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# Does Mandatory IFRS Adoption Improve the Information Environment?

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### DOES MANDATORY IFRS ADOPTION IMPROVE THE INFORMATION ENVIRONMENT?

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#### **ABSTRACT**

We examine the effect of mandatory International Financial Reporting Standards ('IFRS') adoption on firms' information environment. We find that after mandatory IFRS adoption consensus forecast errors decrease for firms that mandatorily adopt IFRS relative to forecast errors of other firms. We also find decreasing forecast errors for voluntary adopters, but this effect is smaller and not robust. Moreover, we show that the magnitude of the forecast errors decrease is associated with the firm-specific differences between local GAAP and IFRS. Exploiting individual analyst level data and isolating settings where investors would benefit more from either increased comparability or higher quality information, we document that the improvement in the information environment is driven both by information and comparability effects. These results are robust to variations in the measurement of information environment quality, forecast horizon, sample composition and tests of earnings management.

JEL Classification: M41, G14, G15

**Keywords**: IFRS, analysts, information environment, comparability,

information quality

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#### 1. INTRODUCTION

According to proponents of International Financial Reporting Standards (IFRS), publicly traded companies must apply a single set of high quality accounting standards, in the preparation of their consolidated financial statements, in order to contribute to better functioning capital markets (Quigley [2007]). IFRS has the potential to facilitate cross-border comparability, increase reporting transparency, decrease information costs, reduce information asymmetry and thereby increase the liquidity, competition and efficiency of markets (Ball [2006], Choi and Meek [2005]).<sup>1</sup>

These potential benefits rely on the presumption that mandatory IFRS adoption provides superior information to market participants or increased accounting comparability compared to previous accounting regimes. However, to-date there is little and conflicting empirical evidence that this is the case. Moreover, while all of these potential benefits provide a persuasive argument for IFRS adoption, the compliance costs associated with such a transition cannot be ignored (ICAEW [2007]). In addition to direct costs, other indirect costs might also be incurred that may make investors worse off. For example, Ball [2006] notes that the fair value orientation of IFRS could add volatility to financial statements, in the form of both good and bad information, the latter consisting of noise which arises from inherent estimation error and possible managerial manipulation.

Whether harmonisation will actually be achieved is also currently up for debate with many commentators arguing that the same accounting standards can be implemented differently. In the absence of suitable enforcement mechanisms, real convergence and harmonisation is infeasible, resulting in diminished comparability (Ball [2006]). Cultural, political and business differences may also continue to impose significant obstacles in the progress towards this single global financial communication system, since a single set of accounting standards cannot reflect the differences in national business practices arising from differences in institutions and cultures (Armstrong et al. [2009]; Soderstrom and Sun [2007]).

In this paper we investigate whether the adoption of IFRS improves the information environment for firms in countries where IFRS is legally required. Specifically, we consider how analyst forecast accuracy changes after mandatory IFRS adoption. We find that after the mandatory transition to IFRS forecast accuracy and other measures of the quality of the information environment increase significantly more for mandatory adopters relative to non-adopters or voluntary adopters. Moreover, we find that forecast accuracy improves more for firms with accounting treatments that diverge the most from IFRS, increasing our confidence that it is IFRS adoption that causes the improvement in the information environment. To isolate the effect of mandatory adoption we control for time-varying and persistent unobservable firm characteristics that affect forecast accuracy. We also control for industry-year and country-year effects to mitigate any industry and country-wide changes in forecast accuracy. The results are robust to alternative dependent variables, samples of control firms, and forecast horizon choices.

We also attempt to provide evidence on whether the improvement in the information environment can be attributed to higher quality information and/or increased accounting comparability. First, we try to hold constant any information effects and allow comparability effects to vary. To achieve this we consider three groups of analysts. First, analysts covering firms that report under a single local GAAP (for example UK GAAP) before mandatory adoption and after mandatory adoption some firms switch to IFRS but other firms continue to report under local GAAP. For these analysts, we expect accounting comparability to decrease. Second, analysts covering firms that report under a single local GAAP before mandatory adoption and after mandatory adoption all firms switch to IFRS. For these analysts, we expect accounting comparability to remain the same. Third, analysts covering firms that report under multiple local GAAP (for example some firms use UK GAAP and other firms Spanish GAAP) before mandatory adoption and after mandatory adoption all firms switch to IFRS. For these analysts, we expect accounting comparability to increase. We expect that if information effects exist that they are going to benefit all three groups of analysts for mandatory adopters. To eliminate the possibility that an analyst's choice to change firm coverage affects the results we include in the analysis only mandatory adopters that the analyst is covering both before and after mandatory adoption. We find results consistent with a comparability effect. Forecast accuracy improves more for analysts with portfolios that move from Local GAAP to

IFRS compared to Local GAAP to Multiple GAAP, and even more for analysts with portfolios that move from Multiple GAAP to IFRS.

To provide evidence about the existence of information effects we consider analysts covering firms that report under multiple local GAAP before mandatory adoption and after mandatory adoption all firms switch to IFRS. From the portfolios of those analysts we select voluntary and mandatory adopters that the analyst covers both before and after mandatory adoption. We expect that if IFRS increases information quality then forecast accuracy should improve more for mandatory than for voluntary adopters. We also expect that comparability effects will be present for both mandatory and voluntary adopters for these analysts. We find results consistent with an information effect. For this set of analyst-firm pairs, forecast accuracy improves more for mandatory adopters.

We make a number of contributions to the existing literature. First, our study contributes to the literature on the consequences of disclosure by examining the effect of mandatory IFRS adoption (Daske et al. [2008], Horton and Serafeim [2010]) on analysts (Asbaugh and Pincus [2001], Wang et al. [2008]; Tan et al. [2010]) and thus on the information environment (Lang et al. [2003]). We add to the previous literature by documenting a larger improvement in the information environment for mandatory adopters relative to voluntary adopters and non-adopters, and by providing evidence that this effect is driven both by information and comparability effects. We also contribute to the literature which finds that the difference between a firm's

home GAAP and another reporting regime (Bae et al. [2008]; Guan et al. [2006]; Ashbaugh and Pincus [2001]) determines forecast accuracy. However, unlike previous research, we capture the actual differences between GAAP, on a firm specific basis rather than employing a country-wide measure.

Before proceeding we need to highlight a number of caveats. First, as in any study that exploits time-series variation from an exogenous event, it is hard to unambiguously attribute causally the observed effects to the event of interest. However, we attempt to isolate the economic effect of IFRS reporting by considering all three categories of firms and by using several different identification strategies. Second, similar to previous research (Land and Lundholm [1996]; Healy et al. [1999]), we rely on the analyst forecast characteristics to measure changes in the information environment. To the extent that these proxies are not appropriate, one needs to be careful on how to interpret our findings.

The remainder of the paper is organized as follows. Section 2 reviews the literature and presents the hypotheses. Section 3 describes our research design. Section 4 presents our sample selection and statistics. Section 5 presents our results and section 6 concludes.

#### 2. LITERATURE REVIEW AND MOTIVATION

#### 2.1. Background: IFRS adoption

Countries with prominent capital markets, such as Australia, European Union constituents, Hong Kong, Philippines, and South Africa, require publicly

traded companies (with certain exceptions) to present consolidated financial statements in conformity with IFRS for each financial year starting on or after 1 January 2005. Other countries, such as Japan, have decided to adopt IFRS in the future and already allow companies to voluntarily report under IFRS. The SEC has also scheduled a timeline of transition to IFRS for US firms that want to start reporting under IFRS.

While mandatory adoption of IFRS was widespread in 2005 there are still firms that follow alternative accounting standards. For example, in the UK, companies listed in the Alternative Investment Market (AIM) are not subject to the EU IAS Regulation. The AIM has adopted a rule that requires AIM firms to submit IFRS financial statements for periods beginning on or after 1 January 2007, although voluntary adoption is allowed. Swiss firms<sup>2</sup> that are not multinationals are also exempt from IFRS compliance. These companies may continue to use Swiss GAAP, or they may choose IFRS or US GAAP (Deloitte [2008]). In addition, the IAS Regulation is only applicable to consolidated accounts and many investment trusts that only publish parent accounts are by their very nature exempt. Moreover, in countries such as the US, Canada, Mexico, China, Malaysia and Brazil, firms are not allowed to report under IFRS.

Companies reporting under IFRS can be split into either voluntary or mandatory adopters. The first group includes all the companies that adopted IFRS before 2005, while the latter group consists of firms that were forced to adopt IFRS. As a result, currently there are three distinct groups of firms that

exhibit different attitudes towards IFRS: 'non–IFRS adopters' that exploit the exemptions and choose not to report under IFRS or that are listed in countries where IFRS is not allowed; 'mandatory adopters' that only adopt when they are forced to comply; and 'voluntary adopters' that choose to comply with IFRS in the period before the regulatory rules demanded IFRS adoption.

Although earlier studies on 'voluntary adopters' provide valuable insights as to the effect of IFRS disclosure, these results may not be generalizable in the current mandatory setting (Daske et al. [2008]; Horton and Serafeim [2010]). We expect any effects from IFRS mandatory adoption to be different from those documented for voluntary IFRS adopters (Asbaugh and Pincus [2001]; Bae et al. [2008]; Guan et al. [2006]), since the former group is essentially *forced* to adopt IFRS, compared to the latter that *chooses* to adopt. For example, past research finds that the decision to voluntarily adopt IFRS reporting is only one element of a broader strategy that increases a firm's overall commitment to transparency (Daske et al. [2008]; Leuz and Verrecchia [2000]). Thus, any effects around voluntary IFRS adoptions cannot be attributed solely to IFRS compliance. Moreover, under a mandatory setting firms are more likely to be affected by reporting externalities i.e. disclosure by one firm being useful in valuing other firms through intra-industry information transfers. In contrast, under a voluntary setting there are fewer firms disclosing and therefore such externalities may be moderate. Indeed positive externalities are often used as a rational in favor of disclosure regulation.

#### 2.2. Information environment and research analysts

Our approach follows prior research by Lang and Lundholm [1996], Healy et al. [1999], Gebhardt et al. [2001], and Lang et al. [2003] and uses the characteristics of analyst forecasts as a proxy for the information environment. In particular, we focus on the accuracy of analyst forecasts. Previous studies suggest inter alia, that more accurate forecasts indicate a firm with a better information environment. Lang and Lundholm [1996] find that firms with better disclosure have lower analyst forecast errors. Hope [2003] finds that countries with better disclosure policies and enforcement have higher analyst forecast accuracy. Similar to this prior literature, we view the analyst variables as indicative of, but not necessarily the cause of, changes in a firm's information environment.

#### 2.2.1. Firms adopting IFRS mandatorily

The effect of mandatory IFRS adoption on firms' information environment is not clear ex ante. The two most frequently claimed benefits associated with IFRS adoption are an increase in information quality, and an increase in accounting comparability.

Past research has shown that higher quality reporting reduces adverse selection in securities markets (Welker [1995]; Healy et al. [1999]; Lambert et al. [2007]), reduces cost of capital (Botosan [1997]; Hail and Leuz [2006]), and improves the efficiency of information intermediaries (Land and Lundholm [1996]; Healy et al. [1999]; Hope [2003]). IFRS is considered to be

a high quality set of standards providing valuable information to investors (Ashbaugh and Pincus [2001]). Barth et al. [2008] finds that firms' reporting quality increases following IFRS compliance for voluntary adopters. Ashbaugh and Pincus [2001] find that voluntarily switching to IAS typically increases a firm's level of disclosure and reduces the absolute forecast errors. Horton and Serafeim [2010] find that IFRS reconciliations provide new information to investors even for firms that have already reported their performance under a high quality accounting regime (UK GAAP). Beuselinck et al. [2010] show that stock price synchronicity decreases after mandatory IFRS adoption but the effect is temporary.

However, the effect of mandatory IFRS adoption on information quality is questionable if firms' reporting incentives do not change to align with transparency. A stream of research argues that firms' reporting incentives and not accounting standards is the primary factor that determines the informativeness of accounting statements (Ball et al. [2000], Ball and Shivakumar [2005]). Consistent with the importance of reporting incentives, Christensen et al. [2009] find that incentives dominate standards in determining accounting quality around mandatory IFRS adoption. Moreover, various studies fail to find strong evidence that IFRS improves the information set of investors and find limited or no capital market benefits for mandatory adopters. Daske et al. [2008] show that capital market benefits around mandatory adoption of IFRS are unlikely to exist primarily because of IFRS

adoption. Daske [2006] finds no evidence that IFRS adoption decreases a firm's cost of capital.

Furthermore, for the first few years of IFRS adoption it might be hard for investors and analysts to understand and forecast fundamentals because of limited experience with IFRS and/or because of the break in the historical time-series of earnings. Acker et al. [2002] find that the implementation of the UK Financial Reporting Standard 3 impairs analyst forecasting ability for UK firms, in the first year of adoption, but that in the following years forecast accuracy improves. A similar learning effect could also take place in the first years of IFRS reporting, leading initially to larger forecast errors. Cuijpers and Bujink [2005] find that uncertainty among analysts and investors is higher for firms using IAS or US GAAP than for firms using local GAAP. They compare early and late adopters and find some evidence that the benefits from IFRS disclosure, take time to materialize.

The other major potential benefit from the global move towards IFRS is an increase in accounting comparability. Studies have shown that accounting comparability reduces home bias (Bradshaw et al. [2004]; Covrig et al. [2007]), and improves the efficiency of information intermediaries (Bae et al. [2008]; Bradshaw et al. [2010]). Covrig et al. [2007] show that voluntary IFRS adoptions facilitate cross-border equity investments. Yu [2010] shows that mandatory IFRS adoption also increases cross-border equity holdings. Tan et al. [2010] provide evidence that foreign analysts are more likely to

cover a firm that adopts IFRS, and that forecast accuracy for these analysts improves after mandatory IFRS adoption.

However, the potential for IFRS to increase comparability is questioned by many, because the same accounting standards can be implemented differently. In the absence of suitable enforcement mechanisms, real convergence and harmonisation is infeasible, resulting in diminished comparability (Ball [2006]). Cultural, political and business differences may also continue to impose significant obstacles in the progress towards this single global financial communication system, since a single set of accounting standards cannot reflect the differences in national business practices arising from differences in institutions and cultures (Armstrong et al. [2009]; Soderstrom and Sun [2007]). Beneish et al. [2010] show that mandatory IFRS adoption increases cross-border debt but not equity investments. Lang et al. [2010] find that earnings comparability does not improve for IFRS adopters relative to a control group of non-adopters.

Thus, the empirical question remains as to whether the quality of the information environment improves or deteriorates following IFRS adoption.

This leads to our first hypothesis:

**Ha1:** Mandatory IFRS adoption affects analyst earnings forecast accuracy for firms adopting IFRS mandatorily.

#### 2.2.2. Firms adopting IFRS voluntarily

Voluntary adopters, under this new mandatory setting, may benefit from positive externalities in terms of increases in transparency and/or comparability (Coffee [1984]; Lambert et al. [2007]; Daske et al. [2008]). Before mandatory adoption, these firms were the outliers in the economy. However, after mandatory adoption they are the leaders with an established record of IFRS numbers towards which analysts can evaluate the impact of IFRS on other companies. Following the mandatory adoption there is now a large industry pool in which intra-industry information transfers could take place providing additional information resulting in an improvement in the information environment (Foster [1980]; Ramnath [2002]; Gleason et al. [2008]).

Moreover, disclosure theory suggests that an increase in mandatory disclosure is paralleled by an increase in the incentives to voluntary disclosure – i.e. there is a 'race to the top' (Dye 1986; 1990). Therefore, if the level of disclosure increases for all firms following mandatory adoption, voluntary adopters have an incentive to disclose incrementally more to continue to differentiate themselves.

Our second hypothesis is therefore the following:

**Hь1:** Mandatory IFRS adoption affects analyst earnings forecast accuracy for firms adopting IFRS voluntarily.

#### 3. RESEARCH DESIGN

To investigate the effect of IFRS adoption on a firm's information environment we test for differences in forecast errors before and after IFRS mandatory compliance. I/B/E/S reports twelve consensus forecasts each year for a firm. We choose the consensus forecast that is calculated three months before fiscal year end to ensure that analysts have adequate information generated by IFRS reporting to affect their forecast accuracy. We later use other consensus forecasts to assess the robustness of our results to the choice of forecast horizon. To test for the effect of IFRS adoption we use the following research design:

$$FE_{it} = \beta_0 + \beta_1 \text{VoluntaryI FRS}_{it} + \beta_2 \text{MandatoryI FRS}_{it} + \beta_3 \text{Mandatory}_{it} + \beta_4 \text{VoluntaryI FRS * Mandatory} + \beta_5 \text{MandatoryI FRS * Mandatory} + \sum_{j=6}^{n} \beta_j \text{controls} + \varepsilon_{it}$$
 (1)

We define  $FE_{ii}$  as the forecast error for firm i and year t. Forecast error is the absolute difference between actual earnings and consensus forecast deflated by absolute actual earnings.<sup>3</sup> *Voluntary IFRS* is an indicator variable that takes the value of one for firms that adopted IFRS before IFRS was mandated. *Mandatory IFRS* is an indicator variable that takes the value of one for firms that adopted IFRS after IFRS was mandated. *Mandatory* is an indicator variable that captures the period after mandatory IFRS adoption. It takes a value of one for the period after 2005 (after 2003 for Singapore) and zero otherwise.  $\beta_3$  captures the effect on firms that did not adopt IFRS,  $\beta_3 + \beta_4$  captures the effect on firms that voluntarily adopted IFRS early and  $\beta_3 + \beta_5$  captures the effect on firms that adopted IFRS mandatorily.

Model (1) includes only firms that have available data for periods both before and after the mandatory IFRS adoption. Previous research (Clement [1999]; Duru and Reeb [2002]; Bradshaw et al. [2010]) suggests various factors that might affect forecast errors. We use these variables as controls in the models. Control variables include 1) the level of absolute accruals, 2) analyst coverage, 3) the logarithm of the market value of the firm's equity, 4) reporting negative income, 5) forecast horizon, defined as the number of days between the forecast's issue date and the fiscal year end. We also include indicator variables for firms that report under US GAAP or for firms that trade an ADR in the US. We include country-year and industry-year fixed effects in model (1) to control for industry and country-wide time-varying effects. Moreover, we include firm fixed effects to control for persistent firm differences across the three groups of firms. We cluster standard errors at the firm-year level to mitigate serial correlation.

#### 4. SAMPLE AND DESCRIPTIVE STATISTICS

#### 4.1. Sample Selection

The sample covers firms from all countries with IBES coverage and fiscal years ending on or after December 31, 2001, through December 31, 2007. We start by identifying all firms covered in I/B/E/S. We include only firms with IBES coverage both before and after IFRS adoption. To classify firms according to which accounting standards they are following we manually code each firm as adopting IFRS early ('voluntary adopters'), adopting IFRS

mandatorily ('mandatory adopters'), or continuing to report under other GAAP after 2005 ('non-adopters'), by reviewing their annual reports. The Worldscope classification suffers from many classification errors (Daske et al. [2008]) and therefore we do not use it.<sup>4</sup>

This procedure yields in total 8,124 unique firms, of which 2,235 adopt IFRS for the first time mandatorily, and 635 firms had voluntarily adopted IFRS. Table 1 provides a break-down of the sample into the number of firms and observations by country and by the accounting standards followed. The majority of mandatory adopters come from Australia, France, Singapore, Sweden, Hong Kong and the UK. The majority of voluntary adopters are incorporated in Germany, Italy and Switzerland. The composition of the sample is broadly consistent with Daske et al. [2008].

#### 4.2. Descriptive Statistics

Table 2, Panel A, reports summary statistics for the whole sample. For the average sample firm, the mean and median deflated (un-deflated) forecast errors are 0.334 (2.873) and 0.107 (0.140), respectively. Mean forecast dispersion, consensus, common precision, and idiosyncratic precision are 0.148, 0.585, 113, and 191 respectively. We measure consensus, common precision, and idiosyncratic precision consistent with Barron et al. [2002]. Mean and median analyst coverage is 7.4 and 5 respectively. The forecast horizon is approximately 74 days.

Table 2, Panel B reports summary statistics by IFRS adoption type. Voluntary adopters are larger than mandatory adopters and have higher analyst coverage. The level of absolute accruals is similar across the two groups. Voluntary adopters report more frequently losses than mandatory adopters. Non-adopters are moderately larger and have the same analyst coverage as mandatory adopters. The level of absolute accruals is also very similar to the level of absolute accruals for mandatory and voluntary adopters. The same is true for non-adopters excluding US firms or including only firms from countries that mandated IFRS. Frequency of loss reporting for non-adopters is similar to frequency of loss reporting by mandatory adopters when US firms are excluded.

#### 5. RESULTS

#### 5.1. Effect of mandatory IFRS adoption

#### 5.1.1. Varying the sample

Table 3 presents the estimated coefficients from the multivariate regressions for different samples. We find that forecast accuracy improves significantly after mandatory IFRS adoption for mandatory and voluntary adopters, relative to firms that do not adopt IFRS (column (1)). This improvement is significant at the 1% level for mandatory adopters and at the 10% for voluntary adopters. Column (2) excludes US firms to assess the robustness of the results when the control group does not include US firms. Forecast accuracy again improves for mandatory adopters, but accuracy for voluntary adopters does not significantly

improve. Column (3) excludes forecasts made for 2005, the first year of mandatory IFRS adoption. For that year there was still little information generated from IFRS adoption, mainly in the form of companies' presentations of the impact of IFRS and reconciliation reports between IFRS and local GAAP. Excluding forecasts made for the 2005 fiscal year, we find significant decrease in forecast errors both for mandatory and voluntary adopters. Column (4) excludes forecasts made for 2001 and 2002. For these two years, the economy was in a recession. In contrast, for all the other years in the sample the economy was expanding. Therefore, eliminating forecasts for 2001 and 2002 makes the periods before and after mandatory IFRS adoption more comparable in terms of economic conditions. Forecast accuracy improves for mandatory adopters, but accuracy for voluntary adopters does not significantly improve. Estimating the regression only on the countries that mandate IFRS produces similar results, with forecast accuracy improving only for mandatory adopters (column (5)). Finally, column (6) excludes firms from Singapore because Singapore was the only country that mandated IFRS before 2005. Forecast accuracy improves significantly after mandatory IFRS adoption for mandatory adopters and marginally significant for voluntary IFRS adopters.

#### 5.1.2. Varying the measurement of information environment

Table 4 estimates the same model but uses different dependent variables. The first column uses the un-deflated absolute difference between forecast and

actual earnings. We find that forecast accuracy improves significantly after mandatory IFRS adoption for mandatory and voluntary IFRS adopters relative to firms that do not adopt IFRS (column (1)). This improvement is significant at the 1% level for mandatory adopters and significant at the 10% for voluntary adopters. Column (2) uses as dependent variable forecast dispersion divided by absolute actual earnings. Forecast dispersion drops significantly for both mandatory and voluntary adopters. This result might reflect an increase in the consensus across analysts and/or increased precision in forecasting (Barron et al. [1998]). To disentangle those two effects we estimate the effect of IFRS reporting on analyst consensus (Barron et al. [2002]). Consensus decreases significantly for mandatory adopters relative to other firms (column (3)).<sup>5</sup> Consensus remains unchanged relative to other firms for voluntary adopters. Idiosyncratic and common precision increase after mandatory IFRS adoption both for mandatory and voluntary adopters (columns (4) and (5)).<sup>6</sup> The decrease in consensus for mandatory adopters can be explained by the higher increase in idiosyncratic precision compared to common precision.<sup>7</sup>

#### 5.1.3. Varying the forecast horizon

Table 5 examines the robustness of the results to the choice of forecast horizon. The main results use forecasts with an average horizon of about 70 days. Table 5 shows results using forecasts with horizon of 40, 100, 160 or 220 days. Overall, we find that forecast accuracy improves significantly more for mandatory adopters relative to other firms. Across all specifications

forecast accuracy improves more for mandatory adopters and the estimated effect is significant at the 1% level. Forecast accuracy does not improve significantly more for voluntary adopters relative to non-adopters.

Overall, we find that the information environment improves for mandatory adopters. Macroeconomic factors and not IFRS adoption can cause the decrease in forecast errors thereby casting doubt on whether IFRS causes the improvement in the information environment. However, these factors should affect the three groups of firms on average uniformly and therefore this argument fails to explain why we observe a higher improvement in transparency for mandatory adopters. Moreover, the inclusion of time-varying country, industry and firm factors should mitigate concerns that other unrelated events systematically vary with the IFRS adoption samples and cause different behavior in our information environment measures.

5.2. Effect of mandatory IFRS adoption on information environment – Firm-specific differences between IFRS and local GAAP

So far our research design examines how IFRS impacts the information environment on average. However, it may be the case that there is substantial heterogeneity within the group of firms adopting mandatorily IFRS (Daske et al. [2008]). Previous research has found that the extent of the differences between local GAAP and IFRS is associated with analyst earnings forecast accuracy (Bae et al. [2008]). If IFRS adoption results in greater transparency, comparability and quality of accounting information then *a priori* those firms

with the largest deviation of accounting practice from IFRS should have the most to gain from the transition to IFRS.

To capture these differences previous literature has used a number of proxies at the country-wide level (Ashbaugh and Pincus [2001]). However, these proxies, as Bae et al. [2008] note, capture differences in accounting standards not necessarily actual practice across countries. Moreover, it could be the case that a firm's prior reporting incentives will also determine the differences between local GAAP and IFRS – for example whether the firm chooses an option available in its country that enables it to report results more in line with IFRS or it chooses options that are inconsistent with IFRS (Soderstrom and Sun [2007]). Therefore there might be substantial variation in accounting differences across firms within a country.

We use, as a proxy for the differences between local GAAP and IFRS, a firm-level measure by obtaining the actual reported reconciliation component between IFRS and local GAAP earnings. This is available because firms were required in the first year of adoption to report the reconciliations between their last reported local GAAP accounts and IFRS. Therefore, we use the absolute difference between the firm's local GAAP earnings for 2004 and the reconciled IFRS earnings for 2004, as a percentage of local GAAP earnings. For the median firm the absolute difference between local GAAP and IFRS is 17% of the local GAAP earnings.

Based on the previous literature (Horton and Serafeim [2010]; Christensen et al. [2009]) we assume that the higher the reconciliation amount the more incremental information IFRS reveals and/or the higher is the increase in comparability. If IFRS adoption has a direct effect on the information environment then forecast accuracy should improve more for firms with large reconciliation amounts. Table 6 confirms this prediction. The sample includes 1,389 unique firms from 18 countries with available IBES and reconciliation data. The first two columns include all 1,389 firms. The last two columns exclude 427 UK firms, which populate heavily our sample, to ensure that the results are not driven only by UK firms. Columns (1) and (3) use raw values of the absolute deflated difference between Local GAAP and IFRS earnings. Columns (2) and (4) include rank values of this variable, ranging from one to five. The interaction term *GAAP Difference \* Mandatory* is negative and significant across all specifications and therefore forecast accuracy improves more for firms that domestic accounting practice diverges more from IFRS.

#### 5.3. Are the findings a result of earnings management?

An alternative explanation of the results so far is that managers are more successful in managing earnings under IFRS to meet the analyst consensus forecast. To examine whether earnings manipulation can explain the increase in accuracy we estimate two models. First, we test whether forecast accuracy improves more for mandatory adopters that have high accruals. Accruals provide managers with discretion and allow them to alter the inter-temporal pattern of profit (Healy [1985]). Second, we test whether forecast accuracy

improves more for mandatory adopters that analysts do not forecast cash flows. Firms that analysts issue cash flow forecasts exhibit lower levels of earnings management (DeFond and Hung [2003]; McInnis and Collins [2010]).

Table 7 shows that the results are not likely to be the result of earnings management. The coefficient on the triple interaction term *Mandatory IFRS* \* *Mandatory* \* *Absolute accruals* is insignificant (column (1)). A negative and significant coefficient would be consistent with an earnings management explanation. In unreported tests, we estimate discretionary accruals using the modified Jones model and we replace absolute accruals with absolute discretionary accruals in the regression. The results are similar to the ones reported above.

The second column interacts the effect of mandatory IFRS adoption with the percentage of analysts that issue a cash flow forecast for the firm. For the median firm one out of three analysts with earnings forecasts issue also a cash flow forecast. The coefficient on the triple interaction term *Mandatory IFRS \* Mandatory \* CF forecasts* is also insignificant (column (2)). A positive and significant coefficient would be consistent with an earnings management explanation. Collectively, the results do not support that the decrease in forecast errors is driven by managers manipulating earnings to bring them closer to consensus forecasts.

## 5.4. Mandatory IFRS adoption and information environment: comparability and/or information effects

We note that our findings of an increase in forecast accuracy following mandatory adoption of IFRS is consistent with either IFRS providing a richer information set through greater transparency and/or IFRS providing greater comparability. To disentangle these two effects we segment the analyst sample in such as way as to hold relatively constant the information effects and allow comparability to vary or by holding the comparability effect constant and allow information effects to vary. Research analysts are an ideal testing setting to separate comparability and information effects because the set of stocks that they analyze is publicly observable. Embedded in the analysis of this section is the assumption that analysts focus on specific stocks and therefore a change in accounting standards might increase, decrease or have no effect on accounting comparability for an individual analyst, depending on the composition of the analyst's portfolio.

#### 5.4.1. Comparability Effects

To investigate the potential comparability effects of IFRS adoption we split the analyst sample into three groups. The first group is *Local GAAP to IFRS* that includes only analysts with portfolios consisting of firms that followed a single local GAAP prior to IFRS and then all switched to IFRS. We believe that for this subset of analysts comparability effects are negligible because these analysts focused on numbers generated by a single set of accounting

principles both before and after mandatory IFRS adoption. The second group is Multiple GAAP to IFRS that includes only analysts with portfolios consisting of firms following different local GAAPs prior to IFRS and then all switched to IFRS. We believe that for this subset of analysts comparability increases because these analysts focused on numbers generated by different accounting principles before mandatory IFRS adoption but only from one set of accounting standards after. The last group is Local GAAP to Multiple GAAP that includes analysts with portfolio including firms following a single local GAAP prior to IFRS and after mandatory IFRS some firms adopted IFRS and other firms continued to follow their local GAAP. We believe that for this subset of analysts comparability diminishes because these analysts focused on numbers generated from one set of accounting standards before mandatory IFRS adoption but from multiple sets of accounting standards after. To hold information effects relatively homogeneous across the three groups of firms we include in the analysis only mandatory adopters. Moreover, to mitigate any selection bias that arises from analysts' choice to change coverage we restrict the analysis to firms that an analyst covers both before and after mandatory IFRS adoption.

Table 8, Panel A provides summary statistics for the three groups of analysts, and the firms that each group covers. Analysts with portfolios that move from Local to Multiple GAAP work in brokerage houses with on average 80 analysts, follow a firm for a little over than 3 years, cover 12 firms, and five industries. Average horizon of first (last) forecast is 163 (102) days.

Analysts with portfolios that move from Local GAAP to IFRS work in brokerage houses with on average 54 analysts, follow a firm for a little over 3 years, cover 8 firms, and four industries. Average horizon of first (last) forecast is 173 (86) days. Analysts with portfolios that move from Multiple GAAP to IFRS work in brokerage houses with on average 88 analysts, follow a firm for a little over 3 years, cover 9 firms, and four industries. Average horizon of first (last) forecast is 171 (88) days.

Table 8, Panel B shows that consistent with a comparability effect, forecast accuracy improves more for analysts with portfolios that move from Local GAAP to IFRS and even more for analysts with portfolios that move from Multiple GAAP to IFRS. In the first (last) two columns, we use the first (last) forecast issued by each analyst within 250 days from fiscal year end. We use as dependent variable deflated and un-deflated absolute forecast errors. The coefficients on Local GAAP to IFRS \* Mandatory and Multiple GAAP to IFRS \* Mandatory are negative, and the latter is more negative than the former, across all specifications. Forecast accuracy of analysts, who benefit from accounting comparability, improves more. In unreported tests we examined whether the three groups of analysts differ substantially in terms of the covered firms' country institutions (enforcement, legal institutions etc.) or reconciliation magnitudes. If mandatory adopters covered by analysts with portfolios that move from Multiple GAAP to IFRS are incorporated in countries with stronger legal institutions or have larger reconciliation amounts then this would bias our tests towards rejecting the null hypothesis of no

effect. However, we did not find any systematic differences that could bias our results in either way, and when we included control variables for the quality of country institutions or reconciliation magnitudes all results remained unchanged.

#### 5.4.2. Information Effects

To investigate the potential information effects of IFRS adoption we focus on the analyst group *Multiple GAAP to IFRS*. However this time we use both the mandatory and the voluntary adopters. We expect that for this group of analysts comparability effects are present for both mandatory and voluntary adopters but information effects are stronger for mandatory adopters if IFRS increases transparency. If voluntary adopters improve their level of disclosure substantially (Dye [1986]) following mandatory IFRS adoption, then this introduces bias against the hypothesis.

Table 9, Panel A shows summary statistics for analysts with portfolios that move from Multiple GAAP to IFRS. These analysts work for brokerage houses that employ on average 83 analysts, have a little more of 3 years of firm-specific experience, cover 9 firms, and 4 industries. The sample includes 719 mandatory and 345 voluntary adopters. The sample of mandatory and voluntary adopters is comparable in terms of forecast horizon, reporting losses, firm size, and level of absolute accruals.

Table 9, Panel B shows that consistent with an information effect, forecast accuracy improves more for mandatory than for voluntary adopters,

for the set of analysts with portfolios that move from Multiple GAAP to IFRS. In the first (last) two columns, we use the first (last) forecast issued by each analysts within 250 days from fiscal year end. We use as dependent variable deflated and un-deflated absolute forecast errors. The coefficient on *Mandatory IFRS \* Mandatory* is negative and significant.

#### 6. CONCLUSION

We investigate whether mandatory IFRS adoption improves firms' information environment. We find that, during the mandatory transition to IFRS, forecast accuracy and other measures of the quality of the information environment improve significantly more for mandatory adopters. Moreover, we find that the larger the difference between IFRS earnings and local GAAP earnings the larger is the improvement in forecast accuracy, increasing our confidence that it is IFRS adoption that causes the improvement in the information environment.

We also provide evidence on whether the improvement in the information environment can be attributed to higher quality information and/or improved accounting comparability. We find results consistent with both information, and comparability effects. Forecast accuracy improves more for analyst-firm pairs that are affected by either information or comparability benefits.

We believe that these results have important implications for the debate on the globalization of accounting standards and for regulators that are considering a change to IFRS. Although we make no claim with regard to the net cost or benefit of adoption we do highlight that the effects of IFRS compliance are not homogeneous for all firms, even within the same country. Moreover, we note that IFRS adoption is likely to generate both information and comparability effects.

#### **Endnotes**

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<sup>&</sup>lt;sup>1</sup> Whether IFRS improves disclosure and lowers information asymmetry is debatable. Leuz and Verrecchia [2000] examine German firms that adopted IAS or U.S. GAAP and find a decrease in spreads and an increase in turnover around adoption, compared to German GAAP firms. Cuijpers and Buijink [2005] do not find significant differences between local GAAP and IFRS firms in the EU. Daske [2006] examines voluntary IAS adoption by German firms and finds that IAS firms exhibit even higher cost of equity capital than local GAAP firms. Daske et al. [2008] find that, on average, market liquidity and equity valuations increase around the introduction of mandatory IFRS in a country. However, these market benefits exist only in countries with strict enforcement regimes and institutional environments that provide strong reporting incentives.

<sup>&</sup>lt;sup>2</sup> Switzerland is not a member of the EU and therefore is not subject to the EU IAS Regulation. The Swiss Foundation for Accounting and Reporting publishes accounting standards. Compliance with Swiss GAAP is required for all companies, however compliance with IFRS ensures compliance with Swiss GAAP and many large Swiss companies have, for a number of years, followed IASs/IFRS. However starting with annual reports for 2005 and interim reports for 2006, most Swiss companies whose equity shares are listed on the main board of the Swiss Exchange are required to prepare their financial statements using either IFRS or US GAAP. Swiss GAAP will no longer be permitted.

<sup>&</sup>lt;sup>3</sup> We used alternative deflators such as stock price and all the results were similar. We also find similar results if we do not deflate the forecast errors.

<sup>&</sup>lt;sup>4</sup> Except for firms in countries that IFRS adoption is not allowed.

<sup>&</sup>lt;sup>5</sup> Beuselinck et al. [2010] find no change in consensus. These results differ potentially because the sample in Beuselinck et al. [2010] is significantly smaller and the analysis does not control for time varying industry and country effects, and firm fixed effects.

<sup>&</sup>lt;sup>6</sup> Readers should interpret the decomposition of consensus to common and idiosyncratic precision with care. As Barron et al. [1998] note the decomposition is valid if the following assumptions are satisfied: analysts issue unbiased forecasts, earnings forecast do not strictly determine earnings realizations, all analysts' idiosyncratic information is of equal precision, and forecast errors are equally distributed. We believe it may well be the case that the third assumption does not hold in our setting.

<sup>&</sup>lt;sup>7</sup> We also rank transformed the idiosyncratic and common precision variables and estimated the effect of IFRS adoption on the ranking variables. The results were unchanged.

<sup>&</sup>lt;sup>8</sup> One limitation of this proxy is that, although we are able to capture the recognition and measurement differences within the reconciliation number, we are not able to capture disclosure differences e.g. segmental reporting disclosures pre and post, related party transaction pre and post etc which will also be associated with the analysts variables.

<sup>&</sup>lt;sup>9</sup> We find similar results if we scale the reconciliation amount with the stock price at fiscal year end

year end. <sup>10</sup> The sample includes firms from the following countries: Austria 2, Belgium 39, Czech Republic 1, Denmark 40, Finland 75, France 240, Greece 53, Ireland 27, Italy 109, Luxembourg 1, Netherlands 85, Norway 57, Poland 6, Portugal 16, Spain 79, Sweden 115, Switzerland 17, and UK 427.

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TABLE 1
Sample composition by country and by accounting standard followed

		All	Manda	tory IFRS		ary IFRS	US GAAP		
Country	Firm-years	Unique firms							
ARGENTINA	15	3	0	0	0	0	0	0	
AUSTRALIA	1480	253	484	244	12	2	0	0	
AUSTRIA	175	32	20	7	131	25	13	5	
BELGIUM	382	69	121	49	88	19	7	3	
BERMUDA	86	16	0	0	14	2	71	14	
BRAZIL	552	91	0	0	0	0	0	0	
CANADA	2082	364	0	0	0	0	114	27	
CHILE	169	30	0	0	0	0	0	0	
CHINA	595	121	0	0	275	59	15	3	
CZECH REPUBLIC	30	5	3	2	21	3	0	0	
DENMARK	365	62	123	47	74	15	0	0	
EGYPT	31	7	0	0	0	0	0	0	
FINLAND	541	88	206	74	66	14	0	0	
FRANCE	1514	266	563	230	190	31	24	5	
GERMANY	1592	278	232	100	879	166	321	93	
GREECE	332	59	137	54	25	5	6	3	
HONG KONG	1073	189	482	181	46	8	12	3	
HUNGARY	62	10	2	1	58	9	0	0	
INDIA	603	117	0	0	0	0	6	2	
INDONESIA	295	49	0	0	0	0	0	0	
IRELAND	216	39	83	34	0	0	19	4	
ISRAEL	187	35	0	0	0	0	105	20	
ITALY	681	120	43	15	578	103	12	2	
JAPAN	5977	1032	0	0	0	0	258	47	
KOREA (SOUTH)	241	56	0	0	0	0	0	0	
LUXEMBOURG	52	9	6	2	22	5	19	4	
MALAYSIA	845	161	0	0	0	0	0	0	

MEXICO	308	49	0	0	0	0	0	0
NETHERLANDS	701	113	252	95	55	9	77	17
NEW ZEALAND	240	41	0	0	0	0	0	0
NORWAY	440	77	197	74	10	2	28	8
PERU	45	8	0	0	0	0	0	0
PHILIPPINES	204	34	83	34	0	0	0	0
POLAND	122	21	38	15	38	6	0	0
PORTUGAL	162	25	57	21	18	4	0	0
RUSSIA	93	20	0	0	45	10	40	9
SINGAPORE	586	110	370	103	13	3	31	6
SOUTH AFRICA	637	105	203	95	53	9	0	0
SPAIN	515	83	220	80	0	0	2	1
SWEDEN	770	129	335	125	17	3	7	1
SWITZERLAND	903	146	66	25	593	100	81	16
TAIWAN	582	111	0	0	0	0	4	1
THAILAND	656	125	0	0	0	0	0	0
TURKEY	293	54	0	0	100	21	0	0
UNITED KINGDOM	3162	591	1158	528	7	2	16	4
UNITED STATES	16617	2721	0	0	0	0	16617	2721
TOTAL	47209	8124	5484	2235	3428	635	17905	3019

This table shows the composition of the sample by country and by accounting standard. We refer to Hong Kong as a country in our analyses, although, more appropriately, it has the status of a Special Administrative Region (SAR) of the People's Republic of China. *Voluntary IFRS* includes firms that adopted IFRS before it was mandated in its country. *Mandatory IFRS* includes firms that adopt IFRS when their country mandated IFRS reporting. *US GAAP* includes firms reporting their primary financial statements under US GAAP. The sample includes only countries with at least 10 firm-year observations.

TABLE 2
Panel A: Summary statistics for variables used in regression analysis

Dependent variables	Mean	STD	Q3	Median	Q1
Error (deflated)	0.334	0.596	0.317	0.107	0.036
Error (non-deflated)	2.873	7.959	0.940	0.140	0.040
Dispersion	0.148	0.222	0.152	0.065	0.027
Consensus	0.585	0.351	0.919	0.681	0.244
Common precision	112.910	243.126	75.623	9.073	0.747
Idiosyncratic precision	190.816	475.320	77.836	6.091	0.318
Independent variables					
Absolute accruals	0.042	0.043	0.055	0.036	0.019
Analyst coverage	7.397	6.484	10.000	5.000	3.000
Firm size	8.108	2.808	9.864	7.684	6.064
Loss	0.137	0.344	0.000	0.000	0.000
Forecast horizon	73.576	2.081	75.000	73.000	72.000
ADR	0.095	0.293	0.000	0.000	0.000

Panel B: Summary statistics by type of IFRS adoption

Mandatory adopters	Mean	STD	Q3	Median	Q1
Absolute accruals	0.043	0.042	0.057	0.037	0.018
Analyst coverage	7.370	6.659	10.000	5.000	2.000
Firm size	7.358	2.340	8.879	7.159	5.662
Loss	0.103	0.304	0.000	0.000	0.000
Voluntary adopters					
Absolute accruals	0.046	0.037	0.060	0.041	0.024
Analyst coverage	8.807	8.242	12.000	6.000	3.000
Firm size	7.667	2.438	9.177	7.555	5.890
Loss	0.141	0.348	0.000	0.000	0.000
Non-adopters					
Absolute accruals	0.042	0.043	0.053	0.034	0.019
Analyst coverage	7.237	6.140	10.000	5.000	3.000

Firm size	8.070	2.954	10.429	7.653	6.291
THIII SIZE	8.070	2.934	10.429	7.055	0.291
Loss	0.130	0.307	0.000	0.000	0.000
Non-adopters (excl. US)					_
Absolute accruals	0.042	0.039	0.053	0.035	0.020
Analyst coverage	6.573	5.630	9.000	5.000	2.000
Firm size	7.827	2.116	10.259	7.360	6.907
Loss	0.122	0.327	0.000	0.000	0.000
Non-adopters (from mandatory countries)					_
Absolute accruals	0.047	0.040	0.058	0.038	0.023
Analyst coverage	8.108	9.060	13.000	4.000	1.000
Firm size	6.378	2.484	8.336	6.216	4.587
Loss	0.214	0.410	0.000	0.000	0.000

Error (deflated) is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings. Dispersion is the standard deviation of individual analyst forecasts for a firm i in year t divided by absolute actual earnings. Consensus is a measure of the commonality in analysts' information, as captured by the across-analyst correlation in forecast errors (Barron, Byard and Kim [2002]). Common precision is a measure of the precision of common information in individual analyst forecasts (Barron, Byard and Kim [2002]). Idiosyncratic precision is a measure of the precision of idiosyncratic information in individual analyst forecasts (Barron, Byard and Kim [2002]). Absolute accruals is the absolute difference between net income and cash flows, divided by total assets. Analyst coverage is the number of analysts providing earnings forecasts for a firm. Firm size is the natural logarithm of total assets. Loss is an indicator variable if a firm is reporting negative net income. Forecast horizon is the number of days between consensus forecast and end of forecasting period. ADR is an indicator variable if firm i nyear t trades ADR in the US.

TABLE 3
Effect of mandatory IFRS adoption on information environment – Varying the sample

Sample	All fi	rms	Ex U	JS	Ex 20	005	Ex 2001	-2002	Mandatory	countries	Ex Sing	apore
	(1)	)	(2)	)	(3)		(4)	)	(5)	)	(6)	)
Dependent variable						Error	(deflated)					
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t	Estimate	t	Estimate	t
Intercept	-0.4520	-5.02	-0.3011	-2.23	-0.5400	-5.45	-0.3880	-3.75	-0.3034	-1.73	-0.3996	-4.42
Voluntary IFRS	0.0173	1.63	0.0095	0.86	0.0190	1.75	-0.0037	-0.25	-0.0093	-0.47	0.0168	1.58
Mandatory IFRS	0.0520	8.81	0.0486	7.54	0.0557	7.96	0.0481	5.11	0.0285	1.78	0.0515	8.73
Mandatory	0.0070	0.98	-0.0122	-1.13	0.0105	1.30	0.0000	-0.01	-0.0147	-0.75	0.0041	0.58
Voluntary IFRS * Mandatory	-0.0398	-1.86	-0.0227	-1.03	-0.0581	-2.52	-0.0062	-0.28	-0.0216	-0.75	-0.0404	-1.88
Mandatory IFRS * Mandatory	-0.0474	-4.32	-0.0343	-2.80	-0.0572	-4.44	-0.0357	-2.90	-0.0303	-1.99	-0.0494	-4.36
Absolute accruals	-0.2807	-6.74	-0.2875	-4.97	-0.2815	-6.07	-0.1622	-2.66	-0.3723	-4.49	-0.2737	-6.53
US GAAP	0.0680	13.44	-0.0350	-2.95	0.0710	11.39	0.0728	10.46	-0.0570	-2.48	0.0676	13.40
Analyst coverage	-0.0010	-4.17	-0.0011	-3.40	-0.0011	-4.00	-0.0012	-3.57	-0.0013	-3.02	-0.0009	-4.07
Firm size	0.0064	11.39	0.0054	8.62	0.0073	10.11	0.0065	6.95	0.0076	6.26	0.0063	11.30
Loss	0.2997	26.96	0.3879	24.00	0.2942	25.03	0.3082	23.48	0.3556	16.01	0.2998	26.89
Forecast horizon	0.0023	2.03	0.0005	0.27	0.0033	2.60	0.0014	1.11	0.0004	0.16	0.0017	1.45
ADR	-0.0174	-5.58	-0.0018	-0.48	-0.0076	-1.62	-0.0282	-3.82	-0.0025	-0.47	-0.0171	-5.39
Industry-year benchmark	0.1064	3.93	0.0955	2.49	0.1206	4.07	0.1432	3.69	0.1755	3.28	0.1008	3.72
Country-year benchmark	0.4542	21.12	0.4543	18.30	0.4470	19.38	0.4795	15.30	0.4305	12.22	0.4527	20.72
Firm effects	Yes		Yes		Yes		Yes		Yes		Yes	
Adj R-squared	38.8%		39.0%		38.8%		37.1%		40.1%		38.7%	
N	47,209		30,592		39,898		35,284		16,697		46,623	

This table presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors. Each column uses a different sample. 'All firms' includes all firms tabulated in table 1. 'Excl. US' excludes all US firms. 'Excl. 2005' excludes all forecasts made for the fiscal year of 2005. 'Excl. 2001-2002' excludes all forecasts made for fiscal years 2001 and 2002. 'Mandatory countries' includes only forecasts made for firms that trade in countries that mandated IFRS. 'Excl. Singapore' excludes all firms from Singapore. Dependent variable is *Error* (*deflated*), which is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. *Voluntary IFRS* is an indicator variable for a firm that adopted IFRS before it was mandated in its country. *Mandatory IFRS* is an indicator variable that takes the value of one for a firm that adopts IFRS when its country mandated IFRS reporting. *Mandatory* is an indicator variable that takes the value of one for periods on or after 2005 (2003 for Singapore), or else zero. *Absolute accruals* is the absolute difference between net income and cash flows, divided by total assets. *US GAAP* is an indicator variable that takes the value of one if a firm reports under US GAAP. *Analyst coverage* is the number of analysts providing earnings forecasts for a firm. *Firm size* is the natural logarithm of total assets. *Loss* is an indicator variable if firm i nyear t trades ADR in the US. *Industry-year benchmark* is the average level of the dependent variable by year for each of the 49 Fama-French [1996] industries. *Country-year benchmark* is the average level of the dependent variable by year for each country. Standard errors are robust to heteroscedasticity and clustered at the firm-year level.

TABLE 4
Effect of mandatory IFRS adoption on information environment – Varying the dependent variable

Dependent variable	Error (non-	-deflated)	Dispe	rsion	Cons	enus	Common	precision	Idiosyncratic	precision
	(1	)	(2	()	(3	3)	(4	.)	(5)	
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t	Estimate	t
Intercept	-2.4920	-3.68	-0.0767	-2.26	-0.6969	-11.37	21.1478	0.58	88.4537	1.17
Voluntary IFRS	0.2464	4.03	0.0059	1.37	0.0066	1.13	-9.3317	-4.38	-8.6595	-1.96
Mandatory IFRS	0.3498	7.78	0.0134	6.23	0.0204	6.06	-10.7950	-6.76	-19.4367	-5.90
Mandatory	0.0527	0.85	-0.0055	-2.20	0.0140	3.28	-18.2047	-6.49	-26.5746	-4.56
Voluntary IFRS * Mandatory	-0.2306	-1.80	-0.0256	-2.96	0.0015	0.12	24.7885	5.37	21.4534	2.23
Mandatory IFRS * Mandatory	-0.2330	-2.49	-0.0129	-3.17	-0.0215	-2.98	19.0527	5.35	32.5467	4.39
Absolute accruals	-0.8379	-2.23	-0.1044	-6.80	0.0054	0.20	-4.7230	-0.43	-9.1444	-0.40
US GAAP	0.1017	4.23	0.0310	15.87	-0.0284	-12.31	-12.8968	-10.76	-18.8442	-9.81
Analyst coverage	0.0042	2.35	-0.0003	-2.80	-0.0008	-5.68	-0.3540	-4.48	-0.1634	-0.98
Firm size	0.0573	10.58	0.0012	6.11	0.0012	4.34	-0.1178	-0.83	-0.4663	-1.56
Loss	1.9249	20.85	0.0539	13.30	0.0632	16.76	-22.0241	-16.10	-37.4354	-14.64
Forecast horizon	0.0172	1.97	-0.0003	-0.80	0.0030	3.72	-0.3275	-0.68	-1.3330	-1.32
ADR	-0.1179	-5.86	-0.0060	-5.23	0.0088	6.10	4.0532	6.90	4.5297	4.32
Industry-year benchmark	0.1036	4.70	0.2033	9.72	0.2153	6.32	0.1234	9.23	0.1349	6.86
Country-year benchmark	0.0340	8.18	0.4166	25.26	0.6057	21.87	0.1187	13.83	0.1103	11.55
Firm effects	Yes		Yes		Yes		Yes		Yes	
Adj R-squared	74.1%		44.4%		26.1%		53.6%		43.4%	
N	47,209		41,028		40,951		40,951		40,951	

This table presents OLS specifications testing the effect of mandatory IFRS adoption on measures of information environment quality. Each column uses a different dependent variable. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings. Dispersion is the standard deviation of individual analyst forecasts for a firm *i* in year *t* divided by absolute actual earnings. Consensus is a measure of the commonality in analysts' information, as captured by the across-analyst correlation in forecast errors (Barron, Byard and Kim [2002]). Common precision is a measure of the precision of common information in individual analyst forecasts (Barron, Byard and Kim [2002]). Idiosyncratic precision is a measure of the precision of idiosyncratic information in individual analyst forecasts (Barron, Byard and Kim [2002]). Voluntary IFRS is an indicator variable for a firm that adopted IFRS before it was mandated in its country. Mandatory IFRS is an indicator variable that takes the value of one for a firm that adopted IFRS when its country mandated IFRS reporting. Mandatory is an indicator variable that takes the value of one for singapore), or else zero. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets. US GAAP is an indicator variable that takes the value of one if a firm reports under US GAAP. Analyst coverage is the number of analysts providing earnings forecasts for a firm. Firm size is the natural logarithm of total assets. Loss is an indicator variable if a firm is reporting negative net income. Forecast horizon is the number of days between consensus forecast and fiscal year end. ADR is an indicator variable if firm *i* in year *t* trades ADR in the US. Industry-year benchmark is the average level of the dependent variable by year for each of the 49 Fama-French [1996] industries. Country-year benchmark is the average level of the dependent variable by year for each of the dependent variable by year for each country. Standard er

TABLE 5
Effect of mandatory IFRS adoption on information environment – Varying the forecast horizon

Sample	Horizon 4	0 days	Horizon 1	00 days	Horizon 1	60 days	Horizon 220 days		
	(1)		(2)		(3)		(4)		
Dependent variable	Error (deflated)								
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t	
Intercept	-0.1801	-4.22	-0.3630	-4.59	-0.6696	-5.65	-0.8941	-6.05	
Voluntary IFRS	0.0059	0.58	0.0048	0.43	0.0203	1.59	0.0456	3.02	
Mandatory IFRS	0.0403	7.24	0.0467	7.38	0.0574	7.93	0.0781	9.24	
Mandatory	0.0030	0.50	0.0022	0.32	0.0012	0.17	0.0070	0.92	
Voluntary IFRS * Mandatory	-0.0377	-1.83	-0.0332	-1.48	-0.0366	-1.43	-0.0121	-0.42	
Mandatory IFRS * Mandatory	-0.0508	-4.73	-0.0500	-4.21	-0.0389	-2.94	-0.0433	-2.90	
Absolute accruals	-0.2380	-6.48	-0.2953	-6.97	-0.3741	-7.41	-0.3086	-5.45	
US GAAP	0.0715	14.16	0.0645	12.25	0.0671	11.39	0.0804	12.66	
Analyst coverage	-0.0010	-4.74	-0.0009	-3.51	-0.0002	-0.86	0.0002	0.55	
Firm size	0.0057	11.53	0.0079	13.10	0.0070	10.03	0.0063	7.91	
Loss	0.2539	25.43	0.3121	26.55	0.3758	28.49	0.3985	28.02	
Forecast horizon	-0.0016	-1.58	0.0004	0.55	0.0017	2.48	0.0020	3.08	
ADR	-0.0184	-6.34	-0.0199	-5.92	-0.0217	-5.56	-0.0283	-6.78	
Industry-year benchmark	0.1192	4.27	0.1460	5.78	0.1560	7.11	0.1541	6.75	
Country-year benchmark	0.4528	21.50	0.4685	21.12	0.4982	21.25	0.5619	22.93	
Firm effects	Yes		Yes		Yes		Yes		
Adj R-squared	38.4%		39.8%		41.5%		42.6%		
N	48,067		45,301		43,069		38,893		

This table presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors. Each column uses forecasts of different horizons. 'Horizon 40 days' includes forecasts on average 40 days away from the end of the fiscal period. 'Horizon 100 days' includes forecasts on average 100 days away from the end of the fiscal period. 'Horizon 220 days' includes forecasts on average 220 days away from the end of the fiscal period. Dependent variable is Error (deflated), which is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Voluntary IFRS is an indicator variable for a firm that adopted IFRS before it was mandated in its country. Mandatory IFRS is an indicator variable that takes the value of one for a firm that adopts IFRS when its country mandated IFRS reporting. Mandatory is an indicator variable that takes the value of one for periods on or after 2005 (2003 for Singapore), or else zero. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets. US GAAP is an indicator variable that takes the value of one if a firm reports under US GAAP. Analyst coverage is the number of analysts providing earnings forecasts for a firm. Firm size is the natural logarithm of total assets. Loss is an indicator variable if a firm is reporting negative net income. Forecast horizon is the number of days between consensus forecast and fiscal year end. ADR is an indicator variable if firm i in year t trades ADR in the US. Industry-year benchmark is the average level of the dependent variable by year for each of the 49 Fama-French [1996] industries. Country-year benchmark is the average level of the dependent variable by year for each country. Standard errors are robust to heteroscedasticity and clustered at the firm-year level.

TABLE 6
Effect of mandatory IFRS adoption on information environment – Firm-specific differences between IFRS and local GAAP

Sample		Mandator	y adopters		Mar	ndatory ado	pters excl. UK	-
	(1)		(2)	(2)			(4)	
Dependent variable				Error (d	eflated)			
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t
Intercept	-0.3119	-1.30	-0.3274	-1.36	0.4527	1.24	0.4354	1.19
Mandatory	-0.0288	-1.51	0.0739	2.32	-0.0500	-1.99	0.0419	1.11
GAAP Difference	0.0091	3.15	0.0237	4.84	0.0095	2.71	0.0211	3.66
GAAP Difference * Mandatory	-0.0133	-2.19	-0.0413	-4.36	-0.0130	-1.98	-0.0375	-3.26
Absolute accruals	-0.2530	-2.05	-0.2825	-2.35	-0.4311	-3.08	-0.4472	-3.23
US GAAP	-0.1987	-2.98	-0.1836	-2.80	-0.1904	-2.83	-0.1781	-2.69
Analyst coverage	-0.0021	-3.01	-0.0019	-2.78	-0.0009	-1.25	-0.0007	-0.99
Firm size	0.0065	3.14	0.0060	2.91	0.0031	1.49	0.0027	1.27
Loss	0.3487	11.05	0.3459	10.99	0.3644	10.38	0.3610	10.27
Forecast horizon	0.0008	0.25	0.0003	0.10	-0.0091	-1.96	-0.0095	-2.03
ADR	0.0092	1.16	0.0078	0.99	0.0037	0.39	0.0019	0.20
Industry-year benchmark	0.1782	2.41	0.1773	2.40	0.1233	1.39	0.1254	1.42
Country-year benchmark	0.4420	7.98	0.4329	7.86	0.4563	7.75	0.4447	7.60
Firm effects	Yes		Yes		Yes		Yes	
Adj R-squared	41.2%		41.3%		42.7%		42.7%	
N	8,168		8,168		5,709		5,709	

This table presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors. 'Mandatory adopters' includes all firms that are mandatory adopters of IFRS with available IFRS reconciliation and IBES data. 'Mandatory adopters excl. UK' includes all firms that are mandatory adopters of IFRS with available IFRS reconciliation and IBES data outside the UK. The first and third column use raw values of *GAAP difference*. The second and third column use rank values (ranging from one to five) of *GAAP difference*. Dependent variable is *Error* (*deflated*), which is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. *Mandatory* is an indicator variable that takes the value of one for periods on or after 2005, or else zero. *GAAP difference* is the absolute difference between IFRS earnings and local GAAP earnings, as published in the reconciliation documents of first time adopters in 2005, divided by the absolute local GAAP earnings. *Absolute accruals* is the absolute difference between net income and cash flows, divided by total assets. *US GAAP* is an indicator variable that takes the value of one if a firm reports under US GAAP. *Analyst coverage* is the number of analysts providing earnings forecasts for a firm. *Firm size* is the natural logarithm of total assets. *Loss* is an indicator variable if a firm is reporting negative net income. *Forecast horizon* is the number of days between consensus forecast and fiscal year end. *ADR* is an indicator variable if firm *i* in year *t* trades ADR in the US. *Industry-year benchmark* is the average level of the dependent variable by year for each country. Standard errors are robust to heteroscedasticity and clustered at the firm-year level.

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TABLE 7
Effect of mandatory IFRS adoption on forecast errors and earnings management

Dependent variable		Error (	deflated)	
	(1	)	(2	)
Parameter	Estimate	t	Estimate	t
Intercept	-0.4520	-5.02	-0.4526	-5.03
Voluntary IFRS	0.0173	1.63	0.0168	1.57
Mandatory IFRS	0.0520	8.81	0.0512	8.49
Mandatory	0.0070	0.98	0.0069	0.96
Voluntary IFRS * Mandatory	-0.0384	-1.44	-0.0161	-0.69
Mandatory IFRS * Mandatory	-0.0474	-3.70	-0.0392	-3.16
Absolute accruals	-0.2799	-6.19	-0.2810	-6.73
Voluntary IFRS * Mandatory*Absolute accruals	-0.0373	-0.11		
Mandatory IFRS * Mandatory*Absolute accruals	0.0001	0.00		
CF forecasts			0.0020	0.63
Voluntary IFRS * Mandatory*CF forecasts			-0.0240	-2.09
Mandatory IFRS * Mandatory*CF forecasts			-0.0073	-1.17
US GAAP	0.0680	13.44	0.0693	13.16
Analyst coverage	-0.0010	-4.17	-0.0010	-4.49
Firm size	0.0064	11.38	0.0064	11.46
Loss	0.2997	26.95	0.3000	26.97
Forecast horizon	0.0023	2.03	0.0023	2.02
ADR	-0.0174	-5.57	-0.0177	-5.65
Industry-year benchmark	0.1064	3.93	0.1058	3.91
Country-year benchmark	0.4542	21.12	0.4552	21.18
Firm effects	Yes		Yes	
Adj R-squared	38.8%		38.8%	
N	47,209		47,209	

This table presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors conditional on earnings management variables. Dependent variable is Error (deflated), which is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Voluntary IFRS is an indicator variable for a firm that adopted IFRS before it was mandated in its country. Mandatory IFRS is an indicator variable that takes the value of one for a firm that adopts IFRS when its country mandated IFRS reporting. Mandatory is an indicator variable that takes the value of one for periods on or after 2005 (2003 for Singapore), or else zero. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets. CF forecasts is the number of analysts that forecast cash flow per share divided by the number of analyst that forecast earnings per share. US GAAP is an indicator variable that takes the value of one if a firm reports under US GAAP. Analyst coverage is the number of analysts providing earnings forecasts for a firm. Firm size is the natural logarithm of total assets. Loss is an indicator variable if a firm is reporting negative net income. Forecast horizon is the number of days between consensus forecast and fiscal year end. ADR is an indicator variable if firm i in year t trades ADR in the US. Industry-year benchmark is the average level of the dependent variable by year for each of the 49 Fama-French [1996] industries. Country-year benchmark is the average level of the dependent variable by year for each country. Standard errors are robust to heteroscedasticity and clustered at the firm-year level.

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TABLE 8
Panel A: Summary statistics by analyst classification

Analyst group	From Local to I	Multiple GAAP	From Local G	SAAP to IFRS	From Multiple (	GAAP to IFRS	
# of observations	81	52	28	74	9538		
# of unique firms	10	09	38	34	71	9	
# of unique analysts	42	26	19	97	70	16	
Statistic	Mean	STD	Mean	STD	Mean	STD	
Error (deflated) -(First forecast)	0.406	1.196	0.484	1.327	0.495	1.389	
Error (non-deflated) - (First forecast)	2.784	13.008	2.765	13.346	2.272	18.110	
Error (deflated) - (Last forecast)	0.339	1.090	0.381	1.161	0.427	1.316	
Error (non-deflated) - (Last forecast)	2.460	13.117	2.560	13.275	2.166	18.313	
Brokerage house size	79.724	89.655	53.781	67.617	87.895	85.747	
Experience	3.280	1.771	3.351	1.820	3.362	1.786	
# of firms covered	12.142	6.907	8.261	4.056	8.711	3.959	
# of industries covered	4.865	3.297	3.884	2.697	3.584	2.527	
Forecast horizon (First forecast)	163.619	54.298	173.888	57.453	171.348	57.853	
Forecast horizon (Last forecast)	101.904	49.598	86.132	49.969	87.767	51.740	
Loss	0.052	0.223	0.045	0.208	0.074	0.262	
Firm size	7.272	2.189	9.111	2.347	9.024	2.457	
Absolute accruals	0.041	0.038	0.037	0.037	0.045	0.037	

Panel A presents summary statistics for three groups of analysts. 'From Local to Multiple GAAP' includes analysts, whose portfolios had firms following a single GAAP and after mandatory IFRS adoption some firms in their portfolio follow IFRS and other firms Local or US GAAP. 'From Local GAAP to IFRS' includes analysts, whose portfolios had firms following a single GAAP and after mandatory IFRS adoption all firms in their portfolio follow IFRS. 'From Multiple GAAP to IFRS' includes analysts, whose portfolios had firms following different GAAP and after mandatory IFRS adoption all firms in their portfolio follow IFRS. The sample includes only mandatory IFRS adopters. A firm-analyst pair is included in the sample only if it appears both before and after mandatory IFRS adoption. 'First forecast' uses the first forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. 'Last forecast' uses the last forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. Error (deflated) is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings. Brokerage house size is the number of analysts working for the brokerage house of the focal analyst. Experience is the number of years the analyst has been following a firm. # of firms covered is the number of firms an analyst is covering in a year. # of industries covered is the number of industries an analyst is covering in a year, based on the Fama-French industry classification. Forecast horizon is the number of days between consensus forecast and fiscal year end. Loss is an indicator variable if a firm is reporting negative net income. Firm size is the natural logarithm of total assets. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets.

Panel B: Mandatory IFRS adoption and information environment: effect of accounting comparability

Sample		First fo	precast			Last fo	recast	
Dependent variable	Error (defl	lated)	Error (non-d	eflated)	Error (def	lated)	Error (non-deflated)	
	(1)		(2)	(2)			(4)	
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t
Intercept	-0.6776	-3.55	-6.9735	-3.26	-0.7122	-3.32	-6.4635	-2.92
Local GAAP to IFRS	0.1174	1.67	1.7905	2.52	0.0580	0.84	1.9157	2.55
Multiple GAAP to IFRS	0.1594	1.91	2.9558	2.59	0.1524	1.79	3.1900	2.64
Mandatory	0.2127	3.69	2.8673	3.16	0.2535	3.37	3.2846	3.02
Local GAAP to IFRS * Mandatory	-0.1104	-1.45	-1.2665	-2.09	-0.0807	-1.26	-1.5294	-2.25
Multiple GAAP to IFRS * Mandatory	-0.1798	-1.92	-3.2341	-3.32	-0.1713	-1.74	-3.4268	-3.36
Forecast horizon	0.0008	5.55	0.0035	2.02	0.0005	2.37	-0.0017	-0.80
Brokerage house size	-0.0003	-2.85	-0.0044	-2.27	-0.0003	-2.77	-0.0046	-2.30
Experience	0.0003	0.03	-0.0056	-0.04	0.0023	0.31	-0.0245	-0.17
# of firms covered	0.0010	0.39	-0.0945	-1.73	0.0001	0.05	-0.1123	-1.92
# of industries covered	-0.0033	-0.56	0.1832	2.00	-0.0026	-0.52	0.1898	1.97
Loss	1.2160	9.48	3.8639	3.30	0.9349	8.67	3.6152	2.91
Firm size	-0.0027	-0.27	0.3140	1.90	0.0059	0.60	0.3185	1.86
Absolute accruals	-0.2979	-0.66	6.6745	0.90	-0.0985	-0.24	7.4445	0.98
Industry-year benchmark	0.8273	5.00	0.0191	1.42	1.0935	4.78	0.0231	1.41
Country-year benchmark	0.8573	4.52	1.3058	4.92	0.9431	3.85	1.4098	4.48
Adj R-squared	11.2%		13.8%		9.8%		12.6%	
N	20,564		20,564		20,564		20,564	

Panel B presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors for three groups of analysts. 'From Local GAAP to IFRS' includes analysts, whose portfolios had firms following a single GAAP and after mandatory IFRS adoption all firms in their portfolio follow IFRS. 'From Multiple GAAP to IFRS' includes analysts, whose portfolios had firms following a single GAAP and after mandatory IFRS adoption some firms in their portfolio follow IFRS and other firms Local or US GAAP (omitted group). The sample includes only mandatory IFRS adopters. A firm-analyst pair is included in the sample only if it appears both before and after mandatory IFRS adoption. 'First forecast' uses the first forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. 'Last forecast' uses the last forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. 'Last forecast' uses the last forecast made by absolute actual earnings. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings. Forecast horizon is the number of days between consensus forecast and fiscal year end. Brokerage house size is the number of industries overing in a year, based on the Fama-French industry classification. Loss is an indicator variable if a firm is reporting negative net income. Firm size is the natural logarithm of total assets. Absolute accruals is the absolute difference between end cash flows, divided by total assets. Industry-year benchmark is the average level of the dependent variable by year for each of the 49 Fama-French [1996] industries. Country-year benchmark is the average level of the dependent variable by year for each of the 49 Fama-French at the firm level.

TABLE 9
Panel A: Summary statistics by firm classification for analyst portfolios that change from Multiple GAAP to IFRS

Analyst group		From Multiple	e GAAP to IFRS		
Analyst group		*			
# of observations		_	4147		
# of unique firms		1	064		
# of unique analysts			776		
Statistic		Mean	STD		
Brokerage house size		83.44	83.65		
Experience		3.35	1.78		
# of firms covered		8.68	4.04		
# of industries covered		3.66	2.50		
Firm group	Mandator	y adopters	Voluntary adopters		
# of observations	95	38	4609		
# of unique firms	7	19	345		
Statistic	Mean	STD	Mean	STD	
Error (deflated) -(First forecast)	0.495	1.389	0.431	1.054	
Error (non-deflated) - (First forecast)	2.272	18.111	2.345	22.340	
Error (deflated) - (Last forecast)	0.427	1.316	0.345	0.942	
Error (non-deflated) - (Last forecast)	2.166	18.313	1.849	18.594	
Forecast horizon (First forecast)	171.348	57.853	169.576	58.359	
Forecast horizon (Last forecast)	87.768	51.748	86.206	53.001	
Loss	0.074	0.262	0.069	0.254	
Firm size	9.024	2.457	8.825	2.089	
Absolute accruals	0.045	0.037	0.043	0.028	

Panel A presents summary statistics. 'From Multiple GAAP to IFRS' includes analysts, whose portfolios had firms following different GAAP and after mandatory IFRS adoption all firms in their portfolio follow IFRS. The sample includes voluntary and mandatory IFRS adopters. A firm-analyst pair is included in the sample only if it appears both before and after mandatory IFRS adoption. 'First forecast' uses the first forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. 'Last forecast' uses the last forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. Error (deflated) is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. Error (non-deflated) is the absolute difference between consensus forecast and actual earnings. Brokerage house size is the number of analysts working for the brokerage house of the focal analyst. Experience is the number of years the analyst has been following a firm. # of firms covered is the number of firms an analyst is covering in a year. # of industries covered is the number of industries an analyst is covering in a year, based on the Fama-French industry classification. Forecast horizon is the number of days between consensus forecast and fiscal year end. Loss is an indicator variable if a firm is reporting negative net income. Firm size is the natural logarithm of total assets. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets.

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Panel B: Mandatory IFRS adoption and information environment: information effect

Sample	First forecast				Last forecast			
Dependent variable	Error (deflated) (1)		Error (non-deflated) (2)		Error (deflated) (3)		Error (non-deflated) (4)	
Parameter	Estimate	t	Estimate	t	Estimate	t	Estimate	t
Intercept	-0.3912	-1.61	-3.4213	-1.41	-0.5183	-1.89	-3.1698	-1.35
Mandatory IFRS	0.1916	2.02	1.7946	1.83	0.1874	2.08	1.9063	2.04
Mandatory	0.1791	2.52	1.0633	1.86	0.2352	2.72	0.9659	1.58
Mandatory IFRS * Mandatory	-0.2079	-2.00	-1.5136	-1.92	-0.1912	-1.98	-1.3139	-1.74
Forecast horizon	0.0006	3.47	0.0022	1.11	0.0004	2.07	0.0036	1.16
Brokerage house size	-0.0004	-2.51	-0.0040	-1.41	-0.0004	-3.05	-0.0040	-1.48
Experience	0.0103	0.94	-0.0838	-0.43	0.0119	1.17	-0.1079	-0.51
# of firms covered	-0.0006	-0.14	0.0096	0.21	-0.0011	-0.28	-0.0095	-0.27
# of industries covered	-0.0018	-0.21	-0.0263	-0.57	-0.0041	-0.57	-0.0133	-0.27
Loss	1.0731	8.32	2.2888	2.27	0.7142	6.83	1.7080	1.70
Firm size	-0.0160	-1.34	0.1886	0.81	-0.0095	-0.86	0.1515	0.64
Absolute accruals	-0.3251	-0.51	10.6378	0.75	0.2705	0.45	10.1576	0.76
Industry-year benchmark	0.3986	2.84	-0.0039	-0.19	0.6357	3.31	0.0105	0.45
Country-year benchmark	0.9893	3.82	1.0461	2.87	1.1755	3.07	1.1003	3.50
Adj R-squared	10.4%		26.8%		8.3%		23.5%	
N	14,147		14,147		14,147		14,147	

Panel B presents OLS specifications testing the effect of mandatory IFRS adoption on forecast errors for two groups of firms. 'From Multiple GAAP to IFRS' includes analysts, whose portfolios had firms following different GAAP and after mandatory IFRS adoption all firms in their portfolio follow IFRS. The sample includes only voluntary and mandatory IFRS adopters. A firm-analyst pair is included in the sample only if it appears both before and after mandatory IFRS adoption. *Error* (deflated) is the absolute difference between consensus forecast and actual earnings, divided by absolute actual earnings. 'First forecast' uses the first forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. 'Last forecast' uses the last forecast made by an analyst for a firm within 240 days (but not less than 30 days) from the end of the fiscal year. *Error* (non-deflated) is the absolute difference between consensus forecast and actual earnings. Forecast horizon is the number of days between consensus forecast and fiscal year end. Brokerage house size is the number of analysts working for the brokerage house of the focal analyst. Experience is the number of years the analyst has been following a firm. # of firms covered is the number of firms an analyst is covering in a year, based on the Fama-French industry classification. Loss is an indicator variable if a firm is reporting negative net income. Firm size is the natural logarithm of total assets. Absolute accruals is the absolute difference between net income and cash flows, divided by total assets. Industry-year benchmark is the average level of the dependent variable by year for each country. Standard errors are robust to heteroscedasticity and clustered at the firm level.