

# Quality of IFRS Adoption\*

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## **Abstract:**

We investigate factors associated with European firms' IFRS adoption quality, using three proxies for adoption quality: early application of IAS 39, transparency of transition-year disclosure and rigor of initial application of IFRS in the income statement. In contrast to prior studies, we focus on the IFRS adoption quality in the restatement phase and explore its association with firms' accrual quality before and after IFRS adoption. We hypothesize and find that better governed firms disclose more details concerning the impact of IFRS and apply the new standards in a more rigorous manner. However, governance quality is not uniformly associated with early adoption of IAS 39. Rather, better-governed firms use the adoption flexibility in a conservative fashion. If IAS 39 has a negative impact on equity book value, well-governed firms tend to adopt the standard early and vice versa. Our results suggest that political involvement in the implementation process of new accounting standards is undesirable. Firms are likely to use carve-out options opportunistically or in ways that are inconsistent with the IFRS Conceptual Framework.

**Key Words:** International Accounting, IFRS Restatements, Corporate Governance, Disclosure, IAS39

**JEL classifications :** G14, G15, G30, M38, K22, M41

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## 1. Introduction

The introduction of International Financial Reporting Standards (IFRS) for listed companies in more than 100 countries is one of the most significant regulatory events in accounting history. For EU listed companies, European Regulation made IFRS compulsory from 2005 onwards, with the objective of enhancing the quality of financial reporting. Although the standards are issued by an independent accounting standard setter, the International Accounting Standards Board (IASB), adoption of IFRS by European countries is not a straightforward process. Each standard must pass a two-tiered endorsement mechanism involving a possible “carve-out option”, under which firms may elect to delay or avoid applying a standard. Moreover, the rigor or seriousness with which firms apply the measurement and disclosure provisions of individual standards is unlikely to be uniform, depending on firm-specific incentives and country-specific factors.

This study investigates how IFRS adoption quality differs across firms and how adoption quality relates to firm-specific governance quality, during the restatement phase from local to international standards. We focus on the quality of the IFRS adoption process itself. Companies are required to restate their financial statements from local GAAP to IFRS during the transition year<sup>1</sup>. Prior studies have primarily focused on the change in accounting quality exhibited by firms in periods following IFRS adoption (Cuijpers and Buijink, 2005; Christensen et al., 2007; Barth et al., 2008; Garcia-Osma and Pope, 2009). In contrast to these studies, we focus on the change in quality around the time of the actual adoption of IFRS.

We employ three measures of IFRS adoption quality: (1) early adoption choice of a controversial standard relating to financial instruments, IAS 39, in 2004 instead of making use of a carve-out option proposed by the EU; (2) transparency of disclosure of IFRS impact on five specific financial statement items; and (3) rigor of IFRS restatements, measured by

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<sup>1</sup> For companies with a year-end of December 31, this is 2004; for companies with a year-end differing from December 31, the transition year is 2005.

differences in the magnitudes of accruals computed under IFRS vs. local GAAP for the transition year.

For a sample of 223 European financial and nonfinancial listed firms belonging to the MSCI Pan Euro Index, we hand-collect financial statement data relating to various disclosures, the early adoption of IAS39, and accruals under local GAAP and IFRS for the transition year. All firms are mandatory adopters of IFRS. Our accrual quality measure is similar to earnings management measures used by Barth et al. (2008) and Christensen et al. (2008). However, our “same firm-year” approach facilitates the evaluation of the quality of IFRS adoption because firm-level differences between accruals under local GAAP and those under IFRS are not subject to changes in the economic environment or in disclosure incentives over time. This same firm-year approach has been used in market-based studies (e.g. Wang and Welker, 2008; Hung and Subramanyam, 2007; Clarkson et al., 2008) but not in accounting-based studies investigating the impact of IFRS on earnings quality.

Our descriptive results reveal significant differences in the quality of the IFRS restatement process across firms and countries. Only 44% of the sample firms early adopt IAS 39; on average, however, firms make extensive disclosures about the financial statement impact of IFRS adoption. We also detect a significant increase in accrual quality during the transition. Next, and perhaps more importantly, our univariate results indicate a positive relationship between corporate governance quality and IFRS adoption quality.

The lack of a clear relationship between firm governance and the early adoption of IAS 39 is further investigated in a multivariate setting. We find that well-governed firms tend to adopt IAS 39 in a conservative fashion. They adopt IAS 39 early (or voluntarily) when the application of the standard has a negative impact on equity. Our multivariate analyses confirm the significant and positive association between corporate governance quality on the one hand, and the transparency of IFRS disclosures and IFRS restatement rigor on the other.

Specifically, we find that a well-functioning board is associated with better accounting quality in the restatement phase. All results are robust to sensitivity checks and the employment of two-stage least squares methods to allow for the endogeneity of corporate governance strength and financial reporting choices.

Furthermore, we document an empirical regularity suggesting that firms' IFRS adoption rigor is not associated with firms' pre-IFRS earnings quality. We do find a positive association between IFRS adoption quality and subsequent earnings quality under IFRS. These findings are consistent with the notion that IFRS adoption represents a watershed in financial reporting in which firms with low earnings quality under local GAAP do not apply IFRS in a less serious manner. Finally, we report an increase in earnings quality after mandatory IFRS adoption, confirming earlier findings in the literature (Barth et al., 2008; Christensen et al., 2008). Both signed and unsigned abnormal accruals are significantly lower after IFRS adoption, indicating an improvement in accrual quality.

We contribute to the literature in three ways. First, unlike many prior studies, this study considers accounting quality changes around the time of IFRS adoption rather than looking at accounting quality pre- and post- IFRS adoption, employing a same-year approach. We also document disclosure precision and adoption choices that firms make during this transition period. Second, unlike previous studies that measured governance quality at the country-level, such as Daske et al. (2008), this study considers the influence of firm-specific governance quality on the application quality of IFRS. These results are important as there is considerable variation in governance quality within countries. Third, to provide evidence on the impact of mandatory IFRS adoption on accounting quality, we employ a potentially superior accrual quality measure based on Francis and Wang (2008). To the best of our knowledge this metric has not been used in the literature to document earnings quality changes around IFRS transition.

The paper continues as follows. Section 2 reviews prior literature leading to the formulation of hypotheses. Section 3 discusses the sample selection. Section 4 explains the model design. Section 5 provides descriptive statistics and univariate analyses. Section 6 presents regression results and robustness checks. Section 7 concludes.

## **2. Literature Review and Hypothesis Development**

Prior literature focusing on the benefits of voluntary IFRS adoption provides mixed results. Bartov et al. (2005) report that IFRS numbers are more value relevant than German GAAP accounting numbers. For a sample of Chinese firms owned by foreign investors, however, Eccher and Healy (2003) find that IFRS accounting measures are less value relevant than those based on Chinese GAAP. Pae et al. (2008) find that minority shareholders of EU firms with the highest agency costs are most likely to benefit from IFRS adoption. Bae et al. (2008) report that the extent to which GAAP differs between country pairs is negatively related to both the number of foreign analysts following firms and analysts' forecast accuracy; hence IFRS adoption is likely to enhance international analyst scrutiny, promoting higher quality earnings and a lower cost of equity capital.

Using a same firm-year design similar to ours, Hung and Subramanyam (2007) find that, for 80 voluntary IFRS adopters, book value restatements are value relevant but income restatements are not. Clarkson et al. (2008) find that following IFRS adoption, the value relevance of accounting numbers decreases for firms in common law countries. They find insignificant changes for firms in code law countries.

The average effects of voluntary IFRS adoption on market liquidity and cost of equity capital are reported to be modestly positive (e.g. Daske et al., 2008; Barth et al., 2005; Cuijpers and Buijink, 2005). In fact, enhanced accounting quality and significant economic effects are only observed only for “serious IFRS adopters” as opposed to “label IFRS

adopters,” where “serious IFRS adopters” are defined as those that report comparatively large decreases in the level of accruals due to IFRS adoption (Daske et al., 2007). Moreover, the extent of countries’ investor protection and legal enforcement are positively associated with the beneficial impact of changes in accounting standards (Wang and Yu, 2008; Ball et al., 2003; Burgstahler et al., 2006; Daske et al., 2008).

For a sample of German firms, Van Tendeloo and Vanstraelen (2005) and Goncharov and Zimmermann (2006) find little evidence that IFRS adoption curbs earnings management relative to German GAAP. However, using a time-constant sample of firms in 21 countries, Barth et al. (2008) find a significant increase in accounting quality (i.e. less earnings smoothing, less management of earnings towards a target and more timely loss recognition) following IFRS adoption.

On balance, prior literature suggests that there are economic benefits from adopting IFRS, and that the benefits of adoption are positively associated with the rigor with which firms implement IFRS. We extend the literature by assessing the determinants of IFRS adoption quality around the time of transition itself, using three quality measures:

(1) Early application of IAS39: Firms rigorously applying IFRS are defined as those that apply IAS39 in 2004 rather than postponing the first application to 2005 by using the proposed carve-out option, which was available following political involvement by the European Union.<sup>2</sup> Ultimately the carve-out option did not materialize and all EU firms had to adopt IAS 39 in 2005 (Brackney and Witmer, 2005).

(2) Transparency of disclosure in financial statement notes: Firms considering IFRS as a means to enhance transparency are expected to disclose more information on adoption. We

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<sup>2</sup> This proxy relates to previous studies investigating incentives to opt for the immediate application of a new accounting standard (Langer and Lev, 1993; Amir and Ziv, 1997a and 1997b; Gaeremynck and Van de Gucht, 2004).

develop a disclosure score representing the most relevant restatement items for valuation purposes (the impact of IFRS on equity, earnings, cash flows and sales).<sup>3</sup>

(3) Rigor of initial application of IFRS in the income statement: This is measured as the change in accruals due to the change from local GAAP to IFRS. In contrast to Barth et al. (2008), we use IFRS and local GAAP data from the same fiscal year (i.e. 2004). This same-firm-year research design allows us to gauge the impact of the accounting standards per se on the level of accruals without needing to control for biases introduced by firm-level changes in economic incentives over time. Firms that more rigorously apply IFRS on the transition date are expected to report larger decreases in accrual levels (Daske et al., 2008; Barth et al., 2008).

Although the three IFRS adoption quality indicators are distinct from each other, we hypothesize all of them to be positively associated with the strength of firms' corporate governance practices, after controlling for other factors associated with financial reporting incentives reported in Daske et al. (2008), i.e., firm size, profitability, financing needs, growth opportunities and ownership concentration. Compared with US firms, European firms are more likely to choose non-value maximizing governance levels because they are characterized by concentrated ownership structures (Faccio and Lang, 2002), significant private benefits for insiders (Leuz et al., 2003; Dyck and Zingales, 2004; Pae et al., 2008) and the absence of an active takeover market (Mikkelsen and Partch, 1997). Thus, stronger governance is expected to have a significant and negative impact on information asymmetry for firms that are more transparent at the time of the change from local GAAP to IFRS (Shleifer and Vishny, 1997; Larcker et al., 2007; Goodwin et al., 2009). This leads to our main hypothesis that corporate

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<sup>3</sup> Horton and Serafeim (2007) report significant differences between firms with respect to the timing of IFRS disclosures. We do not consider the timing of the IFRS restatements. Timing is not relevant in our setting since we investigate determinants and not the information content of the restatement process.

governance strength is positively associated with IFRS adoption quality during the transition phase.<sup>4</sup>

After testing this hypothesis, we explore the association between the third measure of IFRS adoption quality (i.e. the change in accruals in going from local GAAP to IFRS) and firms' accrual quality (1) before and (2) after adopting IFRS (i.e. the estimated abnormal accruals). We do not advance any directional predictions for these associations. As to the first association, arguably low agency-cost firms with low accrual quality under local GAAP are likely to seize the opportunity to effect a "clean-up," i.e., to make larger decreases in accruals on IFRS adoption so that there is less "overhang" (such as unrecognized actuarial pension losses) to write off after IFRS adoption. However, high agency-cost firms with low accounting quality under local GAAP may be less likely to consider IFRS as a vehicle for higher transparency, and therefore report a lower increase (or no increase at all) in earnings quality. It can even be argued that there is no relationship between accrual quality under local standards and IFRS adoption quality, since each firm starts with a clean sheet of paper applying IFRS 1 for the first time.

As to the second association, arguably firms adopting IFRS rigorously for the first time are likely to ascribe more value to supplying transparent information and therefore provide higher accrual quality afterwards as well. However, it is also arguable that IFRS adoption quality reflects a one-time opportunity to clean up the balance sheet, so it is unrelated to future earnings quality. Thus, for these associations we test the null hypotheses of no association and comment on the results, ex post. Further, we predict governance quality to be positively associated with future accrual quality under IFRS as previous studies have documented differential quality effects of IFRS, depending on (country-level) governance quality (e.g. Daske et al., 2008) and incentive structures (Christensen et al., 2008).

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<sup>4</sup> Our study complements previous literature reporting positive associations between governance strength and both disclosure quality and earnings quality (e.g. DeFond and Jiambalvo, 1994; Klein 2002; Karamanou and Vafeas, 2005; Peasnell et al., 2005; Marques, 2006).

### 3. Sample selection and data

The initial sample consists of companies belonging to the MSCI Pan Euro Index for the period January 1, 2005 through June 30, 2006.<sup>5</sup> From the initial sample of 299 firms, 18 US GAAP firms are deleted from the sample<sup>6</sup>; 54 firms are voluntary IFRS adopters; 3 firms were exempted from applying IFRS mandatorily and 1 firm merged during the sample period. This procedure results in a final sample of 223 firms across 15 countries.<sup>7</sup> Early IFRS adopters are eliminated for three reasons: (1) Some firms already apply IFRS (and IAS) for long periods, making it costly to track back the annual reports. (2) Voluntary adopters were not required to disclose detailed restatement information and did not face the option to apply IAS39. (3) Previous research suggests that there are significant differences between voluntary and mandatory IFRS applicators. Table 1 shows the distribution by country as well as the split between financial and nonfinancial firms. As expected, the number of nonfinancial firms (152) is significantly larger than the number of financial firms (71). The UK has the largest number of observations in the sample (76) followed by France (44), Italy (21) and Spain (19). Germany, Austria and Switzerland lose a lot of observations because of the elimination of voluntary adopters.

**Insert Table 1 about here**

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<sup>5</sup> The MSCI Pan-Euro Index contains securities with a free float-adjusted market capitalization of € 4,348 billion, selected from 16 European countries.

<sup>6</sup> These are firms that ONLY report under US GAAP. Firms that report under both IFRS and US GAAP are included in the sample.

<sup>7</sup> Our sample selection criteria limit our analysis to large firms only. Although we are aware of this external validity problem, we argue that the large firms in our sample represent a substantial fraction of the market value of all European public companies. In that sense, our results matter a great deal. Furthermore, the variance in corporate governance practices between firms is smaller in large than in small companies. If we find a relationship between governance and IFRS restatement quality for those large firms, it can be expected that the relationship will also exist and will probably be stronger for smaller companies.

The transition year 2004 is used in a same firm-year design to investigate the determinants of IFRS adoption quality and its variation across firms. This is the only year for which both local and IFRS accounting numbers are available reflecting the same economic events. This information is hand-gleaned from data in the 2005 financial statement notes. This is the actual IFRS adoption year.<sup>8</sup>

Corporate governance data for 2004 come from the Risk Metrics corporate database (formerly the Deminor database), which contains detailed corporate governance information for firms in the MSCI Pan Euro Index.<sup>9</sup> The rating is based on more than 300 corporate governance criteria, measured in 2004. Appendix A provides a listing of the items included in the corporate governance score. Aggregated data as well as more detailed data on individual corporate governance items (e.g. audit committee, board independence and functioning of the board) are available.

#### **4. Model development**

To test the hypothesis that IFRS adoption quality is positively associated with governance strength at the firm-level, we use three regression models in which corporate governance strength (CORPGOV) is an explanatory variable for the three IFRS adoption quality proxies (QRIFRS) as follows:

$$QRIFRS = \alpha + \beta_1 CORPGOV + \beta_2 \text{Control variables} + \varepsilon \quad (1)$$

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<sup>8</sup> For firms not voluntarily adopting IFRS with a fiscal year-end not equal to 31st of December, the pre-adoption year is 2004, the transition year is 2005 and the adoption year is 2006. Henceforth we refer to the pre-adoption, transition and adoption year as being 2003, 2004 and 2005 for all firms in the sample.

<sup>9</sup> Deminor Ratings have been used in prior studies such as Bauer et al. (2004), Bozec et al. (2007), Florou et al. (2007) and Van der Bauwhede and Willekens (2008).

In equation (1), CORPGOV represents the company's corporate governance rating and appears in all three models as the main explanatory variable of interest.<sup>10</sup> Consistent with previous literature, we predict a positive coefficient for CORPGOV since governance strength is negatively associated information asymmetry between the firm and outside investors (Klein, 2002; Karamanou and Vafeas, 2005; Larcker et al., 2007). The dependent variable QRIFRS is either (1) early adoption of IAS39 (EARLYADOP), (2) disclosure quality of restatements (DISCL) or (3) rigor of the restatement (DIFFACC<sub>REST</sub>). Each of these adoption quality measures is described in detail below, along with the accompanying control variables.

### ***IFRS adoption quality measure #1: EARLYADOP***

The first measure of IFRS adoption quality is EARLYADOP, an indicator variable taking the value 1 if a firm voluntarily adopts IAS 39 in 2004 and 0 the firm delays IAS 39 application until 2005. The first control variable, IMP(IAS39), proxies for the impact or the materiality of changes in accounting numbers due to applying IAS 39 (Langer and Lev, 1993; Amir and Ziv, 1997a and 1997b). It is defined as the impact of IAS 39 adoption on transition-year book value of equity, scaled by market value of equity (at the end of 2004). As the impact of IAS39 becomes more material, early adoption of the new standard is more likely. To control for the materiality of IFRS restatement in total, we include the unsigned impact of IFRS adoption on net income, ABS( $\Delta$ NI), where  $\Delta$ NI is defined as transition year net income under IFRS minus net income under local GAAP, scaled by market value of equity. We also include the unsigned impact of IFRS adoption on book value of equity, ABS( $\Delta$ BVE), where  $\Delta$ BVE is defined as transition year book value of equity under IFRS minus book value of equity under local GAAP, scaled by market value of equity.

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<sup>10</sup> Results are robust to using 2004 or 2005 ratings. This is expected since corporate governance tends to be sticky over time. We prefer 2004 figures to mitigate endogeneity. For 10 observations we had to use the corporate governance rating of 2005 because the 2004 rating was not available. Regression results remain qualitatively the same without those 10 observations.

The fourth control variable is a country-level measure of investor protection rights, IPR, which is the anti-director rights index from LaPorta et al. (1998). This index is based on the presence of six elements of investor protection in a country's corporate legislation. IPR thus controls for country-level incentives for firms to rigorously apply IFRS (Ball et al., 2003; Burgstahler et al., 2006; Daske et al., 2008; Wang and Yu, 2008). In strong legal environments the IFRS restatement process is expected to be higher in quality. Firm-level incentives are captured by firm size (LNMV), ownership diffusion (OWNDIFF), profitability (LOSS), growth opportunities (MTBV), the age of the firm (LNAGE) and whether the firm also reports under USGAAP or not (Daske et al., 2008; Raffournier, 1996)<sup>11</sup>. Firms that are larger and have a more dispersed ownership are expected to be more likely to commit to transparency in the IFRS change process. In contrast to prior studies, we do not control for auditor type because all sample firms employ a Big-4 auditor. The early adoption model for IAS 39, estimated using a logit model, is as follows:

$$\begin{aligned} \text{EARLYADOP}_i = & \alpha + \beta_1 \text{CORPGOV}_i + \beta_2 \text{IMP(IAS39)}_i + \beta_3 \text{IPR}_c + \beta_4 \text{ABS}(\Delta \text{NI})_i \\ & + \beta_5 \text{ABS}(\Delta \text{BVE})_i + \beta_6 \text{LNMV}_i + \beta_7 \text{LNAGE}_i + \beta_8 \text{LOSS}_i \\ & + \beta_9 \text{MKTBV}_i + \beta_{10} \text{OWNDIFF}_i + \beta_{11} \text{USGAAP}_i + \varepsilon_i \end{aligned} \quad (2)$$

### ***IFRS adoption quality measure #2: DISCL***

The second measure of IFRS adoption restatement quality is DISCL, an index of the transparency of companies' disclosure of the impact of IFRS adoption. DISCL is based on the presence or absence of the following five quantitative disclosures of the restatement impact of IFRS adoption: (1) net income in 2004; (2) book value of equity at the beginning of 2004; (3)

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<sup>11</sup> To make figures comparable between financial and other firms, a loss dummy and MTBV are preferred above ROA and Growth in Sales to capture performance and growth, respectively. However, results remain the same when replacing both variables for alternatives.

book value of equity at the end of 2004; (4) operating cash flow for 2004; (5) total revenues or sales for 2004<sup>12</sup>.

Net income and equity are introduced in the disclosure index because, under IFRS 1, firms must provide detailed information on the restatement of these items. Disclosure of quantitative information concerning the restatement of cash flows is largely voluntary but these items could be important to investors as an alternative performance measure. To earn a score of 1 for a particular item, a firm must disclose the differences between the IFRS and the previous local GAAP number for each specific international standard giving rise to the difference. As the sales variable is only relevant for the nonfinancial firms, two disclosure variables are created. DISCL5 includes the sales restatement and only applies to the nonfinancial sample. DISCL4 without the sales restatement applies to the total sample. Recall that DISCL4 and DISCL5 do not focus on the overall increase in disclosure due to the introduction of IFRS. Rather, they focus on the disclosure of the IFRS impact of the restatement phase itself. During a restatement phase, the availability of information about the IFRS impact on the equity, earnings, cash flows and sales is highly relevant for investors.

In the disclosure model, control variables are similar to those in the early adoption model except for the omission of the IMP(IAS39) and the addition of industry dummies which are found to be significantly associated with disclosures in prior literature (Raffournier, 1996). The other control variables are based on previous literature (Raffournier, 1995; Brown et al., 1999; Holland, 2005); they control for firms' incentives to be more transparent at the time of the switch from local to international standards. The OLS regression specification for testing the disclosure model is as follows:

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<sup>12</sup> In the disclosure index equity is considered twice because both beginning and end of the year book equity should be restated according to IFRS. Previous evidence has also shown that the restatement to IFRS has the largest impact on equity.

$$\begin{aligned}
DISCL_i = & \alpha + \beta_1 CORPGOV_i + \beta_2 IPR_c + \beta_3 ABS(\Delta NI)_i + \beta_4 ABS(\Delta BE)_i \\
& \beta_5 LNMV_i + \beta_6 LNAGE_i + \beta_7 LOSS_i + \beta_8 MTBV_i \\
& + \beta_9 OWNDIFF_i + \beta_{10} USGAAP_i + \sum \beta_j DINDUSTRY_j + \varepsilon_i
\end{aligned} \tag{3}$$

### ***IFRS adoption quality measure #3: DIFFACC<sub>REST</sub>***

Our third measure of adoption quality assesses the rigor of IFRS restatement in the income statement. This is represented by DIFFACC<sub>REST</sub>, the signed difference between the magnitude of accruals computed under IFRS and the magnitude of accruals computed under local GAAP, both scaled by total assets.<sup>13</sup> Prior literature implies that smaller (more negative) values of DIFFACC<sub>REST</sub> indicate more rigorous application of IFRS (Leuz et al., 2003; Barth et al., 2008; Daske et al., 2008). Unlike those studies, this study uses a same firm-year research design in the year of the restatement (Hung and Subramanyam, 2007; Clarkson et al., 2008) to proxy the IFRS restatement quality of the accruals. The chief advantage of this approach is that the quality measure is immune from confounding influences over time, so that differences in accruals can be totally attributed to difference in accounting standards<sup>14</sup>.

In contrast to Leuz et al. (2003), Barth et al. (2008) and Garcia-Osma and Pope (2009), we do not use the ratio of the standard deviation of net operating income (deflated by assets) divided by the standard deviation of operating cash flows (deflated by total assets) or the Spearman Rank correlation changes in accruals and changes in cashflows as proxies for earnings smoothing. The reason is that the impact of IFRS in the restatement process is estimated on firm level and is then linked to firm governance. This also explains why timely loss recognition as well as value relevance are not considered.

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<sup>13</sup> We scale by total assets in the current instead of previous year because these are available under IFRS. Scaling both accrual measures with lagged total assets (under local standards) does not alter results. As a robustness check, we redo all analyses scaling by the absolute value of operating cash flows. Again, results remain qualitatively the same.

<sup>14</sup> Consistent with Hribar and Collins (2002), accruals are calculated as net income minus net operating cash flows scaled by total assets. Accruals under IFRS are based on net income figures excluding any influence from IAS39.

Control variables for reporting incentives to supply high quality information are similar to those used in models (2) and (3) except for sales growth and control variables specific to accrual quality models. The increase in sales is preferred as the growth measure because the link to the level of accruals is strong.  $DIFFACC_{REST}$  is not considered for financial firms. To control for prior performance we introduce lagged (i.e., preadoption year) operating cash flows scaled by total assets ( $CFO(PREADOP)$ ). Worse performing firms are more likely to use income increasing accruals (Bowen et al., 2008; Hibron and Nichols, 2007). Further, we include lagged accruals proxies for earnings quality under local GAAP. Hence, model (4) is as follows:

$$\begin{aligned}
 DIFFACC_{REST_i} = & \alpha + \beta_1 CORPGOV_i + \beta_2 IPR_c + \beta_3 CFO(PREADOP)_i \\
 & + \beta_4 ACC(PREADOP)_i + \beta_5 LNMV_i + \beta_6 SLGR_i \\
 & + \beta_7 OWNDIFF_i + \beta_8 USGAAP + \varepsilon_i
 \end{aligned} \tag{4}$$

**Insert Table 2 about here**

## 5. Descriptive Statistics and Univariate Analyses

Panel A of Table 2 contains descriptive statistics for the variables described above. We note large differences across firms for the three IFRS adoption quality proxies. Only 44% of sample firms early-adopt IAS39. The mean of  $DISCL4$  is 2.9 out of a possible 4.0. 64 firms obtain a score of 4.0, mainly French and British firms. When the sample is limited to the nonfinancial firms, the mean of  $DISCL5$  is 3.82.  $DIFFACC_{REST}$  has a negative mean (median) of  $-0.75\%$  ( $-0.50\%$ ) of total assets, indicating that firms generally report lower accruals under IFRS than under local GAAP.

The sample consists of large firms with a mean (median) market capitalization of 24 (12) billion US dollars. The mean (median) value of  $CORPGOV$  is only 25.09 (24.80) out of a possible 40, with a large standard deviation (5.89). This indicates considerable variation in the sample in terms of overall governance strength. On average, IFRS adoption yields a 1.26 %

increase in net income ( $\Delta NI$ ) and a 0.95% decrease in book value of equity ( $\Delta BVE$ ).<sup>15</sup> The mean of  $IMP(IAS39)$ , the impact of applying IAS 39 on transition-year book value of equity for both early and late adopters, is slightly positive (0.67%) while the mean, unsigned impact is 2.4%. As for other control variables, the average firm exhibits a market to book value of 3.18, 7% of the firms report losses and only 3% of the companies previously reported under US GAAP.

Panel B in Table 2 provides country-level statistics on restatement quality, governance indicators and restatement magnitudes. We observe large differences across countries for all IFRS restatement quality variables. The likelihood of early adoption of IAS39 is low in the UK (0.32) and Sweden (0.23); however, it is high in Finland (1.00) and Southern European countries. Even though some disclosure items are compulsory, Southern European companies exhibit low DISCL scores. Finally, in Germany accruals are slightly larger under IFRS than under local standards. This results in a positive DIFFACC (0.0049). In contrast, for the UK and Ireland the median difference is negative (-0.0149 and -0.0042).

The following two columns depict differences between countries for  $\Delta NI$  and  $\Delta BVE$ . Interestingly, IFRS adoption leads to higher earnings in most countries. Book value of equity decreases in some countries (e.g. in the Netherlands and the UK) and increases in others (e.g. all Scandinavian countries). Overall, we conclude that IFRS restatement quality and the impact on equity and earnings significantly varies across countries. Panel B also indicates that CORPGOV is higher in common law than code law countries. Dutch, French and Scandinavian companies also exhibit higher CORPGOV. Swiss, Portuguese and Greek firms score lower on average.

Panel C in Table 2 shows that 73% of sample firms late-adopt IAS 39 when the impact on book value of equity is negative but only 42% late-adopt when the impact is positive. These

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<sup>15</sup> We scale all IFRS adoption measures by market value of equity (Easton and Sommers, 2003) instead of an index (Weetman and Gordon, 2006).

statistically significant differences in early adoption rates are consistent with firms preferring to delay reporting unfavorable changes in equity and leverage<sup>16</sup>. In other words, the choice of application seems to exhibit opportunism. There are no significant differences in the percentage of late adoption in the total sample vs. the subsample of nonfinancial firms.

Panel D of Table 2 illustrates that differences in disclosure behavior are mostly due to not reporting the IFRS impact on net income, operating cash flows and sales. The voluntary nature of these disclosures probably explains why less than one third of the total sample discloses the IFRS effect on operating cash flows, but not why 15% of the firms do not report the compulsory effect on net income.

Panel E of Table 2 depicts how earnings quality changed moving from local to IFRS based on total and abnormal accrual measures.  $DIFFACC_{REST}$  consists of the accruals under local GAAP  $|ACC_{Local(04)}|/|TA_{Local(04)}|$  and accruals under IFRS  $|ACC_{IFRS(04)}|/|TA_{IFRS(04)}|$ . As expected, mean and median accruals are smaller in magnitude under IFRS than under local GAAP (one-sided p-values are 0.072 and 0.000 respectively). As in Barth et al. (2008), the accruals under local GAAP ( $|ACC_{Local(04)}|/|TA_{Local(04)}|$ ) are significantly lower in comparison with IFRS accruals in the adoption year  $|ACC_{IFRS(05)}|/|TA_{IFRS(05)}|$ . When the decrease in accruals is compared to the decrease using the same firm-year design, the larger drop in accruals (from 0.069 to 0.051 vs. from 0.069 to 0.061) shows that confounding effects can lead to erroneous inferences about changes over time. Finally, a more refined measure of earnings management is developed by computing abnormal accruals measured as in Francis and Wang (2008) and DeFond and Park (2001)<sup>17</sup>. The highly significant differences between

<sup>16</sup> In addition to the effect on equity, we also capture the effect on equity/debt. Results are qualitatively the same.

<sup>17</sup> The abnormal accruals using the DeFond and Park (2001) measure are computed as:

$$ABNACC_t = Total\ Accruals_t - Predicted\ Accruals_t, \text{ where } Predicted\ Accruals_t = ([Sales_t \times (Current\ Accruals_{t-1} / Sales_{t-1})] - [Gross\ PPE_t \times (Depreciation_{t-1} / Gross\ PPE_{t-1})]) / Total\ Assets_{t-1}$$

Local GAAP accruals are based on 2003-2004 data; IFRS accruals are based on 2004-2005 data.

Negative (positive) abnormal accruals evince income-decreasing (income-increasing) earnings management. Higher unsigned abnormal accruals signify lower predictable accruals and thus more earnings management. Hribar and Nichols (2007) argue that signed accruals are a better measure of earnings quality than unsigned accruals.

signed accruals indicate less income increasing earnings management under IFRS. Differences between unsigned accruals imply a higher predictability of accruals and thus less earnings management in general.

### **Insert Tables 3 and 4 about here**

Table 3 provides correlation coefficients for all relevant variables described above. As expected, CORPGOV is positively correlated with DISCL and negatively with the signed  $\text{DIFFACC}_{\text{REST}}$ . Contrary to expectations, the dummy variable for early adoption (EARLYADOP) correlates negatively to CORPGOV.

Table 4 provides further descriptive information on univariate associations between corporate governance (CORPGOV) and the three adoption quality measures (EARLYADOP, DISCL, and  $\text{DIFFACC}_{\text{REST}}$ ). Results are given for the total sample as well as the sample of nonfinancial firms. In this table, we split the total sample of 223 firms arbitrarily into four groups of 56 firms, depending on CORPGOV: Group 1 contains the 25% worst governed firms (mean CORPGOV = 16.58) and Group 4 contains the 25% best-governed ones (mean CORPGOV = 32.23). Contrary to expectations, we do not find a significant relationship between corporate governance and the early adoption of IAS39 for the total sample. For the nonfinancial sample, firms with worse governance apply IAS39 in a timelier manner<sup>18</sup>. With regard to DISCL4, the significant Chi-square value for both samples illustrates that disclosure scores increase significantly when moving from Group 1 to Group 4. Finally, we notice that  $\text{DIFFACC}_{\text{REST}}$  becomes significantly larger in magnitude going from Group 1 to 4. Moreover,

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Accrual quality can also be compared by computing the correlation between cash flows and accruals. The Pearson and rank correlations between signed accruals and cash flows are more negative under local GAAP than under IFRS, indicating less smoothing activity. However, as in the current study the link between corporate governance and IFRS quality is investigated, we do not use this proxy further.

<sup>18</sup> A more detailed analysis shows that most British firms (which usually have high quality governance) do not adopt IAS39 in an early fashion.

DIFFACC<sub>REST</sub> is significantly different from zero only for the two highest governance classes. These results suggest that better governed firms engage in a more rigorous or serious application of IFRS for the first time than worse corporate governance firms (p=0.000).

## 6. Multivariate analyses

### *Early Adoption Model*

Table 5 contains regression results of the early adoption logit model. EARLYADOP is the dependent variable. We report results on the total sample (Models 1-4) as well as for both subsamples of nonfinancial (Model 5) and financial firms (Model 6). Model (1) is a control model without CORPGOV as an explanatory variable. The probability of early-adopting IAS 39 is positively associated with IAS 39 impact (p = 0.000), confirming the result in Panel C of Table 2. Restatement value of equity (p = 0.011) is negatively associated with EARLYADOP. Apparently, firms that already face reporting significant changes in their book value of equity because of IFRS transition are less likely to pre-adopt IAS39. In Model (2), CORPGOV has a negative but insignificant coefficient, suggesting that stronger governance is not associated with early adoption in general.

**Insert Table 5 about here**

In Model (3) the unsigned impact of IAS39 is replaced by a dummy variable, D\_IMP(IAS39), which equals 1 if the firm experiences a negative impact on its book value of equity from applying IAS39 and zero otherwise. An interaction variable between CORPGOV and D\_IMP(IAS39) measures how governance strength incrementally influences the early adoption choice for firms facing a negative effect from IAS 39. The unsigned IAS39 impact is retained in the model to investigate whether the size still matters, given a positive or negative impact of IAS39. The negative coefficient for D\_IMP(IAS39) (p=0.000) implies that firms

facing a negative impact of IAS 39 on equity tend to postpone the application of the standard. Consistent with our hypothesis, the significantly positive coefficient for the interaction variable implies that governance strength incrementally enhances early adoption probability for firms negatively impacted by the standard ( $p=0.003$ ).

In Model (4), we test a two-stage least square model (2-SLS) to allow for the possible endogeneity of IFRS adoption quality and corporate governance (Larcker et al., 2007; Zhao and Chen, 2008). We choose country-level characteristics (represented by country dummy variables) as instruments, similar to Klapper and Love (2004).<sup>19</sup> In the second stage, CORPGOV is replaced by its predicted value from the first stage. IPR is not included in the second stage because collinear country effects were already introduced as instruments in the first stage. Results of Model (4) with control for possible endogeneity problems are similar to the results found in Model (3). Models (5) and (6) indicate a significant effect of IMP(IAS39) on the choice of application of IAS39. The coefficient on the interaction term with corporate governance is significantly positive for both samples and larger in magnitude for in the financial sample. Well-governed financial as well as nonfinancial firms prefer to report conservatively by choosing early application of IAS39 when the impact of IAS39 conveys bad news.

### ***Disclosure model***

Table 6 contains the results of estimating the disclosure-quality model for the total sample as well as for both subsamples separately. As the restatement of sales from local

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<sup>19</sup> The reduced form equation from the first stage looks as follows:

$$\text{CORPGOV}_i = \alpha + \sum \beta_c \text{COUNTRYDUMMY}_c + \varepsilon_i$$

A good instrument is typically strongly correlated with the endogenous variable, but not with the error term of the structural equation. In practice, it is impossible to find a perfect instrument: either the instruments are not exogenous (semi-endogenous instruments) or they have a low correlation with the endogenous variable (weak instruments). We prefer country dummies to alternatives because they are exogenous and prove to be a strong instrument ( $R^2$  is about 0.65 in the first stage).

GAAP to IFRS is not available for the subsample of financial firms, results are given using DISCL4 as the dependent variable for the total sample.

In the control specification (1), the level of disclosure in the IFRS restatement phase is positively associated with institutional investor rights ( $p=0.055$ ) and firm size ( $p=0.027$ ). In Models (2) and (3), as hypothesized, CORPGOV is positively associated with disclosure quality and is robust to two-stage least squares estimation. Finally, Model 4 and 5 confirm the positive impact of governance on the extent of disclosure for financial as well as nonfinancial firms. If the disclosure score is extended from 4 to 5 items, the association between governance and disclosure in the restatement phase becomes even stronger. This is expected, given the voluntary nature of the IFRS impact on sales disclosure.

**Insert Table 6 about here**

### ***Rigorous application model***

The last proxy used to assess adoption quality in the restatement phase is the change in accruals employing a same firm-year design for the subsample of nonfinancial firms. In this model we winsorize at the 1% level.<sup>20</sup> Recall that higher values of DIFFACC<sub>REST</sub> proxy for more earnings management and less rigorous first-time application of IFRS. Regression results are presented in Table 7. In Model (1), investor protection rights are positively associated with restatement rigor ( $p = 0.004$ ). Some control variables are significantly associated with restatement rigor such as firm size ( $p=0.044$ ) and sales growth ( $p=0.072$ ). Model (2) includes corporate governance strength as an explanatory variable. As hypothesized, the coefficient on CORPGOV is negative, but only marginally significant ( $p=0.081$ ). Model (3) is a two-stage least squares formulation which uses the predicted value

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<sup>20</sup> We choose to winsorize the data instead of dropping extremes because the sample contains a limited number of observations. However, our results are not sensitive to the inclusion or exclusion of extreme observations of DIFFACC<sub>REST</sub>.

of CORPGOV as an explanatory variable. This formulation yields a significantly negative coefficient for CORPGOV ( $p = 0.015$ ).

**Insert Table 7 about here**

***Association between IFRS adoption quality and pre-and post-adoption accrual quality***

As explained in Section 2, we are interested in exploring the association between IFRS adoption quality and pre- and post-adoption accrual quality. Panel A of Table 8 regresses  $DIFFACC_{REST}$  on  $ABNACC_{Local}$ . In Panel B we regress  $ABNACC_{IFRS}$  on  $DIFFACC_{REST}$ . Abnormal accruals under local standards are measured using the approach of Francis and Wang (2008). Explanatory variables are the same as in Table 7. Since we do not make any directional predictions for  $ABNACC_{Local}$ , we test the null hypotheses of no association Panel A. We expect that firms applying IFRS in a rigorous fashion initially will continue to do so afterwards (i.e. we expect a positive correlation between  $ABNACC_{IFRS}$  and  $DIFFACC_{REST}$ ).

In Table 8 we find that  $DIFFACC_{REST}$  is not associated with  $ABNACC_{Local}$ .<sup>21</sup> However,  $ABNACC_{IFRS}$  is positively associated with  $DIFFACC_{REST}$ . These results are consistent with the notion that IFRS adoption represents a watershed in financial reporting in which firms with low accrual quality under local GAAP do not exhibit lower IFRS adoption quality, but subsequent accrual quality under IFRS is positively associated with IFRS adoption quality. We caution, however, that this second association is characterized by substantial randomness since  $R^2$  is low by conventional standards. Corporate governance quality was previously found to be significantly associated with first-time IFRS adoption quality ( $p=0.003$ , see Panel A). This effect disappears, however, when relating governance quality to subsequent accrual quality, although we still have a negative coefficient ( $p=0.210$ ).

**Insert Table 8 about here**

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<sup>21</sup> In this case the inclusion or exclusion of outliers does have a significant effect on the estimated coefficients. We decide to leave the top and bottom observation out of the analysis. On top, one observation disappear because the firm ceased to exist in 2005. This results in a sample of 149 observations.

### ***Robustness checks***

DIFFACC<sub>REST</sub> can depend on the structure of local standards as well as on firm incentives. If local standards differ significantly from IFRS, differences in accruals are likely to be larger. Therefore, we employ a two-stage approach. In the first stage DIFFACC<sub>REST</sub> is regressed on the number of standards for which local GAAP differs from IFRS plus the number of standards omitted in local GAAP. Data are obtained from a survey executed by auditing firms (GAAP, 2000 and 2001). In the second stage the residual from the first stage (i.e. when the change in accruals not due to the difference in standards) is regressed on governance quality. Results remain qualitatively the same.

Further, we use legal origin (Durnev and Kim, 2005) and investor protection rights (IPR) as alternative instruments to deal with the possible endogeneity problem between accounting quality and corporate governance. In both cases, results are similar.

Next, we investigate how the four categories of corporate governance quality each explain variation in restatement quality. The governance ratings contain criteria from 4 categories of governance mechanisms: (1) shareholders' rights and duties, (2) range of takeover defences, (3) board structure and functioning and (4) disclosure of corporate governance. Overall, we conclude that there is not one particular aspect of governance that outperforms the others in explaining variation across firms in terms of restatement quality of IFRS. Within the third category, the board functioning indicator appears to be the one providing the most consistent results across the three restatement quality items, scoring better than audit committee, board size and board independence.

A last robustness check is done by decomposing the disclosure transparency into voluntary and compulsory components. As expected, firm governance has an especially large impact on voluntary disclosure. However, for the financial firms, stronger governance is also associated with disclosure of required items.

## 7. Conclusion

This study investigates factors associated with European firms' IFRS adoption quality, using three proxies for adoption quality: early application of IAS39, transparency of transition-year disclosure in financial statement notes, and rigor of initial application of IFRS in the income statement. Although the same firm-year design has been used in market-based studies, it has not been used to date in accounting-based studies measuring the impact of mandatory IFRS transition on accounting quality.

We predict and document an important role of governance quality (at the firm and country level), as firms have considerable discretion in how they adopt IFRS for the first time. Further, we explore the associations between IFRS adoption quality and firms' accrual quality before and after IFRS adoption. The investigation is facilitated by the characteristics of the European institutional environment, viz., a two-tier system of accepting IFRS standards, which allows the possibility of "carve-out" options in adopting IFRS; concentrated ownership structures; and considerable variation in corporate governance strength across firms. The use of hand-collected data for the transition year 2004 enables us to investigate differences between local GAAP and IFRS accounting numbers, independent of changes in the economic and information incentives over time.

We hypothesize and find that better governed firms exhibit greater transparency of disclosure and initial application rigor of IFRS, after controlling for other factors that are likely to be associated with adoption quality. However, governance strength is not uniformly associated with early IAS 39 adoption. Rather, we find that well governed firms use adoption flexibility in a conservative manner. If IAS 39 has a negative impact on equity book value or

leverage, these firms tend to adopt the standard early; when it has a positive impact, they tend to postpone adoption.

We document that firms' IFRS adoption rigor is unassociated with pre-IFRS accrual quality. We find that post-IFRS accrual quality is positively associated with IFRS adoption rigor. These findings are consistent with the notion that IFRS adoption represents a watershed in financial reporting in which firms with low accrual quality under local GAAP do not exhibit lower IFRS adoption quality. We conjecture that the reason for this is that IFRS affords companies a fresh start with regard to their accounting quality. Furthermore, we find that IFRS adoption has significantly improved firms' accounting quality, both during the transition period as well as in the subsequent period.

Our findings add to the literature that is consistent with IFRS adoption making financial statements more useful as hypothesized in the IFRS conceptual framework. However, our results suggest that carve-out options hinder comparability under IFRS, since firms used the IAS 39 carve-out in a conservative way. Such conservatism is inconsistent with the conceptual framework's principle that information should be unbiased to ensure reliability and neutrality (Barth, 2008).

Caution is warranted in interpreting the results for a number of reasons. First, the external validity of these findings could be questioned since the sample comprises only large, listed companies. Second, IFRS adoption quality is measured for a sample of mandatory compliers; prior literature indicates that improvements in accounting quality may differ between voluntary and compulsory applicers. However, using a homogenous sample of large and compulsory adopters of IFRS is likely to work against us finding significant results. Third, while measures for the early adoption of IAS39 and the rigor of IFRS application can be reasonably well captured with proxy variables, our disclosure quality measure only considers a limited number of disclosure items. However, we attempt to measure disclosure of the most

relevant accounting numbers. Fourth, the endogenous character of our governance variables is a potential limitation. The absence of well-specified theory and the difficulty of identifying strictly exogenous instruments make it difficult to address endogenous associations. We mitigate these concerns by employing two-stage least squares procedures. Many of our results remain similar to those without any adjustment for endogeneity. Finally, the study is done in the EU, where a unique, two-tiered system of IFRS endorsement exists. Future research could compare IFRS adoption quality in different institutional environments such as Canada, where the intent is to adopt all IFRS standards without modification.

Despite these caveats, our results should be of interest to regulators and policy makers in many countries. The study suggests that IFRS adoption represents an improvement in financial reporting since we find no association between pre-adoption accrual quality and IFRS adoption quality, but IFRS adoption quality is positively associated with post-adoption accrual quality. Furthermore, we find that IFRS adoption quality is positively associated with governance strength at the firm-level. Hence, for countries that have not yet adopted IFRS, stronger governance guidelines are likely to promote higher quality adoption, and disclosures of governance measures are likely to be useful to analysts and other financial statement readers in inferring the reliability of the initial IFRS numbers. Our results also suggest that political involvement in the IFRS adoption process decreases comparability of financial information since firms are likely to use carve-out options opportunistically or in ways that are inconsistent with the IFRS Conceptual Framework.

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## Appendix A: Structure of the corporate governance index

<b>GENERAL PRINCIPLES</b>	
<b>I. Legal basis and compliance (1)</b>	
1. Comply-or-explain principle	Yes / No
<b>II. Scope (1)</b>	
2. Encouraged to all companies	Yes / No
<b>BOARD OF DIRECTORS</b>	
<b>III. Mission of the board (5)</b>	
3. Shareholder value maximization	Yes / No
4. Long-term viability of the company	Yes / No
5. Good relationship with stakeholders	Yes / No
6. Effective monitoring of management	Yes / No
7. Compliance with laws	Yes / No
<b>IV. Key functions of the board (6)</b>	
8. Guide corporate strategy	Yes / No
9. Monitor and replace key executives	Yes / No
10. Review remuneration	Yes / No
11. Manage potential conflicts of interest	Yes / No
12. Guard integrity of financial reporting	Yes / No
13. Increase effectiveness of governance practices	Yes / No
<b>V. Independence of the board (3)</b>	
14. Separation of chairman and CEO	Yes / No
15. Mix of inside and outside directors	
Non-executive directors	None / minimum number / majority
Independent directors	None / minimum number / majority
16. Stock options not allowed as compensation	Yes / No
<b>BOARD COMMITTEES</b>	
<b>VI. Recommended committees (3)</b>	
17. Appointment committee	Yes / No
18. Remuneration committee	Yes / No
19. Audit committee	Yes / No
<b>VII. Key functions of the committees (7)</b>	
20. Appointment committee: propose appointment of directors	Yes / No
21. Remuneration committee: recommend remuneration for directors	Yes / No
22. Audit committee: report to the board	Yes / No
23. Audit committee: hear the company auditors	Yes / No
24. Audit committee: ensure appropriateness and consistency of accounting policies	Yes / No
25. Audit committee: verify accuracy of internal procedures	Yes / No
26. Audit committee: appoint auditor and determine audit fee	Yes / No
<b>VIII. Independence of the committees (6)</b>	
27. Appointment committee: non-executive directors	None / minimum number / majority
28. Appointment committee: independent directors	None / minimum number / majority
29. Remuneration committee: non-executive directors	None / minimum number / majority
30. Remuneration committee: independent directors	None / minimum number / majority
31. Audit committee: non-executive directors	None / minimum number / majority
32. Audit committee: independent directors	None / minimum number / majority
<b>SHAREHOLDERS</b>	
<b>IX. Shareholders' protection (4)</b>	
33. Equal treatment of shareholders	Yes / No
34. One share/one vote	Yes / No
35. No anti-take-over devices	Yes / No
36. Proxy voting allowed	Yes / No

**X. General meeting (4)**

37. Select new directors	Yes / No
38. Participate in decisions concerning fundamental changes	Yes / No
39. Decide on distribution of profits	Yes / No
40. Ask questions	Yes / No

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**DISCLOSURE**

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**XI. Quality (2)**

41. Use high quality accounting standards	Yes / No
42. Audited by an independent auditor	Yes / No

**XII. Timing (1)**

43. Timely disclosure of relevant information	Yes / No
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**XIII. Contents (7)**

44. Financial situation	Yes / No
45. Performance	Yes / No
46. Ownership	Yes / No
47. Governance	Yes / No
48. Relevant interests of directors	Yes / No
49. Composition of the board	Yes / No
50. Remuneration of key executives	Yes / No

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## Appendix B: Variable Definitions

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EARLYADOP	Dummy variable taking the value of 1 for firms early adopting IAS39, 0 otherwise.
DIFFACC <sub>REST</sub>	$ACC_{IFRS(04)} = \frac{ ACC_{IFRS(04)} - ACC_{LocalG(04)} }{TA_{LocalG(04)}}$ <p>ACC<sub>IFRS(04)</sub> equals NI<sub>IFRS(04)</sub> (restated net income for transition year 2004, before applying IAS39), minus CFO<sub>IFRS(04)</sub> (restated net cash flow from operating activities).</p>
DISCL	Disclosure measure equal to the number of restatement items, minus one, for which detailed IFRS restatement information is provided from a list of five (net income of transition year, book value at the end of pre-adoption year, book value at end of transition year and operating cash flow of transition year). The maximum score is 5.
CORPGOV	Firm specific corporate governance rating from Risk Metrics (formerly Deminor), based on a grid of 300 criteria. The maximum score attainable is 40 (please see Appendix A for details).
IPR	Anti-Director Rights index from La Porta et al. (1998). This index measures investor protection at the country level, based on the presence of six elements of investor protection in a country's corporate legislation.
ΔNI	Transition year net income under IFRS minus net income under local standards, scaled by market value of equity.
ΔBVE	Transition year book value of equity under IFRS minus book value of equity under local GAAP, scaled by market value of equity.
IMP(IAS39)	Effect of IAS 39 on transition year book value of equity, scaled by market value of equity.
IMP(IAS39)	Absolute value of IMP(IAS39).
LNMV	Logarithm of market value of equity at end of the transition year in thousands of USD.
LNAGE	Logarithm of (2004 – year of foundation or incorporation). For more than half of the firms, the foundation year is available. If the date is missing, we use the date of incorporation. If neither of these two are available, we take the year the firm was available in Datastream.
LOSS	Indicator variable equal to 1 if the firm makes a loss, 0 otherwise.
MTBV	Market value of equity at the end of the transition year divided by book value of equity.
OWNDIFF	Percentage of shares not closely held by directors or large shareholders.
USGAAP	Indicator variable equal to 1 if company reported previously under US GAAP, 0 otherwise.
INDUSTRYD	Industry dummy variables, based on two-digit SIC codes.
ACC(PREADOP)	The level of accruals in the pre-adoption year (year before transition year) scaled by lagged total assets.
CFO(PREADOP)	Cash flow in the pre-adoption year scaled by lagged total assets
CFO(TRANS)	Cash flow in the transition year scaled by lagged total assets
ABNACC <sub>IFRS</sub>	Signed abnormal accruals, measured as total accruals minus accruals predicted by the linear decomposition model of Francis and Wang (2007) under IFRS for 2005.
ABNACC <sub>local</sub>	Signed abnormal accruals measured as total accruals minus accruals predicted by the linear decomposition model of Francis and Wang (2007) under local standards for 2004.
DABNACC	ABNACC <sub>IFRS</sub> – ABNACC <sub>local</sub> .

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**Table 1: Sample Composition**

	<b>Nonfinancial</b>	<b>Financial</b>	<b>Total Sample</b>
<b>COUNTRY</b>			
BELGIUM	1	3	4
DENMARK	3	1	4
FINLAND	2	1	3
FRANCE	36	8	44
GERMANY	5	0	5
GREECE	1	3	4
IRELAND	3	5	8
ITALY	8	13	21
NETHERLANDS	11	4	15
NORWAY	2	1	3
PORTUGAL	1	2	3
SPAIN	13	6	19
SWEDEN	8	5	13
SWITZERLAND	1	0	1
UK	57	19	76
	152	71	223

**Table 2: Descriptive statistics**

Panel A: IFRS Adoption quality, corporate governance and control variables

	N	Mean	Median	MIN	MAX	Q1	Q3	STDEV
EARLYADOP	223	0,44	0,00	0,00	1,00	0,00	1,00	0,50
DISCL (/4)	223	2,90	3,00	0,00	4,00	3,00	4,00	1,07
DISCL (/5)	152	3,82	4,00	0,00	5,00	3,00	5,00	1,14
DIFFACC <sub>REST</sub>	152	-0,0075	-0,0050	-0,1085	0,1877	-0,0164	0,0021	0,0280
CORP GOV	223	25,09	24,80	12,35	35,96	19,64	31,50	5,89
$\Delta$ NI	223	0,0126	0,0061	-0,0760	0,1813	-0,0007	0,0155	0,0304
$\Delta$ BVE	223	-0,0095	-0,0012	-0,3891	0,5825	-0,0429	0,0294	0,0876
ABS( $\Delta$ NI)	223	0,0174	0,0087	0,0000	0,1813	0,0030	0,0190	0,0279
ABS( $\Delta$ BVE)	223	0,0554	0,0344	0,0001	0,5825	0,0141	0,0743	0,0684
IMP(IAS39)	223	0,0067	0,0004	-0,1508	0,5537	-0,0072	0,0097	0,0550
ABS IMP(IAS39)	223	0,0240	0,0084	0,0000	0,5537	0,0024	0,0230	0,0499
MV in '000\$	223	24035165	12122100	1432864	209475900	7882279	25373310	32296509
AGE in years	223	61	55	1	261	17	101	47
OWNDIFF	223	64,95	63,00	6,00	100,00	48,00	86,00	22,29
LOSS	223	0,07	0,00	0,00	1,00	0,00	0,00	0,25
MTBV	223	3,18	2,05	0,73	96,06	1,47	3,03	6,69
US GAAP	223	0,03	0,00	0,00	1,00	0,00	0,00	0,17

Panel B: Descriptive statistics per country

COUNTRY	EARLYADOP	DISCL (/4)	DISCL (/5)	DIFFACC <sub>REST</sub>	$\Delta$ NI	$\Delta$ BVE	CORPGOV
	<i>mean</i>	<i>mean</i>	<i>mean</i>	<i>median</i>	<i>median</i>	<i>median</i>	<i>median</i>
BELGIUM	0,50	2,75	2,00	0,0085	-0,0051	0,0591	19,24
DENMARK	0,50	2,50	2,33	-0,0002	0,0095	0,0252	16,89
FINLAND	1,00	3,00	3,50	-0,0046	0,0054	0,0225	22,61
FRANCE	0,57	3,43	4,39	-0,0044	0,0115	0,0019	21,82
GERMANY	1,00	2,80	2,80	0,0049	0,0022	0,0050	19,37
GREECE	0,75	1,75	3,00	0,0068	-0,0060	0,0077	15,71
IRELAND	0,25	3,25	4,33	-0,0042	0,0007	-0,0261	29,93
ITALY	0,33	2,43	3,88	0,0024	0,0014	0,0037	18,78
NETHERLANDS	0,33	3,00	4,18	-0,0085	0,0087	-0,0102	24,52
NORWAY	0,00	2,33	3,00	0,0003	0,0077	0,0449	20,34
PORTUGAL	0,67	3,00	4,00	-0,0140	0,0116	-0,0861	17,32
SPAIN	0,74	1,74	2,77	-0,0031	0,0011	-0,0147	19,98
SWEDEN	0,23	2,46	3,25	-0,0049	0,0051	0,0076	25,30
SWITZERLAND	1,00	0,00	0,00	0,0134	0,0110	0,0156	16,11
UK	0,32	3,18	3,98	-0,0149	0,0104	-0,0028	32,12
MEAN	0,55	2,51	3,16	-0,0015	0,0050	0,0036	21,34
MEDIAN	0,50	2,75	3,25	-0,0031	0,0054	0,0050	19,98
MIN	0,00	0,00	0,00	-0,0149	-0,0060	-0,0861	15,71
MAX	1,00	3,43	4,39	0,0134	0,0116	0,0591	32,12

Panel C: Association between IAS 39 early application and impact on book value of equity

	Total Sample		Nonfinancial Sample			
	Neg Effect BVE	<i>p-value</i>	Pos Effect BVE	Neg Effect BVE	<i>p-value</i>	Pos Effect BVE
EARLY ADOP	28 (27%)	0,001	70 (58%)	22 (29%)	0,001	45 (57%)
LATE ADOP	75 (73%)		50 (42%)	51 (71%)		34 (43%)
TOTAL	103		120	73		79

Panel D: Detailed information on the disclosure of IFRS restatement in financial statements notes

	Total Sample		Nonfinancial Sample	
	No disclosure	disclosure	No disclosure	disclosure
Equity at end of the preadoption year	25	198	12	140
Equity at end of transition year	25	198	12	140
Net income	38	185	25	127
Operating cash flow	154	69	97	55
Turnover or Sales	54	98	54	98

Panel E: Accrual quality measures under local GAAP and IFRS

	Local Standards	<i>p-value</i> (1-sided)	IFRS
<b>1. Accrual Properties around IFRS Transition</b>			
1a. Magnitude of Accruals (Earnings Discretion)			
	$ ACC_{(04)} / TA_{(04)} $		$ ACC_{(04)} / TA_{(04)} $
Mean	0,069	0,072	0,061
Median	0,056	0,000	0,048
<b>2. Accrual Properties Pre and Post IFRS Adoption</b>			
2a. Magnitude of Accruals (Earnings Discretion)			
	$ ACC_{(04)} / TA_{(04)} $		$ ACC_{(05)} / TA_{(05)} $
Mean	0,069	0,000	0,051
Median	0,056	0,000	0,042
2b. Signed and Unsigned Abnormal Accruals (Earnings Discretion)			
	$ABNACC_{(04)}$		$ABNACC_{(05)}$
Mean	0,0165	0,004	-0,0035
Median	0,0074	0,006	-0,0012
	$ ABNACC_{(04)} $		$ ABNACC_{(05)} $
Mean	0,0431	0,103	0,0352
Median	0,0239	0,177	0,0221

**Table 3: Correlations**

	DISCL4	DISCL5	DIFFACC <sub>REST</sub>	ABNACC <sub>Local</sub>	ABNACC <sub>IFRS</sub>	CG	IPR	ABS( $\Delta$ NI)	ABS( $\Delta$ BVE)	LNMV	LNAGE	OWNDIFF	MTBV	LOSS	USGAAP
EARLY ADOP	-0,020	-0,078	0,022	-0,027	0,112	-0,127	-0,152	0,080	-0,025	0,008	-0,010	0,147	-0,099	0,087	0,100
	<i>p=,770</i>	<i>p=,342</i>	<i>p=,789</i>	<i>p=,741</i>	<i>p=,173</i>	<i>p=,059</i>	<i>p=,023</i>	<i>p=,233</i>	<i>p=,713</i>	<i>p=,908</i>	<i>p=,881</i>	<i>p=,028</i>	<i>p=,142</i>	<i>p=,196</i>	<i>p=,138</i>
DISCL4	1,0000	0,789	0,043	0,037	-0,047	0,408	0,218	0,101	0,013	0,161	-0,020	0,107	-0,002	0,025	-0,007
		<i>p=0,00</i>	<i>p=,598</i>	<i>p=,649</i>	<i>p=,564</i>	<i>p=,000</i>	<i>p=,001</i>	<i>p=,134</i>	<i>p=,847</i>	<i>p=,016</i>	<i>p=,768</i>	<i>p=0,111</i>	<i>p=,974</i>	<i>p=,713</i>	<i>p=,912</i>
DISCL5		10,000	-0,018	0,025	-0,005	0,376	0,166	0,016	0,003	0,147	0,021	0,131	-0,008	0,023	-0,056
			<i>p=,826</i>	<i>p=,756</i>	<i>p=,949</i>	<i>p=,000</i>	<i>p=,041</i>	<i>p=,846</i>	<i>p=,970</i>	<i>p=,070</i>	<i>p=,796</i>	<i>p=,108</i>	<i>p=,920</i>	<i>p=,779</i>	<i>p=,491</i>
DIFFACC <sub>REST</sub>			1,0000	-0,064	0,252	-0,316	-0,256	-0,181	0,079	-0,128	0,085	-0,015	-0,114	0,213	0,087
				<i>p=,434</i>	<i>p=,002</i>	<i>p=,000</i>	<i>p=,001</i>	<i>p=,026</i>	<i>p=,337</i>	<i>p=,116</i>	<i>p=,299</i>	<i>p=,858</i>	<i>p=,161</i>	<i>p=,008</i>	<i>p=,285</i>
ABNACC <sub>Local</sub>				1,0000	-0,323	0,054	-0,040	-0,006	-0,007	0,018	0,083	0,023	0,271	-0,131	0,001
					<i>p=,000</i>	<i>p=,514</i>	<i>p=,629</i>	<i>p=,946</i>	<i>p=,928</i>	<i>p=,829</i>	<i>p=,313</i>	<i>p=,778</i>	<i>p=,001</i>	<i>p=,110</i>	<i>p=,987</i>
ABNACC <sub>IFRS</sub>					1,0000	-0,064	-0,073	-0,150	-0,081	-0,009	-0,049	0,213	-0,020	0,038	0,013
						<i>p=,438</i>	<i>p=,376</i>	<i>p=,066</i>	<i>p=,326</i>	<i>p=,915</i>	<i>p=,547</i>	<i>p=,009</i>	<i>p=,808</i>	<i>p=,643</i>	<i>p=,878</i>
CG						1,0000	0,740	0,163	-0,006	0,066	-0,289	0,137	0,097	0,070	-0,086
							<i>p=0,00</i>	<i>p=,015</i>	<i>p=,931</i>	<i>p=,325</i>	<i>p=,000</i>	<i>p=,041</i>	<i>p=,150</i>	<i>p=,298</i>	<i>p=,203</i>
IPR							1,0000	0,128	0,064	-0,025	-0,257	-0,005	0,109	0,025	-0,223
								<i>p=,057</i>	<i>p=,342</i>	<i>p=,708</i>	<i>p=,000</i>	<i>p=,943</i>	<i>p=,103</i>	<i>p=,716</i>	<i>p=,001</i>
ABS( $\Delta$ NI)								1,0000	0,335	-0,027	0,024	0,087	-0,054	0,421	-0,087
									<i>p=,000</i>	<i>p=,690</i>	<i>p=,725</i>	<i>p=,194</i>	<i>p=,425</i>	<i>p=,000</i>	<i>p=,195</i>
ABS( $\Delta$ BVE)									1,0000	-0,147	-0,035	-0,036	-0,055	0,137	-0,045
										<i>p=,028</i>	<i>p=,607</i>	<i>p=,597</i>	<i>p=,413</i>	<i>p=,041</i>	<i>p=,501</i>
LNMV										1,0000	-0,021	0,073	0,043	-0,107	0,064
											<i>p=,754</i>	<i>p=,279</i>	<i>p=,528</i>	<i>p=,112</i>	<i>p=,340</i>
LNAGE											1,0000	-0,016	-0,096	-0,101	0,007
												<i>p=,809</i>	<i>p=,155</i>	<i>p=,134</i>	<i>p=,913</i>
OWNDIFF												1,0000	0,116	0,067	0,096
													<i>p=,085</i>	<i>p=,322</i>	<i>p=,151</i>
MTBV													1,0000	-0,010	-0,041
														<i>p=,877</i>	<i>p=,544</i>
LOSS														1,0000	-0,048
															<i>p=,473</i>

**Table 4: IFRS Adoption Quality per Corporate Governance Category**

This table presents descriptive statistics on EARLYADOP, DISCL, DIFFACC<sub>REST</sub> for four separate groups, categorized by their corporate governance rating. Group 1 (4) contains the worst (best) governed firms. Part 1 of the table shows the number of firms scoring 0 or 1 on EARLYADOP subdivided per corporate governance category. Part 2 shows the number of firms scoring 0, 1, 2, 3, 4 or 5 on DISCL (for nonfinancial firms) and the number of firms scoring 0,1,2,3 or 4 on DISCL (for financial firms) per corporate governance category. In both Part 1 and 2, Chi-square statistics are shown to indicate whether the distribution of firms is equal over the 4 governance categories or not. Part 3 shows mean figures of DIFFACC<sub>REST</sub> per governance category for nonfinancial firms. The significance level (p-values) of differences (t-test) between Group 1 and Group 4 is shown. Please see Appendix B for variable definitions.

	Total Sample (N=223)				Nonfinancial Sample (N=152)			
	Group 1 16,58	Group 2 20,17	Group 3 28,12	Group 4 32,23	Group 1 17,90	Group 2 21,43	Group 3 26,81	Group 4 32,50
<b>1. EARLYADOP</b>								
EARLYADOP= 0	31	26	31	37	16	19	22	28
EARLYADOP= 1	25	30	25	18	22	19	16	10
SUM	56	56	56	55				
	Chi-square = 4,94 <i>p-value</i> = 0,176				Chi-square = 8,41 <i>p-value</i> = 0,039			
<b>2. DISCL</b>								
DISCL= 0	11	2	2	0	3	0	0	0
DISCL= 1	4	2	2	1	1	1	1	0
DISCL= 2	13	6	2	2	6	4	3	0
DISCL= 3	24	35	27	26	11	9	5	3
DISCL= 4	4	11	23	26	11	14	13	20
DISCL= 5	/	/	/	/	6	10	16	15
SUM	56	56	56	55	38	38	38	38
	Chi-square = 28,42 <i>p-value</i> = 0,000				Chi-square = 7,98 <i>p-value</i> = 0,047			
<b>3. DIFFACC<sub>REST</sub></b>								
H <sub>0</sub> =0	/				0,003	-0,001	-0,011	-0,020
					0,508	0,863	0,003	0,000
					Group 1 - Group 4 (T-test): <i>p-value</i> = 0,000			

**Table 5: Early adoption model**

This table presents coefficients and p-values (in italics) from the logistic regression of the early adoption model, equation with EARLYADOP as the dependent variable. Model 1 is a control model. In Model 2, the signed impact of IAS39 on book value of equity, IMP(IAS39), is included. In Model 3, a dummy variable measuring the IAS39 impact, D\_IMP(IAS39), is included together with an interaction dummy variable between CORPGOV and D\_IMP(IAS39). IMP(IAS39) is dropped from the model and replaced by its absolute value, ABSIMP(IAS39). CORPGOV is entered in Model 4 as the predicted value from a two-stage model, where CORPGOV in the first stage is estimated using country dummies as instruments. Model 5 shows regression results for the sample of nonfinancial firms (n=152). Model 6 shows regression results for the sample of financial firms (n=71). In model 5, DISCL is based on 4 items again (DISCL /4).

Dependent Var.: <b>EARLYADOP</b>		<b>Total Sample</b>	<b>Total Sample</b>	<b>Total Sample</b>	<b>Total Sample</b>	<b>Non financial</b>	<b>Financial</b>
		1	2	3	4	5	6
Explanatory Var.:	Pred. Sign:				<b>2-SLS</b>	<b>2-SLS</b>	<b>2-SLS</b>
CORP GOV	+/?		-0,048 <i>0,225</i>	-0,098 <i>0,041</i>	-0,147 <i>0,006</i>	-0,211 <i>0,001</i>	-0,119 <i>0,160</i>
IMP(IAS39)	+	23,938 <i>0,000</i>	23,795 <i>0,000</i>				
D_IMP(IAS39)	-			-5,770 <i>0,000</i>	-4,195 <i>0,008</i>	-6,014 <i>0,005</i>	-8,212 <i>0,019</i>
D_IMP(IAS39)*CORPGOV	+			0,169 <i>0,003</i>	0,108 <i>0,079</i>	0,190 <i>0,023</i>	0,222 <i>0,073</i>
ABSIMP(IAS39)	+			9,656 <i>0,032</i>	9,200 <i>0,037</i>	11,586 <i>0,266</i>	22,876 <i>0,045</i>
IPR	+	-0,245 <i>0,035</i>	-0,103 <i>0,532</i>	-0,194 <i>0,274</i>			
ABS(ΔNI)	-	10,359 <i>0,149</i>	11,038 <i>0,127</i>	12,461 <i>0,081</i>	13,854 <i>0,059</i>	-11,162 <i>0,031</i>	-8,764 <i>0,398</i>
ABS(ΔBVE)	-	-8,820 <i>0,011</i>	-9,234 <i>0,008</i>	-8,603 <i>0,013</i>	-8,043 <i>0,020</i>	1,620 <i>0,877</i>	3,291 <i>0,064</i>
LN MV	+	-0,066 <i>0,691</i>	-0,049 <i>0,774</i>	-0,123 <i>0,487</i>	-0,029 <i>0,868</i>	0,213 <i>0,342</i>	-0,463 <i>0,255</i>
LN AGE	?	-0,188 <i>0,174</i>	-0,213 <i>0,131</i>	-0,251 <i>0,085</i>	-0,307 <i>0,039</i>	-0,209 <i>0,236</i>	-0,548 <i>0,124</i>
LOSS	?	0,272 <i>0,719</i>	0,324 <i>0,671</i>	-0,007 <i>0,992</i>	-0,015 <i>0,984</i>	0,897 <i>0,348</i>	-3,017 <i>0,211</i>
MTBV	?	-0,125 <i>0,111</i>	-0,132 <i>0,099</i>	-0,123 <i>0,128</i>	-0,126 <i>0,129</i>	-0,177 <i>0,068</i>	0,022 <i>0,941</i>
OWNDIFF	+	0,018 <i>0,010</i>	0,020 <i>0,006</i>	0,021 <i>0,005</i>	0,021 <i>0,005</i>	0,017 <i>0,068</i>	0,029 <i>0,073</i>
USGAAP	+	0,409 <i>0,657</i>	0,533 <i>0,569</i>	0,722 <i>0,489</i>	0,745 <i>0,455</i>	1,266 <i>0,333</i>	-0,037 <i>0,989</i>
Constant	?	1,663 <i>0,567</i>	2,081 <i>0,480</i>	5,433 <i>0,090</i>	4,924 <i>0,123</i>	2,120 <i>0,594</i>	1,316 <i>0,082</i>
McFadden R <sup>2</sup>		0,155	0,160	0,192	0,186	0,221	0,382
No Obs		223	223	223	223	152	71

**Table 6: Disclosure model**

This table presents coefficients and p-values (in italics) for the disclosure model with DISCL as dependent variable in regression analysis. Models 1-3 include all observations and DISCL is based on 4 disclosure items (DISCL /4). Model 1 is the control model. The test variable CORPGOV is entered in the Model 2. In Model 3, CORPGOV is included as the predicted value from the first stage regression. CORPGOV is entered in Models 3, 4 and 5 as the predicted value from a two-stage model, where CORPGOV in the first stage is estimated using country dummies as instruments. Model 4 shows regression results for the sample of nonfinancial firms (n=152). In model 4, DISCL is based on 5 instead of 4 items (DISCL /5). Model 5 shows regression results for the sample of financial firms (n=71). In model 5, DISCL is based on 4 items again (DISCL /4).

Dependent Explanatory Var.:	Variable: pred. sign	Total Sample	Total Sample	Total Sample	Non financial	Financial	
		1 DISCL4	2 DISCL4	3 DISCL4	4 DISCL5	5 DISCL4	
					2-SLS	2-SLS	2-SLS
CORP GOV	+		0,104 <i>0,000</i>	0,071 <i>0,000</i>	0,069 <i>0,007</i>	0,133 <i>0,000</i>	
IPR	+	0,114 <i>0,055</i>	-0,176 <i>0,026</i>				
ABS( $\Delta$ NI)	+	5,137 <i>0,157</i>	2,450 <i>0,473</i>	3,882 <i>0,270</i>	-2,189 <i>0,661</i>	9,757 <i>0,104</i>	
ABS( $\Delta$ BVE)	+	0,112 <i>0,926</i>	0,619 <i>0,583</i>	0,292 <i>0,802</i>	-0,630 <i>0,708</i>	0,998 <i>0,620</i>	
LNMV	+	0,212 <i>0,027</i>	0,126 <i>0,163</i>	0,171 <i>0,068</i>	0,205 <i>0,110</i>	0,045 <i>0,790</i>	
LNAGE	+	-0,022 <i>0,768</i>	0,043 <i>0,537</i>	0,037 <i>0,610</i>	-0,001 <i>0,994</i>	0,014 <i>0,918</i>	
LOSS	?	-0,336 <i>0,336</i>	-0,293 <i>0,368</i>	-0,327 <i>0,332</i>	-0,179 <i>0,689</i>	-0,391 <i>0,545</i>	
MTBV	?	-0,003 <i>0,815</i>	-0,003 <i>0,809</i>	-0,003 <i>0,817</i>	-0,012 <i>0,382</i>	-0,012 <i>0,877</i>	
OWNDIFF	+	0,004 <i>0,225</i>	0,002 <i>0,623</i>	0,005 <i>0,203</i>	0,006 <i>0,185</i>	-0,002 <i>0,785</i>	
USGAAP	?/+	-0,308 <i>0,496</i>	-0,549 <i>0,196</i>	-0,301 <i>0,484</i>	-0,620 <i>0,226</i>	0,417 <i>0,720</i>	
Constant	?	-0,631 <i>0,698</i>	-1,136 <i>0,454</i>	-1,805 <i>0,262</i>	-1,608 <i>0,463</i>	-1,358 <i>0,619</i>	
INDUSTRYD		Incl.	Incl.	Incl.	Incl.	Incl.	
Adjusted R <sup>2</sup>		0,081	0,202	0,141	0,113	0,208	
No Obs		223	223	223	152	71	

**Table 7: Rigorous application model**

This table presents coefficients and p-values (in italics) for rigorous application of IFRS in the transition year, with DIFFACCREST as dependent variable using OLS regression analysis. Only nonfinancial firms are considered in this table. Model 1 is the control model. Model 2 introduces corporate governance quality, CORPGOV, as an explanatory variable in the model. In Model 3, CORPGOV is entered as the predicted value in the first stage of a 2-stage least squares model, where CORPGOV in the first stage is estimated using country dummies as instruments. Please see Appendix B for variable definitions.

Dependent Var.: DIFFACC <sub>REST</sub>	pred. sign	Nonfinancial 1	Nonfinancial 2	Nonfinancial 3
Explanatory Var.:				<b>2-SLS</b>
CORP GOV	-		-0,0007 <i>0,081</i>	-0,0008 <i>0,015</i>
IPR	-	-0,004 <i>0,004</i>	-0,002 <i>0,339</i>	
CFO (PREADOP)	-	0,024 <i>0,500</i>	0,023 <i>0,515</i>	0,024 <i>0,502</i>
ACC (PREADOP)	?	0,011 <i>0,682</i>	0,015 <i>0,583</i>	0,018 <i>0,510</i>
LN MV	-	-0,004 <i>0,044</i>	-0,004 <i>0,051</i>	-0,004 <i>0,052</i>
SLSGR	+	0,000 <i>0,072</i>	0,000 <i>0,076</i>	0,000 <i>0,092</i>
OWNDIFF	-	0,000 <i>0,657</i>	0,000 <i>0,960</i>	0,000 <i>0,735</i>
US GAAP	?	0,006 <i>0,487</i>	0,007 <i>0,385</i>	0,010 <i>0,231</i>
Constant	?	0,068 <i>0,027</i>	0,075 <i>0,016</i>	0,074 <i>0,021</i>
Adjusted R <sup>2</sup>		0,231	0,242	0,218
No Obs		152	152	152

**Table 8: Association between IFRS adoption quality and pre- and post adoption accrual quality**

Panel A presents coefficients and p-values (in italic) from the rigorous application, with DIFFACC<sub>REST</sub> as the dependent variable and ABNACC<sub>LOCAL</sub> as the explanatory variable. In Panel B ABNACC<sub>IFRS</sub> is the dependent variable and DIFFACC<sub>REST</sub> is the explanatory variable. Only nonfinancial firms are considered in both panels. The top and bottom percentile are left out of the analysis. In both Panel A and B, CORPGOV is entered as the predicted value in the first stage of a 2-stage least squares model, where CORPGOV in the first stage is estimated using country dummies as instruments.

Dependent Var.: DIFFACC <sub>REST</sub>	pred. sign	<b>Nonfinancial</b>	Dependent Var.: ABNACC <sub>IFRS</sub>	pred. sign	<b>Nonfinancial</b>
Explanatory Var.:		<b>2-SLS</b>	Explanatory Var.:		<b>2-SLS</b>
ABNACC <sub>Local</sub>	?	-0,001 <i>0,566</i>	DIFFACC	?/+	0,326 <i>0,052</i>
CORP GOV	-	-0,001 <i>0,003</i>	CORP GOV	-	-0,001 <i>0,210</i>
CFO (PREADOP)	+	-0,028 <i>0,359</i>	CFO (TRANS)	+	0,121 <i>0,016</i>
LN MV	-	0,000 <i>0,645</i>	LN MV	-	-0,004 <i>0,309</i>
SLSGR	?	0,000 <i>0,138</i>	SLSGR	?	0,000 <i>0,918</i>
OWNDIFF	-	0,000 <i>0,948</i>	OWNDIFF	-	0,000 <i>0,005</i>
US GAAP	-	0,008 <i>0,335</i>	US GAAP	-	-0,010 <i>0,592</i>
Constant	?	0,038 <i>0,236</i>	Constant	?	0,047 <i>0,495</i>
Adjusted R <sup>2</sup>		0,173	Adjusted R <sup>2</sup>		0,068
No Obs		149	No Obs		149