The Impact of Mandatory IFRS Adoption on Foreign Mutual Fund Ownership: The Role of Comparability

Mark DeFond,[†] Xuesong Hu,[*] Mingyi Hung,[†] Siqi Li[∞]

[†]*University of Southern California*
[*]*University of Oregon*
[∞]*Santa Clara University*

December 2010

ABSTRACT
Proponents of International Financial Reporting Standards (IFRS) argue that mandating a uniform set of accounting standards improves financial statement comparability that in turn attracts greater cross-border investment. Our study tests this assertion by examining the change in foreign mutual fund investment in firms that began using IFRS after its mandatory adoption in the European Union (EU) in 2005. We hypothesize that firms experience larger increases in foreign mutual fund ownership when there is a credible increase in uniformity from IFRS adoption. We define a credible increase in uniformity as a large increase in the number of industry peers using the same accounting standards in countries where IFRS is credibly implemented. Consistent with our hypothesis, we find that subsequent to mandatory IFRS adoption, the increase in foreign mutual fund investment is greater among the firms that experience relatively large increases in uniformity and are in countries with strong implementation credibility.

Acknowledgments: We thank the following for their helpful comments: Mary Barth, Bill Beaver, Craig Chapman, Andrei Filip, Rebecca Hann, Wayne Landsman, and workshop participants at Central University of Finance and Economics, National University of Singapore, Northwestern University, Santa Clara University, Tilburg University Fall Camp, the University of Maryland, the University of Oregon, the University of Southern California, the 2009 Stanford Summer Camp, and the 2010 American Accounting Association Annual Meeting. Siqi Li acknowledges the support of the Presidential Research Grant from Santa Clara University.

The Impact of Mandatory IFRS Adoption on Foreign Mutual Fund Ownership: The Role of Comparability

1. Introduction

Comparability is a qualitative characteristic of financial information that enhances its usefulness (FASB, 1980, 2008; IASB, 1989, 2008). Advocates of mandatory IFRS adoption claim that IFRS increases financial statement comparability, which in turn leads to greater cross-border investment (e.g., SEC, 2008; Tweedie, 2008). The notion is that improved financial statement comparability reduces the information acquisition costs of global investors and thereby increases their investment in foreign firms (Kang and Stulz, 1997; Morgan Stanley Dean Witter, 1998). The purpose of this study is to test this assertion by examining whether the EU's mandatory adoption of IFRS in 2005 results in improved comparability that leads to increased investment by foreign mutual funds.

Comparability is defined as the quality of information that enables users to identify similarities in and differences between two sets of economic phenomena (FASB, 2008; IASB, 2008). Proponents of mandatory IFRS adoption argue that increased uniformity improves financial statement comparability (McCreevy, 2005; Bielstein et al., 2007). This is consistent with the FASB/IASB Conceptual Framework, which argues that comparability is the desired outcome of adopting a uniform set of accounting standards (such as IFRS). However, requiring firms to use a set of uniform accounting standards does not necessarily result in improved comparability (FASB, 2008; IASB, 2008). We expect two factors to impact the extent to which the increased uniformity from mandatory IFRS adoption improves comparability. One factor is what we term implementation credibility, which we define as management's faithful application of IFRS. The

Conceptual Framework argues that a uniform set of standards only increases comparability when it is faithfully applied (i.e., credibly implemented). Financial reporting quality varies across countries and managers have flexibility in implementing IFRS (Nally and Kaplan, 2007; Henry, 2008). Thus, IFRS adoption is only likely to improve comparability when it is credibly implemented. We proxy for implementation credibility in our tests using the earnings quality score from Leuz et al. (2003). Another factor impacting comparability is the magnitude of the increase in uniformity. We measure the increase in uniformity as the change in the number of industry peers using the same accounting standards subsequent to IFRS adoption. The magnitude of the increase in uniformity varies across firms because the increase in comparable industry peers from IFRS adoption varies across countries and industries. We only expect IFRS adoption to improve comparability when it results in a reasonably large increase in uniformity. Thus, IFRS is only likely to improve comparability when there is strong implementation credibility and a large increase in uniformity (i.e., when there is a credible increase in uniformity).

As in Armstrong et al. (2010) and Li (2010), we focus our analysis on mandatory IFRS adoption in the EU. This is a unique setting for investigating the impact of financial reporting uniformity and comparability because thousands of public companies in the EU ceased using their countries' local accounting standards in 2005 and simultaneously adopted a uniform set of reporting standards. We use foreign mutual fund ownership to capture cross-border investment because mutual funds represent a sophisticated set of investors that are likely to base their investment decisions on detailed analysis of financial statements and are therefore likely to benefit from improved comparability.

Thus, we hypothesize that firms experience larger increases in foreign mutual fund ownership when there is a credible increase in uniformity from mandatory IFRS adoption in the EU.

We test our hypothesis using 5,460 firm-year observations of mandatory adopters (who use IFRS only after it is mandated in 2005) in 14 EU countries during the period of our analysis, 2003-2007. Consistent with our hypothesis, we find that mandatory IFRS adoption results in a greater increase in foreign investment among companies in countries with strong implementation credibility that experience relatively large increases in uniformity. We also find that these companies are the only firms with a significant increase in foreign mutual fund ownership.

We also perform two analyses intended to corroborate the findings in our hypothesis test. Our first additional analysis, as expected, finds that a credible increase in uniformity associated with mandatory IFRS adoption in the EU does not increase domestic mutual fund ownership. This is consistent with domestic investors having better access to alternative information channels (such as managers and local analysts) and being more familiar with local accounting standards (Covrig et al., 2007). Our second additional analysis, also as expected, finds that the effect of comparability on foreign mutual fund ownership is primarily driven by foreign global funds, as opposed to foreign regional, country, and other funds. This finding is consistent with foreign global funds having investments across a large number of countries, and hence being more likely to benefit from benchmarking with a large set of firms. Finally, we find that our results are robust to a variety of sensitivity tests.

Our findings make several contributions to the literature. First, we provide evidence that both implementation credibility and increased uniformity are important factors leading to improved comparability. Consistent with the FASB/IASB Conceptual Framework, our findings suggest that uniformity does not necessarily lead to comparability, and that the effects of adopting a uniform set of accounting standards on cross-border investment critically depend upon the economic institutions and management incentives in the adopting country. This finding is also consistent with the message in Holthausen (2009), which argues that enforcement is likely to play an important role in whether a uniform set of accounting standards, such as IFRS, actually leads to improved comparability.

Second, we add to a growing body of working papers that examine the effects of mandatory IFRS adoption on cross-border investment (e.g., Beneish et al., 2009; Bruggemann et al., 2009; Florou and Pope, 2009; Yu, 2010).[1] This stream of research is particularly important because it investigates a potential "real effect" of accounting, which is somewhat rare in the literature. Beneish et al. (2009) examine the effect of mandatory IFRS adoption on cross-border investment in equity and debt markets. Florou and Pope (2009) examine the effects of mandatory IFRS adoption on foreign institutional investors, and Bruggemann et al. (2009) examine the effects on foreign individual investors.

Our study is most closely related to Yu (2010). Similar to our study, Yu (2010) also finds that foreign mutual fund ownership increases following mandatory IFRS adoption.

[1] Another line of literature on IFRS adoption examines the benefits from *voluntary* IFRS adoption (e.g., Covrig et al., 2007). We focus our discussion on studies examining mandatory IFRS adoption because voluntary IFRS adoption, when it is not yet widely used, can actually reduce firms' comparability with their peers. This suggests that studies examining voluntary IFRS adoption generally document the effects of increased disclosure, not improved comparability.

There are, however, important differences that distinguish our study from Yu (2010). The most important one is that we each investigate different mechanisms through which IFRS attracts foreign investors. Our study examines the effects of comparability, which compares the accounting standards of investee firms within industries across different countries. Yu (2010) examines the effects of "accounting distance," which compares the difference between the investees' and investors' accounting standards. Our study finds evidence that improved comparability plays an important role explaining increased foreign investment, and that both credible implementation and increased uniformity are critical factors leading to improved comparability. Yu (2010) finds that reduced accounting distance helps explain the increase in foreign investment by reducing the information asymmetry between investees and investors. We also perform sensitivity tests that verify that our results are not explained by the accounting distance measure used in Yu (2010). Thus, while our study differs from Yu (2010) in terms of the mechanisms we investigate and the conclusions we draw, we believe the two studies provide complementary evidence on the drivers of increased foreign investment in response to the IFRS mandate.

Third, we are one of the few studies that investigate the consequences of improved financial statement comparability. Exceptions are concurrent papers by Barth et al. (2009), Bradshaw et al. (2009), and De Franco et al. (2009). Our study differs from these papers on several dimensions. For example, we focus on a different implication of comparability, examine comparability in a different setting, and use different empirical proxies to capture comparability. For example, Barth et al. (2009) examine the comparability of U.S. GAAP with IFRS and measure comparability using output-based

proxies. Bradshaw et al. (2009) examine the impact of comparability on analyst forecasts and measure comparability using the commonality of accounting choices. De Franco et al. (2009) examine comparability among U.S. firms and measure comparability using financial statement outputs. We also differ from Yip and Young (2009), who examine mandatory IFRS adoption in the EU but do not examine its impact on investment decisions and use an output measure to capture comparability. Our work is unique from this contemporaneous work in that we explicitly consider the role of uniformity in leading to improved comparability. This is an important contribution because uniformity purportedly plays an integral role in improved comparability. Thus, our study both complements and extends the concurrent literature on comparability by explicitly investigating the role of uniformity.

The remainder of the paper is organized as follows. Section 2 discusses our hypothesis development. Section 3 presents the research design and empirical results. Section 4 presents the additional analyses and Section 5 reports sensitivity tests. Section 6 concludes the study.

2. Hypothesis development

2.1. Improved comparability and foreign investment

Comparability, one of the "enhancing qualitative characteristics" of accounting information, is a key motivation behind the initiative to converge global accounting standards and the EU's mandatory IFRS adoption. Proponents of IFRS claim that mandatory adoption results in improved financial statement comparability that in turn leads to increased cross-border investment. For example, the European Commissioner for

the Internal Market, Frits Bolkestein, states that adoption of IFRS will mean that *"investors and other stakeholders will be able to compare like with like*" (GAAP Convergence, 2002).

The argument that improved comparability will lead to increased cross-border investment is consistent with academic research as well as the views of investment professionals. Prior studies suggest that a major factor explaining why investors are reluctant to make cross-border investments is the high costs of acquiring and processing information about foreign companies (Kang and Stulz, 1997; Bradshaw et al., 2004; Chan et al., 2005; Covrig et al., 2007). Similarly, investment professionals often argue that a major obstacle to cross-border investment is the time-consuming reconciliation of differences in accounting standards across countries (Morgan Stanley Dean Witter, 1998). Thus, improved financial statement comparability is expected to reduce information acquisition costs for foreign investors, thereby increasing their investment in foreign firms.

However, we expect the effects on comparability of adopting a uniform set of accounting standards, such as IFRS, to vary across firms for two reasons. First, increased uniformity is only expected to improve comparability when the uniform standards are credibly implemented. Second, comparability is only likely to improve when IFRS adoption results in a large increase in uniformity. We discuss each of these reasons in turn.

2.2. Credible implementation of uniform standards

Uniformity simply means requiring firms to apply the same set of standards, while comparability is a characteristic of the relation between two or more items of information.

Comparability should improve financial reporting quality by allowing financial statement users to identify similarities in, and differences between, two or more sets of economic phenomena (FASB, 2008; IASB, 2008). While comparability is the desired outcome of adopting a set of uniform accounting standards, uniformity alone does not necessarily result in comparability. In particular, the uniform standards must also be faithfully implemented. As stated in the FASB's Concepts Statement 2: "*Comparability is achieved when information being compared is a faithful representation of a relevant phenomenon."* The Statement goes on to point out that regardless of how comparable information may be, it is useless unless it faithfully represents the information it purports to represent.

The above discussion suggests that the adoption of a set of uniform standards is unlikely to improve financial information comparability in countries where financial statements lack credibility. Prior literature suggests that weak country-level institutions can result in poor implementation of high quality accounting standards, which in turn can result in less credible financial reporting (e.g., Ball et al., 2000, 2003; Hung, 2001; Daske et al., 2008). Because IFRS is principles-based, it allows managers considerable flexibility in its application (Nally and Kaplan, 2007; Henry, 2008). This suggests that the increased uniformity that follows from mandatory IFRS adoption is only likely to lead to improved financial statement comparability among firms in countries with strong implementation credibility – i.e., where the standards are applied such that they faithfully capture the underlying economic phenomena. Thus, we predict that the increased uniformity associated with mandatory IFRS adoption in countries with strong implementation credibility is likely to lead to consequences such as increased cross-

border investment, while such consequences are unlikely in countries with weak implementation credibility.[2]

2.3. Variation in increased uniformity

The benefits from improved comparability are based on the assumption that information about a given firm is more useful when it adopts the same accounting standards as the standards used by its industry peers. The notion is that increased uniformity leads to improved comparability, where increased uniformity is defined as an increase in the number of firms using the same accounting standards as the firm of interest. The role of uniformity in comparability is also highlighted in the FASB/IASB Conceptual Framework, which argues that comparability is the desired outcome of adopting a set of uniform accounting standards. This is also consistent with the SEC's emphasis on uniformity in its recent proposal to mandate IFRS in the U.S. In particular, the SEC's original proposed roadmap to IFRS adoption states that U.S. companies qualify for early IFRS adoption when they are in industries where IFRS is the most frequently used foreign standard (SEC, 2008). In other words, the proposal only allows early adoption when it results in a relatively large increase in uniformity between the adopter and its industry peers.

We predict that IFRS adoption is likely to substantially improve comparability only among firms that experience large increases in uniformity. We measure the change in uniformity using the ratio of the number of a firm's industry peers that use the same accounting standards before and after mandatory IFRS adoption. That is, we divide the

[2] A maintained assumption in our prediction is that IFRS, when appropriately adopted, is a reasonably high quality set of accounting standards. This assumption is consistent with prior research that finds IFRS adoption tends to enhance financial reporting quality (e.g., Covrig et al., 2007; Barth et al., 2008). If IFRS is not a reasonably high quality set of standards, it biases against finding support of our predictions.

number of industry peers using IFRS in 2007 by the number of industry peers using the same local accounting standards in 2003. The following example illustrates the intuition behind our measure of the change in uniformity and how it maps into improved comparability.[3] Prior to mandatory IFRS adoption there are two firms in the Finnish petroleum industry that use Finnish GAAP. Thus, the uniform use of Finnish GAAP results in only two peers in the Finnish petroleum industry that use comparable accounting standards. After mandatory IFRS adoption, the uniform use of IFRS results in 82 peers in the petroleum industry that use comparable accounting standards, including the two Finnish firms. Because the number of industry GAAP peers (i.e., industry peers that use comparable accounting standards) increases from 2 to 82, we measure the change in uniformity for the Finnish petroleum industry as 41 (82/2). By comparison, there are 19 companies in the U.K. petroleum industry using U.K. GAAP before IFRS adoption, which means the change in uniformity in the U.K. petroleum industry is 4.32 (82/19). The increase in uniformity is smaller in the U.K. than in Finland because IFRS adoption results in a relatively smaller increase in industry GAAP peers for U.K. petroleum companies. Intuitively, because they have more comparable industry GAAP peers prior to mandatory adoption, U.K. petroleum firms benefit less than Finnish petroleum firms from changing to IFRS.

There are, however, two caveats to our measure of increased uniformity. First, an implicit assumption in our analysis is that local GAAP is not very comparable across countries. For example, the above case assumes that Finnish GAAP and U.K. GAAP are not very comparable. To the extent that they are relatively comparable (or that any local

[3] We use the terms "change" in uniformity and "increase" in uniformity interchangably because uniformity can only increase as a result of mandatory IFRS adoption.

standards are comparable across countries), it introduces noise to our measure. We do not, however, expect it to introduce bias. Second, some firms with very few industry peers have unusually large changes in uniformity (because they have a small denominator when calculating the ratios). For instance, in the above example, the change in uniformity for Finnish firms (41) is nearly ten times larger than the change for U.K. firms (4.32). However, because our tests use a dummy variable based on the median value of the change in uniformity measure to capture large increases in uniformity, extreme values should not unduly influence our results.

An important element of our approach in evaluating the effect of comparability is that we explicitly consider the role of uniformity. This is important in our setting because increased uniformity is the reason why proponents of mandatory IFRS adoption expect it to make companies more comparable (McCreevy, 2005; Bielstein et al., 2007). It is also important because the FASB/IASB Conceptual Framework argues that comparability is the desired outcome of adopting a uniform set of accounting standards. Thus, by explicitly considering uniformity we are examining the fundamental underlying characteristic of the IFRS mandate that is purported to lead to improved comparability. By comparison, other contemporaneous research that explores comparability tends to use outputs of the accounting system to capture comparability. For example, De Franco et al. (2009) and Yip and Young (2009) use an earnings-based measure of the extent to which firms produce accounting numbers that are similar to their industry peers (as captured by stock returns). We believe that our setting is unique in allowing us to study a change in uniformity and hence explore a fundamental driver of comparability. Nevertheless, we expect that our setting is likely to have some implications for the earnings-based

measures of comparability used in other studies. Hence, in Section 5 we report tests that replace our measure of uniformity with the earnings-based comparability measure used in De Franco et al. (2009) and Yip and Young (2009).

2.4. Hypothesis

Based on the above arguments, we expect the mandatory adoption of a uniform set of accounting standards, such as IFRS, to attract greater investment by foreign mutual funds if the standards increase financial reporting comparability. Further, we expect IFRS adoption to improve comparability only when IFRS is credibly implemented, and when it results in a relatively large increase in uniformity. This leads to the following hypothesis:

Hypothesis: Firms experience larger increases in foreign mutual fund ownership when there is a credible increase in uniformity from IFRS adoption.

3. Research design and empirical results

3.1. Primary variables of interest

3.1.1. Proxy for strength of implementation credibility

We measure implementation credibility using the earnings quality score from Leuz et al. (2003), which is an outcome measure of managers' actual reporting behavior and has been used in prior literature to capture management's responsiveness to the IFRS mandate (Daske et al., 2008). The score is computed as the average rank across four measures of country-level earnings quality, with higher values indicating countries with relatively less implementation credibility. Since this score is an output measure of the financial reporting system, it reflects all the reporting incentives faced by managers, including those provided by a strong rule of law and concentrated ownership. The notion

that underlies this measure is that weak country-level financial reporting incentives result in poor implementation of accounting standards, which in turn leads to less credible financial reporting. Countries are classified as having strong implementation credibility based on the sample country-level median.

3.1.2. Proxy for changes in uniformity

We define accounting standards uniformity for a firm as the number of industry peers using the same (i.e., uniform) accounting standards. We capture uniformity based on industry membership because investment professionals use industry-oriented analysis when comparing global companies. The focus on industry-level comparison is also consistent with the SEC's industry-related guidelines for early IFRS adoption in the U.S. As in Daske et al. (2008) and Li (2010), our industry classifications are based on Campbell (1996), which results in a reasonably large number of observations per industry as compared with using 2-digit SIC codes. Consistent with the SEC's criteria for comparing U.S. firms with their worldwide peers, as outlined in its roadmap to IFRS adoption in the U.S. (SEC, 2008), we use the universe of Compustat Global and North America databases to capture the firms and industries included in our uniformity measure.[4]

Our measure of the change in uniformity associated with mandatory IFRS adoption, referred to as "*Δuniformity*", equals the number of firms using IFRS in a given industry subsequent to the EU mandatory adoption, divided by the number of firms in a given country that use local accounting standards in that industry prior to the mandatory adoption. Since *Δuniformity* is an industry-country-level measure, we classify firms as

[4] The only data constraint for inclusion in our comparability measure is that a firm has non-missing Compustat industry and accounting standards codes throughout our sample period.

having a "large increase in uniformity" based on the median value of the *Δuniformity* measure at the industry-country-level.

3.2. Sample and descriptive statistics

Our sample consists of 5,460 firm-year observations of mandatory IFRS adopters in 14 EU countries from 2003-2004 and 2006-2007. We eliminate 2005 to avoid the potentially confounding effects in the transition year. Our baseline analysis also includes a benchmark sample of 30,520 firm-year observations in ten non-IFRS adoption countries over these periods. We restrict the mandatory adopters to firms with accounting standards (data item astd) designated as DS prior to 2005 and as DI after 2004, and the non-IFRS adopters to firms with accounting standards designated as DS throughout our sample period.

We obtain foreign mutual fund holdings data from the Thomson Financial Services (TFS) international mutual fund database. This database reports firm-level investments and gathers its mutual fund holding data from local authorities and mutual funds and includes both open and closed-end funds.[5] We collect financial statement and stock performance variables from the Compustat Global and North America database, and the number of analysts following from I/B/E/S. To mitigate the influence of outliers, we winsorize all of the scaled independent variables included in our multivariate regression analysis (i.e., *ROE*, *Returns*, *Return variation*, *LEV*, *Div. yield*, *Book-to-market*, *E-P ratio*, *Sales growth*, *Turnover*, *Cash*, and *Closely held*) at the top and bottom 1% of their distributions.

[5] For a detailed description of the TFS worldwide mutual fund holding data, see Chan et al. (2005) and Covrig et al. (2006).

Table 1 presents the sample distribution for our treatment sample of EU mandatory adopters and the benchmark non-IFRS adopters.[6] Columns two and three indicate that the number of unique firms and the number of total observations vary widely across the EU countries. For example, the U.K. has the largest number of firm-year observations (1,404) while Austria has the lowest (36). In addition, the table shows that there is considerable variation in sample distribution across the benchmark firms. For example, the U.S. has the largest number of observations (13,496) while Pakistan has the lowest (60).

Table 2 presents descriptive statistics of the variables used in our analysis. Panel A reports country-level descriptive statistics on foreign mutual fund ownership and our implementation credibility measure. The panel shows that for the EU mandatory adopters, the country-level mean foreign mutual fund ownership ranges from a low of 1.2% in Austria to a high of 13.2% in Ireland, while for the non-IFRS adopters, ownership ranges from a low of 0.8% in Malaysia and Pakistan to a high of 6.4% in Korea. The panel also shows that our implementation credibility measure ranges from a low (representing high credibility) of 5.1 in Ireland to a high (representing low credibility) of 28.3 in Austria and Greece for the EU mandatory adopters, and ranges from a low of 2 in the U.S. to a high of 26.8 in Korea for the non-IFRS adopters, with the sample mean (median) of 16.5 (18.3).

Panel B of Table 2 reports descriptive statistics on our uniformity measure, *Δuniformity*, which is used to create our industry-country partition capturing large

[6] Our analysis is limited to the 14 EU countries with sufficient data over the period of our analysis. While there are 27 EU countries in total, the countries excluded from our analysis have few public firms, representing only approximately 5% of all public firms in the EU (i.e., Bulgaria, Cyprus, The Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, and Slovenia). Thus, omission of these countries from the analysis is not expected to have important implications for our conclusions.

increases in uniformity. The panel indicates that the largest increase in uniformity occurs in the Austrian-GAAP and Irish-GAAP users in the consumer durables industry, with a *Δuniformity* ratio of 605 (605/1). The smallest increase in uniformity occurs in the U.K. GAAP users in the petroleum industry, with a *Δuniformity* measure of 4.32 (82/19). Panel C of Table 2 reports descriptive statistics for the firm-level and country-level control variables used in our multivariate analysis, with the EU mandatory adopters and the non-adopters shown separately. The panel shows a reasonably high degree of variation in many of the variables.

3.3. Empirical results

3.3.1. Univariate analysis

Table 3 presents a univariate analysis comparing foreign mutual fund ownership before and after the IFRS mandate in 2005 for EU mandatory adopters and non-IFRS adopters. The table reports that the percentage ownership in the post-adoption period (2006-2007) is significantly greater than that in the pre-adoption period (2003-2004) for both groups: 5.3% versus 3.9% for mandatory adopters and 1.6% versus 1.5% for non-IFRS adopters. While this indicates an overall increase in foreign mutual fund holdings during our sample period, the mandatory adopters experience a significantly greater increase in percentage ownership after 2005 (1.4% for mandatory adopters and 0.1% for non-IFRS adopters, with the difference significant at $p \leq 1\%$). Thus, the analysis in Table 3 suggests that, on average, mandatory IFRS adoption in the EU results in increased foreign mutual fund investment and that this increase is significantly larger than the increase in non-IFRS adopting countries during the same period. In the following section we examine this change in investment in a multivariate analysis.

3.3.2. Baseline analysis

Our first multivariate analysis models the impact of mandatory IFRS adoption on foreign mutual fund investment in EU firms. We include the non-IFRS adopters to control for changes in foreign mutual fund ownership that are unrelated to IFRS adoption. Thus, the sample firms in this analysis consist of all mandatory IFRS adopters in the EU, plus a benchmark group of non-IFRS users in countries that do not allow IFRS over the period of our analysis.

This baseline model regresses foreign mutual fund holdings on dummy variables indicating whether the firm is a mandatory adopter (*Mandatory adopters*), whether the period is post adoption (*Post*), and their interaction. Our variable of interest is the interaction term, which captures the change of foreign mutual fund ownership in mandatory IFRS users after 2005, relative to the corresponding change for non-IFRS adopters. Following prior literature, we calculate firm-level foreign mutual fund ownership as the total number of company shares owned by foreign mutual funds divided by the total number of shares outstanding (e.g., Covrig et al., 2007). Our baseline regression model is as follows:

$$\begin{aligned} \textit{Foreign mutual fund ownership} = {} & \beta_0 + \beta_1(\textit{Mandatory adopters}) + \beta_2(\textit{Post}) \\ & + \beta_3(\textit{Mandatory adopters}*\textit{Post}) + \beta_j(\textit{Controls}_j) \end{aligned} \qquad (1)$$

Our regression model includes firm-level, country-level, and industry-level control variables used in prior research to explain mutual fund holdings (Bradshaw et al., 2004; Covrig et al., 2006, 2007; Ferreira and Matos, 2008; Florou and Pope, 2009). We list and define these variables in Appendix A. If mandatory IFRS adoption in the EU leads to higher foreign mutual fund ownership, we expect a positive coefficient on β_3. In this and

all of our regression analyses we adjust the standard errors by firm clusters, and present one-tailed *p*-values where we have a prediction and two-tailed *p*-values otherwise.

Table 4 presents the results of this analysis. Model 1 includes only our variables of interest. Model 2 and Model 3 control for country-level institutions by adding country-level variables and country dummy variables to Model 1, respectively. Model 4 and Model 5 add firm-level controls to Model 2 and Model 3. The results find that the coefficient on *Mandatory adopters*Post* is significantly positive at $p \leq 1\%$ in all five models, with a magnitude of 0.008 in Models 4 and 5 (i.e., the models that include both firm-level and country-level controls). Thus, relative to the non-IFRS adopters, foreign mutual fund ownership in mandatory IFRS adopters increases by 0.8% subsequent to mandatory IFRS adoption. This represents a mean increase of 21% based on the pre-adoption ownership of 3.9% for mandatory adopters (reported in Table 3), consistent with the increase being economically significant.[7]

Table 4 also reports that foreign mutual fund ownership is higher among firms with more analyst following (*Nanalyst*), that are larger (*Size*), that are included in major indexes (*MSCI* and *Market indexes*), that are cross-listed (*ADR*), that have higher return variation (*Return variation*), that have lower earnings-to-price ratios (*E-P ratio*), that have more cash holdings (*Cash*), and that have less concentrated ownership (*Closely held*), significant at $p \leq 5\%$ in both models 4 and 5. Although it is difficult to make direct comparisons with prior studies due to differences in the time periods and the variables analyzed, these findings on the firm-level controls are generally consistent with prior studies, such as Bradshaw et al. (2004), Covrig et al. (2006 and 2007), and Ferreira and

[7] Models 4 and 5 of Table 4 also report a coefficient on *Post* of 0.000, which is insignificant. This indicates that the change in mutual fund ownership in non-IFRS adopters equals zero after controlling for firm-level and country-level effects.

Matos (2008). Finally, Table 4 reports that foreign mutual fund ownership is lower in countries with larger stock market capitalization (*Market cap/GDP*), significant at $p \leq 5\%$ in models 2 and 4.

3.3.3. Hypothesis test

Our hypothesis test examines whether mandatory IFRS adoption results in a greater increase in foreign mutual fund investment among firms in countries with strong implementation credibility that experience relatively large increases in uniformity. Since we are unable to measure the change in uniformity among the non-IFRS adopting countries (because their local GAAP does not change after 2005), and because we are primarily interested in the role of credibility and uniformity among IFRS adopters, the sample in this test consists exclusively of mandatory IFRS adopters in the EU.

We test our hypothesis by regressing foreign mutual fund holdings on three dummy variables (and their interactions) indicating: (1) whether the period is post adoption (*Post*), (2) whether the country has strong implementation credibility (*Strong credibility),* and (3) whether IFRS adoption results in a large increase in uniformity (*Large increase in uniformity)*, and a set of control variables as listed in Appendix A. The regression model testing our hypothesis is as follows:

$$\begin{aligned} \textit{Foreign mutual fund ownership} = {} & \beta_0 + \beta_1(\textit{Post}) + \beta_2(\textit{Strong credibility}) \\ & + \beta_3(\textit{Post*Strong credibility}) + \beta_4(\textit{Large increase in uniformity}) \\ & + \beta_5(\textit{Post*Large increase in uniformity}) \\ & + \beta_6(\textit{Strong credibility*Large increase in uniformity}) \\ & + \beta_7(\textit{Post*Strong credibility*Large increase in uniformity}) \\ & + \beta_j(\textit{Controls}_j) \end{aligned} \qquad (2)$$

Panel A of Table 5 reports the results of estimating equation (2).[8] Our hypothesis predicts that the coefficient β_7 is positive. This coefficient equals the incremental change in foreign mutual fund ownership after 2005 for mandatory adopters that experience large increases in uniformity in strong implementation credibility countries, minus the corresponding change in weak implementation credibility countries. Panel A shows that this coefficient equals 0.021 and is significant at $p \leq 1\%$. This indicates that the increase in foreign mutual fund holdings is 2.1% larger among firms that experience large increases in uniformity in countries with strong implementation credibility, when compared to firms in countries with weak implementation credibility.

To better understand the interpretation of the coefficients in Panel A, Panel B of Table 5 reconstructs the coefficients for each of the four categories of firms in our sample. The four categories are based on whether the firms are in countries with strong implementation credibility and whether the firms experience a large increase in uniformity. The bottom two rows of Panel B report the results for firms in countries with strong implementation credibility. The bottom row shows that the change in ownership for the firms in countries with strong implementation credibility that experience large increases in uniformity is 1.7% ($\beta_1+\beta_3+\beta_5+\beta_7$). The third row shows that the change in ownership for the firms in countries with strong implementation credibility that experience small increases in uniformity is -0.1% ($\beta_1+\beta_3$). Thus, in countries with strong implementation credibility, the increase in ownership among firms with large increases in uniformity is 1.8% greater than the increase in ownership among firms with small

[8] In the interests of parsimony, in this and all subsequent multivariate analysis, we report only the models using country-level control variables, and suppress reporting the coefficients on the control variables.

increases in uniformity. That is, as reported in Panel B, 1.8% ($\beta_5+\beta_7$) equals 1.7% ($\beta_1+\beta_3+\beta_5+\beta_7$) minus -0.1% ($\beta_1+\beta_3$).[9]

The top two rows of Panel B report the results for firms in countries with weak implementation credibility. The second row shows that the change in ownership for the firms in countries with weak implementation credibility that experience large increases in uniformity is 0.0% ($\beta_1+\beta_5$). The first row shows that the change in ownership for the firms in countries with weak implementation credibility that experience small increases in uniformity is 0.3% (β_1). Thus, in countries with weak implementation credibility, the increase in ownership among firms with large increases in uniformity is 0.3% lower than the increase in ownership among firms with small increases in uniformity. That is, as reported in Panel B, -0.3% (β_5) equals 0.0% ($\beta_1+\beta_5$) minus 0.3% (β_1).

The far right column of Panel B shows that β_7 captures the difference in the increase in foreign mutual fund ownership when there is a credible increase in uniformity from IFRS adoption. Specifically, 2.1% (β_7) equals the difference in ownership change between firms with large and small increases in uniformity in strong credibility countries of 1.8% ($\beta_5+\beta_7$), minus the corresponding difference in weak credibility countries of -0.3% (β_5).

We also observe that Table 5 presents two other approaches to test for the joint effects of implementation credibility and increased uniformity as suggested in our hypothesis. One approach is to examine ($\beta_5+\beta_7$), which is 1.8% and significant at $p\leq 1\%$.

[9] Our interest in Panel B is to examine the change in ownership among the four groups, not the pre and post levels. Thus, we construct the pre and post levels in each cell based only on the dummy variables in Panel A of Table 5. The actual pre and post levels would also include the average ownership amounts captured by the control variables in Panel A. Specifically, each cell in Panel B would increase by the sum of the coefficients on each control variable times the control variables calculated at their mean values. In untabulated analysis we calculate this average as 3.4%. Thus, the actual pre and post values would all be higher by 3.4%.

Finding a significantly positive value on ($\beta_5+\beta_7$) means that in countries with strong implementation credibility, the increase in mutual fund ownership is significantly greater in firms with large increases in uniformity. The other approach is to examine ($\beta_3+\beta_7$), which has a value of 1.7% and is significant at $p\leq 1\%$ (though not directly reported in Table 5).[10] Finding a significantly positive value on ($\beta_3+\beta_7$) means that when firms experience a large increase in uniformity, the increase in mutual fund ownership is significantly greater for firms in strong credibility countries. While both of these approaches provide evidence that is consistent with the joint effects of implementation credibility and increased uniformity suggested by our hypothesis, we focus on β_7 because this coefficient measures the joint incremental effect of credibility and uniformity.

Finally, Panel B of Table 5 shows that the only firms with a significant increase in foreign mutual fund ownership are those in countries with strong implementation credibility that experience large increases in uniformity. Specifically, while the bottom row of Panel B shows that foreign mutual fund ownership increases by 1.7% (which is significant at $p\leq 1\%$), each of the other three rows shows that the change in ownership is insignificant. These findings suggest that foreign investors are not attracted to mandatory IFRS users in countries with weak implementation credibility, or to firms with small increases in uniformity.

4. Additional analyses

4.1. Analysis of domestic mutual funds

We argue that improved comparability leads to increased foreign mutual fund ownership because an improvement in financial statement comparability reduces the

[10] Specifically, 1.7% ($\beta_3+\beta_7$) equals 1.7% ($\beta_1+\beta_3+\beta_5+\beta_7$) minus 0.00% ($\beta_1+\beta_5$).

information acquisition costs of foreign investors. Compared to foreign investors, the information costs argument is less likely to hold for domestic investors because they have better access to alternative information channels (such as managers and local analysts) and tend to be more familiar with local accounting standards (Covrig et al., 2007). Thus, to corroborate this argument, we repeat our analysis in Table 5 with domestic mutual fund holdings as the dependent variable. While we do not have predictions on whether improved comparability associated with mandatory IFRS adoption will increase domestic mutual fund holdings, we expect that the effect should not be as pronounced as that on foreign mutual fund holdings.

Table 6 reports the results of this analysis. The table shows that in sharp contrast to the results in Table 5, the coefficient β_7 is -0.012 and significant at $p \leq 1\%$. Thus, corroborating the arguments in our hypothesis development, this finding indicates that the improved comparability associated with mandatory IFRS adoption does not increase domestic mutual fund ownership. Finding that β_7 is negative is consistent with domestic mutual funds reducing their investment in mandatory IFRS adopters and is not surprising given the results in Table 5. If foreign mutual funds increase their investment in mandatory IFRS adopters, other investors must reduce their investment. These other investors include domestic mutual funds as well as non-mutual fund investors such as individuals and other institutions. One reason domestic mutual funds might sell shares of local IFRS adopters is that the domestic fund managers, at the margin, lose their relative information advantage in evaluating firms with local GAAP once IFRS is adopted.

4.2. Analysis by type of foreign mutual funds

In this section we attempt to corroborate our findings by separately examining specific types of foreign mutual funds. As in prior studies (Chan et al., 2005, 2006; Covrig et al., 2007), we disaggregate foreign mutual funds into four types based on the scope of their investment: (1) foreign global funds - foreign funds with at least 80% of equity holdings in no specific country or region, (2) foreign regional funds - foreign funds with at least 80% of their equity holdings in the investee firm's region, (3) foreign country funds - foreign funds with at least 80% of their equity holdings in the investee firm's country, and (4) other foreign funds. The benefits of comparability (i.e., the enhanced ability to make cross-country comparisons of the EU adopters) are likely to be greater for foreign global funds than for foreign regional funds or other types of foreign funds. This is because foreign global funds have investments across a larger number of countries, and hence are likely to benefit more from the improved ability to benchmark with a larger set of firms.

Table 7 reports the results of this analysis. Consistent with our prediction, we find that the impact of comparability on foreign mutual fund ownership is largest in foreign global funds. Specifically, the coefficient on *Post*Strong credibility*Large increase in uniformity* (β_7) indicates that the incremental change in foreign mutual fund ownership for firms experiencing a credible increase in uniformity is 1.2% for foreign global funds, but only 0.4% for foreign regional funds, 0.5% for foreign country funds, and -0.1% for other foreign funds. Thus, more than 57% of the 2.1% change in foreign mutual fund ownership found in Table 5 (i.e., 1.2%/2.1%) is explained by increases in foreign global

fund ownership.[11] Overall, our analysis of the change in ownership among the different types of foreign mutual funds provides evidence that corroborates the findings in our hypothesis test.

5. Sensitivity tests

5.1 Alternative measures of implementation credibility

We repeat our hypothesis test using two alternative measures of implementation credibility: rule of law and ownership concentration. The rule of law proxy is the 2005 rule of law index compiled by Kaufmann et al. (2007).[12] Ball et al. (2003) argue that a strong rule of law increases managers' incentives to report more transparently. Consistent with this argument, Daske et al. (2008) find that mandatory IFRS adoption results in capital market benefits primarily in countries with a strong rule of law. Our ownership concentration proxy, obtained from La Porta et al. (1998), is computed as the average percentage of common shares owned by the three largest shareholders in the 10 largest nonfinancial, privately owned domestic firms in a given country. Consistent with this measure capturing reporting incentives, Daske et al. (2008) report that the capital market benefits of IFRS adoption are greater in countries where ownership is less concentrated. We repeat our analysis in Table 5 after sequentially replacing our earnings quality scores with each of the alternative measures of implementation credibility and find results

[11] The magnitude of β_7 in each of the Table 7 regressions is smaller than the magnitude of β_7 in Table 5 because the dependent variables in the Table 7 regressions are a disaggregation of the dependent variable in Table 5. The sum of β_7 across the Table 7 regressions (which sum to 2.0%) does not add up exactly to β_7 in Table 5 (which is 2.1%) because of rounding.

[12] The rule of law index from Kaufmann et al. (2007) is available at the World Bank website (http://info.worldbank.org/governance/wgi/index.asp) and is also used in Daske et al. (2008) to capture managements' compliance with IFRS. As explained in Kaufmann et al. (2007), the rule of law index is based on "…a large number of enterprise, citizen and expert survey respondents in industrial and developing countries, as reported by a number of survey institutes, think tanks, non-governmental organizations, and international organizations."

(untabulated) that are qualitatively identical to those reported in Table 5.[13] Thus, the results of our hypothesis test are not sensitive to alternative measures of implementation credibility.

5.2 Using country dummies to control for country effects

While our hypothesis test in Table 5 uses country-level control variables to control for country-level institutions, we repeat our hypothesis test after replacing the country-level controls with country dummies. In performing this test, we suppress the dummy variable *Strong credibility* because it is a linear combination of the country dummies. This analysis finds results (untabulated) that are qualitatively identical to those reported in Table 5. Thus, the results of our hypothesis test are not sensitive to using country dummies to control for country fixed-effects.

5.3. Replacing the uniformity measure with an earnings-based output measure of comparability

As previously discussed, we believe that an explicit consideration of uniformity is important in our setting because proponents of mandatory IFRS adoption argue that increased uniformity leads to improved comparability, and the FASB/IASB Conceptual Framework argues that comparability is the objective of adopting a uniform set of accounting standards. Other studies that examine comparability, which focus on much different settings, typically use output-based measures in an attempt to capture comparability. While these measures are fundamentally different than our measure of uniformity, we have some expectation of how these measures are likely to behave in our setting if they are valid proxies for comparability. In particular, increases in these output-

[13] By "qualitatively identical to those reported in Table 5," we mean that the coefficient β_7 is positive and significant at $p \leq 10\%$.

based measures of comparability are more likely to result in increased foreign investment in countries with strong implementation credibility than in countries with weak implementation credibility. Thus, we perform tests that replace our measure of uniformity with a measure of earnings-based comparability used in De Franco et al. (2009) and Yip and Young (2009).

This comparability measure, which De Franco et al. (2009) label as *Comp4ACCT*, captures the extent to which firms produce accounting numbers that are similar to their industry peers (as captured by stock returns). We compute *Comp4ACCT* before and after mandatory IFRS adoption for the firms in our sample and create a dummy variable equal to one if the change in *Comp4ACCT* indicates an increase in comparability after mandatory IFRS adoption, and zero otherwise.[14] We then replace our dummy variable indicating large increases in uniformity with a dummy variable indicating increases in *Comp4ACCT*. In addition, because we are able to compute this measure for firms in non-IFRS adopting countries, we include those firms as our benchmark group.

We perform this test by first partitioning our sample into countries with strong and weak implementation credibility. We then regress foreign mutual fund holdings on *Mandatory adopters, Post, Increases in Comp4ACCT* (and their interactions), and the control variables. This analysis continues to find results (untabulated) supporting our hypothesis. Specifically, we find that the coefficient on *Mandatory*

[14] Specifically, using the universe of firms in the Compustat Global and North America database, we first measure the difference in the predicted values from regressing firm i's semi-annual earnings on firm i's returns using estimated coefficients for firms i and j respectively, when firms i and j are in the same industry as defined in Campbell (1996). We then compute the change in comparability (pre verus post 2005) for each firm based on the average of the four industry peers with the smallest differences in predicted values.

*adopters*Post*Increases in Comp4ACCT* is significantly positive at $p \leq 10\%$ only for firms in countries with strong implementation credibility.

5.4. Excluding accounting-based control variables

Hung and Subramanyam (2007) find that the value and variability of accounting numbers are different between IFRS and German GAAP. Thus, the changes in foreign mutual fund investment after the IFRS mandate may be mechanically related to the differences between accounting numbers based on local GAAP and those based on IFRS. To ensure that this difference does not drive our results, we remove the control variables constructed based on accounting measures (i.e., *ROE*, *LEV*, *Div. yield*, *Book-to-market*, *E-P ratio*, *Sales growth*, and *Cash*) and repeat our analysis in Table 5. This analysis finds results (untabulated) that are qualitatively identical to those reported in Table 5. Thus, our primary conclusion is robust to excluding accounting-based control variables.

5.5. Excluding countries with influential observations

The country-level sample distribution in Table 1 indicates that the U.K. has the largest number of firms in our treatment sample. Thus, we explore whether firms in the U.K. drive our results by repeating our analysis in Table 5 after excluding observations from the U.K. This analysis finds results (untabulated) that are qualitatively identical to those reported in Table 5. Thus, our primary conclusion is not sensitive to excluding countries with influential observations.

5.6. Controlling for country-level improvements in disclosure

While a commonly espoused outcome of voluntary IFRS adoption is increased disclosure, there is little evidence on this issue regarding mandatory IFRS adoption. Nevertheless, a potential alternative explanation for our findings is that they are caused

by increased disclosure rather than by improved comparability. Thus, we repeat our analysis in Table 5 after further controlling for a country-level variable capturing the extent of increased disclosures under IFRS relative to local standards (as used in Li, 2010), along with its interaction with the post adoption dummy variable. In untabulated analysis we find results that are qualitatively identical to those reported in Table 5. Thus, our primary conclusion is robust to controlling for increased disclosure that may be associated with mandatory IFRS adoption.

5.7. Controlling for country-level accounting distance as in Yu (2010)

In a contemporaneous working paper, Yu (2010) finds evidence that mandatory IFRS adoption increases foreign mutual fund holdings by reducing the differences between the investee's and the investor's accounting standards. We explore whether our results hold after controlling for this difference, referred to as "accounting distance," by constructing an annual country-level measure of the average distance between the local accounting standards of a given country and all other countries, based on the *AD1* measure in Yu (2010).[15] We then repeat our analysis in Table 5 including this new control variable and find results (untabulated) that are qualitatively identical to those currently reported. Thus, our findings do not appear to be explained by the measure of accounting distance used in Yu (2010).

5.8. Controlling for the interaction between country-level variables and post adoption

By construction, our change in uniformity measure captures both cross-country and within-country variations in changes in accounting peers. For example, as reported in

[15] Yu (2010) includes three accounting distance measures, *AD1*-*AD3*. *AD1*, used in her primary analysis, considers two local accounting standards non-compliant with IFRS to be similar only if the two countries are from the same legal origin. *AD2* (*AD3*), used in her robustness tests, treats two non-compliant local accounting standards to be always similar (different). We also perform additional analysis using *AD2* and *AD3* to capture accounting distance, and find similar results (untabulated).

Panel B of Table 2, mandatory adopters in Austria experience a greater increase in uniformity than mandatory adopters in the U.K. because Austrian firms had a smaller number of peers using local GAAP than U.K. firms prior to the IFRS adoption. To explore whether the effects of changes in uniformity hold after controlling for the cross-country variation in the changes in uniformity, we repeat our analysis in Table 5 after including interaction terms between our country-level control variables and the post adoption dummy. We find that our results (untabulated) continue to be qualitatively identical to those currently reported. Thus, our results are not sensitive to controlling for the cross-country variation in the change in uniformity.

5.9. Including benchmark firms in our hypothesis test

Our hypothesis test in Table 5 does not include non-IFRS adopters as a benchmark because we are unable to measure the change in uniformity for these firms. To explore whether our result is sensitive to including this benchmark group, we perform an analysis by first randomly assigning half of the benchmark firms to the subsamples with large and small changes in uniformity. We then partition our sample into countries with strong and weak implementation credibility. Next, we regress foreign mutual fund holdings on *Mandatory adopters, Post, Large increase in uniformity* (and their interactions), and the control variables. This analysis continues to find results (untabulated) supporting our hypothesis. Specifically, we find that the coefficient on *Mandatory adopters*Post*Large increase in uniformity* is significantly positive at $p \leq 10\%$ only for firms in countries with strong implementation credibility.

6. Conclusion

This study examines the effect of adopting a uniform set of accounting standards (i.e., mandatory IFRS adoption) on comparability and cross-border investment. While we expect improved comparability to result in increased cross-border investment, we predict that mandatory IFRS adoption will lead to improved comparability only when there is a credible increase in uniformity. Consistent with our prediction, we find that mandatory IFRS adoption results in a greater increase in foreign investment among companies in countries with strong implementation credibility that experience relatively large increases in uniformity. We also find that these are the only firms with a significant increase in foreign mutual fund ownership.

Additional analysis shows that the improved comparability associated with mandatory IFRS adoption does not increase domestic mutual fund ownership, consistent with domestic investors being more familiar with local accounting standards. Further, consistent with financial statement comparability being most important for global investors, we find that the increase in foreign mutual fund ownership in response to improved comparability is primarily driven by foreign global mutual funds. Overall, our findings suggest that the effects of improved comparability associated with mandatory IFRS adoption on cross-border investment depend both on the institutional environment that shapes firms' reporting incentives and on the extent of increased number of industry peers using the same accounting standards.

References

Armstrong, C., Barth, M., Jagolinzer, A., Riedl, E.J., 2010. Market reaction to the adoption of IFRS in Europe. The Accounting Review 85, 31-61.

Ball, R., Kothari, S.P., Robin, A., 2000. The effect of international institutional factors on properties of accounting earnings. Journal of Accounting and Economics 29, 1-51.

Ball, R., Robin, A., Wu, J., 2003. Incentives versus standards: Properties of accounting income in four East Asian countries. Journal of Accounting and Economics 36, 235-270.

Barth, M., Landsman, W.R., Lang, M., 2008. International Accounting Standards and accounting quality. Journal of Accounting Research 46, 467-498.

Barth, M., Landsman, W.R., Lang, M., Williams, C., 2009. Are International Accounting Standards-based and US GAAP-based accounting amounts comparable? Working paper, Stanford University and University of North Carolina.

Beneish, M., Miller, B., Yohn, T., 2009. The effect of IFRS adoption on cross-border investment in equity and debt markets. Working paper, Indiana University.

Bielstein, M.T., Munter, P.H., Schinas, W.J., 2007. How the IFRS movement will affect financial reporting in the US. Published by KPMG's Department of Public Practice as part of the Defining Issues Series, New York.

Bradshaw, M.T., Bushee, B.J., Miller, G.S., 2004. Accounting choice, home bias, and US investment in non-US firms. Journal of Accounting Research 42, 795–841.

Bradshaw, M.T., Miller, G.S., Serafeim, S.J., 2009. Accounting method heterogeneity and analysts' forecasts. Working paper, University of Chicago, University of Michigan, and Harvard Business School.

Bruggemann, U., Daske, H., Homburg, C., Pope, P., 2009. How do individual investors react to global IFRS adoption? Working paper, Lancaster University, University of Mannheim, and University of Cologne.

Campbell, J., 1996. Understanding risk and return. Journal of Political Economy 104, 298-345.

Chan, K., Covrig, V., Ng, L., 2005. What determines the domestic bias and foreign bias? Evidence from mutual fund equity allocations worldwide. Journal of Finance 60, 1495–1534.

Chan, K., Covrig, V., Ng, L., 2006. Does home bias affect firm value? Evidence from holdings of mutual funds worldwide. Working paper, Hong Kong University of Science and Technology.

Covrig, V., Lau, S., Ng, L., 2006. Do domestic and foreign fund managers have similar preferences for stock characteristics? A cross-country analysis. Journal of International Business Studies 37, 407–429.

Covrig, V., DeFond, M., Hung, M., 2007. Home bias, foreign mutual fund holdings, and the voluntary adoption of International Accounting Standards. Journal of Accounting Research 45, 41-70.

Daske, H., Hail, L., Leuz, C., Verdi, R., 2008. Mandatory IFRS reporting around the world: Early evidence on the economic consequences. Journal of Accounting Research 46, 1085-1142.

De Franco, G., Kothari, S.P., Verdi, R., 2009. The benefits of firm comparability. Working paper, University of Toronto and MIT Sloan School of Management.

Ferreira, M., Matos, P., 2008. The colors of investors' money: The role of institutional investors around the world. Journal of Financial Economics 88, 499-533.

Financial Accounting Standards Board, 1980. Concepts statement 2: Qualitative characteristics of accounting information. Financial Accounting Standards Board.

Financial Accounting Standards Board, 2008. Exposure draft of conceptual framework for financial reporting. Financial Accounting Standards Board.

Florou, A., Pope, P., 2009. Mandatory IFRS adoption and investor asset allocation decisions. Working paper, University of Macedonia and Lancaster University.

GAAP, 2001. A survey of national accounting rules benchmarked against International Accounting Standards. Anderson, BDO, Deloitte Touche Tohmatsu, Ernst & Young, Grant Thornton, KPMG, PricewaterhouseCoopers, Editor Christopher W Nobes.

Henry, D., 2008. Global accounting rules: Simpler, yes. But better? BusinessWeek. September 4, 2008.

Holthausen, R., 2009. Accounting standards, financial reporting outcomes, and enforcement. Journal of Accounting Research 47, 447-458.

Hung, M., 2001. Accounting standards and the value relevance of financial statements: An international analysis. Journal of Accounting and Economics 30, 401-420.

Hung, M., Subramanyam, K.R., 2007. Financial statement effects of adopting International Accounting Standards: The case of Germany. Review of Accounting Studies 12, 623-657.

International Accounting Standards Board, 1989. Framework for the preparation and presentation of financial statements. International Accounting Standards Board.

International Accounting Standards Board, 2008. Exposure draft of an improved conceptual framework for financial reporting. International Accounting Standards Board.

Kang, J. K., Stulz, R., 1997. Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan. Journal of Financial Economics 46, 3–28.

Kaufmann, D., Kraay, A., Mastruzzi, M., 2007. Governance matters VI: Aggregate and individual governance indicators 1996–2006. Washington, DC: The World Bank.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R., 1998. Law and finance. The Journal of Political Economy 106, 1113-1155.

Leuz, C., Nanda, D., Wysocki, P., 2003. Earnings management and investor protection: An international comparison. Journal of Financial Economics 69, 505-527.

Li, S., 2010. Does mandatory adoption of International Financial Reporting Standards in the European Union reduce the cost of equity capital? The Accounting Review 85, 607-636.

McCreevy, C., 2005. IFRS-No pain, no gain? Speech to the Federation de Experts Compatables Europeans, Brussels, October 18, 2005.

Morgan Stanley Dean Witter, 1998. Apples-to-apples: Accounting for value in world market. Morgan Stanley Dean Witter Equity Research, New York, New York. 1998.

Nally, D., Kaplan, D., 2007. 10 minutes on IFRS. PricewaterhouseCoopers, New York, New York. October 2007.

Securities and Exchange Commission, 2000. SEC concept release: International Accounting Standards. Available at http://sec.gov/rules/concept/34-42430.htm.

Securities and Exchange Commission, 2008. Roadmap for the potential use of financial statements prepared in accordance with International Financial Reporting Standards by US issuers. Securities and Exchange Commission, Washington DC.

Tweedie, D., 2008. Prepared statement of Sir David Tweedie, Chairman of the IASB to officials of the Singaporean government. Available at

http://www.asc.gov.sg/attachments/IFRS17Jul08_IASB_Worldwide_Adoption_of_IFRS.pdf.

Yip, W., Young, D., 2009. Does IFRS adoption improve cross-border information comparability? Working paper, The Chinese University of Hong Kong.

Yu, G., 2010. Accounting standards and international portfolio holdings: Analysis of cross-border holdings following mandatory adoption of IFRS. Working paper, University of Michigan.

Appendix A
Variable definitions

Variables of interest

Foreign mutual fund ownership: Total number of shares owned by foreign mutual funds divided by shares outstanding at year-end. Foreign mutual funds are those funds whose domicile is different from the country of their investees.

Implementation credibility: Aggregate earnings quality score from Leuz et al. (2003). Higher values represent countries with less implementation credibility (more earnings management).

Strong credibility: Indicator variable equal to one if a firm is classified into the strong implementation credibility partition, based on the median value of the implementation credibility index.

Δuniformity: Industry-country-level measure of changes in uniformity, calculated as the number of firms using the same GAAP in an industry that a firm can be compared to after the mandatory IFRS adoption divided by the number of firms in an industry that a firm can be compared to before the mandatory adoption.

Large increase in uniformity: Indicator variable equal to one if a firm's *Δuniformity* measure is greater than the median industry-country-level observation.

Mandatory adopters: Indicator variable equal to one if companies prepared their financial statements based on local accounting standards before 2005, and switched to IFRS in 2005.

Post: Indicator variable equal to one if a firm-year falls in or after 2005.

Firm-level controls

Nanalyst: Number of analysts following the company at year-end.

Size: Natural logarithm of the market value of equity in millions of U.S. dollars at year-end.

MSCI index: Indicator variable equal to one if a company is included in MSCI World Index as of December 2002.

Market index: Indicator variable equal to one if a company is included in any stock market index based on Worldscope.

ADR: Indicator variable equal to one if a company is cross-listed in the U.S. stock exchanges or OTC market as of November 2006, according to JP Morgan ADR Analytics.

Big5 auditor: Indicator variable equal to one if a company is audited by a Big 5 audit firm at year-end of 2004 and 2007. [16]

ROE: Net income before extraordinary items divided by book value of equity at year-end.

Returns: Stock returns over the fiscal year.

Return variation: Standard deviation of monthly stock returns over the fiscal year.

LEV: Total liabilities divided by total assets.

Div. yield: Total dividends divided by market value of equity at year-end.

Book-to-market: Book value of equity divided by market value of equity at year-end.

E-P ratio: Net income divided by market value of equity at year-end.

Sales growth: Annual growth rate in net sales.

[16] In Compustat Global, the code for the type of auditor firms is missing ("AUOP"="091") for over 70% of our sample firms in 2006 and 2007. We therefore collect information on audit firms in 2007 from Worldscope and supplement it to the code in Compustat Global whenever it is missing. In addition, Compustat Global mistakenly codes the audit firms as "other" for countries such as Japan and Korea where the 'Big 5 auditors' are the local affiliates of the Big 5 international firms (for example, Ernst &Young as 'Shin Nihon' in Japan). We correct the auditor codes in these countries based on the full auditor names in Worldscope.

Appendix A, continued

Turnover: Annual share volume divided by shares outstanding.
Cash: Ratio of cash and short-term investment to total assets at year-end.
Closely held: Number of shares held by insiders as a proportion of the number of shares outstanding.

Country-level controls

LogDistance: Natural logarithm of the average bilateral distance in kilometers between a country's capital city and the capital cities of other countries.

English: Indicator variable equal to one if the country's official language is English based on the World Factbook.

LogGDP: Natural logarithm of gross domestic product per capita in US$ in 2003 based on the World Bank WDI.

Market cap/GDP: Ratio of stock market capitalization to gross domestic product in US$ in 2003 based on the World Bank WDI.

Others

Country indicators: Indicator variables for countries.
Industry indicators: Variables indicating industry membership based on two-digit SIC codes.

Table 1
Sample distribution

Country	Unique firms	Firm-years (from 2003-2004 and 2006-2007)
Mandatory adopters [a]		
Austria	9	36
Belgium	31	124
Denmark	39	156
Finland	74	296
France	251	1,004
Germany	89	356
Greece	48	192
Ireland	21	84
Italy	159	636
Netherlands	69	276
Portugal	21	84
Spain	48	192
Sweden	155	620
U.K.	351	1,404
Subtotal	*1,365*	*5,460*
Non-IFRS adopters		
Canada	227	908
India	17	68
Indonesia	109	436
Japan	2,664	10,656
Korea	162	648
Malaysia	383	1,532
Pakistan	15	60
Taiwan	436	1,744
Thailand	243	972
U.S.	3,374	13,496
Subtotal	*7,630*	*30,520*
Total	8,995	35,980

[a] *Mandatory adopters* include EU companies that prepared their financial statements based on local accounting standards before 2005, and switched to IFRS in 2005. *Non-IFRS adopters* include companies in non-IFRS adoption countries that prepared their financial statements based on local standards throughout our sample period.

Table 2
Descriptive statistics

Panel A: Key variables by country (N=35,980 firm-years)

Country	Mean value of foreign mutual fund ownership	Implementation credibility
Mandatory adopters [a]		
Austria	1.2%	28.3
Belgium	4.7%	19.5
Denmark	4.5%	16.0
Finland	7.1%	12.0
France	3.8%	13.5
Germany	2.5%	21.5
Greece	3.6%	28.3
Ireland	13.2%	5.1
Italy	4.1%	24.8
Netherlands	11.6%	16.5
Portugal	2.5%	25.1
Spain	5.5%	18.6
Sweden	4.7%	6.8
U.K.	3.7%	7.0
Non-IFRS adopters		
Canada	4.1%	5.3
India	4.4%	19.1
Indonesia	2.1%	18.3
Japan	1.4%	20.5
Korea	6.4%	26.8
Malaysia	0.8%	14.8
Pakistan	0.8%	17.8
Taiwan	2.0%	22.5
Thailand	1.1%	18.3
U.S.	1.2%	2.0
Mean	*2.0%*	*16.5*
Median	*0.3%*	*18.3*
Std. dev.	*4.0%*	*7.5*

Table 2, continued

Panel B: Descriptive statistics on industry-country-level changes in uniformity (Δuniformity) measure (N=182 industry-countries)

	Industry as in Campbell (1996)	Number of IFRS users in 2007	Number of local-GAAP users in 2003													
			Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Netherlands	Portugal	Spain	Sweden	U.K.
1	Finance & real estate	909	4	19	15	12	72	52	11	7	55	19	4	25	34	180
			227.25	*47.84*	*60.60*	*75.75*	*12.63*	*17.48*	*82.64*	*129.86*	*16.53*	*47.84*	*227.25*	*36.36*	*26.74*	*5.05*
2	Food & tobacco	244	2	9	4	4	33	10	5	5	6	10	3	7	5	28
			122.00	*27.11*	*61.00*	*61.00*	*7.39*	*24.40*	*48.80*	*48.80*	*40.67*	*24.40*	*81.33*	*34.86*	*48.80*	*8.71*
3	Utilities	230	2	5	3	2	20	11	5	0	18	3	5	16	6	29
			115.00	*46.00*	*76.67*	*115.00*	*11.50*	*20.91*	*46.00*	.	*12.78*	*76.67*	*46.00*	*14.38*	*38.33*	*7.93*
4	Basic industry	464	2	9	7	11	44	25	13	3	16	6	6	18	27	67
			232.00	*51.56*	*66.29*	*42.18*	*10.55*	*18.56*	*35.69*	*154.67*	*29.00*	*77.33*	*77.33*	*25.78*	*17.19*	*6.93*
5	Transportation	174	0	0	6	4	9	6	5	3	11	5	1	2	7	19
			.	.	*29.00*	*43.50*	*19.33*	*29.00*	*34.80*	*58.00*	*15.82*	*34.80*	*174.00*	*87.00*	*24.86*	*9.16*
6	Consumer durables	605	1	5	7	16	59	32	9	1	29	20	2	7	40	77
			605.00	*121.00*	*86.43*	*37.81*	*10.25*	*18.91*	*67.22*	*605.00*	*20.86*	*30.25*	*302.50*	*86.43*	*15.13*	*7.86*
7	Construction	238	1	3	4	3	26	6	8	4	18	7	7	14	6	32
			238.00	*79.33*	*59.50*	*79.33*	*9.15*	*39.67*	*29.75*	*59.50*	*13.22*	*34.00*	*34.00*	*17.00*	*39.67*	*7.44*
8	Services	676	3	6	4	21	110	51	6	4	17	20	2	10	58	142
			225.33	*112.67*	*169.00*	*32.19*	*6.15*	*13.25*	*112.67*	*169.00*	*39.76*	*33.80*	*338.00*	*67.60*	*11.66*	*4.76*
9	Textiles & trade	247	2	5	1	5	32	16	3	2	25	9	1	7	13	36
			123.50	*49.40*	*247.00*	*49.40*	*7.72*	*15.44*	*82.33*	*123.50*	*9.88*	*27.44*	*247.00*	*35.29*	*19.00*	*6.86*
10	Leisure	219	0	1	3	3	22	7	4	3	15	7	7	5	7	42
			.	*219.00*	*73.00*	*73.00*	*9.95*	*31.29*	*54.75*	*73.00*	*14.60*	*31.29*	*31.29*	*43.80*	*31.29*	*5.21*
11	Petroleum	82	1	0	1	2	5	1	2	1	3	0	1	2	4	19
			82.00	.	*82.00*	*41.00*	*16.40*	*82.00*	*41.00*	*82.00*	*27.33*	.	*82.00*	*41.00*	*20.50*	*4.32*
12	Capital goods	386	1	5	6	16	32	35	6	2	23	8	0	4	41	51
			386.00	*77.20*	*64.33*	*24.13*	*12.06*	*11.03*	*64.33*	*193.00*	*16.78*	*48.25*	.	*96.50*	*9.41*	*7.57*
13	Others	26	0	0	1	0	2	0	0	0	4	0	1	0	2	2
			.	.	*26.00*	.	*13.00*	.	.	.	*6.50*	.	*26.00*	.	*13.00*	*13.00*

Descriptive statistics on industry-country-level Δuniformity measure: Mean: 67.18; Median: 39.67; Std dev: 89.34

Table 2, continued

Panel C: Descriptive statistics of control variables (N=35,980 firm-years)

	Mandatory adopters			Non-IFRS adopters		
Variable	**Mean**	**Median**	**Std. dev.**	**Mean**	**Median**	**Std. dev.**
Firm-level controls						
Nanalyst	4.90	2	6.96	2.97	0	5.15
Size	6.04	5.88	2.10	5.35	5.22	2.10
MSCI Index	0.13	0	0.33	0.03	0	0.17
Market Index	0.54	1	0.50	0.30	0	0.46
ADR	0.09	0	0.28	0.02	0	0.12
Big 5 auditor	0.73	1	0.45	0.63	1	0.48
ROE	0.12	0.14	0.35	0.06	0.08	0.47
Returns	0.18	0.16	0.43	0.15	0.05	0.60
Return variation	0.09	0.08	0.05	0.12	0.09	0.09
LEV	0.60	0.61	0.23	0.59	0.55	0.42
Div. yield	0.02	0.01	0.02	0.01	0.01	0.02
Book-to-market	0.64	0.53	0.48	0.79	0.64	0.68
E-P ratio	0.02	0.05	0.18	-0.01	0.05	0.21
Sales growth	0.25	0.19	0.47	0.18	0.11	0.49
Turnover	0.76	0.49	0.85	1.28	0.68	1.62
Cash	0.11	0.06	0.14	0.16	0.10	0.19
Closely held	0.33	0.30	0.28	0.25	0.20	0.25
Country-level controls						
LogDistance	8.65	8.65	0.02	9.06	9.06	0.03
English	0.27	0	0.45	0.48	0	0.50
LogGDP	10.29	10.35	0.18	10.13	10.41	0.82
Market cap/GDP	0.86	0.82	0.33	1.05	1.25	0.32

[a] *Mandatory adopters* include EU companies that prepared their financial statements based on local accounting standards before 2005, and switched to IFRS in 2005. *Non-IFRS adopters* include companies in non-IFRS adoption countries that prepared their financial statements based on local standards throughout our sample period.

Variable definitions: See Appendix A.

Table 3
Univariate analysis of foreign mutual fund ownership, pre and post mandatory IFRS adoption (N=35,980 firm-years)

		Pre (2003-2004)	Post (2006-2007)	Diff. [a]
A	**Ownership of MANDATORY adopters** [b]	3.9% *N=2,730*	5.3% *N=2,730*	1.4%***
B	**Ownership of Non-IFRS adopters**	1.5% *N=15,260*	1.6% *N=15,260*	0.1%***
Diff.	A-B	2.4 %***	3.7%***	1.3%***

[a] ***, **, *Indicates significance at the 0.01, 0.05, and 0.10 level or better, respectively.
[b] *Mandatory adopters* include EU companies that prepared their financial statements based on local accounting standards before 2005, and switched to IFRS in 2005. *Non-IFRS adopters* include companies in non-IFRS adoption countries that prepared their financial statements based on local standards throughout our sample period.

Variable definitions:
Foreign mutual fund ownership: Total number of shares owned by foreign mutual funds divided by shares outstanding at year-end. Foreign mutual funds are those funds whose domicile is different from the country of their investees.

Table 4
Baseline regression[a]

Dep. var. = foreign mutual fund ownership					
Variable	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Mandatory adopters	0.024***	0.026***	0.003	0.016**	0.003
	(0.000)	(0.006)	(0.798)	(0.036)	(0.645)
Post	0.001***	0.001***	0.001***	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.477)	(0.215)
Mandatory adopters*Post	0.013***	0.013***	0.013***	0.008***	0.008***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm-level controls					
Nanalyst				0.001***	0.001***
				(0.000)	(0.000)
Size				0.005***	0.004***
				(0.000)	(0.000)
MSCI index				0.021***	0.025***
				(0.000)	(0.000)
Market index				0.002**	0.002**
				(0.028)	(0.046)
ADR				0.010***	0.009***
				(0.001)	(0.002)
Big5 auditor				0.002***	0.000
				(0.001)	(0.577)
ROE				0.001*	0.000
				(0.058)	(0.317)
Returns				-0.000	-0.000
				(0.136)	(0.756)
Return variation				0.024***	0.013***
				(0.000)	(0.000)
LEV				-0.001	-0.000
				(0.383)	(0.556)
Div. yield				0.039**	-0.004
				(0.027)	(0.823)
Book-to-market				-0.000	-0.001
				(0.310)	(0.256)
E-P ratio				-0.004***	-0.004***
				(0.000)	(0.000)
Sales growth				0.000	0.000
				(0.358)	(0.614)
Turnover				-0.000	-0.000**
				(0.173)	(0.038)
Cash				0.013***	0.013***
				(0.000)	(0.000)
Closely held				-0.010***	-0.006***
				(0.000)	(0.000)
Country-level controls					
LogDistance		0.007		-0.003	
		(0.762)		(0.889)	
English		0.002		-0.004**	
		(0.224)		(0.020)	
LogGDP		-0.001		-0.003***	
		(0.404)		(0.000)	
Market cap/GDP		-0.010***		-0.005**	
		(0.000)		(0.014)	
Country indicators	no	no	yes	no	yes
Industry indicators	no	yes	yes	yes	yes
Adj. R^2	0.079	0.107	0.188	0.302	0.364
N	35,980	35,980	35,980	35,980	35,980

Table 4, continued

[a] Two-tailed *p*-values based on robust standard errors clustered by firm in parentheses. ***, **, * indicates significance at the 0.01, 0.05, and 0.10 level or better, respectively.

Variable definitions: See Appendix A.

Table 5
The effect of improved comparability associated with mandatory IFRS adoption on foreign mutual fund ownership

Panel A: Regression analysis[a, b]

Dep. var. = foreign mutual fund ownership			
Variable	**Pred. sign**		**Coeff.**
Post		β_1	0.003
			(0.271)
Strong credibility		β_2	0.014**
			(0.012)
Post*Strong credibility		β_3	-0.004
			(0.161)
Large increase in uniformity		β_4	0.006
			(0.270)
Post*Large increase in uniformity		β_5	-0.003
			(0.532)
Strong credibility*Large increase in uniformity		β_6	0.006
			(0.505)
Post*Strong credibility*Large incr. in uniformity	+	$\boldsymbol{\beta_7}$	**0.021***** **(0.001)**
Firm-level controls			yes
Country-level controls			yes
Industry indicators			yes
Adj. R^2			0.406
N			5,460

Panel B: Changes in foreign mutual fund ownership from reconstructed coefficients in Panel A [b]

		Pre	**Post**	**Change (Post-Pre)**	**Large – Small increase in uniformity**	**Diff.**
Weak credibility	**Small increase in uniformity**	-	0.003 (β_1)	0.003 (β_1)	-0.003 (β_5)	**0.021***** **($\boldsymbol{\beta_7}$)**
	Large increase in uniformity	0.006 (β_4)	0.006 ($\beta_1+\beta_4+\beta_5$)	0.000 ($\beta_1+\beta_5$)		
Strong credibility	**Small increase in uniformity**	0.014** (β_2)	0.013** ($\beta_1+\beta_2+\beta_3$)	-0.001 ($\beta_1+\beta_3$)	0.018*** ($\beta_5+\beta_7$)	
	Large increase in uniformity	0.026*** ($\beta_2+\beta_4+\beta_6$)	0.043*** ($\beta_1+\beta_2+\beta_3+\beta_4+\beta_5+\beta_6+\beta_7$)	0.017*** ($\beta_1+\beta_3+\beta_5+\beta_7$)		

[a] *p*-values based on robust standard errors clustered by firm in parentheses (one-tailed for coefficients with predicted signs and two-tailed otherwise).
[b] ***, **, * indicates significance at the 0.01, 0.05, and 0.10 level or better, respectively.

Variable definitions: See Appendix A.

Table 6
The effect of improved comparability associated with mandatory IFRS adoption on domestic mutual fund ownership[a]

Dep. var. = domestic mutual fund ownership		
Variable		**Coeff.**
Post	β_1	0.001
		(0.503)
Strong credibility	β_2	-0.008*
		(0.100)
Post*Strong credibility	β_3	0.011***
		(0.000)
Large increase in uniformity	β_4	0.014***
		(0.001)
Post*Large increase in uniformity	β_5	-0.004
		(0.175)
Strong credibility*Large increase in uniformity	β_6	-0.041***
		(0.000)
Post*Strong credibility*Large incr. in uniformity	$\boldsymbol{\beta_7}$	**-0.012*** **
		(0.009)
Firm-level controls		yes
Country-level controls		yes
Industry indicators		yes
Adj. R^2		0.242
N		5,460

[a]Two-tailed *p*-values based on robust standard errors clustered by firm in parentheses. ***, **, * indicates significance at the 0.01, 0.05, and 0.10 level or better, respectively.

Variable definitions:

Domestic mutual fund ownership: Total number of shares owned by domestic mutual funds divided by shares outstanding at year-end. Domestic mutual funds are those funds whose domicile is the same as the country of their investees.

See Appendix A for definitions on other variables.

Table 7
Analysis of different types of foreign mutual fund ownership[a,b]

Variable		Foreign global fund ownership (1)	Foreign regional fund ownership (2)	Foreign country fund ownership (3)	Foreign other fund ownership (4)
Post	β_1	0.001	0.003*	-0.000	-0.001***
		(0.342)	(0.064)	(0.827)	(0.001)
Strong credibility	β_2	0.011***	0.002	-0.000	0.002*
		(0.002)	(0.533)	(0.579)	(0.063)
Post*Strong credibility	β_3	0.001	-0.003*	-0.002**	-0.001
		(0.325)	(0.075)	(0.027)	(0.226)
Large increase in uniformity	β_4	0.003	0.003	0.000	-0.000
		(0.238)	(0.372)	(0.714)	(0.537)
Post*Large increase in uniformity	β_5	-0.004*	0.005	-0.004***	-0.000
		(0.057)	(0.159)	(0.002)	(0.971)
Strong credibility*Large increase in uniformity	β_6	-0.001	0.005	-0.001	0.003**
		(0.867)	(0.348)	(0.435)	(0.022)
Post*Strong credibility*Large incr. in uniformity	β_7	**0.012*** **	**0.004**	**0.005*** **	**-0.001**
		(0.001)	**(0.344)**	**(0.000)**	**(0.393)**
Firm-level controls		yes	yes	yes	yes
Country-level controls		yes	yes	yes	yes
Industry indicators		yes	yes	yes	yes
Adj. R^2		0.386	0.303	0.068	0.109
N		5,460	5,460	5,460	5,460

[a]Two-tailed *p*-values based on robust standard errors clustered by firm in parentheses. ***, **, * indicates significance at the 0.01, 0.05, and 0.10 level or better, respectively.

[b] This analysis disaggregates foreign mutual funds into four types based on the scope of their investment: (1) foreign global funds - foreign funds with at least 80% of equity holdings in no specific country or region, (2) foreign regional funds - foreign funds with at least 80% of their equity holdings in the investee firm's region, (3) foreign country funds - foreign funds with at least 80% of their equity holdings in the investee firm's country, and (4) other foreign funds.

Variable definitions: See Appendix A.