

The effect of IFRS on cross-border acquisitions

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Abstract

We examine whether the 2005 mandatory adoption of IFRS is followed by an increase in cross-border acquisitions into the adopting countries and whether the association is driven by IFRS per se or by concurrent enforcement changes. We use the exogeneity of a firm's listing status to identify the effect of IFRS, which enables us to more reliably establish a causal relation between IFRS and foreign investments. The overall evidence suggests that the adoption of IFRS led to a significant increase in cross-border investment into the adopting countries, which is likely to benefit the adopting countries substantially. Consistent with the notion that the economic effects of IFRS are likely to depend on the strength of the local institutions and regulatory implementation, the increase in foreign investment flow is limited to adopting countries where government ability to implement sound regulations is high. However, there is no evidence that the increase in investment flow is driven by those countries that apparently bundled the IFRS adoption with enforcement changes, suggesting that the effect that we document is due to IFRS as opposed to changes in enforcement.

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1. Introduction

We examine whether the 2005 mandatory adoption of the International Financial Reporting Standards (IFRS) is followed by an increase in cross-border mergers and acquisitions (M&A) into the adopting countries and whether any such association is driven by IFRS per se or by concurrent enforcement changes. Prior studies generally suggest that IFRS has real economic implications (see, e.g., Brüggemann et al. 2009; Beuselinck et al. 2009; Armstrong et al. 2010; Li 2010; Byard et al. 2011; DeFond et al. 2011; Tan et al. 2011; Horton et al. 2012; and Landsman et al. 2012). One argument against the notion that IFRS provides real economic benefits is the observation that few unlisted firms voluntarily adopt IFRS. The benefits could be real but the managers of the unlisted firms might not be aware of them or IFRS could impose certain costs on the managers of the unlisted firms that exceed the benefits. Alternatively, the documented effects could be incorrectly attributed to IFRS. Consistent with this last explanation, Christensen et al. (2013) suggest that effects that are commonly attributed to IFRS could actually be driven by changes in enforcement by EU members, particularly Finland, Germany, the Netherlands, Norway, and the U.K., which also made substantive changes in enforcement concurrent with the introduction of IFRS. Their study raises doubt on the validity of the inferences drawn in prior studies regarding the economic effects of IFRS.

Christensen et al. (2013) focus on the potential liquidity effect of IFRS and do not analyze the effect of the bundling of enforcement changes with the IFRS adoption on cross-border investments. Although we cannot attribute to IFRS every change that is observed after the IFRS adoption, we cannot conclude that none of the changes is due to IFRS either. It is therefore important to determine the extent to which other presumed effects of IFRS are indeed due to IFRS, as opposed to increased enforcement. In particular, one of the primary purposes of IFRS is to improve the comparability of financial statements, with the ultimate goal of increasing cross-

border transactions (EC Regulation No. 1606/2002).¹ While a strong regulatory environment is beneficial for foreign portfolio investors, it can impede foreign direct investment (FDI), even when the regulations are intended to protect investors and creditors.² Considering that, on average, the regulatory environment is already strong in the countries that made substantive changes in enforcement concurrent with the IFRS adoption, the additional regulations can be seen as an indication of a more aggressive regulatory environment and thus dampen direct foreign investment. Hence, it is essential to determine whether investment into the adopting countries increased after the IFRS adoption and whether any documented increase is driven by concurrent enforcement changes or by IFRS per se. There are many studies on the association between IFRS and foreign investment; however, as we later explain, the extant evidence is not sufficient to draw any reliable conclusion on the effects of IFRS on cross-border M&As.

We have several other reasons for focusing on M&As. First, M&As are generally large and information intensive investments (Goldstein and Razin 2006), and probably the types of investments that IFRS is intended to attract. As Busse and Groizard (2008, p. 861) note, “[i]n contrast to short-term capital flows, long-term foreign investment is much more likely to be valuable to host economies.” According to the Organization for Economic Cooperation and Development (OECD) (2008), foreign direct investment (FDI),³ which includes primarily greenfield investment⁴ and M&As, “provides a means for creating direct, stable, and long-lasting links between economies” (p. 14). FDI is also an important technology transfer vehicle and

¹European Commissioner McCreevy (2005) argues, for instance, that IFRS “should lead to more efficient capital allocation and greater cross-border investment” (see also Securities and Exchange Commission (SEC) 2008; Tweedie 2008; and White 2008).

²Busse and Groizard (2008) discuss the pros and cons of regulations for foreign direct investments.

³According to the OECD (2008, p. 17), FDI “is a category of cross-border investment made by a resident in one economy (the *direct investor*) with the objective of establishing a lasting interest in an enterprise (the *direct investment enterprise*) that is resident in an economy other than that of the direct investor. The motivation of the direct investor is a strategic long-term relationship with the direct investment enterprise to ensure a significant degree of influence by the direct investor in the management of the direct investment enterprise.”

⁴While M&A transactions imply the purchase or sale of existing equity, greenfield investments refer to altogether new investments (*ex nihilo* investments) (OECD 2008, p. 87).

contributes more to economic growth than domestic investment (Borensztein et al. 1998). Second, M&A tends to create enormous wealth, particularly for target shareholders. While the average M&A announcement return is slightly negative for acquirers (depending on the method of payment), it is substantially positive for targets, with the combined return being significantly positive (Andrade et al. 2001). Moreover, because an M&A target can be either listed or unlisted (and thus not subject to IFRS), M&A offers a very good setting to isolate the potential IFRS effect. Third, as we mentioned earlier, while a strong regulatory environment is beneficial for FPI, it is likely to impede FDI. Hence, FDI offers a better setting to isolate the IFRS effect from the increased enforcement effect than FPI.

We do not analyze FDI in general because, in addition to the fact that the opportunity to compare listed and unlisted targets is nonexistent in this setting, the case for an increase in greenfield investment (a major component of FDI) following the IFRS adoption is not strong. In general, a firm engaging in a cross-border investment into an IFRS adopting country will continue to use its domestic GAAP, instead of IFRS, to report the performance of its foreign investment. Thus, while the accounting standard of the host country is very important in the case of M&A, it is not so important in the case of greenfield investments. M&A involves the valuations of existing reporting entities and is thus likely to be affected by reporting standards, which is not the case for greenfield investments.

To capture the incremental cross-border investment that firms listed in the IFRS countries have attracted after the 2005 mandatory adoption, we compare the odds of a cross-border acquisition of a listed firm in the adopting countries before and after the adoption, conditional on the value of the transaction. By using the odds that an acquisition is a cross-border (as opposed to a domestic) transaction, we control for potential endogenous and unobserved factors that could induce changes in M&A activities. The use of the odds of cross-border acquisitions of listed firms offers at least two other major advantages over extant alternative procedures.

First, Beneish et al. (2012) conclude that “the increase in foreign equity investment around IFRS adoption documented in prior work is not robust to alternative deflators or to the exclusion of the U.S. as an investor.” Our design allows us to avoid the scaling issue. Second, and more importantly, as mentioned earlier, IFRS is mandatory for listed and not for unlisted firms.⁵ There are very few unlisted firms that voluntarily adopt IFRS. André et al. (2012) report that only 287 out of 8,417 large and medium-sized unlisted UK firms adopted IFRS by the end of 2009. The proportion is likely much lower for the smaller firms, for the smaller adopting countries, and for the earliest years after the adoption given that voluntarily adoption of IFRS by unlisted UK firms are irreversible. Therefore, a firm’s listing status can serve as a simple but powerful instrument to determine whether IFRS leads to an increase in cross-border investment. Observing an increase in the odds of cross-border acquisitions of listed firms, but not in the odds of cross-border acquisitions of unlisted firms, would be strong evidence that the increase is due to IFRS. Even if a few unlisted firms adopt IFRS, on average, the IFRS effect should at least be stronger for listed firms than for unlisted firms. Comparing cross-border acquisitions of listed and unlisted firms from the IFRS adopting countries enables us to conduct our analysis within the set of adopting countries, avoiding thereby the inherent endogeneity problems associated with comparing investments across adopting and non-adopting countries. Our identification test is not applicable to studies on FPI (foreign portfolio investment). Because FPI is limited to trading activities in listed firms, these studies could not use unlisted firms as controls.

Consistent with the notion that IFRS induces more cross-border investment, we find an increase in the odds of cross-border acquisitions of *listed* firms from the adopting countries following the IFRS adoption. In contrast, we find no evidence of an increase in the odds of cross-border acquisitions of *unlisted* firms from the adopting countries. We also use listed targets from

⁵In general, governments do not dictate how private companies do their accounting, unless the firms are raising capital in the public market or the accounting reports are also used for tax purposes.

non-adopting countries as benchmarks and find no evidence of an increase in the odds of cross-border M&A involving these targets. Hence, there is no evidence that the increase in cross-border acquisitions of firms listed in the IFRS adopting countries is due to some general trend in cross-border M&A. The evidence instead suggests that the increase is due to IFRS per se.

We find that the increase in investment flow into adopting countries comes from both adopting and non-adopting countries.⁶ IFRS can induce cross-border M&A into the adopting countries by improving comparability between potential acquirers' and targets' financial reporting systems. It can also achieve the same objective by improving comparability within the potential targets' reporting systems. This second mechanism is consistent with Tweedie and Seidenstein's (2005 p. 591) argument that a common set of financial standards "enable investors to compare the financial results of companies operating in different jurisdictions more easily." While the first mechanism is likely to favor acquirers (and investors) from the adopting countries more, the second dimension could favor acquirers from the non-adopting countries more. The adopting countries generally have strong commercial, educational, cultural, social, and labor ties, as evidenced by the high level of cross-border activities within Europe even before the IFRS adoption. It is thus plausible that the average manager from the adopting countries generally has a better understanding of financial reports, and better ability to screen potential targets, from other adopting countries than managers from the non-adopting countries. By standardizing the process, IFRS allows everyone to use only one set of rules to screen potential targets for investment opportunities instead of multiple sets of country-specific rules, which could particularly benefit investors from the non-adopting countries, who generally have less business experience with the adopting countries, reducing then the baseline advantage of acquirers from the adopting countries. The evidence that the increase in investment flow into the adopting countries comes from both adopting and non-adopting countries is consistent with this

⁶This result also implies that increase in cross-border M&A is not driven by acquisitions by U.S. firms.

conjecture. It suggests that improvement in comparability within the potential targets' reporting systems is likely a strong determinant of the IFRS effect.

To address the concern that the IFRS effect could be due to some countries' bundling of the IFRS adoption with changes in financial reporting enforcement, we follow Christensen et al. (2013) by conditioning the IFRS effect on an indicator for the EU members and an indicator for Finland, Germany, the Netherlands, Norway, and the U.K., which made substantive changes in enforcement concurrent with the introduction of IFRS. Consistent with DeFond et al. (2011), we find that the increase in foreign investment is confined to targets from those IFRS countries that have strong ability to implement sound regulations. However, we also find a strong IFRS effect even for those countries that did not bundle the adoption of IFRS with an increase in enforcement. We therefore conclude that IFRS has a significant effect on cross-border M&A that is distinct from the enforcement effect documented by Christensen et al. (2013). We also find no evidence that the increase in cross-border acquisitions is driven by investments into the EU countries, an observation that also addresses concerns that our findings could be the result of the large EU expansion between 2004 and 2007, as opposed to the IFRS adoption *per se*.⁷

The remainder of this paper is organized as follows. The next section discusses the literature on the association between IFRS, reporting quality, and M&A. Section 3 explains our research design. Section 4 describes the sample selection process and provides descriptive statistics. The results are reported in Section 5. Section 6 concludes.

2. Extant studies on the association between IFRS, reporting quality, and M&A

There are many studies on the relation between reporting quality, IFRS, and foreign investment. However, there is little evidence in the extant literature that could be used to reach

⁷We document the IFRS effect for listed and not for unlisted targets, which also argues against the EU expansion explanation. It is difficult to explain why the expansion effect would impact cross-border investment in listed firms and not cross-border investment in unlisted firms.

our conclusion that the adoption of IFRS led to an increase in cross-border investment. The evidence provided by Rossi and Volpin (2004) and Erel et al. (2012) might actually lead to the opposition inference.

Using a 1990 country-level accounting quality measure, Rossi and Volpin (2004) infer that the odds of a cross-border M&A between 1990 and 2002 decrease with improvement in an acquired firm's accounting quality. Based on the same 1990 accounting quality measure, Erel et al. (2012) reach a similar conclusion for the 1990-2007 period. By using the 1990 measure, these studies implicitly assume that country-level accounting quality is constant. However, many countries were actively improving the quality of their financial reports during the 1990-2007 period. Moreover, Rossi and Volpin (2004) use a country as the unit of observations. To facilitate comparison, we also report results at the country level. However, as we explain in the next section, this approach has many disadvantages, including the fact that it overweighs observations from those countries with few M&As.⁸ More importantly, Rossi and Volpin (2004) and Erel et al. (2012) do not analyze the effect of IFRS. First, Rossi and Volpin's (2004) study actually predates the mandatory adoption of IFRS. Second, the question as to whether IFRS improves reporting quality is unsettled. While some studies suggest that IFRS is of high quality, others suggest that it does not necessarily lead to higher quality accounting (Christensen et al. 2011) and that, because it is principle-based, it could actually provide more opportunities for misreporting (Ahmed et al. 2012; Capkun et al. 2012). Consistent with this view, Robert H. Herz, then chairman of the Financial Accounting Standards Board, opines that, under IFRS, "you

⁸Consider, for instance, a sample of two countries (A and B) with a total dollar amount of M&A of \$100 million, including \$15 million from cross-border transactions. The proportion of the total value of cross-border acquisitions to the total value of all acquisitions would then be 0.15. Further assume that the volume of M&A for Country A is \$10 million, including \$6 million from cross-border transactions; and the volume of M&A for Country B is \$90 million, including \$9 million from cross-border transactions. Then, the proportion of the total value of cross-border acquisitions to the total value of all acquisitions would be 0.60 and 0.10 for Country A and Country B, respectively. The average for the two countries would be 0.35, although the overall average is only 0.15. The discrepancy arises because the observations for Country A are overweighed when a country is used as the unit of observation.

can do almost anything you want” (Henry 2008). Thus, the evidence in Rossi and Volpin (2004) and Erel et al. (2012) does not necessarily imply that IFRS would lead to a reduction in cross-border M&A.

As explained earlier, the IFRS effect that we document is not driven by the fact that a given country has adopted IFRS nor does it require that IFRS improves reporting quality. It can be explained by the fact that potential targets from many different countries report under the same accounting standards. The use of common standards reduces information costs and enables foreign investors to better compare potential targets and identify investment opportunities. In this regard, our study is silent on Rossi and Volpin’s (2004) and Erel et al.’s (2012) argument that the probability of cross-border M&A decreases with improvement in a target’s accounting quality.

In a concurrent study, Francis et al. (2013) also suggest that the mandatory adoption of IFRS is associated with more cross-border M&A activities among paired-adopting countries than among non-paired-adopting countries that have trading activities. They perform the comparison for only two years: 2004 and 2006. Moreover, they rely on the gravity model, which uses country pairwise cross-border investment to capture the sum of investment inflow and outflow. Such an analysis does not address the question that we examine in our study. More specifically, the objective of our study is to capture whether (unidirectional) cross-border investment in firms listed in IFRS adopting countries increased after the IFRS adoption and whether any documented effect is driven by concurrent enforcement changes or IFRS per se. In general, a model that captures the total flow of investment between two countries is unlikely to indicate whether IFRS leads to an increase in cross-country investment into the adopting countries (see Bergstrand (1985) for a more extensive discussion of problems associated with the gravity model).

Furthermore, although Francis et al. (2013) correctly limit their analysis to M&A, they use M&A in general. The 2005 mandatory IFRS adoption applies only to listed firms, which represent a relatively small fraction of targets in cross-border M&A. Erel et al. (2012), for

instance, report that unlisted targets can represent up to 96% of cross-border M&A, depending on the sample selection criteria. In addition, the country-level analysis suffers from the same problem that we discuss above; in particular, it overweighs observations from those countries with few M&A (see footnote 8). Finally and more importantly, Francis et al. (2013) does not address our fundamental question as to whether the relative increase in cross-border acquisitions into the IFRS countries is due to IFRS per se or to enforcement changes.

Gordon et al. (2012) compare FDI across IFRS and non-IFRS adopting countries over the entire 1996-2008 period. Not only does their sample include acquisitions of unlisted targets, but it also includes greenfield investment (a major component of FDI). As we explained earlier, the accounting standard of a host country is not very important in the case of greenfield investment. More importantly, Gordon et al. (2012) do not test whether the difference in investment across adopting and non-adopting countries shifts after the IFRS adoption. They present a univariate comparison between before and after the adoption, but the comparison is across developing and non-developing countries and not across adopting and non-adopting countries. Therefore, they have not analyzed the effect of the adoption of IFRS on cross-border acquisitions (or on FDI in general for that matter).

3. Research design

3.1 Our basic model

We use the mandatory change in financial reporting in the EU and several other countries around 2005 to test the effect of IFRS on cross-border acquisitions. Our objective is to compare the amount of investment that firms listed in the IFRS countries attract from overseas after the IFRS adoption to the amount that they attract before the adoption. To ensure that we do not simply capture an overall trend in acquisition activities, we standardize the number of acquisitions from overseas by the number of domestic acquisitions to obtain a measure of the

odds of a cross-border acquisition. Because all acquisitions are not of equal size, for the differential odds of a cross-border acquisition to capture the effect of IFRS on cross-border acquisitions, we need to control for the values of the acquisitions. We therefore compare the odds that a listed target from an IFRS country is acquired by a foreign firm before and after the IFRS adoption, conditional on the values of the transactions. Higher odds after the IFRS adoption would mean that, holding the values of the transactions constant, the IFRS adopting countries attract relatively more investments from overseas after the IFRS adoption than before the adoption. More specifically, we model the odds of a cross-border acquisition using the following logistic regression model:

$$CROSS_BORDER_i = \alpha_0 + \alpha_1 POST_ADOPTION_i + \alpha_2 LTVALUE_i + control\ variables + \varepsilon_i, \quad (1)$$

where *CROSS_BORDER* is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions; *POST_ADOPTION* is an indicator variable taking the value zero for announcements made between January 1, 1990 and December 31, 2004 (pre-adoption period) and one for those made between April 1, 2005 and December 31, 2010 (post-adoption period); we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS; and *LTVALUE* is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars).

Our design takes the acquisitions as given and models the odds that the investments come from overseas. The coefficient on *POST_ADOPTION* (α_1) captures the difference between the log odds of a cross-border acquisition before the IFRS adoption and the log odds of a cross-border acquisition after the IFRS adoption, conditional on the target being taken over. Hence, although a positive α_1 does not necessarily indicate an increase in acquisition activities, because the model treats the acquisitions as given and holds their values constant, a positive α_1 does indicate relatively more investment from overseas, which is the effect that we want to capture.

An alternative approach used in the literature is the gravity model, which captures country-pairwise cross-border investment flow. However, as explained earlier, this approach does not determine the effect of IFRS on investment flow into the adopting countries. Another potential alternative approach would be to compare the average change in the dollar values of cross-border acquisitions after the IFRS adoption, using the values of the acquisitions as the dependent variable. To interpret the results from such an analysis, the values of the acquisitions would need to be deflated to control for endogenous factors that are likely to affect investment values. However, there is not an obvious deflator for foreign investments in a firm. One could use a country as the unit of observation and compare the country's total value of cross-border acquisitions before and after the adoption of IFRS. The total value of the cross-border acquisitions could be deflated by the value of all the acquisitions in the country. However, this approach would reduce the number of observations to a few data points, severely limiting the power of the statistical tests and the ability to conduct cross-sectional analyses. It would also obscure the potential effects of relevant cross-sectional variations in the sample because of the difficulty to control for firm and transaction characteristics when using country level data. Moreover, as we explained earlier, it would give too much weight to observations from those countries with few M&As. Finally, note again that an analysis that uses transaction value as the dependent variable would confuse the potential effect of reporting quality on transaction value with the effect of IFRS on cross-border transaction.

The approach that we take in this study enables us to address the deflation issue, control for relevant cross-sectional variations, give equal weight to each observation, and conduct cross-sectional comparisons, while preserving the power of our statistical tests. In addition, because a firm can be acquired only once, we do not have firm fixed effects or the other usual problems associated with multiple observations from the same firm.

3.2 Controlling for other relevant factors

We extend Model (1) to control for the method of payment, the industry relatedness of the merging partners, acquisitions of regulated firms, and acquisitions of high-technology firms. Because we take an acquisition as given and model the odds that an observed transaction is a cross-border acquisition, our design controls for the effects of forces that could cause the overall acquisition level in a given country to increase. To further ensure that our results are not due to omitted correlated economic factors, we control for the relative size of the local economy, the growth in the gross domestic product (GDP), the population growth, the currency exchange rate fluctuations, the inflation rates, the interest rates, and the corporate tax rates of the targets' countries. Many of these factors are identified in prior studies as potential determinants of FDI (see, e.g., Dunning 1980, 1998; Froot and Stein 1991; Chung and Alcacer 2002; Chung et al. 2003; and Globerman and Shapiro 2003). Finally, to ensure that our findings are not driven by unobserved cross-country heterogeneity, we also control for country fixed effects. More specifically, we use the following logistic model:

$$\begin{aligned} CROSS_BORDER_i = & \alpha_0 + \alpha_1 POST_ADOPTION_i + \alpha_2 LTVALUE_i + \alpha_3 STOCK_i \\ & + \alpha_4 SAME_IND_i + \alpha_5 REGULATED_i + \alpha_6 HIGH_TECH_i + \alpha_7 ECON_SIZE_i \\ & + \alpha_8 GDP_GROWTH_i + \alpha_9 POP_GROWTH_i + \alpha_{10} FX_FLUX_i \\ & + \alpha_{11} INFLATION_i + \alpha_{12} INTEREST_i + \alpha_{13} TAX_i + Country\ fixed\ effects + \varepsilon_i, \quad (1') \end{aligned}$$

where

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical components, except computer equipment), 3812–3845 (measuring, analyzing,

and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

3.3 A control sample approach

Given that a firm from an IFRS adopting country is available for sales, we want to determine whether the odds that the target attracts overseas investors increases after the adoption of IFRS. There could be reasons unrelated to IFRS that might cause the odds of a cross-border acquisition to increase over time. We control for potential observable factors by including various target, transaction, and country characteristics, and for potential unobservable factors by including country fixed effects in the model. It is still possible that our results could be driven by a failure to control for relevant factors (such as certain countries opening their markets more in recent years) that are not captured by our control variables or the country fixed effects. To account for these potential factors, we use a control sample approach. More specifically, we use a firm's listing status as an identification instrument. Because IFRS is mandatory for listed and not for unlisted firms, the use of a firm's listing status can serve as a valid instrument to purge our results from the potential forces that our control variables and the country fixed effects might fail to capture.

Note also that self-selection is less of an issue in our setting since our identification process relies on the listing status of the targets, as opposed to the listing status of the acquirers. The analysis is conditioned on the targets being taken over. The only question is whether the targets are taken over by foreign or by domestic acquirers. We also find no evidence that our results are driven by biases associated with the listing status. More specifically, our inferences hold whether we compare listed targets from the adopting countries with unlisted targets from the same countries or compare listed targets from the adopting countries with listed targets from non-adopting countries.

4. Sample selection and description

4.1 Sample selection

The study covers completed acquisitions that were announced between January 1990 and December 2010. The primary sample includes listed targets from countries that mandated IFRS as of January 1, 2005. The sample is obtained from the Security Data Company (SDC)'s M&A database. An acquisition is included in the sample if the value of the transaction and information on the method of payment are available on SDC. We delete the few cross-listed targets in the sample. Pownall and Wieczynska (2012) find that many EU listed firms continued to use domestic GAAPs after the official adoption of IFRS. The power of our test is likely to weaken to the extent that all listed firms from the adopting countries did not adopt IFRS after 2005. To mitigate this potential problem, we delete all observations for listed firms from the adopting countries with "DS" or "ND" for Compustat Global data item "acctstdq" after 2004. To reduce potential problems associated with early adoption of IFRS, we also delete all observations with "DI" for Compustat Global data item "acctstdq" prior to 2005.⁹

⁹"DS", "ND", and "DI" stand for "domestic standards", "not determined", and "domestic standards generally in accordance with or fully compliant with International Financial Reporting Standards (IFRS)." "DI" was made available from 12/31/04 forward; prior to that date, 'DS' will appear."

We obtain information on GDP, population, and currency exchange rates from Penn World Tables from the Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania; information on inflation and interbank interest rates from World Bank publications; and information on corporate tax income as a percentage of GDP from the OECD online statistics. We fill missing information from these specific sources with data from a variety of online sources from the World Bank, the International Monetary Fund (IMF), Datastream, CIA World Factbooks, and various governments' statistics bureaus and departments.

Acquisitions by unlisted companies are difficult to classify in terms of whether they involve cross-border investment flow or not. For instance, an acquisition of a listed company by a private company or a subsidiary is often a “going-private” transaction that involves some management engagement. In addition, the acquirer can be a shell company and can be registered domestically or overseas, depending on the tax and corporate laws of the countries involved. The potential misclassification can, not only create noise, but also bias the results, given that “going-private” transactions increased substantially in the most recent years in response to tighter financial reporting requirements for listed companies. To ensure that our inferences are not driven by misclassifications of investment flow associated with acquisitions by “nominal” unlisted acquirers, we focus our analysis on M&As by listed acquirers. However, we also report results based on all M&As in the SDC database.

Our main sample includes 1,870 acquisitions of listed firms from the adopting countries. We benchmark these transactions against 4,231 acquisitions of unlisted companies from the adopting countries. To ensure that we do not simply capture an overall listed target effect, we also benchmark against 6,819 acquisitions of listed targets from non-adopting countries.

4.2 Sample description

Panel A of Table 1 presents the time-series distribution of the sample. Not surprisingly, the strongest concentration of observations is during the merger wave of 1997-2001. There has

also been a resurgence of M&A activities in the IFRS adopting countries in 2006 and 2007. However, there is no evidence of any strong time clustering in the data. There are some notable variations in the time-series pattern of the number of acquisitions across listed and unlisted targets. There tends to be a stronger concentration of acquisitions of listed targets than unlisted targets during the 1997-2001 merger wave. The trend is reversed starting in 2004, with a stronger concentration of acquisitions of unlisted targets than listed targets. These patterns are likely due to the fact that, in the late 1990s, entrepreneurs and managers were more likely to cash in on the values of their private firms by going public, reducing the number of unlisted companies available for takeover. Initial public offering activities substantially diminished in the next decade, as entrepreneurs chose to sell their enterprises, instead of going public, increasing the number of takeover of unlisted companies.

Panel B of Table 1 presents the sample distribution by country. There is a strong concentration of targets from the UK and Australia. However, we control for country-specific effects by including country-fixed effects in our model. Therefore, our results must be interpreted as within country effects. In addition, our results hold for EU countries (which exclude Australia) as well as non-EU countries (which exclude the UK).

Table 1 shows time-series variations in the number of listed and unlisted targets, which can occur for many different reasons, including market conditions that affect entrepreneurs' choice of how and when to cash in on their private businesses. Our interest is in the variations in cross-border acquisitions of listed and unlisted targets across the pre-IFRS and post-IFRS periods. We present these results in Table 3, where we report bivariate statistics, and Table 4 onwards, where we control for other factors that could affect variations in cross-border M&As.

Before we analyze the variations in cross-border M&A, we present characteristics of the transactions in Table 2. Not surprisingly, transactions involving listed targets are generally larger

and more likely to be financed with stock than those involving unlisted targets. The merging partners are more likely to be from the same industry; GDP growth, interest rates, corporate tax rates, local currency values are generally lower; and population growth is generally higher in the adopting countries in the post-adoption period than in the pre-adoption period. The listed targets are also more likely to be from high-technology industries in the post-adoption period than in the pre-adoption period. The average proportion of the acquisitions of unlisted targets that is financed with stock is generally lower and the proportion of regulated unlisted targets and inflation rates in the unlisted targets' countries are also generally higher in the post-adoption period. We control for these factors in our regression analysis.

4.3 Univariate comparisons

We report univariate comparisons of cross-border M&A activities before and after the IFRS adoption in Table 3. Panel A presents the average ratio of the total value of cross-border acquisitions to the total value of all acquisitions in a country during a year. We first note that, in the pre-adoption period, the average ratio of the total value of cross-border acquisitions to the total value of all acquisitions in a country is generally smaller for listed targets than for unlisted targets. More specifically, the average ratio of the total value of cross-border acquisitions is 0.347 for the listed targets from the adopting countries, 0.557 for the unlisted targets from the adopting countries, and 0.224 for the listed targets from the non-adopting countries. We are particularly interested in how these numbers change after the IFRS adoption. For our treatment sample (listed targets from adopting countries), the average ratio of the total value of cross-border acquisitions by listed acquirers to the total value of all acquisitions by listed acquirers is significantly larger after the adoption of IFRS than before the adoption. The difference is 0.170 (0.517 versus 0.347), with a two-tail p -value of 0.002. In contrast, the difference in the average ratio for the unlisted targets from the adopting countries is only 0.016 (0.573 versus 0.557), with a two-tail p -value of 0.722.

The difference in the average ratio is also small for listed targets from non-adopting countries, 0.049 (0.273 versus 0.224), with a two-tail p -value of 0.429. We observe a similar pattern when we use M&A activities by all acquirers. The difference in the average ratio of the total value of cross-border acquisitions to the total value of all acquisitions is 0.182, 0.099, and 0.051 for the samples of listed targets from adopting countries, unlisted targets from adopting countries, and listed targets from non-adopting countries, respectively.

The statistics in Panel A are consistent with the notion that cross-border acquisition flow into the adopting countries' listed companies increased after the IFRS adoption. However, these statistics need to be interpreted with caution because, as we explained earlier, they are based on country averages and, therefore, give too much weight to small countries that have only few observations. In addition, the univariate analysis does not control for other factors that could affect the relation between cross-border acquisitions and target listing status.

An alternative approach is to compare the proportion of cross-border acquisitions before and after the IFRS adoption, which we do in Panel B. For our treatment sample (listed targets from adopting countries), the proportion of cross-border acquisitions by listed acquirers is significantly larger after the adoption of IFRS than before the adoption. The difference is 0.115 (0.389 versus 0.274), with a two-tail p -value of 0.000. In contrast, the difference in the average ratio for the unlisted targets from the adopting countries is only 0.023 (0.356 versus 0.333), with a two-tail p -value of 0.126. The difference in the average ratio also tends to be smaller for listed targets from non-adopting countries, 0.062 (0.180 versus 0.118), with a two-tail p -value of 0.000. We observe a similar pattern when we use M&A activities by all acquirers. The increase in the proportion of cross-border acquisitions is 0.122, 0.032, and 0.071 for the samples of listed targets from adopting countries, unlisted targets from adopting countries, and listed targets from non-adopting countries, respectively.

In general, the proportion of cross-border acquisitions of listed targets from the adopting countries is higher than the proportion of cross-border acquisitions of listed targets from the non-adopting countries. The proportion of cross-border acquisitions of listed targets from the adopting countries is similar to the proportion of cross-border acquisitions of unlisted targets from the adopting countries prior to the IFRS adoption for the full sample of acquirers. The difference-in-difference of 0.09 in the proportion of cross-border acquisitions before and after the IFRS adoption and across listed and unlisted targets is driven primarily by the increase in the proportion of cross-border acquisitions of listed targets. However, the main effect of target listing status varies across acquisitions by listed and unlisted acquirers. While the proportion of cross-border acquisitions in the pre-IFRS period is not different when we consider all acquirers, it is different when we consider only listed acquirers. Apparently, listed (unlisted) firms engaging in cross-border acquisitions tend to acquire unlisted (listed) targets. Nonetheless, there is a positive difference-in-difference in the proportion of cross-border acquisitions before and after the IFRS adoption and across listed and unlisted targets, whether we consider transactions involving all acquirers or only those involving listed acquirers.

The statistics in Panel B also are consistent with the notion that cross-border acquisition flow into the adopting countries' listed companies increased after the IFRS adoption. However, we cannot make definitive inferences on the basis of the proportions of cross-border acquisitions without controlling for the values of the transactions and other relevant factors. We account for these factors in the next section using a multivariate regression analysis.

5. Multivariate regression results

5.1 Association between cross-border acquisitions and IFRS adoption

Table 4 reports the association between IFRS and the odds of a cross-border acquisition in a multivariate setting. We present results for the transactions involving listed targets from the

adopting countries under column (1). The results provide strong support for the notion that IFRS leads to an increase in foreign investment. The coefficient on *POST_ADOPTION*, the indicator variable for the IFRS period, which represents the within-country difference in the log odds of a cross-border acquisition between before and after the IFRS adoption, is 0.473, with a p -value of 0.005, when we limit the sample to acquisitions by listed acquirers. The coefficient is 0.301, with a p -value of 0.010, when we include all acquirers in the sample. The weaker results for the larger sample are consistent with the view that some M&A transactions are acquisitions by “nominal” unlisted acquirers that cannot easily be classified into cross-border or domestic transactions. The potential misclassification creates noise and biases the coefficient estimate downwards; however, the overall effect is still quite strong.

We also analyze the association between IFRS and the odds of a cross-border acquisition of an unlisted target from an adopting country. Cross-border acquisitions offer a natural experimental setting for testing whether the mandatory adoption of IFRS leads to more foreign investment. Since IFRS is mandatory for listed and not for unlisted firms and very few unlisted firms adopt IFRS, there is no reason to observe an increase in the odds of a cross-border acquisition of an unlisted target after the IFRS adoption if IFRS is the only driver of the shift in cross-border acquisitions. The results of this analysis are reported in Table 4 under column (2). In contrast to the results in column (1), where we analyze acquisitions of listed targets, the results in column (2) provide no evidence of an increase in the odds of a cross-border acquisition after the IFRS adoption. The coefficient on *POST_ADOPTION* is actually negative, -0.126 (p -value = 0.226). We obtain a similar result when we include all acquirers in the sample; the coefficient on *POST_ADOPTION* becomes -0.007 (p -value = 0.928). Note that both the listed and the unlisted targets are from IFRS adopting countries and that we control for country macroeconomic factors and country-fixed effects. Therefore, it is unlikely that the effect that we document is due to variations in the characteristics of the adopting and the non-adopting countries.

For completeness, we also use acquisitions of listed targets from the non-adopting countries as another benchmark. The results are also reported in Table 4, under column (3). Again, in contrast to the results in column (1), those in column (3) provide no evidence of an increase in the proportion of cross-border acquisitions after the IFRS adoption. The coefficient on *POST_ADOPTION* is -0.078 (p -value = 0.525) when we limit the sample to acquisitions by listed acquirers and 0.047 (p -value = 0.600) when we include all acquirers in the sample.

5.2 Cross-border acquisitions across alternative pre- and post-IFRS adoption years

We start the pre-adoption period in 1990 to increase the power of our tests and ensure that our results are not due to some occasional reduction in cross-border acquisitions into the adopting countries just before the mandatory IFRS adoption date. However, the results could be driven by the M&A boom of the turn of the century. An even more serious concern is that the shift in the proportion of cross-border acquisitions could occur prior to 2005 (say in 2004) as opposed to after 2004. In this the case, we could still get a significant difference in the proportion of cross-border acquisitions across the pre-adoption and the post-adoption periods; however, it would be difficult to assign the difference to IFRS. To ensure that the shift in the proportion of cross-border acquisitions did not occur prior to 2005, we replicate our analysis using two different base periods: 2002-2004 and 2004. As shown in Panel A of Table 5, the coefficient on *POST_ADOPTION* is positive whether we benchmark the IFRS years against 2002-2004 or just against 2004. The p -value for the coefficient on *POST_ADOPTION* is large when we benchmark the IFRS years against 2004 because the number of pre-adoption transaction falls from 1,402 to just 80; however, if anything, the coefficient estimate is larger than the estimate that we obtained for the full 1990-2004 pre-adoption period in column (1) of Table 4 (0.611 versus 0.473).

We also assess the persistence of the shift in investment flow from listed acquirers to the IFRS countries by sorting the post-IFRS years into two sub-periods: 2005-2007 and 2008-2010.

This analysis addresses concerns that the results could reflect the effect of the recent credit crisis on cross-border M&A. As shown in Panel B of Table 5, the coefficient on *POST_ADOPTION* is positive and significant for both sub-periods. Overall, the results indicate that 2005 was the pivotal year in the shift of the cross-border acquisition pattern and that the shift seems quite persistent.

5.3 The effect of acquiring firms' adopting status

We also examine whether the incremental investment flow into the IFRS adopting countries comes more from the adopting countries than from non-adopting countries. DeFond et al. (2011) explains the impact of IFRS adoption on foreign mutual fund investments by its effects on reporting comparability. However, Beneish et al. (2012) find no evidence that the increase in the flow of FPIs comes from IFRS adopting countries and conclude that the increase in FPIs associated with the adoption of IFRS is more likely to be due to improved reporting quality than to improved comparability.

The results reported in Table 6 show that the coefficient on *POST_ADOPTION* is significantly positive whether the acquirers are from adopting or non-adopting countries. The coefficient (*p*-value) is 0.611 (0.002) when the acquirers are from adopting countries and 0.747 (0.017) when they are from non-adopting countries. Therefore, the increase in the investment flow to the adopting countries' targets comes from both adopting and non-adopting countries. The increase tends to be more pronounced when the acquirers are from non-adopting countries. Note, however, that the incremental proportion of cross-border acquisitions of unlisted targets is also higher for acquirers from non-IFRS adopting countries than for acquirers from IFRS adopting countries. Consequently, there is not a significant difference-in-difference across the two groups of acquirers when the listed targets are compared to the unlisted targets. Because IFRS does not generally apply to unlisted firms, the difference across the acquirers from non-

IFRS adopting countries and the acquirers from IFRS adopting countries is unlikely to be related to IFRS. It is more likely due to a relative decrease (increase) in cross-border activities by acquirers from IFRS (non-IFRS) adopting countries

Beneish et al. (2012) argues that, if improved comparability is the driver of the IFRS effect, one should observe more investment into the IFRS adopting countries from other IFRS adopting countries than from non-IFRS adopting countries. However, the adopting countries generally have strong commercial, educational, cultural, social, and labor ties between themselves. Therefore, the average manager from these countries could generally have a better understanding of financial reports, and better ability to screen potential targets, from the other adopting countries than managers from the non-adopting countries. By standardizing the reporting process and, hence, allowing everyone to use only one set of rules to screen potential targets for investment opportunities instead of multiple sets of country-specific rules, IFRS could actually benefit managers from the non-adopting countries more than managers from the adopting countries. It is this dimension of comparability that most likely drives our results.

5.4 The effect of regulatory implementation quality

We analyze the extent to which the effect of IFRS on cross-border acquisitions is impacted by the level of regulatory quality and implementation. We use the regulatory quality measure from World Bank's Worldwide Governance Indicators (WGI). This measure captures "perceptions of the ability of the government to formulate and implement sound policies and regulations" (Kaufmann, Kraay, and Mastruzzi 2009, p. 6). It uses "a large number of individual data sources that provide ... information on the perceptions of governance of a wide range of stakeholders. These data sources consist of surveys of firms and individuals, as well as the assessments of commercial risk rating agencies, non-governmental organizations, and a number

of multilateral aid agencies and other public sector organizations” (Kaufmann, Kraay, and Mastruzzi 2009, p. 7).¹⁰ The measure has the advantage of being available for almost every country and every year from 1996 to 2010. We use the 1996 estimates for the years prior to 1996. The measure is also unavailable for 1997, 1999, and 2001; in these cases we use the data from the subsequent years. We deem the regulatory quality measure high if it is at or above the median for the year and low if it is below the median.

The results are reported in Table 7. Consistent with DeFond et al. (2011), we find that the increase in foreign investment after the adoption of IFRS is limited to those countries where government regulatory implementation ability is high. More specifically, the coefficient on *POST_ADOPTION* is positive (0.579) and highly significant (p -value = 0.001) for those countries with high regulatory implementation quality. In contrast, for countries with low regulatory implementation quality, the coefficient on *POST_ADOPTION* is actually negative (−0.348), although statistically insignificant (p -value = 0.407). These results are consistent with the notion that the effect of IFRS on cross-border acquisitions is conditional on a country’s regulatory implementation ability.

5.5 The effect of the EU and the bundling of IFRS adoption with enforcement changes

Christensen et al. (2013) argue that many EU members bundled the IFRS adoption with changes in financial reporting enforcement and that effects that are commonly attributed to IFRS could actually be driven by changes in enforcement by EU members. In addition, the EU experienced its largest expansion between 2004 and 2007, with Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia joining the Union in

¹⁰Detailed information about the WGI regulatory quality measure can be found at <http://info.worldbank.org/governance/wgi/index.asp> and Kaufmann, Kraay, and Mastruzzi (2009).

2004 and Romania and Bulgaria joining in 2007. Because IFRS is adopted throughout the EU, the increase in cross-border investments in the IFRS adopting countries could be the result of increased economic activities within the EU as opposed to the adoption of IFRS per se. We therefore test whether our inferences are driven by the EU. The results reported in Table 8, under column (1), provide no evidence that the increase in cross-border acquisitions is driven by investment into the EU. The coefficient on *POST_ADOPTION* is positive and statistically significant for both the EU targets and the non-EU targets. If anything, it is slightly higher for the non-EU targets (0.558 vs. 0.421).

Christensen et al. (2013) also suggest that the EU effect is “limited to five EU countries (Finland, Germany, the Netherlands, Norway, and the U.K.) that also made substantive changes in enforcement concurrent with the introduction of IFRS.” However, as reported under column (2) of Table 8, there is no evidence that our results are driven by these countries. The coefficient on *POST_ADOPTION* is positive and statistically significant for targets from these five countries as well as targets from the other adopting countries (0.464 vs. 0.482).

It is remarkable that the coefficient on *POST_ADOPTION* is almost identical for targets from these five countries that bundled enforcement changes with the IFRS adoption and targets from the other adopting countries. At first glance, it might seem that, even if there is an IFRS effect, because of the potential enforcement effect, the coefficient on *POST_ADOPTION* would be stronger for targets from countries that bundled enforcement changes with the IFRS adoption. However, as explained earlier, while stronger enforcement is beneficial for securities investors, it also imposes costs on managers. Considering that, on average, the regulatory environment is already strong in the countries that made substantive changes in enforcement concurrent with the adoption of IFRS, the additional regulations can be seen as an indication of a more aggressive regulatory environment and therefore adversely affect foreign direct investments.

6. Conclusion

We examine whether the 2005 mandatory adoption of IFRS leads to an increase in cross-border acquisitions into the adopting countries and whether any documented effect is driven by concurrent enforcement changes. We use the exogeneity of a target's listing status to identify the effect of IFRS. We therefore rely on a much stronger identification instrument than prior studies, which enables us to more reliably establish a causal relation between IFRS and the shift in foreign investments around the mandatory IFRS adoption.

We find that the odds of a cross-border acquisition of a listed firm in the adopting countries increase significantly following the IFRS adoption, whereas the change in the odds of a cross-border acquisition of an unlisted firm is insignificantly different from zero. We also find that the increase in the flow of investment into the IFRS adopting countries comes from both non-IFRS adopting countries and other IFRS adopting countries. Moreover, consistent with the notion that the economic effects of IFRS are likely to depend on the strength of the local institutions and regulatory implementation, we find that the increase in foreign investment after the adoption of IFRS is limited to those countries where government ability to implement sound regulations is high. However, we find no evidence that the increase in cross-border acquisitions of listed firms from the adopting countries is driven by countries that apparently bundled the IFRS adoption with enforcement changes, suggesting that not all effects associated with IFRS can be attributed to changes in enforcement. Overall, the evidence strongly suggests that the mandatory adoption of IFRS leads to a substantial increase in cross-border acquisitions of listed companies in the adopting countries.

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Table 1
Sample distribution by year and country

Panel A: Year distribution

Year	Listed targets		Unlisted targets	
	Frequency	Percent	Frequency	Percent
1990	46	2.46	26	0.61
1991	56	2.99	32	0.76
1992	29	1.55	64	1.51
1993	38	2.03	115	2.72
1993	55	2.94	141	3.33
1995	75	4.01	187	4.42
1996	99	5.29	251	5.93
1997	131	7.01	211	4.99
1998	147	7.86	235	5.55
1999	201	10.75	262	6.19
2000	178	9.52	360	8.51
2001	114	6.10	235	5.55
2002	76	4.06	161	3.81
2003	77	4.12	139	3.29
2004	80	4.28	230	5.44
2005	65	3.48	223	5.27
2006	93	4.97	315	7.45
2007	95	5.08	347	8.20
2008	62	3.32	244	5.77
2009	75	4.01	171	4.04
2010	78	4.17	282	6.67
Total	1,870	100.00	4,231	100.00

Panel B: Distribution by country

	Listed targets				Unlisted targets			
	Pre-adoption		Post-adoption		Pre-adoption		Post-adoption	
	#	%	#	%	#	%	#	%
Australia	271	19.33	151	32.26	190	7.17	290	18.33
Austria	0	0.00	1	0.21	2	0.08	4	0.25
Belgium	6	0.43	4	0.85	32	1.21	17	1.07
Czech	0	0.00	0	0.00	4	0.15	11	0.70
Denmark	16	1.14	3	0.64	26	0.98	20	1.26
Finland	15	1.07	3	0.64	58	2.19	28	1.77
France	71	5.06	10	2.14	126	4.76	67	4.24
Germany	19	1.36	6	1.28	102	3.85	72	4.55
Greece	11	0.78	6	1.28	3	0.11	2	0.13

Hong Kong	16	1.14	12	2.56	112	4.23	155	9.80
Ireland	19	1.36	2	0.43	55	2.08	20	1.26
Italy	17	1.21	11	2.35	51	1.93	44	2.78
Netherlands	47	3.35	14	2.99	73	2.76	38	2.40
Norway	39	2.78	21	4.49	51	1.93	29	1.83
Philippines	6	0.43	1	0.21	14	0.53	10	0.63
Poland	2	0.14	4	0.85	7	0.26	29	1.83
Portugal	0	0.00	0	0.00	2	0.08	2	0.13
Romania	1	0.07	16	3.42	0	0.00	4	0.25
South Africa	63	4.49	0	0.00	54	2.04	38	2.40
Spain	17	1.21	6	1.28	40	1.51	30	1.90
Sweden	80	5.71	23	4.91	83	3.13	56	3.54
Switzerland	8	0.57	12	2.56	29	1.09	28	1.77
UK	678	48.36	162	34.62	1531	57.8	585	36.98
Venezuela	0	0.00	0	0.00	4	0.15	3	0.19
Total	1,402	100	468	100	2,649	100	1,582	100

Notes: The pre-adoption period covers fiscal quarters ending between January 1, 1990 and December 31, 2004 and the post-adoption period covers fiscal quarters ending between April 1, 2005 and December 31, 2010; we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS.

Table 2
Average characteristics of transactions involving targets from IFRS adopting countries

	Listed targets		Unlisted targets	
	Pre-adoption (<i>N</i> = 1,402)	Post-adoption (<i>N</i> = 468)	Pre-adoption (<i>N</i> = 2,649)	Post-adoption (<i>N</i> = 1,582)
<i>LTVALUE</i>	18.950	19.002	17.051	17.024
<i>STOCK</i>	0.553	0.498**	0.378	0.344***
<i>SAME_IND</i>	0.549	0.596*	0.474	0.515**
<i>REGULATED</i>	0.306	0.321	0.230	0.255*
<i>HIGH_TECH</i>	0.114	0.194***	0.217	0.202
<i>ECON_SIZE</i>	-0.194	-0.291*	-0.306	-0.276
<i>GDP_GROWTH (%)</i>	5.273	-1.180***	5.159	-0.801***
<i>POP_GROWTH (%)</i>	0.584	1.088***	0.480	0.864***
<i>FX_FLUX</i>	0.011	-0.007***	0.011	0.004**
<i>INFLATION (%)</i>	2.561	2.561	2.126	2.537***
<i>INTEREST (%)</i>	7.845	5.701***	6.927	5.692***
<i>TAX (%)</i>	35.177	33.829***	35.159	33.470***

Notes:

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845 (measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

The pre-adoption period expands from January 1, 1990 to December 31, 2004 and the post-adoption period expands from April 1, 2005 and December 31, 2010. We exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS. ***, **, and * indicate that the average difference across the pre-adoption and the post-adoption periods is statistically significant at the 1, 5, and 10 percent levels in a two-tail test, respectively.

Table 3
Average cross-border M&A activities before and after the IFRS adoption

Panel A: Ratio of total value of cross-border acquisitions to total value of all acquisitions in a country during a year

	Listed acquirers			All acquirers		
	(1) Treatment sample: Listed targets from adopting countries	(2) Benchmark against: Unlisted targets from adopting countries	(3) Benchmarking against: Listed targets from non- adopting countries	(1) Treatment sample: Listed targets from adopting countries	(2) Benchmark against: Unlisted targets from adopting countries	(3) Benchmarking against: Listed targets from non- adopting countries
Pre-adoption 1990-2004	0.347 {N = 175}	0.557 {N = 237}	0.224 {N = 100}	0.374 {N = 199}	0.503 {N = 257}	0.224 {N = 110}
Post-adoption 2005-2010	0.517 {N = 79}	0.573 {N = 119}	0.273 {N = 58}	0.556 {N = 94}	0.602 {N = 124}	0.276 {N = 62}
Difference	0.170	0.016	0.049	0.182	0.099	0.051
2-tail <i>p</i> -value	(0.002)	(0.722)	(0.429)	(0.000)	(0.020)	(0.362)

Panel B: Proportion of cross-border acquisitions

	Listed acquirers			All acquirers		
	(1) Treatment sample: Listed targets from adopting countries	(2) Benchmark against: Unlisted targets from adopting countries	(3) Benchmarking against: Listed targets from non- adopting countries	(1) Treatment sample: Listed targets from adopting countries	(2) Benchmark against: Unlisted targets from adopting countries	(3) Benchmarking against: Listed targets from non- adopting countries
Pre-adoption 1990-2004	0.274 {N = 1,402}	0.333 {N = 2,649}	0.118 {N = 5,071}	0.331 {N = 2,159}	0.325 {N = 3,654}	0.134 {N = 6,161}
Post-adoption 2005-2010	0.389 {N = 468}	0.356 {N = 1,582}	0.180 {N = 1,748}	0.453 {N = 873}	0.357 {N = 2,376}	0.205 {N = 2,596}
Difference	0.115	0.023	0.062	0.122	0.032	0.071
2-tail <i>p</i> -value	(0.000)	(0.126)	(0.000)	(0.000)	(0.011)	(0.000)

Notes: In Panel A, we compute the total value of cross-border acquisitions and the total value of all acquisitions in each country for every year. The table presents the average of ratio of the two numbers. The unit of observation in this panel is country-year. The number of data points in this panel is lower than the number that we would expect if every country had acquisitions every year. Panel B presents the proportion of cross-border acquisitions for the sample, with unit of observation being an acquisition. The pre-adoption period expands from January 1, 1990 to December 31, 2004 and the post-adoption period expands from April 1, 2005 and December 31, 2010. We exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS.

Table 4
Association between IFRS and cross-border acquisitions

$$\begin{aligned}
 \text{CROSS_BORDER}_i = & \alpha_0 + \alpha_1 \text{POST_ADOPTION}_i + \alpha_2 \text{LTVALUE}_i + \alpha_3 \text{STOCK}_i + \alpha_4 \text{SAME_IND}_i + \alpha_5 \text{REGULATED}_i + \alpha_6 \text{HIGH_TECH}_i \\
 & + \alpha_7 \text{ECON_SIZE}_i + \alpha_8 \text{GDP_GROWTH}_i + \alpha_9 \text{POP_GROWTH}_i + \alpha_{10} \text{FX_FLUX}_i + \alpha_{11} \text{INFLATION}_i + \alpha_{12} \text{INTEREST}_i \\
 & + \alpha_{13} \text{TAX}_i + \text{Country fixed effects} + \varepsilon_i
 \end{aligned}$$

	Listed acquirers			All acquirers		
	(1) Treatment sample: Listed targets from adopting countries (N = 1,870)	(2) Benchmark against: Unlisted targets from adopting countries (N = 4,231)	(3) Benchmarking against: Listed targets from non-adopting countries (N = 6,819)	(1) Treatment sample: Listed targets from adopting countries (N = 3,032)	(2) Benchmark against: Unlisted targets from adopting countries (N = 6,030)	(3) Benchmarking against: Listed targets from non-adopting countries (N = 8,757)
<i>POST_ADOPTION</i>	0.473 (0.005)	-0.126⁺⁺⁺ (0.226)	-0.078⁺⁺⁺ (0.525)	0.301 (0.010)	-0.007⁺⁺ (0.928)	0.047⁺⁺ (0.600)
<i>LTVALUE</i>	0.257 (0.000)	0.153 ^{**} (0.000)	0.204 (0.000)	0.260 (0.000)	0.115 ^{***} (0.000)	0.191 ^{***} (0.000)
<i>STOCK</i>	-1.297 (0.000)	-0.432 ^{***} (0.000)	-1.439 (0.000)	-1.410 (0.000)	-0.266 ^{***} (0.000)	-1.414 (0.000)
<i>SAME_IND</i>	0.400 (0.001)	0.144 [*] (0.083)	-0.124 ^{***} (0.180)	0.452 (0.000)	0.291 (0.091)	0.043 ^{***} (0.550)
<i>REGULATED</i>	-0.679 (0.000)	-0.468 (0.000)	-0.569 (0.000)	-0.537 (0.000)	-0.334 (0.000)	-0.429 (0.000)
<i>HIGH_TECH</i>	0.250 (0.156)	0.280 (0.008)	0.590 (0.000)	0.346 (0.008)	0.395 (0.000)	0.582 (0.000)
<i>ECON_SIZE</i>	-0.747 (0.000)	-0.855 (0.000)	1.283 ^{***} (0.000)	-0.601 (0.000)	-0.802 ^{***} (0.000)	1.029 ^{***} (0.000)
<i>GDP_GROWTH (%)</i>	-0.009 (0.414)	-0.006 (0.229)	-0.005 (0.442)	-0.248 (0.001)	-0.006 (0.127)	0.004 ^{***} (0.424)
<i>POP_GROWTH (%)</i>	-0.017 (0.917)	-0.013 (0.110)	-0.228 (0.289)	-0.017 (0.106)	-0.044 (0.474)	-0.063 (0.549)

<i>FX_FLUX</i>	0.190 (0.771)	0.089 (0.840)	-1.157 (0.228)	-0.157 (0.723)	0.339 (0.337)	-1.634 (0.039)
<i>INFLATION (%)</i>	-0.012 (0.810)	0.073 (0.024)	0.022 (0.522)	0.018 (0.625)	0.025 (0.278)	0.030 (0.301)
<i>INTEREST (%)</i>	0.004 (0.917)	-0.036 (0.155)	-0.011 (0.690)	0.007 (0.776)	-0.017 (0.365)	-0.001 (0.964)
<i>TAX (%)</i>	0.018 (0.713)	0.071 (0.015)	0.071 (0.092)	0.042 (0.230)	-0.053 (0.000)	0.037 (0.281)
Country fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Percent Concordant (Discordant)	78.8 (21.0)	83.0 (16.9)	83.2 (16.3)	76.2 (23.5)	78.5 (21.3)	80.6 (19.0)
Max-rescaled R^2	0.479	0.503	0.766	0.349	0.422	0.695

Notes:

CROSS_BORDER is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions;

POST_ADOPTION is a binary variable taking the value zero for announcements made between January 1, 1990 and December 31, 2004 (pre-adoption period) and one for those made between April 1, 2005 and December 31, 2010 (post-adoption period); we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS;

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845

(measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

Two-tail *p*-values are reported in parentheses. ⁺⁺⁺ and ⁺⁺ indicate that the coefficients in columns (2) and (3) are statistically different from the coefficients in column (1) at the 1 and 5 percent levels in a one-tail test, respectively. ^{***}, ^{**}, and ^{*} indicate that the coefficients in columns (2) and (3) are statistically different from the coefficients in column (1) at the 1, 5, and 10 percent levels in a two-tail test, respectively. When testing whether the coefficients for the listed targets and the unlisted targets from the adopting countries are statistically different, we combine the observations for the two subsamples and estimate a pooled regression. When testing whether the coefficients for the listed targets from the adopting countries and the listed targets from the non-adopting countries are statistically different, we combine the observations for the two subsamples and estimate a pooled regression.

Table 5**Comparing cross-border acquisitions across alternative pre- and post-IFRS adoption years**

$$\begin{aligned}
CROSS_BORDER_i = & \alpha_0 + \alpha_1 POST_ADOPTION_i + \alpha_2 LTVALUE_i + \alpha_3 STOCK_i + \alpha_4 SAME_IND_i \\
& + \alpha_5 REGULATED_i + \alpha_6 HIGH_TECH_i + \alpha_7 ECON_SIZE_i + \alpha_8 GDP_GROWTH_i \\
& + \alpha_9 POP_GROWTH_i + \alpha_{10} FX_FLUX_i + \alpha_{11} INFLATION_i + \alpha_{12} INTEREST_i + \alpha_{13} TAX_i \\
& + Country\ fixed\ effects + \varepsilon_i
\end{aligned}$$

Panel A: Using the most recent pre-IFRS years as baselines

Baseline →	(1) Last three pre-adoption years (N = 701)		(2) The last pre-adoption year (N = 548)	
	Estimate	Pr > χ^2	Estimate	Pr > χ^2
<i>POST_ADOPTION</i>	0.562	0.024	0.611	0.099
<i>LTVALUE</i>	0.254	<.0001	0.277	<.0001
<i>STOCK</i>	-1.209	<.0001	-1.342	<.0001
<i>SAME_IND</i>	0.259	0.208	0.182	0.420
<i>REGULATED</i>	-0.568	0.020	-0.503	0.058
<i>HIGH_TECH</i>	0.151	0.571	-0.038	0.901
<i>ECON_SIZE</i>	-0.829	<.0001	-0.648	<.0001
<i>GDP_GROWTH (%)</i>	0.007	0.653	0.008	0.612
<i>POP_GROWTH (%)</i>	0.165	0.460	0.186	0.413
<i>FX_FLUX</i>	-0.082	0.940	0.012	0.992
<i>INFLATION (%)</i>	0.140	0.347	0.077	0.667
<i>INTEREST (%)</i>	-0.094	0.392	-0.076	0.516
<i>TAX (%)</i>	-0.160	0.097	-0.179	0.083
Country fixed effects	Yes		Yes	
Percent Concordant (Discordant)	81.5 (18.3)		80.6 (19.2)	
Max-rescaled R^2	0.481		0.450	

Panel B: Different post-adoption period: Years 2005-2007 vs. years 2008-2010

Post-adoption period →	(1) Years: 2005 - 2007 (N = 1,655)		(2) Years: 2008 - 2010 (N = 1,617)	
	Estimate	Pr > χ^2	Estimate	Pr > χ^2
<i>POST_ADOPTION</i>	0.494	0.018	0.622	0.033
<i>LTVALUE</i>	0.260	<.0001	0.250	<.0001
<i>STOCK</i>	-1.365	<.0001	-1.279	<.0001

<i>SAME_IND</i>	0.381	0.004	0.463	0.001
<i>REGULATED</i>	-0.634	<.0001	-0.769	<.0001
<i>HIGH_TECH</i>	0.308	0.104	0.335	0.090
<i>ECON_SIZE</i>	-0.794	<.0001	-0.755	<.0001
<i>GDP_GROWTH (%)</i>	-0.041	0.326	-0.003	0.839
<i>POP_GROWTH (%)</i>	0.110	0.767	0.044	0.795
<i>FX_FLUX</i>	0.276	0.752	-0.092	0.895
<i>INFLATION (%)</i>	-0.023	0.684	-0.026	0.623
<i>INTEREST (%)</i>	0.018	0.658	0.005	0.888
<i>TAX (%)</i>	0.070	0.274	0.050	0.338
Country fixed effects		Yes		Yes
Percent Concordant (Discordant)		79.4 (20.4)		79.0 (20.8)
Max-rescaled R^2		0.492		0.498

Notes:

CROSS_BORDER is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions;

POST_ADOPTION is a binary variable taking the value zero for announcements made in the pre-adoption period and one for those made in the post-adoption period; we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS;

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845 (measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

Table 6**Association between IFRS and cross-border acquisitions: Adopting versus non-adopting cross-border acquirers**

$$\begin{aligned}
CROSS_BORDER_i = & \alpha_0 + \alpha_1 POST_ADOPTION_i + \alpha_2 LTVALUE_i + \alpha_3 STOCK_i + \alpha_4 SAME_IND_i \\
& + \alpha_5 REGULATED_i + \alpha_6 HIGH_TECH_i + \alpha_7 ECON_SIZE_i + \alpha_8 GDP_GROWTH_i \\
& + \alpha_9 POP_GROWTH_i + \alpha_{10} FX_FLUX_i + \alpha_{11} INFLATION_i + \alpha_{12} INTEREST_i \\
& + \alpha_{13} TAX_i + \text{Country fixed effects} + \varepsilon_i
\end{aligned}$$

Cross-border acquirers are from→	(1)		(2)	
	IFRS adopting countries		Non-IFRS adopting countries	
	Listed targets (<i>N</i> = 1,627)	Unlisted targets (<i>N</i> = 3,596)	Listed targets (<i>N</i> = 1,556)	Unlisted targets (<i>N</i> = 3,458)
<i>POST_ADOPTION</i>	0.611 (0.002)	-0.247⁺⁺⁺ (0.041)	0.747 (0.017)	0.219⁺ (0.240)
<i>LTVALUE</i>	0.329 (0.000)	0.097 ^{***} (0.002)	0.156 (0.017)	0.097 (0.039)
<i>STOCK</i>	-1.473 (0.000)	-1.070 ^{**} (0.000)	-0.856 (0.001)	0.051 ^{***} (0.770)
<i>SAME_IND</i>	0.520 (0.001)	0.234 ^{**} (0.019)	0.221 (0.346)	0.138 (0.350)
<i>REGULATED</i>	-0.672 (0.000)	-0.596 (0.000)	-0.530 (0.062)	-0.180 (0.333)
<i>HIGH_TECH</i>	0.041 (0.853)	0.038 (0.769)	0.020 (0.951)	0.322 (0.080)
<i>ECON_SIZE</i>	0.480 (0.000)	0.159 ^{***} (0.016)	-2.606 (0.000)	-2.389 (0.000)
<i>GDP_GROWTH (%)</i>	-0.000 (0.973)	0.000 (0.914)	-0.007 (0.700)	-0.012 (0.176)
<i>POP_GROWTH (%)</i>	0.064 (0.728)	-0.183 (0.044)	0.033 (0.904)	0.094 (0.488)
<i>FX_FLUX</i>	0.913 (0.239)	0.894 (0.092)	-0.380 (0.751)	-0.779 (0.333)
<i>INFLATION (%)</i>	-0.006 (0.915)	0.060 (0.109)	0.142 (0.163)	0.118 (0.041)
<i>INTEREST (%)</i>	0.031 (0.436)	-0.051 [*] (0.086)	-0.118 (0.129)	-0.053 (0.267)
<i>TAX (%)</i>	0.009 (0.875)	0.096 (0.003)	-0.066 (0.524)	-0.049 (0.392)
Country fixed effects	Yes	Yes	Yes	Yes
Percent Concordant (Discordant)	82.1 (17.7)	83.9 (15.8)	90.0 (9.7)	89.2 (10.6)
Max-rescaled <i>R</i> ²	0.602	0.613	0.843	0.819

Notes:

CROSS_BORDER is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions;

POST_ADOPTION is a binary variable taking the value zero for announcements made between January 1, 1990 and December 31, 2004 (pre-adoption period) and one for those made between April 1, 2005 and December 31, 2010 (post-adoption period); we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS;

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845 (measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

Two-tail *p*-values are reported in parentheses. ⁺⁺⁺ and ⁺ indicate that the difference between the coefficient for the unlisted targets and the coefficient for the listed targets is significant at the 1 and 10 percent levels in a one-tail test, respectively. ^{***}, ^{**}, and ^{*} indicate that the differences between the coefficients for the unlisted targets and the coefficients for the listed targets are significant at the 1, 5, and 10 percent levels in a two-tail test, respectively. When testing whether

the coefficients for the listed targets and the unlisted targets from the adopting countries are statistically different, we combine the observations for the two subsamples and estimate a pooled regression.

The sample has a total of 1,870 listed targets and 4,231 unlisted targets from the adopting countries. The sums of the observations in column (1) and column (2) exceed these numbers because we sort only the cross-border acquisitions. Because all the targets are from adopting countries, all the acquirers involving in local acquisitions are also from adopting countries. Hence, the sorting of the acquisitions within transactions by acquirers from adopting countries and transactions by acquirers from non-adopting countries is performed only for the cross-border acquisitions; and the local acquisitions are all included under both column (1) and column (2).

Table 7

Association between IFRS and cross-border acquisitions of listed companies: The effect of regulatory implementation quality ($N = 1,870$)

$$\begin{aligned}
 \text{CROSS_BORDER}_i = & \alpha_0 + \alpha_1 \text{POST_ADOPTION}_i * \text{LOW_RQ}_i + \alpha_2 \text{POST_ADOPTION}_i * \text{HIGH_RQ}_i \\
 & + \alpha_3 \text{LTVALUE}_i + \alpha_4 \text{STOCK}_i + \alpha_5 \text{SAME_IND}_i + \alpha_6 \text{REGULATED}_i + \alpha_7 \text{HIGH_TECH}_i \\
 & + \alpha_8 \text{ECON_SIZE}_i + \alpha_9 \text{GDP_GROWTH}_i + \alpha_{10} \text{POP_GROWTH}_i + \alpha_{11} \text{FX_FLUX}_i \\
 & + \alpha_{12} \text{INFLATION}_i + \alpha_{13} \text{INTEREST}_i + \alpha_{14} \text{TAX}_i + \text{Country fixed effects}_i + \varepsilon_i
 \end{aligned}$$

	Coefficient estimate	Pr > χ^2
<i>POST_ADOPTION*LOW_RQ</i>	-0.348	0.407
<i>POST_ADOPTION*HIGH_RQ</i>	0.579	0.001
<i>LTVALUE</i>	0.258	<.0001
<i>STOCK</i>	-1.300	<.0001
<i>SAME_IND</i>	0.400	0.001
<i>REGULATED</i>	-0.676	<.0001
<i>HIGH_TECH</i>	0.251	0.154
<i>ECON_SIZE</i>	-0.705	<.0001
<i>GDP_GROWTH (%)</i>	-0.867	0.406
<i>POP_GROWTH (%)</i>	-3.661	0.819
<i>FX_FLUX</i>	0.104	0.872
<i>INFLATION (%)</i>	-0.019	0.711
<i>INTEREST (%)</i>	0.000	0.993
<i>TAX (%)</i>	0.016	0.740
<i>Country fixed effects</i>	Yes	
Percent Concordant (Discordant)	79.4 (20.4)	
Max-rescaled R^2	0.479	

Notes:

CROSS_BORDER is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions;

POST_ADOPTION is a binary variable taking the value zero for announcements made in the pre-adoption period and one for those made in the post-adoption period; we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS;

LOW_RQ is a binary variable taking the value one if the regulatory quality (RQ) measure is below the median for the year and zero otherwise;

HIGH_RQ is a binary variable taking the value one if the regulatory quality (RQ) measure is at or above the median for the year and zero otherwise;

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845 (measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

POP_GROWTH is the annual growth rate in the population of the target's country;

FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.

Table 8

Association between IFRS and cross-border acquisitions of listed companies: The effect of enforcement bundling and investment in EU countries ($N = 1,870$)

$$\begin{aligned}
 \text{CROSS_BORDER}_i = & \alpha_0 + \alpha_{1a}\text{POST_ADOPTION}_i * \text{EUT}_i + \alpha_{2a}\text{POST_ADOPTION}_i * \text{NEUT}_i \\
 & + \alpha_{1b}\text{POST_ADOPTION}_i * \text{ENF}_i + \alpha_{2b}\text{POST_ADOPTION}_i * \text{NENF}_i + \alpha_3\text{LTVALUE}_i \\
 & + \alpha_4\text{STOCK}_i + \alpha_5\text{SAME_IND}_i + \alpha_6\text{REGULATED}_i + \alpha_7\text{HIGH_TECH}_i \\
 & + \alpha_8\text{ECON_SIZE}_i + \alpha_9\text{GDP_GROWTH}_i + \alpha_{10}\text{POP_GROWTH}_i + \alpha_{11}\text{FX_FLUX}_i \\
 & + \alpha_{12}\text{INFLATION}_i + \alpha_{13}\text{INTEREST}_i + \alpha_{14}\text{TAX}_i + \text{Country fixed effects}_i + \varepsilon_i
 \end{aligned}$$

	(1)		(2)	
	Coefficient	Pr > χ^2	Coefficient	Pr > χ^2
<i>POST_ADOPTION*EUT</i>	0.421	0.036	–	–
<i>POST_ADOPTION*NEUT</i>	0.558	0.024	–	–
<i>POST_ADOPTION*ENF</i>	–	–	0.464	0.032
<i>POST_ADOPTION*NENF</i>	–	–	0.482	0.033
<i>LTVALUE</i>	0.258	<.0001	0.258	<.0001
<i>STOCK</i>	–1.302	<.0001	–1.299	<.0001
<i>SAME_IND</i>	0.404	0.001	0.403	0.001
<i>REGULATED</i>	–0.677	<.0001	–0.680	<.0001
<i>HIGH_TECH</i>	0.260	0.140	0.256	0.146
<i>ECON_SIZE</i>	–0.700	<.0001	–0.702	<.0001
<i>GDP_GROWTH (%)</i>	–0.009	0.408	–0.009	0.408
<i>POP_GROWTH (%)</i>	–0.023	0.887	–0.015	0.927
<i>FX_FLUX</i>	0.226	0.731	0.196	0.764
<i>INFLATION (%)</i>	–0.013	0.800	–0.014	0.778
<i>INTEREST (%)</i>	0.004	0.920	0.005	0.890
<i>TAX (%)</i>	0.017	0.732	0.016	0.750
<i>Country fixed effects</i>	Yes		Yes	
Percent Concordant (Discordant)	79.1 (20.7)		79.1 (20.7)	
Max-rescaled R^2	0.477		0.477	

Notes:

CROSS_BORDER is a binary variable taking the value one for cross-border acquisitions and zero for within-border acquisitions;

POST_ADOPTION is a binary variable taking the value zero for announcements made in the pre-adoption period and one for those made in the post-adoption period; we exclude the first quarter of 2005 to ensure that the acquisition negotiations in the IFRS period are based on financial reports prepared under IFRS;

EUT is a binary variable taking the value one if the target is from a EU country and zero otherwise;

NEUT is a binary variable taking the value one if the target is not from a EU country and zero otherwise;

ENF is a binary variable taking the value one if the target is from one of the five EU countries that bundled IFRS adoption with substantive changes in enforcement (Finland, Germany, the Netherlands, Norway, and the U.K.) and zero otherwise;

NENF is a binary variable taking the value one if the target is not from any of the five EU countries that bundled IFRS adoption with substantive changes in enforcement and zero otherwise;

LTVALUE is the natural logarithm of the transaction's total value (in constant 2011 U.S. dollars);

STOCK is the proportion of the transaction that is financed with stock;

SAME_IND is a binary variable that takes the value one if the two merging partners are in the same two-digit SIC code and zero otherwise;

REGULATED is a binary variable taking the value one for targets in regulated industries [SIC codes: 4000–4999 (utilities) and 6000–6999 (financials)] and zero otherwise;

HIGH_TECH is an indicator variable that takes the value one for technology firms [SIC codes: 2833–2836 (drugs), 3570–3577 (computer and office equipment), 3600–3674 (electronic and other electrical equipment and components, except computer equipment), 3812–3845 (measuring, analyzing, and controlling instruments), 7371–7379 (computer programming and data processing), and 8731–8734 (research, development, and testing services)] and zero otherwise;

ECON_SIZE is the (relative) size of the local economy, computed as the log of the ratio of the target's country annual GDP to the acquirer's country annual GDP;

GDP_GROWTH is the annual growth rate in the GDP of the target's country;

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FX_FLUX is the annual fluctuation in the exchange rate of the currency of the target's country relative to the US dollar;

INFLATION is the annual inflation rate of the target's country;

INTEREST is the annual interbank lending rate of the target's country; and

TAX is the ratio of the annual corporate tax income to the annual GDP of the target's country.