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Mandatory adoption of IFRS by EU listed firms and Comparability: Determinants and Analysts' Forecasts

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Mandatory adoption of IFRS by EU listed firms and Comparability:

Determinants and Consequences

Abstract

In 2005, the EU adopted IFRS for all listed companies publishing consolidated

financial statements in Europe. The transition from national accounting standards to

IFRS was complex and costly but the main arguments for it included the improvement

in comparability across companies and improvement in capital markets' efficiency.

This study focuses on the comparability of the financial statements of EU listed firms,

before (2003) and after (2005 & 2010) IFRS mandatory implementation, and on its

determinants and consequences. We find significant convergence in firm's accounting

practices (input comparability) after IFRS. Output comparability also significantly

improves between the pre and post IFRS periods. However, neither of the two

measures improves with IFRS familiarity (no significant difference between 2005 and

2010). Furthermore, we find that output comparability is not driven by the

convergence in accounting choices. Our tests strongly suggest that output

comparability is improved because of IFRS adoption and more comparable accruals in

relation to industry peers. This suggests that more comparable accruals facilitate

investors to value firms more accurately. In fact, we find that more comparable

accruals facilitate lower analysts' forecast dispersion. Finally, we find that analysts'

forecasts errors declining as output comparability increases, suggesting that output

comparability increases the usefulness of accounting information.

JEL Classifications: M40, M41, M48

Key words: IFRS implementation, Europe, direct and indirect comparability,

analysts' forecasts.

1. Introduction

True comparability is desirable because it increases the usefulness of accounting information (FASB 2010; IASB 2010). Accounting information is relevant to decisions-making and its role is to provide capital providers (e.g., equity investors, lenders) with data that can be used in assessing an entity's ability to generate future cash flows and management's stewardship responsibilities. However, if the accounting information reported to and used by capital providers is not comparable, risk and return assessments based on such information are also non-comparable. As a consequence, the resulting value estimates may themselves be inconsistent across firms (Revsine 1975).

Following along these lines and given the ineffectiveness of the EU accounting directives, the Lisbon European Council Conclusions stressed the need to enhance the comparability of companies' financial statements within the EU to benefit companies and investors (EC, 2000). The means for meeting this objective was the mandatory implementation of International Financial Reporting Standards (IFRS) across all EU listed companies publishing consolidated financial statements from the financial periods starting on or after 2005 with the enactment of the Regulation (EC) No 1606/2002. ¹

Advocates of IFRS consistently claim that IFRS increases financial statement comparability (SEC 2008; Tweedie 2010). In 2010, at the IFRS Conference, the then Chairman of the IASB, Sir David Tweedie, stated in his speech that "benefits of IFRS include improved comparability cross companies and across political boundaries" (Tweedie 2010, page 3-4). Recent effort and process by the FASB and IASB also leads weight to the view that shared accounting standards will lead to greater comparability. In the *Conceptual Framework for Financial Reporting* by FASB and IASB (2010), the boards claim that consistency is a

¹ Approximately 9,000 listed companies in 28 EU countries (25 member states and three countries in the Economic Area) had to switch to IFRS at the same time. This development has been described as the most significant event in the history of financial reporting (Whittington, 2005).

means to an end that helps in achieving comparability, and non comparability is thought to arise when firms do not use similar inputs, do not apply similar procedures, or even do not use similar standards (Framework, QC22). Improved cross-country comparability is also deemed as the main motivation behind the Securities Exchange Commission's (SEC) 2008 proposal to require U.S. firms to file their financial reports based on IFRS. In 2008, the *Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers*, SEC states that,

The Commission has long expressed its support for a single set of highquality global accounting standards as an important means of enhancing comparability. We believe that IFRS has the potential to best provide the common platform on which companies can report and investors can compare financial information. (SEC 2008, page 9)

It is surprising, however, that little published research has been attempted to test whether the desirable increase in the comparability of financial statements has been achieved (e.g., Kvaal and Nobes, 2010; 2012).

It is argued that IFRS may not be sufficient to ensure equivalent quality of financial reporting and, as a result, the desirable increase in the comparability of financial statements may not be achieved. Among the reasons for this are the influence of local traditions and cultures, including legal and political systems, financial markets, corporate governance arrangements, auditing and enforcement of regulation (see e.g. Ball, 2006; Nobes, 2006, Zeff, 2007). These may lead to different interpretation and application of IFRS in various countries, especially where there are gaps or options in the standards. In fact, Nobes (2006) outlines eight sources which provide the opportunity for international differences in IFRS practice to exist. These include gaps, overt options, covert options, (i.e., vague criteria and interpretations), and measurement estimations in IFRS.

Given these concerns and the limited evidence on this area, we examine whether adoption of and familiarity with IFRS enhance comparability across EU listed firms, what are the determinants of comparability and which are its consequences. Reflecting on the EU's objectives, comparability improvement would be expected if significant *de facto* harmonization of companies' financial statements is observed due to *de jure* harmonisation (i.e., mandatory adoption of IFRS) but given the options within IFRS it is unlikely that perfect uniformity will be achieved in companies' financial statements; nevertheless, significant convergence should be observed.

To address our research objectives, we conduct a three step analysis. We first investigate whether comparability across EU listed companies during pre- and post-IFRS periods has been improved. In particular, we compare comparability for the years 2003 and 2005 as well as for 2003 and 2010. We also examine whether familiarity with IFRS enhances comparability by comparing comparability between 2005 and 2010. Second, we examine which characteristics (at firm level and country level) are related to higher comparability (both for the pre and post IFRS periods). Third, we examine whether comparability has an impact on analysts' forecast errors and dispersion (both for the pre and post IFRS periods).

Our contributions are as follows. First, we contribute to the extant literature by addressing recent calls for research on the determinants and consequences of comparability (De Franco et al., 2011, p.36). Second, prior studies either look at the post adoption period only and examine the accounting policies companies follow (input comparability) (e.g., Kvaal and Nobes, 2011) or only use indirect measures of comparability (i.e., output comparability) and assume that having adopted the same set of accounting standards should lead to comparable economic events (e.g., Lang et al., 2010). We add to both strands of the literature by specifically examining the (manually collected) accounting practices chosen by IFRS mandatory adopters and whether these become more comparable over time. Moreover, we test

whether direct (input) measures of comparability are in tandem with indirect (output) measures of comparability. That is, our output measures of comparability do not simply rely on the assumption that IFRS adoption (i.e., *de jure* harmonisation) leads to better mapping of earnings into returns.

Third, conducting these analyses allows us to test the empirical measure of accounting comparability developed by De Franco et al. (2011) in a non-US setting. Fourth, all our tests regarding the consequences of comparability include both our input and output measures. Including the former allows us to examine, directly, whether companies' accounting policies homogeneity levels affect analysts' forecast errors and dispersion both in the pre and post IFRS periods. Including the latter allows us to examine, directly, whether the mapping of earnings into returns increases the usefulness of accounting information (c.f., Lang et al., 2010). We, therefore, do not simply assume that this is the case and that by having adopted IFRS analysts' forecast errors and dispersion would be decreased.

Fourth, unlike prior studies that focus on cross-country comparability (e.g., Lang et al., 2010), we focus on cross-industry comparability. We argue that as the markets have become more integrated over time (partly because of IFRS), firms within the same industry (and across countries) should be the centre of analysis rather than firms within the same country (but across industries). In addition, all firms used in this study have similar characteristics in terms of size and liquidity and minimum analysts following in each of the three years tested. We, however, control for country factors separately.

Our findings are summarised as follows. We find significant convergence in firm's accounting practices (input comparability) after IFRS. Output comparability also significantly improves between the pre and post IFRS periods. However, neither of the two measures improves with IFRS familiarity (no significant difference between 2005 and 2010). Furthermore, we find that output comparability is not driven by the convergence in

accounting choices. Our tests strongly suggest that output comparability is improved because of IFRS adoption and more comparable accruals in relation to industry peers. This suggests that more comparable accruals facilitate investors to value firms more accurately. In fact, we find that more comparable accruals facilitate lower analysts' forecast dispersion. Finally, we find that analysts' forecasts errors declining as output comparability increases, suggesting that output comparability increases the usefulness of accounting information.

The remainder of the paper is organised as follows. Section 2 provides details regarding the research design employed and introduces the research hypotheses. Section 3 reports the empirical findings. Section 4 forms the concluding remarks.

2. Research design and research hypotheses

2.1 Sample selection process

We begin our sample collection by focusing on the companies that comprise the Standard and Poor's (S&P) Europe 350 index in 2010 (five years after the adoption of IFRS) and subsequently also collect information for these firms in the years 2003 and 2005, i.e. two years prior to IFRS adoption and the first year of adoption. From these 350 firms, we exclude those in the financial industry (71) given the substantial differences in their activities from other firms and as result, their non-comparable accounting policy choices. We also exclude companies that voluntarily adopted IFRS prior to 2005 (38) and those that were using exclusively US GAAP in any of the three years under examination (22). Additionally, for the companies that are listed in more than one European stock market (2), we keep only the market data regarding the primary listing. This leaves us with a final balanced panel of 187 companies, resulting in 561 firm-year observations.

2.2 Comparability measures

De Franco et al. (2011) discuss two types of comparability measures: input based and output based. While they go-on to focus on the later only, we examine both types and are able to examine if they capture similar constructs.²

2.2.1 Direct (Input) comparability measure

De Franco et al. (2011) define *Input* based comparability as similar accounting policy and presentation choice. Thus, the accounting policy and presentation choices a company follows are considered as "inputs" of comparability.

To identify and measure input-based comparability, we compiled a list of accounting policy and presentation choices (i.e., comparable inputs) which were available under the various national accounting rules in the EU and for which IFRS still offer an option. This process is similar to Kvaal and Nobes (2010) who use 16 overt presentation and measurement options of accounting policy to test international differences in five large IFRS countries between 2005 and 2006. By following the same process, Kvaal and Nobes (2012) extend their first study by examining the choices made in 2008/9 IFRS financial statements by the majority of the companies examined in the 2010 study.

Similarly, Cairns et al. (2011) choose 13 accounting issues in their study of fair value measurement practices under IFRS in the UK and Australia between 2004 and 2005. The thirteen accounting issues are items for which IFRS require fair value measurement, or for which IFRS allow a choice of either fair value or historical cost-based measurement. In a similar vein, Paananen (2008) explores the comparability or diversity of fair value accounting for goodwill under IFRS in France, Germany and the UK.

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² For a more detailed review of the comparability literature, see André et al. (2011).

We extend this prior literature by compiling a comprehensive list of choices regarding 25 presentation and measurement of accounting policy practices. Subsequently, we manually collect the information regarding these practices from the companies' annual reports, with reference to the three years of examination. Our list comprises of 11 items related to presentation and 14 items related to recognition and measurement.

Having collected this data, we then calculate our measure of Input comparability (i.e., *CHOICE*) as the accounting heterogeneity measure developed by De Fond and Hung (2003). According to this measure, first, the accounting choices firms choose are classified into 'common' or 'atypical' based on a benchmark which is the modal choice followed by other firms within the same industry.³ Then, accounting choice heterogeneity is the sum of a firm's accounting method choices that vary from the mode of their industry peers scaled by the number of accounting method choices. As a result, this ratio takes values from 0 to 1, with higher values meaning firms applying more atypical accounting choices.⁴ We subsequently transform this an accounting homogeneity measure by subtracting this ratio from 1 so as to be interpreted as higher values meaning higher input comparability. On that basis, for each firm, we define *CHOICE* as:

$$CHOICE = 1 - \frac{\sum (AtypicalChoices)}{\sum (Applicable \Pr actices)}$$
 (1)

Considering Nobes' (2011) argument that measurement and presentation accounting choices vary in terms of importance, we compute three measures of input comparability. The first one refers to all the items in our list ($CHOICE_{ALL}$), one related only to the 11 items regarding presentation ($CHOICE_{PRE}$) and one related only to the 14 items regarding recognition and measurement ($CHOICE_{REC_MES}$).

³ We use the ICB Level 2 Industry Classification.

⁴ Non-disclosure for a particular practice is considered as an atypical choice, provided that most firms in the industry disclose their choice. If, however, most firms do not disclose their choice, that practice is excluded from the portfolio of applicable practices for all firms in that industry.

Given the EU's objective to reduce diversity of accounting practices across European companies and the mandatory adoption of IFRS, we hypothesise that accounting homogeneity increases over time (i.e., higher input or *de facto* comparability should be observed when one compares 2003 and 2005 or 2003 and 2010). However, given the higher familiarity of companies with IFRS in 2010, we cannot predict specifically a decrease or increase in accounting homogeneity between 2005 and 2010. It is probable that companies will change policies over time but this does not mean that they will follow necessarily the options followed by their peers. Being more familiar with IFRS in 2010 may result in companies to switch from the policies chosen in 2005 in an effort to choose those that reflect their underlying economics in a better way. This is in line with Kvaal and Nobes (2012) who report that many EU companies made changes in their 2008/2009 financial statements compared to their first IFRS financial statements (in fact, they made more changes after transition than at transition).

2.2.2. Indirect (Output) comparability measures

According to De Franco et al. (2011), firms with similar economic events (as proxied by returns) and accounting systems should have more comparable/similar financial statements (captured by the summary earnings number). They name this as 'accounting system comparability'. They also suggest earnings co-movement as an output comparability measure in an earlier draft, which they call 'earnings comparability'; measure deleted in the recent published paper.

Following De Franco et al., Lang et al. (2010) examine the two output-based measures in a cross-country setting (with many country-level legal and institutional variable controls). They find that mandatory adoption of IFRS did increase earnings co-movement but it failed to increase true cross-country comparability. More importantly, they indicate that accounting

system comparability and earnings comparability are indeed different constructs and in a cross-country setting this may pose different implications for financial statement users (Lang, et al. 2010, p3).

Barth et al. (2011) compare the comparability of non-U.S. firms reporting under IFRS to U.S. firms, using the De Franco et al. (2011) output-based measure of 'accounting system comparability' but also some value relevance measures. Barth et al. (2011) extend the accounting system comparability approach developed by De Franco et al. (2011) by including three economic outcomes (stock price, stock return, and subsequent cash flow) rather than just returns. Their findings suggest that the widespread application of IFRS by non-U.S. firms has increased financial reporting comparability to U.S. firms.

In line with Lang et al. (2010) and Barth et al. (2011), we also follow the research design developed by De Franco et al. (2011). However, considering the findings of Lang et al. (2010), we focus on *cross-industry* comparability as opposed to *cross-country* comparability. We argue that as the markets have become more integrated over the years (partly because of IFRS); firms within the same industry should be more comparable than firms across countries. In addition, all firms used in this study have similar characteristics in terms of size and liquidity, while we set the restriction to be followed by at least three analysts in each of the three years tested. On that basis, given their size and information asymmetry, cross-industry comparisons are appropriate from investors' and standard setters' perspective.

The De Franco et al. 'accounting system' comparability measure is determined as follows. First, using data of a time-series for five years prior to year t (i.e., from t=-5 to t=0, where t=0 is 2003 and 2010 accordingly), we regress earnings (NI) divided by beginning of year market value (MV) for firm i on its returns (R)⁵:

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⁵ De Franco et al. (2011) actually use 16 quarters. Unfortunately, European rules vary with respect to supplying interim financials.

$$NI_{it} = a_i + b_i R_{it} + \mathcal{E}_{it} \tag{2}$$

The estimate \hat{a}_i, \hat{b}_i proxy for firm i's accounting system. Similarly, we estimate this for every firm j in the same industry (within the S&P Europe 350 index), leading to estimated \hat{a}_j, \hat{b}_j . De Franco et al. argue that the closeness of the accounting system of two firms reflects the comparability between firms. They then use firm i's and firm j's accounting system parameters to predict their earnings assuming they had the same return that proxy for same economic events, giving the following:

$$N\hat{I}_{iit} = \hat{a}_i + \hat{b}_i R_{it} \tag{3}$$

$$N\hat{I}_{ii} = \hat{a}_i + \hat{b}_i R_{ii} \tag{4}$$

 $N\hat{l}_{iit}$ is the predicted earnings of firm i's given firm i's system and firm i's returns. $N\hat{l}_{ijt}$ is the predicted earnings of firm j given firm j's system and firm i's returns. The negative average of the absolute value of the difference between $N\hat{l}_{iit}$ and $N\hat{l}_{ijt}$ indicate differences between i and j, given the same economic events:

Out_Com_Ti m_Ser_,
$$ijt} = -\frac{1}{5} \sum_{t=-4}^{t} |N\hat{I}_{iit} - N\hat{I}_{ijt}|$$
 (5)

The higher the $Out_Com_Tim_Ser_{ijt}$ the higher the comparability. Having estimated $Out_Com_Tim_Ser_{ijt}$ for all industry peers j, we use the mean comparability of all industry peers. If comparability is improved after the IFRS adoption, $Out_Com_Tim_Ser_{2003}$ will be significantly lower than $Out_Com_Tim_Ser_{2010}$.

However, this measure does not allow us to capture the comparability of 2005 (the first year of IFRS), as the accounting practices used in the previous five years involved local accounting standards. We, therefore, also adopt a cross-sectional adaptation of this approach drawn from the Jones (1991) model and measure comparability across 2003, 2005 and 2010. Specifically, using all firms in the same industry j (within the S&P Europe 350 index) as the

sample firm i but excluding i itself, the following regression equation should hold for each year t:

$$NI_{it} = a_{it} + b_{it}R_{it} + \varepsilon_{it} \tag{6}$$

The estimated a_{jt} , b_{jt} represent the expected parameters for firm i as at the year t. Replacing a_{jt} , b_{jt} with \hat{a}_{jt} , \hat{b}_{jt} gives the expected earnings for i:

$$E(NI_{iit}) = \hat{a}_{it} + \hat{b}_{it}R_{it} \tag{7}$$

The absolute value of the difference between the actual and expected earnings is our measure of comparability:

$$Out_Com_Cros_Sec_t = - \mid NI_{it} - E(NI_{iit}) \mid$$
 (8)

The higher the $Out_Com_Cros_Sec_t$ the higher the comparability. This procedure is replicated for each firm for each of the three years. If comparability is improved after the IFRS adoption, $Out_Com_Cros_Sec_{2003}$ will be significantly lower than $Out_Com_Cros_Sec_{2005}$ and $Out_Com_Cros_Sec_{2010}$. Similarly, if familiarity with IFRS facilitates comparability enhancement, $Out_Com_Cros_Sec_{2005}$ will be significantly lower than $Out_Com_Cros_Sec_{2010}$.

2.2.3 Determinants of Input and Output comparability

De Franco et al., (2011) highlight that there is lack of evidence of what determines accounting comparability. Given the three measures of comparability we calculate, we conduct analyses to provide an answer to this research question accordingly.

Pooling our sample, we first examine the determinants of accounting homogeneity (i.e., Input comparability) by regressing $CHOICE_{ALL}$, $CHOICE_{PRE}$ and $CHOICE_{REC_MES}$ on IFRS indicator variables as well as controls for firm and country specific factors, as specified below:

$$CHOICE = IFRS_{pre-post} + IFRS_{2010} + Country Controls + Firm Controls$$
 (9)

IFRS_{pre-post} is a binary variable that takes one for 2005 and 2010, and zero for 2003. IFRS₂₀₁₀ is a binary variable that takes one for 2010 and zero for 2003 and 2005. FirmControls include sales growth (SGTH), firm size (Size), profitability (ROA), leverage (Lev), an indicator (LOSS) that equals one if actual earnings are negative, and equals zero otherwise. Given the evidence suggesting that companies may choose particular accounting policies to meet earnings targets, we also control for earnings quality by introducing industry mean adjusted accruals (ACCR) as another determinant of comparability. CountryControls include the following country specific factors: earnings management 'tradition' (Earn_mgt - based on Leuz et al., (2003) countries' earnings management ranking), legal tradition (Legal_trad - based on La Porta et al., 1998), regulator's enforcement power (Enforcement - based on la Porta et al., 2006), type of the financial system (Mktbase - based on Demirguc et al., 2002), and the real GDP growth rate (GDP_{growth}). All variables are further described in Appendix A.

Second, we examine the determinants of output comparability and as we do so, we provide an answer to the following question as well: do input and output comparability move in tandem? In effect, we examine whether output comparability is affected by companies' accounting homogeneity levels or not. If we find a high positive correlation coefficient between input and output comparability, we interpret this as higher accounting homogeneity leading to higher similarity of the mapping between earnings and stock returns across companies. We operationalise these tests by running cross sectional OLS regressions, pooling the variables for the three years tested and as follows:

Out_Com = IFRS
$$_{pre-post}$$
 + IFRS $_{2010}$ + CHOICE + ACCR + CountryCon trols + FirmContro ls (10)

We first run twice this regression: once when the independent variable is $Out_Com_Cros_Sec$ and once when the independent variable is $Out_Com_Tim_Ser$ but having not included the *CHOICE* variable. This allows us to test what would be the

determinants of output comparability without one considering accounting homogeneity. Subsequently, we run six variations of the above regression, three for each of the three alternative measures of input comparability we measure (i.e., $CHOICE_{ALL}$, $CHOICE_{PRE}$ and $CHOICE_{REC_MES}$) when the independent variable is $Out_Com_Cros_Sec$ and three when the independent variable is $Out_Com_Tim_Ser$. All independent variables are those included in model 9 above and they are further described in Appendix A.

2.2.4. Analysts' forecasts errors and dispersion and comparability

Tan et al. (2011, p.2), argue that 'accounting harmonisation brings comparability benefits that enhance the usefulness of accounting data'. They reach this conclusion by showing that the adoption of IFRS *inter alia* leads to a higher degree of analyst following and lower analysts' forecast errors. However, their research design captures *de jure* harmonisation (i.e., adoption of IFRS) and not *de facto* harmonisation (i.e., increase in accounting homogeneity). We extend this study by examining whether analysts' forecast errors and dispersion decrease on transition to IFRS and five years later by also controlling for accounting homogeneity and industry mean adjusted accruals. These controls reflect the findings of De Fond and Hung (2003) and Richardson (2000).

The former argue that earnings are uncertain because accrual-based earnings include managers' subjective estimates of uncertain future events, and managers have incentives to use their reporting discretion opportunistically. Considering this, they report evidence that, given the greater risk of financial misstatements associated with accruals, in supplementing earnings forecasts, analysts are more likely to forecast also cash flows for firms with relatively large absolute accruals. Richardson (2000), in fact, reports that earnings management is related to analysts' forecast. On that basis, we expect that the higher a company's accruals the higher the analysts' errors and dispersion.

In addition, De Fond and Hung (2003: 77) argue that "accounting choice heterogeneity" increases the difficulty in comparing earnings across companies' and they report evidence that there is higher probability analysts to forecast also cash flows for firms with high accounting choice heterogeneity. On that basis, this would suggest that the increase in input comparability, following IFRS adoption, would assist analysts' forecasts.

Finally, De Franco et al. (2011: 895) report that their output based comparability 'measure is positively related to analyst following and forecast accuracy, and negatively related to analysts' dispersion in earnings forecasts'. Following along these lines, we examine whether analysts' properties are also driven by output comparability in our cross-industry setting and whether this improves with the adoption of IFRS. Our tests are operationalised using pooled OLS regressions as follows:

$$ForecastErr = IFRS_{pre-post} + IFRS_{2010} + Out_Com + CHOICE + ACCR + \\ + CountryControls + FirmControls$$
 (11)

$$Dispersion = IFRS_{pre-post} + IFRS_{2010} + Out_Com + CHOICE + ACCR + \\ + CountryControls + FirmControls$$
 (12)

ForecastErr is defined as: |ACTUAL - MEANEST| / PRICE, where ACTUAL stands for the actual EPS, MEANEST for mean estimated value of EPS and PRICE the price for last available price prior to the forecast summary date (STATPERS). All amounts are from the I/B/E/S Summary File.

Dispersion is defined as: STDEV / PRICE, where STDEV is the standard deviation of forecasts and PRICE the price for last available price prior to the forecast summary date (STATPERS). All amounts are from the I/B/E/S Summary File. All independent variables are those included in models 9 and 10 above and they are further described in Appendix A.

In all our tests we control for auto and cross-sectional correlation of standard errors with firm and industry fixed-effects. Additionally, we consider the issue of outliers. These have been defined as cases for which their standardised residuals laid outside the range of +/-

3 standard deviations. Finally, our tests for multicollinearity showed no signs of problems (the average variance inflation factor (VIF) is lower than 2 for each regression; see in the tables).

3. Results and discussion

3.1 Univariate analysis

Table 1 reports descriptive statistics for the input and output comparability measures. The results suggest that, as expected, firm choices (input comparability) converge after the IFRS adoption. $CHOICE_{ALL}$ significantly increases from 2003 to 2005 (statistically significant at the 1% level). Additionally, $CHOICE_{ALL}$ increases further in 2010, although this change is not statistically significant. Having disaggregated this measure across presentation and measurement choices, we see that the non-significant increase of $CHOICE_{ALL}$ in 2010 can be attributed to the following. $CHOICE_{PRE}$ which captures input comparability with regard to presentation choices increases (but not significantly) between 2003 and 2005 but subsequently increases significantly (at the 1% level) in 2010. Overall, this results in a significant increase in this measure (at the 1% level) between 2003 and 2010. However, $CHOICE_{MES_REC}$ which captures input comparability with regard to measurement and recognition choices increases (significantly at the 1%) between 2003 and 2005 but subsequently decreases in 2010. Hence, on the one hand presentation related input comparability increases whereas recognition and measurement related input comparability decreases in 2010 and this results in a non-significant increase of the combined measure.

Focusing on the differences between 2003 and 2010 only, these are statistically significant at the 1% or 5% level for all three measures of input comparability. This indicates a significant convergence in firm accounting practices after the adoption of IFRS. With respect to firm choices in years 2005 and 2010, we find that accounting homogeneity is improved only with regard to presentation related choices due to familiarity with IFRS or amendments/changes in some of the standards. Reflecting on the finding regarding the

measure $CHOICE_{MES_REC}$, it appears that once firms adopt IFRS, they do not converge further towards their industry peers by changing their accounting practice choices to the industry mode.

To shed more light on these univariate tests, Appendix B provides the mode of accounting policy and presentation choices made by the firms analysed across the three years of examination, with reference to the 25 items included in our list for measuring input comparability. All items comprise the $CHOICE_{ALL}$, measure. Items 1-9 and 24 and 25 comprise the $CHOICE_{PRE}$ measure and items 10-23 comprise the $CHOICE_{MES_REC}$ measure. A close look at this appendix indicates that the modal choices stay fairly similar across the three years of analysis. However, there is a significant change in the number of firms change their policy choice across the three years. This results in the industry modal choices, which is the focus of this study, to vary significantly between the years we analyse. The highlighted cells in Appendix C provide evidence regarding this.

Both of our output comparability measures *Out_Com_Cros_Sec* and *Out_Com_Tim_Ser* suggest that output comparability (i.e., the mapping of earnings on returns) significantly improves between the pre and post IFRS (statistically significant at the 1% level). However, *Out_Com_Cros_Sec* in 2005 is not significantly different from that of 2010, suggesting that comparability does not increase as IFRS familiarity improves.

The fact that our cross-sectional adaptation of the De Franco et al. (2011) measure (Out_Com_Cros_Sec) provides similar findings with the original De Franco et al. variable indicates that our adaptation is also able to measure output comparability adequately. This is further emphasised by untabulated correlation coefficients between Out_Com_Cros_Sec and Out_Com_Tim_Ser which are 0.482 and 0.491 for 2003 and 2010, respectively. They are also statistically significant at the 1% level.

TABLE 1 – ABOUT HERE

Table 2 reports information in relation to industry adjusted accruals (Panel A) and analysts' forecast errors and dispersion (Panel B). Adjusted accruals indicate a non-significant change between 2003 and 2005 and between 2003 and 2010.

We observe a statistically significant improvement of analysts' forecast errors, after the IFRS adoption. In particular, forecast errors decrease significantly from 2003 to 2005 and from 2003 to 2010. We interpret this as improvement in analyst forecast accuracy. Moreover, analysts' forecast dispersion also decreases from 2003 to 2010. These findings provide some support to our prediction of an increase in homogeneity of analysts' forecasts possibly driven by the increase in financial reporting comparability indicated above.

TABLE 2 – ABOUT HERE

3.2 Determinants of comparability

Table 3 shows the results of the pooled regression analysis to explain the determinants of input comparability, i.e. of the firm choices with regard to accounting practices (Eq.9). If IFRS contribute to the improvement of *de facto* comparability, the IFRS indicator variables should have significantly positive coefficient. We test this with all three measures of input comparability.

With regard to our aggregate measure, $CHOICE_{ALL}$, consistent with our expectations, the indicator variable $IFRS_{pre-post}$ has a positive coefficient of 0.018 (statistically significant at the 1%). This in line with the univariate statistics shown in Table 1 above. Similarly in line with the univariate statistics in Table 1 which indicate no significant change in the overall accounting homogeneity between 2005 and 2010, the indicator variable $IFRS_{2010}$ has a non-significant coefficient. It is noted that we also find that companies with high sales growth, are domiciled in code law countries and in countries with high earnings management tradition

exhibit lower levels of input comparability with their industry peers since all three variables have a negative coefficient and significant (at the 5% or 1% level).

As far as the measure related to input comparability regarding presentation choices $(CHOICE_{PRE})$ is concerned, consistent with our expectations, both IFRS indicator variables are significant at the 1% with a positive coefficient. It is noted that the finding regarding companies which are domiciled in code law countries and in countries with high earnings management tradition exhibiting lower levels of input comparability with their industry peers holds significant in this regression as well. Both variables have a negative and significant coefficient (at the 1% or 5% level respectively).

Finally, the evidence we find regarding the measure related to input comparability capturing recognition and measurement choices ($CHOICE_{MES_REC}$) further supports the evidence provided in Table 1. Consistent with our expectations, the $IFRS_{pre-post}$ indicator variable is significant at the 1%, with a positive coefficient. However, the $IFRS_{2010}$ indicator variable has a negative and statistically significant (at the 1%) coefficient. This indicates that although companies become more comparable on transition to IFRS they start deviating from the industry mode a few years later. We show that this is the case in the 2010 financial statements relative to the 2005 financial statements. As discussed earlier, this justifies the non-significant change in the overall measure with regard to the period 2005 and 2010. It is noted that the finding regarding companies which are in countries with high earnings management tradition and hiving high sales growth exhibiting lower levels of input comparability with their industry peers holds significant in this regression as well. Both variables have a negative and significant coefficient (at the 5% or 1% level respectively). Additionally, we find that more profitable firms exhibit lower levels of input comparability with regard to recognition and measurement accounting choices followed.

TABLE 3 – ABOUT HERE

Table 4 provides the results of the panel data analysis examining the determinants of output comparability (Eq.10). Panel A presents the findings with our cross-sectional comparability measure (i.e., with regard to all three years of examination) and Panel B presents the findings with our time series comparability measure for 2003 and 2010 (i.e., as in De Franco et al., 2011). Regressions 4 and 8 report what the determinants of output comparability would be if one does not consider the input comparability (i.e., accounting homogeneity). Turning to our research question on whether output comparability is affected by the accounting homogeneity, regressions 5-7 and 9-11 include all three variations of *CHOICE* as an additional explanatory variable, expecting a significant and positive coefficient.

Regressions 4 and 8 provide robust evidence that, in line with our expectations, the mapping of earnings on returns i.e., output comparability improves significantly in the post-IFRS adoption period. The $IFRS_{pre-post}$ indicator variable in regression 4 and the $IFRS_{2010}$ indicator variable in regression 8 have a positive and significant coefficient (at the 5% and 10% level, respectively). Additionally, we find consistent evidence that the level of industry mean adjusted accruals have a positive and significant coefficient (at the 5% level). This indicates that the better the quality of earnings the better the mapping of earnings on returns. Given the evidence presented in Table which shows that industry mean adjusted accruals do not change between the three years of examination, we conclude that these do not change because of the transition to IFRS and continue to play an important role in firm valuation.

Turning to our research question, the findings in regressions 5-7 and 9-11 provide robust evidence that the mapping of earnings on returns does not improve because of the increase in input comparability because of the transition to IFRS that we observe. The results do not support the anticipated significantly positive coefficient for *CHOICE* (and all its variations).

On that basis, Table 4 strongly suggests that output comparability is improved (as shown in Table 1) because of the transition to IFRS and for firms which have more comparable accruals in relation to industry peers. We conclude that it is not whether companies choose more common accounting policies under IFRS. It is that the choices available under IFRS in general which are different from those under national accounting regulation improve output comparability i.e., the mapping of earnings on returns. This is consistent with the evidence that there is lower earnings management and higher value relevance of accounting information for firms adopting IFRS mandatorily (Barth et al., 2008).

TABLE 4 – ABOUT HERE

3.3 Analysts forecasts' errors and dispersion

To further investigate whether comparability improves analysts' forecasts, we examine the determinants of forecast errors and dispersion as shown in Tables 5 and 6, respectively. Regressions 13-18 and 20-25 provide the results after regressing forecast errors and dispersion on input and output comparability, IFRS indicators as well as firm- and country-specific factors. Regressions 12 and 19 explore the determinants of forecast errors and dispersion of input and output comparability were not considered.

Starting from the results from regression 12, consistent with prior evidence, we find that analysts' forecast errors decrease following the adoption of IFRS. Our indicator variable *IFRS*_{pre-post} has a negative coefficient and significant at the 1% level. However, our second IFRS indicator variable has a non-significant coefficient. The latter suggests that analysts' forecast errors do not decline in 2010. Additionally, consistent with Richardson (2000) and De Fond and Hung (2003), we find that industry mean adjusted accruals have a negative and significant (at the 5%level) coefficient. This suggests that analysts make fewer errors in their estimations when companies have smaller accruals.

Turning into regressions 12-15 and 16-18, we find consistent evidence that, irrespective of how output comparability is measured (i.e., cross-sectionally; Panel A or time-series; Panel B), output comparability reduces analysts' errors. This is consistent with the evidence in the US (De Franco et al., 2011). However, input comparability does not appear to affect analyst forecast accuracy, suggesting that analysts do not examine the individual firm choices in comparison with the industry peers. The IFRS indicator *IFRS*_{pre-post} continue to have a negative and statistically significant at the 5% or 1% level, confirming that IFRS significantly contributes to the reduction of forecast errors. However, we note that the effects of accruals on analysts' forecasts errors are not evident in these regressions. This is not surprising, given that we provided evidence that output comparability is positively related with accruals levels.

This finding supports conjecture that more comparable accruals facilitate higher forecast accuracy.

TABLE 5 – ABOUT HERE

The findings in Table 6 provide more insights regarding the relationship between accruals and output comparability with analysts' forecast errors. More specifically, the results from all regressions indicate that analysts' dispersion declines when output comparability increases. Additionally, all our tests indicate that industry mean adjusted accruals have significantly negative coefficient, confirming that higher accrual homogeneity significantly reduces analyst dispersion.

4. Conclusions

Given limited evidence on this area, we examine whether adoption of and familiarity with IFRS enhance comparability across EU listed firms, what are the determinants of

comparability and which are its consequences. Comparability improvement would be apparent if significant *de facto* harmonization of companies' financial statements is observed due to *de jure* harmonisation (i.e., mandatory adoption of IFRS). Given the options within IFRS, we should not expect a perfect uniformity in companies' financial statements but significant convergence should be observed instead.

To address our research objectives, we follow three steps of analyses. We first investigate whether IFRS comparability between EU listed companies during pre- and post-IFRS periods has been improved. To examine this, we compare comparability for the years 2003 and 2005 as well as for 2003 and 2010. We also examine whether familiarity with IFRS enhance comparability by comparing comparability between 2005 and 2010. Subsequently, we contribute to the extant literature by addressing recent calls for research about the consequences and determinants of comparability (De Franco et al., 2011, p.36). As far as the consequences of comparability are concerned, we examine analysts' coverage, forecast errors and dispersion. Regarding the determinants, we examine which are the characteristics (at firm level and country level) that are related to higher comparability (both for the pre and post IFRS periods).

First, we collect manually the accounting policies followed by 187 non-financial European public firms which mandatorily adopted IFRS in 2005 and are constituents of the S&P 350 in 2010, for the years 2003, 2005, 2010 with regard to 25 accounting practices. This allows us to examine the pre-IFRS financial statements, the financial statements during the first year of adoption and the financial statements five years later, when IFRS familiarity is expected to improve, while we use the first year of the newly introduced IFRS (i.e., new and/or revised standards after the so called 'stable platform' period). Once we manually collect the accounting practices, we calculate the variable *CHOICE*, as in De Fond and Hung (2003) to measure of input comparability. Second, following output measures similar to De

Franco et al. (2011), we provide evidence on whether input comparability measures co-move with output (indirect) measures and whether comparability is improving over the years. Finally, we investigate whether analysts' coverage, forecast errors and dispersion are determined *inter alia* by our input and output measures of comparability.

Our findings are summarised as follows. We find significant convergence in firm's accounting practices (input comparability) after IFRS. Output comparability also significantly improves between the pre and post IFRS periods. However, neither of the two measures improves with IFRS familiarity (no significant difference between 2005 and 2010). Furthermore, we find that output comparability is not driven by the convergence in accounting choices. Our tests strongly suggest that output comparability is improved because of IFRS adoption and more comparable accruals in relation to industry peers. This suggests that more comparable accruals facilitate investors to value firms more accurately. In fact, we find that more comparable accruals facilitate lower analysts' forecast dispersion. Finally, we find that analysts' forecasts errors declining as output comparability increases, suggesting that output comparability increases the usefulness of accounting information.

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Table 1: Input and output comparability measures

This table provides descriptive statistics for the input (CHOICE) and output (Out_Com_Cros_Sec and Out_Com_Tim_Ser) comparability measures, which are as defined in Appendix A. Paired t-test and Man-Witney test for mean and median equality across the years are also provided. In brackets, t and z statistics are provided.

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Variables		Year	N	Mean	Median	Max	StDev	Min
Panel A: Input Compa	ırability							
$CHOICE_{ALL}$		2003	187	0.779	0.783	0.957	0.083	0.435
		2005	187	0.806	0.818	1.000	0.085	0.500
		2010	187	0.810	0.826	0.958	0.069	0.609
	Test for dif.	2003-2005		'	(-3.33)***			
	Test for dif.	2003-2010		'	(-3.81)***			
	Test for dif.	2005-2010		(-0.54)	(-0.19)			
$CHOICE_{PRE}$		2003	187	0.776	0.818	1.000	0.101	0.500
		2005	187	0.786	0.818	1.000	0.119	0.455
		2010	187	0.816	0.818	1.000	0.096	0.455
	Test for dif.	2003-2005		(-0.855)	(-0.98)			
	Test for dif.	2003-2010		'	(-3.79)***			
	Test for dif.	2005-2010		(-2.69)***	(-2.43)**			
CHOICE REC_MES		2003	187	0.781	0.800	1.000	0.120	0.364
		2005	187	0.824	0.833	1.000	0.111	0.273
		2010	187	0.805	0.800	1.000	0.101	0.538
	Test for dif.	2003-2005		(-3.61)***	(-3.93)***			
	Test for dif.	2003-2010		(-2.13)**	(-2.00)**			
	Test for dif.	2005-2010		(1.71)*	(2.14)**			
Panel B: Output Comp	parability							
Out_Com_Cros_Sec		2003	187	-0.118	-0.059	-0.003	0.185	-1.062
		2005	187	-0.043	-0.023	0.000	0.058	-0.367
		2010	187	-0.049	-0.029	0.000	0.064	-0.460
	Test for dif.	2003-2005		(-5.34)***	(-6.57)***			
	Test for dif.	2003-2010		(-4.88)***	(-5.34)***			
	Test for dif.	2005-2010		(0.93)	(1.64)*			
Out_Com_Tim_Ser		2003	179	-0.105	-0.082	-0.028	0.120	-1.072
		2010	179	-0.053	-0.042	-0.019	0.034	-0.227
	Test for dif.	2003-2010		(-5.59)***	(-9.40)***			

^{*, **, ***} denote significance at the 10%, 5% and 1% level respectively.

Table 2: Accruals and analysts' error and dispersion

This table provides descriptive statistics for the industry mean adjusted accruals (*ACCR*), forecast errors (*ForecastErr*) and dispersion. The variables are as defined in Appendix A. Paired *t*-test and Man-Witney test for mean and median equality across the years are also provided. In brackets, t and z statistics are provided.

Variables		Year	N	Mean	Median	Max	StDev	Min
Panel A: Indi	istry mean ad	justed accrud	als					
ACCR		2003	187	-0.041	-0.023	0.000	0.054	-0.326
		2005	187	-0.048	-0.027	0.000	0.060	-0.544
		2010	187	-0.043	-0.027	0.000	0.071	-0.715
	Test for dif.	2003-2005		(1.19)	(1.53)			
	Test for dif.	2003-2010		(0.43)	(0.98)			
	Test for dif.	2005-2010		(0.63)	(0.77)			
Panel B: Ana	lysts' errors a	ınd dispersio	n					
ForecastErr		2003	187	0.036	0.008	1.898	0.154	0.000
		2005	187	0.007	0.003	0.160	0.014	0.000
		2010	187	0.007	0.003	0.078	0.011	0.000
	Test for dif.	2003-2005		(2.53)**	(5.05)***			
	Test for dif.	2003-2010		(2.58)**	(5.99)***			
	Test for dif.	2005-2010		(0.40)	(1.34)			
Dispersion		2003	187	0.017	0.007	0.890	0.068	0.000
		2005	187	0.008	0.004	0.230	0.018	0.000
		2010	187	0.006	0.004	0.048	0.007	0.000
	Test for dif.	2003-2005		(1.72)*	(3.62)***			
	Test for dif.	2003-2010		(2.07)**	(4.22)***			
Test for di		2005-2010		(1.07)	(0.37)			

^{*, **, ***} denote significance at the 10%, 5% and 1% level respectively.

Table 3: Determinants of input comparability

This table provides panel data analysis with the input comparability measure (*CHOICE*) as the dependent variable. $IFRS_{pre-post}$ is a binary variable that takes one for 2005 and 2010, and zero for 2003. $IFRS_{2010}$ is a binary variable that takes one for 2010 and zero for 2003 and 2005. All country-specific factors such $Earn_mgt$, $Eagl_trad$, Ea

		Î	Reg. 1]	Reg. 2]	Reg. 3
		CHO	DICEALL	CHO	OICE <i>PRE</i>	CHOIC	CEREC_MES
Variables	Exp. Sign	Coef.	tstat	Coef.	tstat	Coef.	tstat
Constant		0.911	(28.16)***	0.961	(17.23)***	0.849	(20.56)***
IFRS pre-post	+	0.018	(6.26)***	0.008	(2.73)***	0.029	(5.58)***
IFRS 2010	+	0.000	(-0.05)	0.017	(5.13)***	-0.017	(-3.74)***
Earn_mgt		-0.002	(-4.33)***	-0.002	(-2.43)**	-0.001	(-2.15)**
ACCR		-0.021	(-1.04)	-0.040	(-0.98)	0.011	(0.46)
Legal_trad		-0.017	(-2.26)**	-0.036	(-3.41)***	0.006	(0.61)
Enforcement		0.012	(1.01)	0.019	(1.28)	0.005	(0.30)
Mktbase		-0.014	(-1.32)	-0.018	(-1.93)	-0.012	(-0.95)
GDP growth		-0.002	(-0.97)	-0.002	(-0.65)	-0.002	(-0.89)
Sales growth		-0.035	(-2.31)**	-0.035	(-1.83)	-0.042	(-3.36)***
Size		0.000	(0.17)	-0.003	(-1.00)	0.004	(1.58)
Profit		-0.063	(-1.25)	0.006	(0.09)	-0.120	(-2.46)**
Lev		-0.001	(-0.68)	-0.001	(-0.44)	-0.001	(-0.76)
Loss		-0.005	(-0.96)	-0.006	(-0.62)	-0.008	(-0.50)
Firm & Industry	fixed effects		Yes		Yes		Yes
N			559		557		557
R^2			0.12		0.12		0.08
F-test		5.	46***	6	.83***	3.	46***
Mean VIF			1.75		1.75		1.75

^{*, **, ***} denote significance at the 10%, 5% and 1% level respectively.

Table 4: Determinants of output comparability

This table provides panel data analysis with depended variable the output comparability measures (Out_Com_Cros_Sec and Out_Com_Tim_Ser). CHOICE reflects input comparability and ACCR stands for industry mean adjusted accruals. IFRSpre-post is a binary variable that takes one for 2005 and 2010, and zero for 2003. IFRS₂₀₁₀ is a binary variable that takes one for 2010 and zero for 2003 and 2005. All country-specific factors such Earn_mgt, Legal_trad, enforcement, GDPgrowth, as well as firm-specific factors such as sales growth (SGTH), firm size (Size), profitability (ROA) and leverage (Lev) are as defined in Appendix A. In brackets, t statistics are provided.

Panel A: Out_	Com_Cros_Sec				
		Reg. 4	Reg. 5	Reg. 6	Reg. 7
Variables	Exp. Sign	Coef. tstat	Coef. tstat	Coef. tstat	Coef. tstat
Constant		0.006 (0.09)	0.021 (0.25)	0.077 (1.28)	-0.034 <u>(</u> -0.40)
Input Comp.	+		-0.016 (-0.27)	-0.073 (-1.67)	0.049 (1.21)
IFRS pre-post	+	0.037 (2.09)**	0.037 (2.06)**	0.038 (2.08)**	0.036 (2.00)**
IFRS 2010	+	-0.001 (-0.30)	-0.001 (-0.30)	0.000 (-0.05)	-0.001 (-0.14)
Earn_mgt		0.000 (0.45)	0.000 (0.40)	0.000 (0.29)	0.000 (0.53)
ACCR		0.187 (2.06)**	0.187 (2.06)**	0.184 (2.06)**	0.187 (2.07)**
Legal_trad		0.001 (0.15)	0.001 (0.13)	-0.001 (-0.15)	0.001 (0.14)
Enforcement		-0.002 (-0.15)	-0.002 (-0.14)	-0.001 (-0.06)	-0.002 (-0.17)
Mktbase		-0.007 (-1.25)	-0.007 (-1.16)	-0.009 (-1.33)	-0.007 (-1.13)
GDP growth		0.002 (2.93)***	0.002 (2.87)***	0.002 (2.91)***	0.003 (3.03)***
Sales growth		-0.035 (-2.77)***	-0.035 (-2.86)***	-0.037 (-2.97)***	-0.033 (-2.57)**
Size		-0.004 (-1.49)	-0.004 (-1.45)	-0.004 (-1.61)	-0.004 (-1.64)
Profit		-0.093 (-1.47)	-0.094 (-1.49)	-0.094 (-1.50)	-0.089 (-1.33)
Lev		0.000 (-0.24)	0.000 (-0.24)	0.000 (-0.23)	0.000 (-0.23)
Loss		-0.105 (-4.65)***	-0.105 (-4.64)***	-0.105 (-4.61)***	-0.104 (-4.47)***
Firm & Indust	ry fixed effects	Yes	Yes	Yes	Yes
N		548	548	548	548
R^2		0.25	0.25	0.25	0.25
F-test		8.34***	7.85***	7.76***	7.84***
Mean VIF		1.75	1.72	1.72	1.71
Panel B: Out_0	Com_Tim_Ser				
		Reg. 8	Reg.9	Reg. 10	Reg. 11
Variables	Exp. Sign	0.115 / 0.00\###	Coef. tstat	Coef. tstat	Coef. tstat
Constant		-0.115 (-2.82)***	-0.082 (-0.99)	-0.096 (-1.51)	-0.103 (-1.72)*
Input Comp.	+		-0.036 (-0.61)	-0.019 (-0.61)	-0.014 (-0.36)
IFRS 2010	+	0.033 (3.05)***	0.033 (3.05)***	0.033 (3.09)***	0.033 (3.03)***
Earn_mgt		0.001 (1.04)	0.001 0.92	0.001 (1.00)	0.001 (0.97)
ACCR		0.138 (2.30)**	0.137 (2.29)**	0.137 (2.27)**	0.138 (2.31)**
Legal_trad		0.010 (1.61)	0.010 (1.52)	0.010 (1.45)	0.010 (1.62)
Enforcement		0.022 (2.06)**	0.023 (2.04)**	0.023 (2.08)**	0.022 (2.05)**
Mktbase		-0.008 (-0.87)	-0.008 (-0.87)	-0.008 (-0.87)	-0.008 (-0.87)
GDP growth		0.000 (0.14)	0.000 (0.10)	0.000 (0.10)	0.000 (0.14)
Sales growth		0.008 (0.30)	0.006 (0.23)	0.007 (0.28)	0.007 (0.26)
Size		0.001 (0.38)	0.001 (0.37)	0.001 (0.33)	0.001 (0.41)
Profit		0.012 (0.27)	0.012 (0.26)	0.013 (0.31)	0.011 (0.24)
Lev		-0.001 (-0.38)	-0.001 (-0.40)	-0.001 (-0.38)	-0.001 (-0.39)
Loss		-0.049 (-3.99)***	-0.050 (-4.03)***	-0.049 (-3.99)***	-0.050 (-3.98)***
Firm & Indust	ry fixed effects	Yes	Yes	Yes	Yes
N		354	354	354	354
R^2		0.31	0.31	0.31	0.31
F-test		11.16***	10.83	10.50***	10.71
Mean VIF		1.76	1.73	1.73	1.72

^{*, **, ***} denote significance at the 10%, 5% and 1% level respectively.

Table 5: Analysis regarding comparability and analysts' forecast errors

This table provides panel data analysis with depended variable analysts' forecast errors (ForecastErr). CHOICE reflects input comparability, Output Comp stands for Out_Com_Cros_Sec and Out_Com_Tim_Ser. ACCR stands for industry mean adjusted accruals. IFRSpre-post is a binary variable that takes one for 2005 and 2010, and zero for 2003. IFRS₂₀₁₀ is a binary variable that takes one for 2010 and zero for 2003 and 2005. All country-specific factors such Earn_mgt, Legal_trad, enforcement, GDPgrowth, as well as firm-specific factors such as sales growth (SGTH), firm size (Size), profitability (ROA) and leverage (Lev) are as defined in Appendix A. In brackets, t statistics are provided.

		R	eg. 12	Re	eg. 13	Re	eg. 14	Reg. 15		
Variables	Exp. Sign	Coef.	tstat	Coef.	tstat	Coef.	tstat	Coef.		
Constant		0.001	(0.05)	-0.027	(-1.28)	-0.016	(-0.73)	-0.020	(-1.15)	
Output Comp.	-			-0.088	(-2.01)**	-0.088	(-2.01)**	-0.088	(-2.03)**	
Input Comp.	-			0.021	(1.01)	0.009	(0.47)	0.015	(0.94)	
IFRS pre-post	-	-0.011	(-3.14)***	-0.007	(-2.17)**	-0.006	(-1.99)**	-0.007	(-2.28)**	
IFRS 2010	-	0.000	(0.01)	-0.001	(-0.60)	-0.001	(-0.66)	-0.001	(-0.42)	
Earn_mgt		0.000	(0.65)	0.000	(1.26)	0.000	(1.18)	0.000	(1.21)	
ACCR	-	-0.065	(-2.48)**	-0.021	(-1.52)	-0.021	(-1.53)	-0.021	(-1.50)	
Legal_trad		0.008	(1.73)*	0.007	(2.05)**	0.007	(2.14)**	0.007	(1.95)**	
Enforcement		-0.006	(-0.79)	-0.002	(-0.59)	-0.002	(-0.58)	-0.002	(-0.55)	
Mktbase		-0.004	(-0.94)	-0.004	(-1.19)	-0.004	(-1.18)	-0.004	(-1.25)	
GDP growth		0.002	(1.32)	0.001	(1.33)	0.001	(1.28)	0.001	(1.33)	
Sales growth		-0.013	(-1.67)*	-0.009	(-1.56)	-0.009	(-1.55)	-0.009	(-1.64)	
Size		0.001	(0.93)	0.001	(1.17)	0.001	(1.25)	0.001	(1.07)	
Profit		-0.034	(-2.35)**	-0.044	(-1.85)	-0.045	(-1.91)	-0.044	(-1.89)	
Lev		0.000	(0.57)	0.001	(1.24)	0.001	(1.24)	0.001	(1.24)	
Loss		0.023	(2.02)**	0.008	(1.11)	0.008	(1.13)	0.008	(1.07)	
Firm & Industry fix	ed effects		Yes	,	Yes	,	Yes		Yes	
N			558		553		553		553	
R^2			0.20	(0.26	(0.26		0.26	
F-test		3.	17***	2.4	8***	2.4	17***	2.49		
Mean VIF			1.75		1.71		1.72		1.71	
Panel B: Output cor	$mp. = Out_0$	Com_Tin	ı_Ser							
				Re	eg. 16	Re	eg. 17	Re	eg. 18	
Variables	Exp. Sign			Coef.	tstat	Coef.	tstat	Coef.	tstat	
Constant				-0.068	(-3.06)***	-0.050	(-1.38)	-0.052	(-2.85)**	
Output Comp.	-			-0.221	(-3.01)***	-0.222	(-2.98)***	-0.222	(-3.05)**	
Input Comp.	-			0.039	(1.43)	0.018	(0.91)	0.023	(1.29)	
IFRS 2010	-			-0.004	(-1.58)	-0.004	(-1.50)	-0.004	(-1.50)	
Earn_mgt				0.000	(1.51)	0.000	(1.24)	0.000	(1.46)	
ACCR	-			-0.031	(-1.30)	-0.031	(-1.30)	-0.032	(-1.36)	
									(2.07)**	
				0.018	(2.18)**	0.018	(2.17)**	0.018		
Legal_trad				0.018 -0.002	(2.18)**		(' /			
Legal_trad Enforcement				-0.002	(-0.17)	-0.002	(-0.17)	-0.001	(-0.12)	
Legal_trad Enforcement Mktbase				-0.002 -0.012	(-0.17) (-1.64)	-0.002 -0.012	(-0.17) (-1.64)	-0.001 -0.012	(-0.12) (-1.65)	
Legal_trad Enforcement Mktbase GDP growth				-0.002 -0.012 0.003	(-0.17) (-1.64) (1.76)	-0.002 -0.012 0.003	(-0.17) (-1.64) (1.73)	-0.001 -0.012 0.003	(-0.12) (-1.65) (1.68)	
Legal_trad Enforcement Mktbase GDP growth Sales growth				-0.002 -0.012 0.003 -0.013	(-0.17) (-1.64) (1.76) (-1.21)	-0.002 -0.012 0.003 -0.014	(-0.17) (-1.64) (1.73) (-1.33)	-0.001 -0.012 0.003 -0.013	(-0.12) (-1.65) (1.68) (-1.34)	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size				-0.002 -0.012 0.003 -0.013 0.001	(-0.17) (-1.64) (1.76) (-1.21) (1.26)	-0.002 -0.012 0.003 -0.014 0.001	(-0.17) (-1.64) (1.73) (-1.33) (1.28)	-0.001 -0.012 0.003 -0.013 0.001	(-0.12) (-1.65) (1.68) (-1.34) (1.11)	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit				-0.002 -0.012 0.003 -0.013 0.001 -0.040	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)**	-0.002 -0.012 0.003 -0.014 0.001 -0.042	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)**	-0.001 -0.012 0.003 -0.013 0.001 - 0.039	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)**	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit Lev				-0.002 -0.012 0.003 -0.013 0.001 -0.040 0.000	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)** (-0.08)	-0.002 -0.012 0.003 -0.014 0.001 -0.042 0.000	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)** (-0.11)	-0.001 -0.012 0.003 -0.013 0.001 -0.039	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)*** (-0.08)	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit Lev Loss	sed effects			-0.002 -0.012 0.003 -0.013 0.001 -0.040 0.000 0.017	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)** (-0.08) (1.60)	-0.002 -0.012 0.003 -0.014 0.001 -0.042 0.000 0.017	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)** (-0.11) (1.57)	-0.001 -0.012 0.003 -0.013 0.001 -0.039 0.000 0.017	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)*** (-0.08) (1.60)	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit Lev Loss Firm & Industry fix	sed effects			-0.002 -0.012 0.003 -0.013 0.001 -0.040 0.000 0.017	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)** (-0.08) (1.60)	-0.002 -0.012 0.003 -0.014 0.001 -0.042 0.000 0.017	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)** (-0.11) (1.57) Yes	-0.001 -0.012 0.003 -0.013 0.001 -0.039 0.000 0.017	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)*** (-0.08) (1.60) Yes	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit Lev Loss Firm & Industry fix	sed effects			-0.002 -0.012 0.003 -0.013 0.001 -0.040 0.000 0.017	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)** (-0.08) (1.60) Yes 353	-0.002 -0.012 0.003 -0.014 0.001 -0.042 0.000 0.017	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)** (-0.11) (1.57) Yes	-0.001 -0.012 0.003 -0.013 0.001 -0.039 0.000 0.017	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)** (-0.08) (1.60) Yes 353	
Legal_trad Enforcement Mktbase GDP growth Sales growth Size Profit Lev Loss Firm & Industry fix N R ² F-test	sed effects			-0.002 -0.012 0.003 -0.013 0.001 -0.040 0.000 0.017	(-0.17) (-1.64) (1.76) (-1.21) (1.26) (-2.27)** (-0.08) (1.60)	-0.002 -0.012 0.003 -0.014 0.001 - 0.042 0.000 0.017	(-0.17) (-1.64) (1.73) (-1.33) (1.28) (-2.50)** (-0.11) (1.57) Yes	-0.001 -0.012 0.003 -0.013 0.001 -0.039 0.000 0.017	(-0.12) (-1.65) (1.68) (-1.34) (1.11) (-2.27)*** (-0.08) (1.60) Yes	

Table 6: Analysis regarding comparability and analysts' forecast dispersion

This table provides panel data analysis with depended variable analysts' dispersion (*Dispersion*). CHOICE reflects input comparability, Output Comp stands for Out_Com_Cros_Sec and Out_Com_Tim_Ser. ACCR stands for industry mean adjusted accruals. IFRSpre-post is a binary variable that takes one for 2005 and 2010, and zero for 2003. IFRS₂₀₁₀ is a binary variable that takes one for 2010 and zero for 2003 and 2005. All country-specific factors such Earn_mgt, Legal_trad, enforcement, GDPgrowth, as well as firm-specific factors such as sales growth (SGTH), firm size (Size), profitability (ROA) and leverage (Lev) are as defined in Appendix A. In brackets, t statistics are provided.

Reg. 20

Reg. 21

Reg. 22

Panel A: Output comp. = Out_Com_Cros_Sec

Reg. 19

		Reg. 19	Reg. 20	Reg. 21	Reg. 22
Variables	Exp. Sign	Coef. tstat	Coef. tstat	Coef. tstat	Coef. tstat
Constant		0.010 (2.59)***	0.000 (-0.03)	0.000 (-0.09)	0.006 (1.21)
Output Comp.	-		-0.023 (-9.14)***	-0.023 (-9.14)***	-0.023 (-9.24)***
Input Comp.	-		0.008 (1.18)	0.008 (1.61)	0.002 (0.39)
IFRS pre-post	-	-0.003 (-3.66)***	-0.002 (-1.26)	-0.001 (-1.23)	-0.001 (-1.16)
IFRS 2010	-	0.000 (-0.85)	-0.001 (-1.21)	-0.001 (-1.45)	-0.001 (-1.09)
Earn_mgt		0.000 (0.17)	0.000 (0.60)	0.000 (0.62)	0.000 (0.47)
ACCR	-	-0.024 (-3.39)***	-0.020 (-3.18)***	-0.020 (-3.19)***	-0.020 (-3.19)***
Legal_trad		-0.002 (-2.82	-0.002 (-2.64)***	-0.002 (-2.41)**	-0.002 (-3.02)***
Enforcement		-0.002 (-0.75)	-0.001 (-0.68)	-0.001 (-0.70)	-0.001 (-0.64)
Mktbase		0.000 (-0.60)	0.000 (-0.55)	0.000 (-0.46)	0.000 (-0.76)
GDP growth		0.000 (-0.39)	0.000 (-0.37)	0.000 (-0.38)	0.000 (-0.40)
Sales growth		-0.009 (-2.65)***	-0.008 (-2.97)***	-0.008 (-3.01)***	-0.008 (-3.11)***
Size		0.000 (0.38)	0.000 (0.55)	0.000 (0.81)	0.000 (0.55)
Profit		-0.024 (-2.81)***	-0.028 (-2.45)**	-0.029 (-2.51)**	-0.029 (-2.49)**
Lev		0.001 (1.37)	0.001 (1.62)	0.001 (1.61)	0.001 (1.61)
Loss		0.011 (2.97)***	0.008 (2.30)**	0.008 (2.33)**	0.008 (2.29)**
Firm & Industry	fixed effects	Yes	Yes	Yes	Yes
N		558	556	556	556
R^2		0.28	0.32	0.32	0.32
F-test		6.46***	5.48***	5.53***	5.5***
Mean VIF		1.75	1.71	1.72	1.71
Panel B: Output	$comp. = Out_{\perp}$	Com_Tim_Ser			
			Reg. 23	Reg. 24	Reg. 25
Variables	Exp. Sign		Coef. tstat	Coef. tstat	Coef. tstat
Constant			-0.013 (-1.74)	-0.010 (-1.08)	-0.008 (-1.26)
Output Comp.	-		-0.073 (-4.93)***	-0.071 (-4.49)***	-0.072 (-4.58)***
Input Comp.	-		0.012 (1.89)	0.007 (1.10)	0.006 (1.93)
IFRS 2010	-		0.000 (-0.52)	-0.001 (-0.65)	-0.001 (-0.55)
Earn_mgt			0.000 (1.07)	0.000 (1.06)	0.000 (1.07)
ACCR	-		-0.019 (-3.93)***	-0.019 (-3.94)***	-0.019 (-4.14)***
Legal_trad			-0.001 (-0.52)	0.000 (-0.32)	-0.001 (-0.67)
Enforcement			0.001 (0.44)	0.001 (0.44)	0.002 (0.52)
Mktbase			-0.001 (-1.64)	-0.001 (-1.68)	-0.001 (-1.76)
GDP growth			0.000 (0.07)	0.000 (0.09)	0.000 (0.00)
Sales growth			-0.008 (-2.14)**	-0.008 (-2.28)**	-0.008 (-2.27)**
Size			0.000 (0.81)	0.000 (1.24)	0.000 (0.89)
Profit			-0.029 (-3.52)***	-0.030 (-3.65)***	-0.029 (-3.57)***
Lev			0.001 (2.04)**	0.001 (1.50)	0.001 (1.51)
			0.001 (2.04)		
Loss	fixed effects		Yes	0.009 (2.73)*** Yes	0.009 (2.79)*** Yes
Firm & Industry	jixeu ejjecis		352	353	353
Firm & Industry				111	333
N					
N R^2			0.42	0.42	0.42
N					

Appendix A: Variable definitions

Ap	pendix A: Variable	definitions
•	CHOICE	: Measure of input comparability, defined as one minus the percentage of
		the atypical firm choice compared to the industry mode. Atypical
		choices are measured as in De Fond and Hung (2003).
•	NI	: Net income before extraordinary items and preference shares. NI is the
		Worldscope item WC01551.
•	MV	: Market value, defined as the Datastream item MV multiplied by 1000.
•	R	: Return, defined as the natural logarithm of the Datastream RI index for
		period t divided by RI index for period t-1, $R_t = \ln\left(\frac{RI_t}{RI_{t-1}}\right)$. Lang et al.
		(2010) define R as $R_t = \frac{RI_{t-1}}{RI_t} - 1$. We use the logarithmic returns for
		theoretical and empirical reasons (see Strong, 1992).
•	Out_Com_Tim_Ser	: Measure of output comparability defined as in De Franco et al. (2011).
•	Out_Com_Cros_Sec	: Measure of output comparability which constitutes a cross-sectional
		adaptation of the De Franco et al. (2011) methodology.
•	ACCR	: Mean adjusted industry accruals. Accruals are defined as
		$- (NI_t - OCF_t)/MV $ where OCF is the operating cash flows
		(WC04860).
•	GDP_{growth}	: GDP growth rate (%), as given in World Bank World Development
	LOGG	Indicators (<u>www.worldbank.org/data</u>).
•	LOSS	: An indicator that equals one if actual earnings are negative, and equals zero otherwise.
	IFPC	: A binary variable that takes one for 2005 and 2010, and zero for 2003.
•	$IFRS_{pre-post}$ $IFRS_{2010}$: A binary variable that takes one for 2010 and zero for 2003 and 2005.
•	Sales _{growth}	: Sales (WC01001) change to Total assets (WC02999).
•	Size	: Firm size, defined as the natural log of total assets, ln(A). (Total assets:
		WC02999.)
•	ROA	: Return on assets, defined as <i>NI</i> divided by total assets. (Total assets: WC02999.)
•	Leverage	: Firm leverage, defined as the total debt (WC03255) divided by book value of equity (WC03501).
•	Industry	: Industry classifications are according to ICB Level 2.
•	Earn_mgt	: Country related earnings management score (as provided by Leuz et al.,
		2003) used as a proxy for earnings management 'tradition'.
•	Enforcement	: Regulator's enforcement power, based on la Porta et al., 2006.
•	Mktbase	: A binary variable that takes one for market based financial system law and 0 for bank based financing system, based on Demirgue et al., 2002.
•	Legal_trad	: A binary variable that takes one for common law and 0 for code law
	0 –	countries, based on La Porta et al., (1998).
•	ForecastErr	: Forecast error, defined as ACTUAL - MEANEST / PRICE, where
		ACTUAL stands for the actual EPS, MEANEST for mean estimated
		value of EPS and <i>PRICE</i> the price for last available price prior to the
		forecast summary date (STATPERS). All amounts are from the I/B/E/S
		Summary File.
•	Dispersion	: Analyst dispersion, defined as <i>STDEV / PRICE</i> , where <i>STDEV</i> is the
		standard deviation of forecasts and <i>PRICE</i> the price for last available
		price prior to the forecast summary date (STATPERS). All amounts are from the I/B/E/S Summary File.
		nom are ubital o outlining i lie.

Appendix B: Mode of accounting choices followed per year of analysis

					2003		2005					
				N	%	Mode	N	%	Mode	N	%	Mode
Income	1	Incor	ne statement presentation		•	•	-		•			-
statement		a	by function (if so, footnote by nature)	39	20.9%		76	40.6%		50	26.7%	
		b	by nature	93	49.7%	X	103	55.1%	X	80	42.8%	X
		c	mixture	55	29.4%		8	4.3%		57	30.5%	
	2	Inclu	sion of a line for									
		a	EBIT or operating profit	178	95.2%	X	184	98.4%	X	186	99.5%	X
		b	no such line	9	4.8%		3	1.6%		1	0.5%	
	3	Inclu	sion of a line for other, non-gaap, sub-total such as underlying	g profit,	activity o	ontribut	ion, g	ross ma	rgin etc			
		a	Yes	5	2.7%		1	0.5%		11	5.9%	
		b	No	182	97.3%	X	186	99.5%	X	176	94.1%	X
	4	Inves	tments (in associates and/or joint ventures) accounted for un	der equi	ty accou	nting (m	ethod) include	ed			
		a	in 'operating'	40	21.4%		40	21.4%		36	19.3%	
		b	immediately after	37	19.8%		23	12.3%		28	15.0%	
		c	after finance	58	31.0%	X	88	47.1%	X	90	48.1%	X
		d	N/A	52	27.8%		36	19.3%		33	17.6%	
	5	Reve	nue split between net sales and other income									
		a	Yes	47	25.1%		105	56.1%	X	35	18.7%	
		b	No	140	74.9%	X	82	43.9%		152	81.3%	X
Balance sheet	6	Balan	ice sheet shows									
		a	assets = credits (single step)	117	62.6%	X	126	67.4%	X	126	67.4%	X
		b	net assets (multiple steps)	70	37.4%		61	32.6%		61	32.6%	
	7	Balan	ce sheet liquidity									
		a	decreasing (cash at top)	9	4.8%		11	5.9%		10	5.3%	
		b	increasing	178	95.2%	X	176	94.1%	X	177	94.7%	X
Statement of	8	State	ment of									
shareholders'		a	changes in Equity, including dividends and share issues	178	95.2%	X	113	60.4%	X	13	7.0%	
equity		b	SORIE, not including them	9	4.8%		74	39.6%		174	93.0%	X

Cash flow	9 In sta	atement of cash flows, operating cash flows are presented	d								
statement	a	direct method	6	3.2%		16	8.6%		6	3.2%	
	b	indirect method	168	89.8%	X	171	91.4%	X	181	96.8%	X
	c	N/A	13	7.0%		0	0.0%		0	0.0%	
Accounting	10 Tang	ible assets (PPE) measurement	•								
choices	a	only cost	180	96.3%	X	176	94.1%	X	186	99.5%	X
	b	some fair value (revaluation model)	7	3.7%		11	5.9%		1	0.5%	
	11 Tang	ible assets are depreciated using the:	-								
	a	straight line	171	91.4%	X	171	91.4%	X	177	94.7%	X
	e	mixed depreciation method	15	8.0%		16	8.6%		9	4.8%	
	f	unit of production	1	0.5%		0	0.0%		1	0.5%	
	12 Intan	gibles (other than goodwill)									
	a	only cost	144	77.0%	X	170	90.9%	X	187	100.0%	X
	b	some fair value (revaluation model)	1	0.5%		17	9.1%		0	0.0%	
	d	Not shown separately	1	0.5%		0	0.0%		0	0.0%	
	e	N/A	41	21.9%		0	0.0%		0	0.0%	
	13 Intan	gibles with finite lives are amortised using									
	a	Straight line	125	66.8%	X	180	96.3%	X	175	93.6%	X
	e	Mixed depreciation method	7	3.7%		7	3.7%		8	4.3%	
	f	Unit of production	0	0.0%		0	0.0%		1	0.5%	
	g	Other	2	1.1%		0	0.0%		2	1.1%	
	h	Not shown separately	2	1.1%		0	0.0%		0	0.0%	
	i	N/A	51	27.3%		0	0.0%		1	0.5%	
	14 Inves	stment property									
	a	at cost	4	2.1%		32	17.1%		37	19.8%	
	b	at fair value	3	1.6%		0	0.0%		3	1.6%	
	c	Not shown separately	2	1.1%		0	0.0%		0	0.0%	
	d	N/A	178	95.2%	X	155	82.9%	X	147	78.6%	X
	15 Gove	rnment grants									
	a	deducted from assets (netting method)	18	9.6%		34	18.2%		47	25.1%	
	b	deferred income	42	22.5%		55	29.4%		35	18.7%	
	c	Not shown separately	8	4.3%		0	0.0%		3	1.6%	
	d	N/A	119	63.6%	X	98	52.4%	X	102	54.5%	X

16 Are	investments in equity or debt securities classified as held for tradi	ng me	asured at	fair va	lue?					
a	Yes	3	1.6%		23	12.3%		6	3.2%	
b	No	105	56.1%	X	1	0.5%		104	55.6%	X
С	N/A	79	42.2%		163	87.2%	X	77	41.2%	
17 Are	any other financial assets and liabilities classified as at fair value t	hroug	h profit o	r loss a	nd me	easured a	at fair va	lue?		
a	Yes	3	1.6%		157	84.0%	Х	76	40.6%	
b	No	151	80.7%	X	4	2.1%		103	55.1%	X
С	N/A	33	17.6%		26	13.9%		8	4.3%	
18 Does	s the company apply hedge accounting?									
a	Yes	32	17.1%		179	95.7%	X	183	97.9%	X
b	No	139	74.3%	X	6	3.2%		3	1.6%	
c	Not shown separately	16	8.6%		2	1.1%		1	0.5%	
19 Inve	ntory									
a	FIFO	46	24.6%		29	15.5%		58	31.0%	
b	Weighted average	40	21.4%		36	19.3%		58	31.0%	X
С	LIFO	1	0.5%		0	0.0%		0	0.0%	
d	Most current purchase price	0	0.0%		1	0.5%		0	0.0%	
e	Retail prices reduced by appropriate margins	3	1.6%		11	5.9%		3	1.6%	
f	Mixture	17	9.1%		89	47.6%	X	26	13.9%	
g	Not shown separately	80	42.8%	X	21	11.2%		42	22.5%	
20 Fore	ign currency									
a	temporal method only	1	0.5%		0	0.0%		0	0.0%	
b	net investment method (also current/closing rate method) only	165	88.2%	X	181	96.8%	X	181	96.8%	X
С	mix of methods	10	5.3%		0	0.0%		2	1.1%	
d	Not shown separately	0	0.0%		0	0.0%		0	0.0%	
e	N/A	11	5.9%		6	3.2%		4	2.1%	
21 Leas	es	•			-			-		
a	All operating	36	19.3%		30	16.0%		24	12.8%	
b	Some financial	130	69.5%	X	156	83.4%	X	154	82.4%	X
a	Not shown separately	14	7.5%		0	0.0%		0	0.0%	
b	N/A	7	3.7%		1	0.5%		9	4.8%	

	22 R&D										
	a	No R&D capitalised	101	54.0%	Х	55	29.4%		80	42.8%	
	b	Some R&D capitalised	48	25.7%		103	55.1%	X	84	44.9%	X
	c	N/A	38	20.3%		29	15.5%		23	12.3%	
	23 Actu	arial gains and losses	•								
	a	to SORIE	67	35.8%		87	46.5%	X	120	64.2%	X
	b	to income in full	1	0.5%		8	4.3%		2	1.1%	
	c	corridor	48	25.7%		75	40.1%		53	28.3%	
	d	Not shown separately	71	38.0%	X	17	9.1%		12	6.4%	
Segement	24 Segm	ental information				•					
reporting	a	Yes	155	82.9%	X	182	97.3%	X	186	99.5%	X
	b	No	32	17.1%		5	2.7%		1	0.5%	
Tax	25 Expla	nation of the relationship between tax expense (income) and acco	untin	g profit in	either	or bo	th of the f	followin	g forr	ns:	
		a numerical reconciliation between tax expense (income) and									
	a	the product of accounting profit multiplied by the applicable									
		tax rate(s), disclosing also the basis on which the applicable									
		tax rate(s) is (are) computed; or	115	61.5%	X	144	77.0%	X	128	68.4%	X
		a numerical reconciliation between the average effective tax									
	b	rate and the applicable tax rate, disclosing also the basis on									
		which the applicable tax rate is computed;	54	28.9%		36	19.3%		38	20.3%	
	c	both a & b	8	4.3%		7	3.7%		21	11.2%	
	d	Not shown separately	10	5.3%		0	0.0%		0	0.0%	

Appendix C: Mode of accounting choices followed per year of analysis across industries

Appendix C.		louc o	acco	unung		ا	wed p	ci ycai	or and	ily sis a		Huusti	ICS			j		j		1
				sic erials	Cons Go	umer ods	Cons Serv		Indus	trials	Tele	coms	Oil &	z Gas	Util	ities	Healt	hcare	Techi	ology
			Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)	Mode	N(%)
INCOME	1	2003	b	46.7%	b	48.4%	b	59.5%	b	41.7%	b	63.6%	с	50.0%	b	86.7%	С	70.0%	с	37.5%
STATEMENT		2005	b	66.7%	a	58.1%	b	67.6%	b	47.9%	b	72.7%	b	53.8%	b	93.3%	a	100.0%	a	50.0%
		2010	c	46.7%	a	38.7%	b	37.8%	b	45.8%	b	72.7%	c	41.7%	b	93.3%	С	80.0%	a	50.0%
	2	2003	a	100.0%	a	96.8%	a	97.3%	a	89.6%	a	90.9%	a	100.0%	a	93.3%	a	100.0%	a	100.0%
		2005	a	100.0%	a	96.8%	a	100.0%	a	97.9%	a	100.0%	a	100.0%	a	93.3%	a	100.0%	a	100.0%
		2010	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	91.7%	a	100.0%	a	100.0%	a	100.0%
	3	2003	b	100.0%	b	93.5%	b	94.6%	b	97.9%	b	100.0%	b	100.0%	b	100.0%	b	100.0%	b	100.0%
		2005	b	100.0%	b	96.8%	b	100.0%	b	100.0%	b	100.0%	b	100.0%	b	100.0%	b	100.0%	b	100.0%
		2010	b	100.0%	b	93.5%	b	91.9%	b	93.8%	b	100.0%	b	100.0%	b	93.3%	b	90.0%	b	87.5%
	4	2003	a	53.3%	d	32.3%	c	35.1%	d	33.3%	c	36.4%	d	41.7%	a	33.3%	b	50.0%	d	50.0%
		2005	a	40.0%	c	64.5%	c	35.1%	c	50.0%	c	36.4%	c	61.5%	c	46.7%	c	55.6%	d	62.5%
		2010	c	33.3%	c	54.8%	c	35.1%	c	52.1%	c	36.4%	c	58.3%	c	53.3%	c	80.0%	d	50.0%
	5	2003	b	80.0%	b	83.9%	b	78.4%	b	72.9%	b	63.6%	b	75.0%	b	53.3%	b	60.0%	b	100.0%
		2005	a	66.7%	a	61.3%	a	51.4%	b	56.3%	a	81.8%	a	69.2%	a	80.0%	a	55.6%	b	87.5%
		2010	b	73.3%	b	93.5%	b	91.9%	b	75.0%	a	54.5%	b	91.7%	b	73.3%	b	70.0%	b	100.0%
BALANCE	6	2003	a	60.0%	a	71.0%	a	51.4%	a	68.8%	a	81.8%	a	58.3%	a	60.0%	a	60.0%	b	62.5%
SHEET		2005	a	66.7%	a	71.0%	a	56.8%	a	75.0%	a	90.9%	a	61.5%	a	60.0%	a	77.8%	b	62.5%
		2010	a	60.0%	a	74.2%	a	59.5%	a	75.0%	a	81.8%	a	58.3%	a	60.0%	a	80.0%	b	62.5%
	7	2003	b	100.0%	b	90.3%	b	91.9%	b	100.0%	b	90.9%	b	83.3%	b	100.0%	b	100.0%	b	100.0%
		2005	b	93.3%	b	100.0%	b	94.6%	b	95.8%	b	81.8%	b	84.6%	b	93.3%	b	100.0%	b	87.5%
		2010	b	93.3%	b	100.0%	b	94.6%	b	97.9%	b	81.8%	b	91.7%	b	93.3%	b	90.0%	b	87.5%
STATEMENT	8	2003	a	93.3%	a	93.5%	a	91.9%	a	100.0%	a	100.0%	a	91.7%	a	93.3%	a	90.0%	a	100.0%
OF S.H.		2005	a	53.3%	a	64.5%	b	56.8%	a	72.9%	a	54.5%	a	69.2%	a	60.0%	a	66.7%	b	50.0%
EQUITY		2010	b	100.0%	b	90.3%	b	91.9%	b	89.6%	b	100.0%	b	100.0%	b	100.0%	b	90.0%	b	87.5%

ACCOUNTING	10 2003	a	100.0%	a	96.8%	a	100.0%	a	89.6%	a	90.9%	a	100.0%	a	100.0%	a	100.0%	a	100.0%
CHOICES	2005	a	100.0%	a	96.8%	a	94.6%	a	91.7%	a	81.8%	a	92.3%	a	93.3%	a	100.0%	a	100.0%
	2010	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	90.9%	a	100.0%	a	100.0%	a	100.0%	a	100.0%
	11 2003	a	73.3%	a	100.0%	a	97.3%	a	93.8%	a	100.0%	a	58.3%	a	80.0%	a	100.0%	a	100.0%
	2005	a	60.0%	a	93.5%	a	100.0%	a	91.7%	a	100.0%	a	76.9%	a	93.3%	a	100.0%	a	100.0%
	2010	a	60.0%	a	93.5%	a	100.0%	a	97.9%	a	100.0%	a	91.7%	a	100.0%	a	100.0%	a	100.0%
	12 2003	a	73.3%	a	83.9%	a	64.9%	a	79.2%	a	100.0%	a	83.3%	a	66.7%	a	100.0%	na	50.0%
	2005	a	93.3%	a	100.0%	a	91.9%	a	77.1%	a	100.0%	a	84.6%	a	100.0%	a	100.0%	a	100.0%
	2010	a	100.0%																
	13 2003	a	73.3%	a	71.0%	a	51.4%	a	66.7%	a	100.0%	a	66.7%	a	60.0%	a	90.0%	na	50.0%
	2005	a	93.3%	a	100.0%	a	97.3%	a	95.8%	a	100.0%	a	76.9%	a	100.0%	a	100.0%	a	100.0%
	2010	a	86.7%	a	96.8%	a	94.6%	a	95.8%	a	81.8%	a	91.7%	a	93.3%	a	100.0%	a	87.5%
	14 2003	na	100.0%	na	96.8%	na	94.6%	na	93.8%	na	100.0%	na	91.7%	na	86.7%	na	100.0%	na	100.0%
	2005	na	86.7%	na	87.1%	na	70.3%	na	83.3%	na	72.7%	na	92.3%	na	80.0%	na	100.0%	na	100.0%
	2010	na	80.0%	na	90.3%	na	62.2%	na	72.9%	na	81.8%	na	83.3%	na	80.0%	na	100.0%	na	100.0%
	15 2003	na	46.7%	na	61.3%	na	89.2%	na	66.7%	na	54.5%	na	41.7%	na	40.0%	na	60.0%	na	62.5%
	2005	na	33.3%	na	61.3%	na	89.2%	b	47.9%	na	54.5%	na	38.5%	b	60.0%	na	77.8%	na	62.5%
	2010	na	33.3%	na	45.2%	na	86.5%	na	50.0%	na	54.5%	na	50.0%	b	53.3%	na	60.0%	na	87.5%
	16 2003	С	60.0%	b	54.8%	b	56.8%	c	52.1%	b	81.8%	b	58.3%	b	73.3%	b	70.0%	b	62.5%
	2005	С	93.3%	c	80.6%	c	86.5%	c	97.9%	c	63.6%	c	84.6%	c	80.0%	c	88.9%	c	87.5%
	2010	b	60.0%	b	67.7%	b	54.1%	c	60.4%	b	90.9%	b	58.3%	b	53.3%	b	60.0%	b	62.5%
	17 2003	b	73.3%	b	87.1%	b	81.1%	b	66.7%	b	100.0%	b	91.7%	b	80.0%	b	90.0%	b	100.0%
	2005	a	86.7%	a	93.5%	a	83.8%	a	70.8%	a	100.0%	a	84.6%	a	93.3%	a	88.9%	a	75.0%
	2010	b	80.0%	b	67.7%	b	51.4%	a	47.9%	b	54.5%	b	75.0%	b	66.7%	b	60.0%	a	75.0%

	18 2003	b	66.7%	b	77.4%	b	70.3%	b	70.8%	b	72.7%	b	83.3%	b	80.0%	b	80.0%	b	87.5%
	2005	a	100.0%	a	96.8%	a	91.9%	a	95.8%	a	100.0%	a	92.3%	a	100.0%	a	88.9%	a	100.0%
	2010	a	100.0%	a	100.0%	a	97.3%	a	97.9%	a	100.0%	a	91.7%	a	100.0%	a	100.0%	a	87.5%
	19 2003	nss	53.3%	a	38.7%	nss	56.8%	nss	52.1%	nss	36.4%	b	33.3%	nss	60.0%	a	50.0%	nss	62.5%
	2005	f	80.0%	f	67.7%	f	37.8%	f	33.3%	f	45.5%	f	53.8%	f	53.3%	f	55.6%	a	50.0%
	2010	a	33.3%	f	29.0%	nss	29.7%	a	35.4%	b	54.5%	b	50.0%	b	60.0%	a	50.0%	a	62.5%
	20 2003	b	93.3%	b	93.5%	b	78.4%	b	97.9%	b	90.9%	b	83.3%	b	66.7%	b	90.0%	b	87.5%
	2005	b	100.0%	b	96.8%	b	91.9%	b	97.9%	b	100.0%	b	100.0%	b	93.3%	b	100.0%	b	100.0%
	2010	b	100.0%	b	96.8%	b	94.6%	b	100.0%	b	90.9%	b	100.0%	b	93.3%	b	90.0%	b	100.0%
	21 2003	b	53.3%	b	71.0%	b	78.4%	b	79.2%	b	81.8%	b	50.0%	b	46.7%	b	50.0%	b	75.0%
	2005	b	93.3%	b	80.6%	b	83.8%	b	91.7%	b	90.9%	b	61.5%	b	80.0%	b	55.6%	b	87.5%
	2010	b	73.3%	b	93.5%	b	81.1%	b	83.3%	b	90.9%	b	75.0%	b	73.3%	b	70.0%	b	87.5%
	22 2003	a	80.0%	a	74.2%	na	56.8%	a	43.8%	a	63.6%	a	50.0%	b	53.3%	a	70.0%	a	75.0%
	2005	b	53.3%	a	51.6%	na	40.5%	b	66.7%	b	54.5%	b	46.2%	b	80.0%	b	55.6%	b	100.0%
	2010	a	66.7%	a	58.1%	b	37.8%	b	56.3%	b	54.5%	a	50.0%	a	53.3%	a	60.0%	b	100.0%
	23 2003	nss	40.0%	c	48.4%	a	45.9%	nss	39.6%	nss	45.5%	nss	58.3%	nss	53.3%	nss	40.0%	nss	37.5%
	2005	a	46.7%	c	48.4%	a	64.9%	c	47.9%	c	36.4%	c	53.8%	a	53.3%	c	55.6%	a	50.0%
	2010	a	66.7%	a	61.3%	a	75.7%	a	68.8%	a	54.5%	c	50.0%	a	66.7%	c	60.0%	a	87.5%
SEGMENT	24 2003	a	80.0%	a	96.8%	a	70.3%	a	85.4%	a	90.9%	a	91.7%	a	60.0%	a	80.0%	a	100.0%
REPORTING	2005	a	100.0%	a	96.8%	a	94.6%	a	97.9%	a	100.0%	a	100.0%	a	93.3%	a	100.0%	a	100.0%
	2010	a	93.3%	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	100.0%	a	100.0%
TAX	25 2003	a	60.0%	a	54.8%	a	64.9%	a	64.6%	a	72.7%	a	58.3%	a	66.7%	b	60.0%	a	87.5%
	2005	a	73.3%	a	64.5%	a	83.8%	a	83.3%	a	81.8%	a	69.2%	a	73.3%	a	55.6%	a	100.0%
	2010	a	46.7%	a	71.0%	a	78.4%	a	75.0%	a	63.6%	a	66.7%	a	60.0%	b	70.0%	a	87.5%