
Tax Incentive:						
Tax $_{d,f}$	643	0.31	1.06	1.00	3.20	0.43
Investor Protection:						
Shareholder Right $_{d,f}$	643	0.17	1.23	1.00	6.00	0.88
Creditor Right $_{d,f}$	643	0.20	1.21	1.00	5.00	0.78
Legal Enforcement $_{d,f}$	643	0.29	0.99	0.97	3.39	0.39
Legal Origin $_{d,f}$	643	-1.00	0.02	0.00	1.00	0.69
Target Country's Openness:						
FDI $_{f}$	643	-1.98	4.77	3.10	48.26	6.47
Trade $_{f}$	643	19.74	80.71	65.94	332.77	57.91
Cost of Entry $_{f}$	643	-1.74	-0.50	-0.53	1.22	0.83

All variables are defined in Appendix 1.

TABLE 3
Regression analysis of cross-border merger and acquisition (M&A) activity and the similarity/comparability of GAAP

	Pred. Sign	(1) Pct_M&A_Num$_{d,f}$		(2) Pct_M&A_Value$_{d,f}$		(3) Pct_M&A_Num$_{d,f}$		(4) Pct_M&A_Value$_{d,f}$	
		Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept		-20.692	-0.93	-49.37	-1.16	-16.157	-0.71	-45.077	-1.05
Similarity $_{d,f}$	+	**3.490****	**2.12**	**4.957***	**1.94**				
Comparability $_{d,f}$	+					**21.737*****	**2.91**	**23.327****	**1.99**
Accounting Quality:									
AQ $_{f}$	+	0.154***	2.78	0.268**	2.40	0.189***	3.44	0.308***	2.84
Economic Development:									
GDPC $_{d,f}$	+	0.081	0.45	0.08	0.42	0.068	0.39	0.069	0.36
GDPGR $_{d,f}$	+	0.343*	1.68	0.728*	1.66	0.297*	1.64	0.685*	1.72
MTB $_{d,f}$	+	0.328	0.7	0.622	0.95	0.288	0.70	0.569	0.96
Currency $_{d,f}$	+	11.156	0.59	31.355	0.82	10.606	0.54	31.048	0.81
Inflation $_{d,f}$	-	-0.073	-0.53	-0.213	-0.74	-0.076	-0.53	-0.215	-0.74
MKTRET $_{d,f}$	+	0.103	1.17	-0.028	-0.21	0.130	1.49	0.003	0.02
Capital Market Development:									
MKTCAP $_{d,f}$	+	1.035	1.38	1.334*	1.88	1.051	1.46	1.352*	1.96
Turnover $_{d,f}$	+	0.363	1.28	0.185	0.30	0.354	1.15	0.168	0.26
BANKCREDIT $_{d,f}$	+	2.722***	2.79	3.578***	2.81	2.643**	2.71	3.462**	2.73
Familarity:									
DUMLANG $_{d,f}$	+	2.479**	2.73	0.393	0.26	2.748***	2.81	0.846	0.59
Log_DIST $_{d,f}$	-	-0.536	-1.28	-0.201	-0.28	-0.605	-1.45	-0.205	-0.29
Crosslist $_{d,f}$	+	0.598***	8.96	0.455***	4.70	0.604***	9.29	0.470***	5.05
Bilateral Trade $_{d,f}$	+	79.185***	3.16	64.543*	2.03	78.78***	3.20	65.429**	2.05
Industry Structure $_{d,f}$	+	-1.304	-1.48	-2.245*	-1.72	-0.518	-0.63	-1.465	-1.10
Religion $_{d,f}$	+	0.022	0.02	-0.197	-0.12	-0.152	-0.17	-0.378	-0.24
Tax Incentive:									
Tax $_{d,f}$	-	1.146	0.95	1.985	1.12	1.112	0.94	2.069	1.20
Investor Protection:									
Shareholder Right $_{d,f}$	+	-1.055*	-1.9	-1.092	-1.21	-0.784	-1.34	-0.808	-0.84
Creditor Right $_{d,f}$	+	0.376	0.56	0.341	0.42	0.477	0.76	0.450	0.57
Legal Enforcement $_{d,f}$	+	11.317***	4.41	17.011***	4.39	11.565***	4.56	17.257***	4.43
Legal Origin $_{d,f}$	+	2.085*	1.96	0.890	0.42	2.019*	1.91	0.79	0.38
Target Country's Openness:									
FDI $_{f}$	+	0.168***	3.42	0.205**	2.55	0.156***	3.09	0.199**	2.59
Trade $_{f}$	+	-0.007	-0.96	-0.024	-1.64	-0.008	-1.08	-0.023	-1.60
Cost of Entry $_{f}$	-	-3.740***	-5.03	-4.031***	-3.59	-3.964***	-5.20	-4.212***	-3.84
Country Fixed Effects		Yes		Yes		Yes		Yes	
N		643		643		643		643	
Adj R^2		0.554		0.405		0.563		0.408	

Dependent variable is volume of cross-border M&A. All variables are defined in Appendix 1. *, **, *** represent significance levels of 0.10, 0.05, and 0.01 (two-tailed), respectively.

Table 4
Analysis of cross-border merger and acquisition (M&A) activity by enforcement regimes

Panel A: Enforcement is measured using public enforcement

	Pred. Sign	(1) Pct_M&A_Num$_{d,f}$				(2) Pct_M&A_Value$_{d,f}$				(3) Pct_M&A_Num$_{d,f}$				(4) Pct_M&A_Value$_{d,f}$			
		Strong		Weak		Strong		Weak		Strong		Weak		Strong		Weak	
		Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept		12.119	0.35	21.956	1.14	-39.803	-0.86	57.098	1.21	24.235	0.72	24.214	1.13	-36.647	-0.80	67.201	1.32
Similarity $_{d,f}$	+	4.871**	1.96	-2.424	-1.13	4.738*	1.87	-0.943	-0.20								
Comparability $_{d,f}$	+									29.535**	2.11	13.758	1.61	47.542***	3.79	12.917	0.60
F test (Strong = Weak)		**5.93****				**4.17****				**6.28****				**8.75*****			
Pub_Enf $_{d,f}$	+	0.732	0.43	1.033*	1.95	0.075	0.03	1.919*	2.08	1.335	0.81	1.046*	1.93	0.398	0.14	2.109**	2.40
Control Variables		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Country Fixed Effects		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N		330		313		330		313		330		313		330		313	
Adj R²		0.674		0.607		0.508		0.550		0.681		0.611		0.508		0.572	

Panel B: Enforcement is measured using securities regulation

	Pred. Sign	(1) Pct_M&A_Num$_{d,f}$				(2) Pct_M&A_Value$_{d,f}$				(3) Pct_M&A_Num$_{d,f}$				(4) Pct_M&A_Value$_{d,f}$			
		Strong		Weak		Strong		Weak		Strong		Weak		Strong		Weak	
		Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
Intercept		26.084	0.66	-50.263	-1.62	-38.327	-0.80	-54.483	-0.72	51.164	1.32	-50.345	-1.56	-28.728	-0.64	-50.347	-0.64
Similarity $_{d,f}$	+	5.459**	2.14	-4.396	-1.29	6.491*	1.88	-5.474	-1.12								
Comparability $_{d,f}$	+									43.623***	2.84	1.847	0.20	24.893**	2.10	13.318	0.66
F test (Strong = Weak)		**5.26****				**5.64****				**9.88*****				**8.12*****			
SEC_REG $_{d,f}$	+	1.551	0.57	0.019	0.03	0.423	0.11	-0.396	-0.46	1.598	0.58	-0.097	-0.18	0.638	0.15	-0.544	-0.60
Control Variables		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Country Fixed Effects		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N		330		313		330		313		330		313		330		313	
Adj R²		0.654		0.485		0.504		0.341		0.669		0.481		0.504		0.341	

Dependent variable is volume of cross-border M&A. All variables are defined in Appendix 1. *, **, *** represent significance levels of 0.10, 0.05, and 0.01 (two-tailed), respectively.

Table 5
Descriptive statistics and regression analysis of cross-border M&A activity around mandatory IFRS adoption
Panel A: Descriptive statistics of cross-border M&A activity around mandatory IFRS adoption

		Pre-IFRS Adoption	Post-IFRS Adoption	Diff	t-statistics
Pct_M&A_Num	IFRS Adopter country pairs	0.072	0.081	0.009	(2.12)**
	Other country pairs	0.066	0.070	0.004	(0.74)
Pct_M&A_Value	IFRS Adopter country pairs	0.059	0.093	0.034	(4.58)***
	Other country pairs	0.054	0.058	0.004	(1.26)

Panel B: Changes in cross-border M&A activity around mandatory IFRS adoption, and the impact of changes in similarity around mandatory IFRS adoption on cross-border M&A activity

	Pred. Sign	**(1) Pct_M&A_Num$_{d,f}$**		**(2) Pct_M&A_Value$_{d,f}$**		**(3) Pct_M&A_Num$_{d,f}$**		**(4) Pct_M&A_Value$_{d,f}$**	
		Coeff.	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**
Intercept		-63.325***	-5.01	-105.507***	-4.72	-69.091***	-5.41	-110.099***	-4.93
IFRS Adopter	?	3.074**	2.42	5.236**	2.54				
Similarity_Change $_{d,f}$	-					-3.587	-1.41	-9.67**	-2.16
Post	?	-1.178**	-2.28	-2.759**	-2.37	-2.377***	-2.82	-6.237**	-2.69
IFRS Adopter * Post	**+**	**1.688***	**2.03**	**6.383*****	**3.17**				
Similarity_Change $_{d,f}$ * Post	**+**					**4.135****	**2.46**	**13.369*****	**3.04**
Control Variables		Yes		Yes		Yes		Yes	
Country Fixed Effects		Yes		Yes		Yes		Yes	
N		546		546		546		546	
Adj R^2		0.600		0.348		0.596		0.349	

All variables are defined in Appendix 1. *, **, *** represent significance levels of 0.10, 0.05, and 0.01 (two-tailed), respectively.
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Table 6
Cross-border M&A activity around mandatory IFRS adoption: public versus private Targets

		Public Targets				Private Targets			
		(1) $Pct\_M\&A\_Num_{d,f}$		(2) $Pct\_M\&A\_Value_{d,f}$		(3) $Pct\_M\&A\_Num_{d,f}$		(4) $Pct\_M\&A\_Value_{d,f}$	
		Coeff.	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**
Intercept		-27.26	-0.60	-134.716*	-2.00	-81.901***	-5.38	-112.79***	-4.26
IFRS Adopter	?	7.695***	3.40	9.117***	2.82	2.711**	2.09	4.105*	1.73
Post	?	-2.378	-1.64	-3.038	-1.04	-0.834*	-1.78	-1.651	-1.26
IFRS Adopter * Post	**+**	**5.389****	**2.33**	**14.809*****	**3.10**	**1.373**	**1.54**	**3.749**	**1.57**
Control Variables		Yes		Yes		Yes		Yes	
Country Fixed Effects		Yes		Yes		Yes		Yes	
N		546		546		546		546	
Adj R^2		0.421		0.359		0.413		0.319	

All variables are defined in Appendix 1. *, **, *** indicate significance at 10%, 5%, 1% level (two-tailed), respectively.

TABLE 7
Analysis of cross-border M&A activity around mandatory IFRS adoption by enforcement regimes

		Enforcement Proxied by															
		Public Enforcement								**Securities Regulation**							
	Pred. Sign	**(1) Pct_M&A_Num$_{d,f}$**				**(2) Pct_M&A_Value$_{d,f}$**				**(3) Pct_M&A_Num$_{d,f}$**				**(4) Pct_M&A_Value$_{d,f}$**			
		Strong		**Weak**		**Strong**		**Weak**		**Strong**		**Weak**		**Strong**		**Weak**	
		Coeff.	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**	**Coeff.**	**t-stat**
Intercept		-41.345**	-2.11	-49.575**	-2.04	-50.209	-1.51	-34.348	-0.97	-95.589***	-4.43	43.737	1.31	-118.220***	-2.62	2.075	0.04
IFRS Adopter	?	2.419	1.49	5.115*	1.80	3.941	1.47	8.393**	2.12	2.857*	1.83	7.219**	2.35	5.647*	1.87	10.271***	2.86
Post	?	-1.244*	-1.80	0.906	0.90	-1.859	-1.20	2.375	1.24	-1.301**	-2.09	-0.230	-0.21	-2.788*	-1.76	0.550	0.25
IFRS Adopter * Post	**+**	**1.634***	**1.96**	**0.597**	**0.54**	**6.410***	**1.81**	**1.752**	**1.07**	**1.759***	**1.92**	**0.572**	**0.97**	**7.159****	**2.17**	**2.987**	**1.06**
F test (Strong = Weak)		**3.93****				**7.03*****				**4.02****				**7.26*****			
Enforcement $_{d,f}$	+	-2.043	-0.83	0.827	1.04	7.417*	1.76	2.152**	2.03	0.072	0.10	-1.762	-0.90	0.370	0.15	2.023	1.00
Control Variables		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
Country Fixed Effects		Yes		Yes		Yes		Yes		Yes		Yes		Yes		Yes	
N		316		230		316		230		324		222		324		222	
Adj R^2		0.678		0.603		0.435		0.276		0.704		0.613		0.433		0.467	

All variables are defined in Appendix 1. *, **, *** represent significance levels of 0.10, 0.05, and 0.01 (two-tailed), respectively.