Compliance with IFRS disclosure requirements and individual analysts’ forecast errors☆

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Abstract

We investigate the relationship between analysts’ earnings forecast errors and firm compliance with the disclosure requirements of International Financial Reporting Standards (IFRS). Using a comprehensive disclosure index of selected IFRS for which previous research has indicated significant noncompliance, we develop an unweighted and an innovative weighted measure of IFRS disclosure compliance. We document that forecast error is negatively related to IFRS compliance, and that the magnitude of this effect is larger when controlling for analyst fixed effects. Our findings suggest that compliance with the disclosure requirements of IFRS reduces information asymmetry and enhances the ability of financial analysts to provide more accurate forecasts. Our findings also support the viewpoint that the extent of compliance with accounting standards is as important as the standards themselves. Our results are robust to alternative model specifications.

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1. Introduction

We investigate the relationship between the analysts’ earnings forecast errors and firm compliance with the disclosure requirements of International Financial Reporting Standards (IFRS).☆ Several studies (Glaum & Street, 2003; Street & Bryant, 2000; Street & Gray, 2001; Street, Gray, & Bryant, 1999) document significant noncompliance with the disclosure requirements of IFRS in many areas. Using a sample of non-U.S. firms that claim to comply with the disclosure requirements of IFRS, we examine whether varying levels of disclosure compliance in 1999 and 2000 annual reports affect analysts’ forecasts of earnings for the years ending December 2000 and 2001, respectively.

☆ Data availability: Data are publicly available from sources identified in the paper.
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4 To simplify the exposition, we use the term IFRS to refer to both International Accounting Standards (IAS) issued by the International Accounting Standards Committee (IASC) and International Financial Reporting Standards (IFRS) issued by the IASC’s successor, the International Accounting Standards Board (IASB).
We ascertain firm compliance with the disclosure requirements of IFRS through an examination of annual reports for the years 1999 and 2000 and measure compliance using both a weighted and unweighted disclosure score. We focus on these two years because several new IFRS came into effect during this period, including IAS 1 Revised. Using individual analysts’ forecast data, we find that our measures of compliance with IFRS disclosure requirements (both weighted and unweighted) are negatively associated with individual analysts’ earnings forecast errors. Furthermore, the magnitude of the estimated effect of compliance on forecast error increases markedly when we control for unmeasured, analyst-specific effects.

Unlike prior studies that examine forecast accuracy using the consensus or mean forecast (e.g., Hope, 2003a, 2003b), we examine forecast accuracy at the individual-analyst level. One complication not addressed in prior international studies is that the consensus earnings forecast of a typical European company is the composite forecast of individual analysts operating in different countries. Phillips Electronics, for instance, had at one time 42 analysts contributing to its consensus earnings forecast; of these 42 analysts, 10 were German, 12 Dutch, 6 French, 1 Spanish, 1 British, and 9 “global” brokers (Beckers, Stelianos, & Thomson, 2004, p. 83). International studies using consensus forecasts have not controlled for the environmental effects that might influence each analyst contributing to the consensus forecast. Additionally, this study is the first study to examine the effects of firm-level disclosures on the properties of individual financial analysts’ forecasts in an international setting. To address the presence of the fixed effects (different intercepts for each analyst/firm combination), we regress change in analyst forecast error on the changes in the independent variables. In contrast to the fixed-effects estimation where the intercept is allowed to vary across analyst/firm combinations, OLS regression constrains the intercept to be the same for all observations. Thus, by focusing on individual analysts’ forecasts rather than consensus forecasts, and using 2-year panel data, we effectively control for those factors (known and unknown) particular to each individual analyst (i.e., analyst-specific effects) that may affect their forecasts. This is the primary advantage of using individual analysts’ forecasts over consensus forecasts.

Furthermore, by focusing only on firms that apply IFRS, our study partially controls for the effects of international differences in accounting principles. Our findings also provide support for the viewpoint that the extent of compliance with accounting standards is as important as the standards themselves.

Lastly, this study incorporates an innovative measure of IFRS compliance based upon the Saidin index found in Spetz and Baker (1999). Our Saidin index incorporates a weighted sum of indicators for various IFRS disclosures, with each weight being the percentage of firms in the sample that did not make a required disclosure. More rare disclosures receive higher weights while disclosures that are more commonplace received lower weights. Future research may find it beneficial to incorporate a weighted disclosure measure such as that used in this study.

Section 2 discusses the prior literature relevant to the study and presents the hypotheses. Section 3 discusses the research design. Section 4 reports the results. Section 5 provides a summary of the paper and discusses its implications, and Section 6 discusses some of the limitations of the study.

2. Background and hypothesis development

2.1. Literature review

This study examines the association between firm compliance with IFRS disclosure requirements and individual financial analysts’ earnings forecast errors. Using a non-U.S. sample, Ashbaugh and Pincus (2001) find that analysts’ consensus forecast accuracy improves after firms adopt IFRS. The Ashbaugh and Pincus study, however, does not address the issue of noncompliance and its possible impact on their results, nor does it consider individual analysts’ forecasts.

While controlling for firm and country-level variables that may affect analysts’ forecasts, Hope (2003b) finds that the level of accounting policy disclosures is significant and negatively related to consensus forecast errors, consistent

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5 Since the passage of IAS 1 Revised (effective July 1, 1998), firms may no longer claim full compliance with IFRS unless they fully comply.

6 We compare our results using individual-analyst-level data to what would have been obtained using consensus forecasts. Combining parameter estimates and associated variance–covariance matrices, we find evidence that the partial effect of IFRS compliance on forecast error is similar using either individual-analyst forecast data or consensus forecasts, but the partial effects of the other regressors are different. While not proof of the “superiority” of individual analyst data, these results do suggest that the implications of using individual-analyst data are not identical to those using consensus forecasts.
with the view that such disclosures reduce uncertainty about forecasted earnings. In a related study, Hope (2003a) documents the important role of enforcement in the financial reporting infrastructure. He argues that enforcement encourages firms to follow prescribed rules, which in turn reduces investors’ uncertainty and leads to more accurate analysts’ forecasts. Hope (2003a) provides evidence that both disclosure and strong enforcement are associated with improved consensus forecast accuracy. As with Ashbaugh and Pincus (2001), however, he did not examine forecast error at the individual-analyst level.

The limited evidence that we have in an international setting also suggests that an examination of analysts’ forecast errors must consider both the level of disclosure in general and the level of compliance with specific disclosure requirements. If IFRS firms are not in compliance and the level of compliance is not specifically controlled for in studies examining IFRS adoption and analysts’ forecast errors, then it becomes very difficult to attribute changes in forecast error to IFRS adoption (Meek & Thomas, 2004). Thus, the omission of compliance from studies of IFRS adoption may lead researchers to draw incorrect conclusions, especially if noncompliance is widespread. Our study seeks to address this shortcoming by directly measuring firm compliance with IFRS and relating it to analysts’ forecast errors.

Compliance with IFRS is a contentious issue. Cairns (1999) documents nine categories of firm compliance with IFRS, ranging from full compliance to “unqualified description of differences.” Cairns (1998, 1999) finds that some companies use a mixture of IFRS and home-country GAAP, while others use IFRS with stated exceptions. Street et al. (1999) report significant noncompliance in many areas. In a subsequent study, Street and Bryant (2000) report that the overall level of compliance for all sample firms is equal to or less than 75% for many of the standards examined, and that firm compliance is higher for firms with U.S. listings vs. those without such a listing. Thus, while firms may be claiming full compliance with IFRS, significant deviations exist.

Concerned about the casual approach many companies were taking towards the application of IFRS, the International Accounting Standards Committee issued IAS 1 Revised “Presentation of Financial Statements” in 1997. IAS 1 Revised states “Financial statements should not be described as complying with International Accounting Standards unless they comply with all the requirements of each applicable Standard and each applicable Interpretation of the Standing Interpretations Committee.”

In spite of the passage of IAS 1 Revised, compliance continues to be an issue. Examining the 1998 annual reports of 279 companies that claim to comply with IFRS, post IAS 1 Revised, Street and Gray (2001) report considerable variation in the level of compliance with IFRS disclosures and find that the level of compliance varies with certain corporate characteristics (e.g., non-regional listing, Big 5 + 2 audit, country of domicile). In a study examining the extent to which companies listed on Germany’s New Market comply with IFRS disclosure requirements in their 2000 annual reports, Glaum and Street (2003) find that compliance ranges from 100% to 41.6%, with an average of 83.7%. The results of these studies reveal a considerable amount of noncompliance despite the requirements of IAS 1 Revised. When compliance with IFRS varies among firms, comparability of financial information may be compromised.

Thus, the omission of compliance from studies of IFRS adoption may lead researchers to draw incorrect conclusions, especially if noncompliance is widespread. Our study seeks to address this shortcoming by directly measuring firm compliance with IFRS and relating it to analysts’ forecast errors.

2.2. Hypotheses

Our study expands upon previous research by determining whether compliance with the disclosure requirements of IFRS is associated with analysts’ forecast errors. We argue that as compliance becomes more complete, the task of financial analysts becomes less complex, and their forecasts become more accurate. Thus, the main hypothesis of our study is:

**H1. Ceteris Paribus**, compliance with the disclosure requirements of IFRS is negatively related to individual financial analysts’ earnings forecast errors.

One problem frequently encountered in international studies is how to control for the innumerable firm and country-level factors that could potentially impact financial analysts’ forecasts. Moreover, there may be many factors that are particular to each analyst (and even to an analyst’s forecasts for a company) that do not vary over time (e.g., differences in innate ability, familiarity with a company, location/nationality of the analyst) and which affect the analyst’s forecast
accuracy. We refer to such factors particular to each individual analyst as “analyst fixed effects.” In our study, variation in GAAP regimes is not an issue, since all of our sample firms claim compliance with IFRS. To control for time-invariant factors that may affect forecast accuracy, we perform fixed-effects estimation with two-year panel data. We examine the change in financial analysts’ forecast errors as a function of the change in disclosure compliance. We argue that increases in firm compliance with IFRS disclosure requirements should be associated with less forecast error. Thus, our second hypothesis is as follows:

**H2. Ceteris Paribus, the change in compliance with the disclosure requirements of IFRS is negatively related to the change in individual financial analysts’ earnings forecast errors.**

3. Research design

3.1. Sample

The sample of interest in this study consists of firms that claim to comply with IFRS for the 2 years 1999 and 2000. In 1999, the IASC posted on its website a list of 831 firms that claimed to use IFRS as their primary basis of financial reporting. In May 2000, the IASC revised its list of firms that use IFRS. The subsequent list contained 183 firms.7

Using these two lists, and checking for firm addresses and websites in the Worldscope Database and International Companies Database of Lexis-Nexis, we compiled a list containing 633 firms that claim to apply IFRS. These firms were contacted and a copy of their annual reports for the fiscal years 1999–2000 was requested.

Of the 377 companies that responded to the request for their 1999 and 2000 annual reports, only 208 claim in their accounting policy footnotes to comply with IFRS for both 1999 and 2000. Of these 208 companies, 107 companies are excluded since they belong to specialized industries (e.g., banking, insurance, oil and gas), consistent with prior studies, or for other reasons (e.g., not included in IBES database, annual reports not available in English), resulting in 101 firms in our sample. Of these 101 firms, 11 are missing estimates or actual earnings for 2000 or 2001 in IBES and are excluded. There is an additional firm for which IBES does not provide a value for actual earnings. Thus, the final sample for the study consists of 89 firms. Additionally, in the analysis of the fixed-effects models of forecast accuracy, an additional 2 firms are dropped, and thus the sample for the fixed-effects models is reduced to 87 firms. Table 1 gives details of countries of origin for the final sample.

3.2. Instrument to measure compliance with IFRS: the disclosure index

We use a disclosure index, based on the disclosure index developed by Street and Gray (2001), to measure firm compliance with selected IFRS disclosure requirements for the years 1999–2000. Table 2 provides a summary of the IFRS disclosures included in our index and citations of the relevant literature that justify their inclusion.

Our disclosure index includes 209 disclosure items, each coded as disclosed, not disclosed, or not applicable, for a sample of 89 firms. This approach is consistent with Cooke (1989), who developed a scoring scheme to capture levels of disclosure for a sample of Swedish firms.

Based on these 209 disclosure items, we compute an unweighted and weighted compliance score for firm j in year t. Our unweighted IFRS compliance score for each firm in each year is a relative measure, defined as the number of mandatory disclosures actually provided by a firm in year t divided by the number of mandatory disclosures that should have been provided by the firm in year t, as follows:

$$PR_{C,j,t} = \frac{\sum_{i=1}^{209} d_{i,j,t} r_{i,j,t}}{\sum_{i=1}^{209} r_{i,j,t}}$$

7 The reduction in the number of firms listed on the IASC’s website as claiming to comply with IFRS has no openly stated cause. We can only surmise that after the passage of IAS 1 Revised, and after several studies drew the attention of the public to the fact that noncompliance was a widespread problem, many firms ceased to claim compliance with IFRS. Thus, following IAS 1 Revised, the IASC temporarily removed its list and when the list subsequently reappeared it contained only 183 firms. The revelation that many firms were only claiming to comply rather than actually complying has implications for the validity of prior studies that examine the effects of IFRS adoption: unless compliance is measured, IFRS adoption is no guarantee that the standards are actually being followed.
where, $PR_{C_{j,t}}$ is the unweighted IFRS compliance score for firm $j$ in year $t$; $d_{i,j,t}$ indicates the disclosure of item $i$, by firm $j$, in year $t$, $i = 1, \ldots, 209$; $j = 1, \ldots, 89$; and $t = 1999, 2000$. $d_{i,j,t} = 1$ if item $i$ is disclosed by firm $j$ in year $t$, and $d_{i,j,t} = 0$ if the item is not disclosed. $r_{i,j,t}$ indicates whether disclosure item $i$ is required for firm $j$ in year $t$. Thus $r_{i,j,t} = 1$ if disclosure for item $i$ is required for firm $j$ in year $t$, and $r_{i,j,t} = 0$ if the disclosure is not required.

The unweighted, dichotomous approach is consistent with Street and Bryant (2000), and Street and Gray (2001).

Table 2 Components of the IFRS disclosure index

<table>
<thead>
<tr>
<th>IFRS</th>
<th>Disclosures</th>
<th>Inclusion supported by</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAS 12, income taxes</td>
<td>All required disclosures</td>
<td>Street and Bryant (2000)</td>
</tr>
<tr>
<td>IAS 14, segment reporting</td>
<td>All required line of business and geographic disclosures</td>
<td>Street and Bryant (2000), Cairns (1999), Street and Gray (2001)</td>
</tr>
<tr>
<td>IAS 16, property, plant, and equipment</td>
<td>All required disclosures for revalued property, plant, and equipment</td>
<td>Street et al. (1999)</td>
</tr>
<tr>
<td>IAS 17, leases</td>
<td>All required disclosures for lessees</td>
<td>Street and Bryant (2000)</td>
</tr>
<tr>
<td>IAS 19, retirement benefits</td>
<td>All required disclosures for defined benefit pensions</td>
<td>Street et al. (1999), Street and Bryant (2000), Cairns (1999)</td>
</tr>
<tr>
<td>IAS 23, borrowing costs</td>
<td>Accounting policy for borrowing cost and required disclosures for capitalized borrowing cost where applicable</td>
<td>Street and Bryant (2000)</td>
</tr>
<tr>
<td>IAS 32, financial instruments</td>
<td>Information about extent and nature of financial instruments; information about interest rate risk; information about credit rate risk</td>
<td>Street and Gray (2001)</td>
</tr>
<tr>
<td>IAS 33, earnings per share</td>
<td>All required disclosures</td>
<td>Street and Bryant (2000)</td>
</tr>
<tr>
<td>IAS 35, discontinued operations</td>
<td>All required disclosures</td>
<td>Not examined in prior literature</td>
</tr>
<tr>
<td>IAS 36, impairment of assets</td>
<td>All required disclosures</td>
<td>Not examined in prior literature</td>
</tr>
<tr>
<td>IAS 37, provisions, contingent liabilities and contingent assets</td>
<td>All required disclosures</td>
<td>Not examined in prior literature</td>
</tr>
<tr>
<td>IAS 38, intangible assets</td>
<td>All required disclosures</td>
<td>Not examined in prior literature</td>
</tr>
</tbody>
</table>
3.3. Alternative compliance measure: the Saidin index

In computing unweighted disclosure scores, we assume equal weighting of all disclosure items, and thus the model is only correct if compliance with any one of the 209 disclosure items examined has an identical effect on forecast accuracy.

We, therefore, use an alternative disclosure index, the “Saidin” index, which weights each disclosure item by the percentage of firms in the sample that do not comply with the item (Spetz & Baker, 1999). In order to create the Saidin index for firm \( j \) in year \( t \), we consider the same 209 disclosures used in calculating the unweighted compliance score, each one indexed as \( i = 1, \ldots, 209 \). For each disclosure, \( a \) weight \( a_i \) is calculated:

\[
 a_i = 1 - \frac{\sum_{t=1}^{2} \sum_{j=1}^{89} d_{i,j,t} r_{i,j,t}}{\sum_{t=1}^{2} \sum_{j=1}^{89} r_{i,j,t}} 
\]

(2)

where \( d_{i,j,t} \) and \( r_{i,j,t} \) are as previously defined. In the circumstance where every item is required for every firm \( (r_{i,j,t} = 1 \) for all \( i, j, \) and \( t \)\), then the denominator of the weight would simply be the product of the number of firms and the number of time periods. If all firms provide this required disclosure, then its weight equals zero, and if none provide this required disclosure, then its weight equals 1. The weights are used to compute the Saidin score for firm \( j \) in year \( t \) as follows:

\[
 \text{Saidin}_{jt} = \frac{\sum_{i=1}^{209} a_i d_{i,j,t} r_{i,j,t}}{\sum_{i=1}^{209} a_i r_{i,j,t}} 
\]

(3)

The Saidin score for firm \( j \) in year \( t \) is the sum of the weighted disclosures provided by the firm divided by the sum of the weighted disclosures that should have been provided.

3.4. The dependent variable: analysts’ forecast data

We obtain data for analysts’ earnings forecasts, analyst following, and earnings actuals from the I/B/E/S International Detail History Files. Following Chang et al. (2000) and Lang, Lins, and Miller (2003), we deflate forecast error by actual earnings instead of price to ensure that changes in price during the years 2000–2001 do not influence our results.\(^8\)

The error metric we use is as follows:

\[
 \text{AFE}_{i,j,t} = \frac{|(A_{j,t} - F_{i,j,t})|}{A_{j,t}} 
\]

(4)

where \( \text{AFE}_{i,j,t} \) = the absolute value of the forecast error of analyst \( i \), for firm \( j \), in period \( t \). \( A_{j,t} \) = the actual EPS reported for firm \( j \) in period \( t \), and \( F_{i,j,t} \) = the forecast of year-end EPS by analyst \( i \), for firm \( j \) in period \( t \).

3.5. Control variables

Prior research has identified certain variables that affect analysts’ forecast errors. We control for the age of individual analysts’ forecasts, since prior studies indicate that forecasts tend to become more accurate closer to the earnings announcement date. We also incorporate a measure of earnings change and include an indicator variable for loss firms, as these are two factors that have been shown to proxy for the difficulty in forecasting earnings. We control for several additional firm-level factors, including firm size, lines of business, analyst following, U.S. vs. non-U.S. listing, and international diversification. As a control for country-level effects, we include an indicator variable for micro-based vs. macro-uniform countries.\(^9\) Lastly, we include a year indicator variable.\(^{10}\)

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\(^8\) We also run all of our tests using stock price (provided by IBES) as a deflator. Our coefficient estimates (standard errors) obtained using price as a deflator are very close to those obtained when deflating by actual earnings.

\(^9\) Country of origin is time-invariant, and is therefore automatically dropped in the fixed-effects estimation.

\(^{10}\) A year indicator variable controls for the effects for time (the change in forecast error from 2000 to 2001); whatever common factors that affect forecast accuracy are explicitly controlled for in the fixed effect for the second time period, allowing the results to be generalizable to other time periods.
Table 3
Descriptive statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Forecasts</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFE (forecast error)</td>
<td>2725</td>
<td>7.79</td>
<td>140.14</td>
<td>.0001</td>
<td>4051</td>
</tr>
<tr>
<td>SIZE (firm size)*</td>
<td>2725</td>
<td>9530</td>
<td>13,800</td>
<td>2927</td>
<td>57,700</td>
</tr>
<tr>
<td>LOB (lines of business)</td>
<td>2725</td>
<td>3.67</td>
<td>1.65</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>LOSS (loss firms indicator)</td>
<td>2725</td>
<td>.05</td>
<td>.22</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>FOLLOW (analyst following)</td>
<td>2725</td>
<td>27</td>
<td>16</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>USLIST (U.S. list indicator)</td>
<td>2725</td>
<td>.37</td>
<td>.48</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>INTDIV (international diversification)</td>
<td>2725</td>
<td>4.25</td>
<td>1.94</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>MICRO (micro vs. macro)</td>
<td>2725</td>
<td>.05</td>
<td>.22</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>EARNCHG (earnings change)</td>
<td>2725</td>
<td>1.51</td>
<td>7.13</td>
<td>.0073</td>
<td>96</td>
</tr>
<tr>
<td>AGE (forecast age)</td>
<td>2725</td>
<td>155.21</td>
<td>133.14</td>
<td>1</td>
<td>706</td>
</tr>
<tr>
<td>PR_C (unweighted score)</td>
<td>2725</td>
<td>.68</td>
<td>.18</td>
<td>.04</td>
<td>.96</td>
</tr>
<tr>
<td>SAIDIN (weighted score)</td>
<td>2725</td>
<td>.55</td>
<td>.19</td>
<td>.01</td>
<td>.93</td>
</tr>
<tr>
<td>D2000 (year 2000 indicator)</td>
<td>2725</td>
<td>.50</td>
<td>.50</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

* In $1,000,000s.

3.6. Descriptive statistics

Descriptive statistics for the independent and dependent variables are reported in Table 3. There are a total of 2725 observations, or analysts’ forecasts. The mean and standard deviation of PR_C (the unweighted disclosure score) are 68% and 18%, respectively, and are consistent with Street and Gray (2001) who find a mean of 72% and standard deviation of 19%, using a similar unweighted compliance score. The SAIDIN (weighted disclosure score) also indicates that there is variability in the level of disclosure provided by IFRS companies. There are no prior studies that utilize a weighted disclosure score with which to benchmark this finding. A very low value for PR_C is noted for one company (4%). Further investigation revealed that the company noted minimal compliance with IFRS in its accounting policy footnotes. Very high compliance is observed for one company (96%), which is also consistent with Street and Gray (2001) who note high compliance by some sample firms.

3.7. Empirical models

To test for functional misspecification, we use several specification tests. We include quadratic terms to test for nonlinear relationships. We also use Ramsey’s (1969) regression specification error test (RESET) as a general test for functional form misspecification.\(^{11}\) We find evidence of a highly significant, nonlinear relationship between analysts’ forecast errors and IFRS compliance, and therefore use the natural logs of the dependent and all independent variables (except the indicator variables, lines of business, age, and international diversification) in the empirical models. We include the quadratic form of all independent variables (except for the indicator variables) to obtain correct functional form specification and to capture decreasing or increasing marginal effects.

The multivariate models for both the unweighted (5) and weighted (6) IFRS compliance scores are as follows:

\[
\text{LNAFE}_{i,j,t} = \alpha_{i,j} + \beta_1 \ln \text{SIZE}_{j,t} + \beta_2 \ln \text{SIZE}^2_{j,t} + \beta_3 \text{LOB}_{j,t} + \beta_4 \text{LOB}^2_{j,t} + \beta_5 \text{LOSS}_{j,t} + \beta_6 \ln \text{FOLLOW}_{j,t} + \beta_7 \ln \text{FOLLOW}^2_{j,t} + \beta_8 \text{USLIST}_{j,t} + \beta_9 \text{INTDIV}_{j,t} + \beta_{10} \ln \text{INTDIV}^2_{j,t} + \beta_{11} \text{MICRO}_{j,t} + \\
\beta_{12} \ln \text{EARNCHG}_{j,t} + \beta_{13} \ln \text{EARNCHG}^2_{j,t} + \beta_{14} \ln \text{PR}_C_{j,t} + \beta_{15} \ln \text{AGE}_{i,j,t} + \beta_{16} \ln \text{PR}_C^2_{j,t} + \beta_{17} \ln \text{D2000}_{j,t} + \mu_{i,j,t}
\]

\(^{11}\) RESET adds polynomials of the OLS fitted values from the estimated model to detect general kinds of functional form misspecification (Wooldridge, 2003, p. 293).
\[ \alpha_{i,j} + \beta_1 \ln \text{SIZE}_{j,t} + \beta_2 \ln \text{SIZE}^2_{j,t} + \beta_3 \ln \text{LOB}_{j,t} + \beta_4 \ln \text{LOB}^2_{j,t} + \]
\[ \beta_5 \ln \text{LOSS}_{j,t} + \beta_6 \ln \text{NFLOLLOW}_{j,t} + \beta_7 \ln \text{NFLOLLOW}^2_{j,t} + \]
\[ \ln \text{AFE}_{i,j,t} = \beta_9 \text{USLIST}_{j,t} + \beta_9 \text{INTDIV}_{j,t} + \beta_{10} \text{INTDIV}^2_{j,t} + \beta_{11} \text{MICRO}_{j,t} + \]
\[ \beta_{12} \text{LNEARNCHG}_{j,t} + \beta_{13} \text{LNEARNCHG}^2_{j,t} + \beta_{14} \text{AGE}_{i,j,t} + \]
\[ \beta_{15} \text{AGE}^2_{i,j,t} + \beta_{16} \text{LNSAIDIN}_{j,t} + \beta_{17} \text{LNSAIDIN}^2_{j,t} + \beta_{18} \text{D2000}_{j,t} + e_{i,j,t} \]

where LNAFE\(_{i,j,t}\) = the natural log of the absolute value of the forecast error of analyst \(i\), for firm \(j\), in period \(t\); LNSIZE\(_{j,t}\) = the natural log of firm size, as measured by firm revenue, converted to U.S. dollars at year-end exchange rates for firm \(j\) in period \(t\); LOB\(_{j,t}\) = the number of distinct lines of business for firm \(j\) disclosed in year \(t\); LOSS\(_{j,t}\) = the loss indicator variable, equal to 1 if the earnings for firm \(j\) at the end of fiscal-year \(t\) is negative, and equal to zero otherwise; NFLOLLOW\(_{j,t}\) = the natural log of the number of analysts providing earnings forecasts for firm \(j\) in year \(t\); USLIST\(_{j,t}\) = the U.S. listing indicator variable equal to 1 if the company has a U.S. listing, and zero otherwise; INTDIV\(_{j,t}\) = the international diversification variable equal to the number of geographic segments in which a firm operates; MICRO\(_{j,t}\) = the indicator variable equal to 1 if the firm is from a micro-based country and zero otherwise; LNEARNCHG\(_{j,t}\) = the change in EPS between 1999 and 2000 deflated by EPS for 1999 (for all forecasts of 2000 earnings); and the change in EPS between 2000 and 2001 deflated by EPS for 2000 (for all forecasts of 2001 earnings), for firm \(j\); AGE\(_{i,j,t}\) = the number of calendar days between the forecast date and the earnings announcement date, of analyst \(i\), for firm \(j\), in period \(t\); LNPRI\(_{C,j,t}\) = the natural log of the unweighted compliance score for firm \(j\) in period \(t\); LNSAIDIN\(_{j,t}\) = the natural log of the Saidin weighted disclosure score for firm \(j\) in period \(t\); D2000\(_{j,t}\) = the indicator variable equal to 1 for 2000 and 0 otherwise. \((i,j)\) and \(e_{i,j,t}\) = the fixed effect for each analyst/firm combination.

Eqs. (5) and (6) are identical except that Eq. (5) uses the unweighted compliance score whereas Eq. (6) uses the SAIDIN weighted disclosure score. Eq. (5) is a multiple-regression model that tests the relationship between LNAFE, the natural log of the absolute value of the analysts’ forecast errors, and LNPRI\(_{C}\), the natural log of the unweighted IFRS disclosure compliance score. Eq. (6) is also a multiple-regression model, and tests the relationship between LNAFE and LNSAIDIN, the weighted IFRS disclosure score.

4. Empirical results

4.1. Forecast error and the unweighted IFRS compliance score (PR\(_C\))

Table 4 presents a summary of the results of Eq. (5), which tests H1 and H2 using our unweighted IFRS compliance score (LNPRI\(_{C}\)). OLS is employed to test H1, and fixed-effects estimation is used to test H2. The OLS multiple regressions examine the effects of IFRS compliance in 1999 and 2000 annual reports on the 2000 and 2001 earnings forecast errors, respectively, using all observations. The fixed-effects estimation model uses a more limited sample, since observations from analysts who do not provide a forecast for both 2000 and 2001 are dropped from the sample.\(^{12}\) In contrast to the fixed-effects estimation where the intercept is allowed to vary across analyst/firm combinations, OLS regression constrains the intercept to be the same for all observations.

Table 4 reports the results of pooled OLS regression and fixed-effects estimation. The R-squared statistic for Eq. (5) using pooled OLS is .22, consistent with prior studies. The coefficient for loss firms (LOSS) is marginally significant and in the expected direction, suggesting a possible forecast bias for loss firms. The coefficient for micro vs. macro uniform firms (MICRO) is statistically significant and also in the expected direction, as is the coefficient for earnings change (LNEARNCHG). The coefficient for forecast age (AGE) is highly significant, but its effect is decreasing as evidenced by the significant and negative coefficient of its quadratic. The coefficients for our unweighted IFRS compliance measure (LNPRI\(_{C}\)) and its quadratic (LNPRI\(_{C}^2\)) are not significant. However, a test of the joint significance (not tabulated)

\(^{12}\) In order to use panel data analysis in this study, each analyst must place an estimate for a particular firm in both time periods. Thus analysts who drop out, i.e., place an estimate for firm \(j\) in 1999 but not in 2000, or drop in, i.e., do not place an estimate for firm \(j\) in 1999 but place an estimate in 2000, are excluded in estimating the fixed-effects models. This results in a drop in observations from 2725 to 1610 for the fixed-effects estimation. OLS estimates using the identical observations used in the fixed-effects estimation are essentially similar.
of the two coefficients shows them to be very significant \((p < .01)\). Thus, using pooled OLS, we find evidence that supports H1.

Results from fixed-effects estimation of Eq. (5) provide evidence in support of H2. Our second hypothesis assumes that an examination of the change in forecast error as a function of the change in disclosure compliance will provide estimates that are superior to those obtained using OLS, which are biased if such fixed effects exist and are correlated with the other regressors in the model. One indication of the appropriateness of a model specification that controls for fixed effects is a test of the joint significance of the analyst-firm indicator variables. Another indication is a comparison with the other regressors in the model. One indication of the appropriateness of a model specification that controls for fixed effects is a test of the joint significance of the analyst-firm indicator variables. Another indication is a comparison with the other regressors in the model. One indication of the appropriateness of a model specification that controls for fixed effects is a test of the joint significance of the analyst-firm indicator variables. Another indication is a comparison with the other regressors in the model.

We see from Table 4 that there are two indications that OLS estimates are biased. First, as indicated in Table 4, note c, the indicator variables for each analyst-firm combination are jointly significant.\(^{13}\) Second, the coefficient estimates, particularly for LNPR\(_C\) and LNPR\(_C^2\), are much larger in magnitude. For instance, the coefficient on LNPR\(_C\) using pooled OLS is \(-.78\), but increases to \(-8.60\) using fixed-effects estimation. The coefficients of LNPR\(_C\) and LNPR\(_C^2\) are highly significant in the fixed-effects model, suggesting that IFRS compliance has an increasingly negative effect on forecast error, as indicated by the negative coefficients of both LNPR\(_C\) and LNPR\(_C^2\). The magnitude of the effect suggests that at the mean level of PR\(_C\), a 1% increase in PR\(_C\) leads to a 6.25% decrease in forecast error.

\[LNAFE_{i,j,t} = \alpha_{i,j} + \beta_1LNSIZE_{i,j,t} + \beta_2LNSIZE^2_{i,j,t} + \beta_3LOB_{i,t} + \beta_4LOB^2_{i,t} + \beta_5LOSS_{i,j,t} + \beta_6LNFO\underline{L}\underline{L}\underline{O\underline{W}}_{i,j,t} + \beta_7LNFO\underline{L}\underline{L}\underline{O\underline{W}}^2_{i,j,t} + \beta_8USLIST_{i,j,t} + \beta_9INTDIV_{i,j,t} + \beta_{10}INTDIV^2_{i,j,t} + \beta_{11}MICRO_{i,j,t} + \beta_{12}LN\underline{E\underline{A\underline{R}}NCHG}_{i,j,t} + \beta_{13}LN\underline{E\underline{A\underline{R}}NCHG}^2_{i,j,t} + \beta_{14}AGE_{i,j,t} + \beta_{15}AGE^2_{i,j,t} + \beta_{16}LNPR_{C,j,t} + \beta_{17}LNPR_{C^2,j,t} + \beta_{18}D2000_{j,t} + \mu_{i,j,t}.\]

\(^{13}\) It should be noted that OLS with the full set of indicator variables for each analyst-firm combination (i.e., fixed-effects estimation) is equivalent to the OLS on the first-differences of the variables when there are only two observations (2 years) per analyst-firm combination.

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**Table 4**

Estimation results Eq. (5): unweighted score

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected sign</th>
<th>Pooled OLS</th>
<th>OLS with fixed effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNSIZE (firm size)</td>
<td>(−)</td>
<td>.41 [.97]</td>
<td>−7.85* [.73]</td>
</tr>
<tr>
<td>LNSIZE(^2)</td>
<td>(+/−)</td>
<td>−.003 [.02]</td>
<td>.23* [.11]</td>
</tr>
<tr>
<td>LOB (lines of business)</td>
<td>(+/−)</td>
<td>.05 [.22]</td>
<td>.33 [.60]</td>
</tr>
<tr>
<td>LOB(^2)</td>
<td>(+/−)</td>
<td>−.01 [.02]</td>
<td>−.03 [.04]</td>
</tr>
<tr>
<td>LOSS (loss firms indicator)</td>
<td>(+)</td>
<td>.74* [.39]</td>
<td>−.60 [.82]</td>
</tr>
<tr>
<td>LNFOLLOW (analyst following)</td>
<td>(−)</td>
<td>1.42 [.87]</td>
<td>2.14 [1.75]</td>
</tr>
<tr>
<td>LNFOLLOW(^2)</td>
<td>(+/−)</td>
<td>−.38* [.20]</td>
<td>−.55 [.35]</td>
</tr>
<tr>
<td>USLIST (U.S. listing indicator)</td>
<td>(−)</td>
<td>.36 [.26]</td>
<td>−.39 [.73]</td>
</tr>
<tr>
<td>INTDIV (international diversification)</td>
<td>(+)</td>
<td>−.31 [.24]</td>
<td>−1.69 [1.07]</td>
</tr>
<tr>
<td>INTDIV(^2)</td>
<td>(+/−)</td>
<td>.03 [.02]</td>
<td>.31* [.13]</td>
</tr>
<tr>
<td>MICRO (micro vs. macro indicator)</td>
<td>(+)</td>
<td>1.04** [.44]</td>
<td>Dropped (time-invariant)</td>
</tr>
<tr>
<td>LNEARNCHG (earnings change)</td>
<td>(+)</td>
<td>.34*** [.06]</td>
<td>.20* [.09]</td>
</tr>
<tr>
<td>LNEARNCHG(^2)</td>
<td>(+/−)</td>
<td>−.004 [.0180]</td>
<td>−.05 [.03]</td>
</tr>
<tr>
<td>AGE (forecast age)</td>
<td>(+)</td>
<td>.007*** [.001]</td>
<td>.003* [.002]</td>
</tr>
<tr>
<td>AGE(^2)</td>
<td>(+/−)</td>
<td>−7.36e-06** [3.02e-06]</td>
<td>−1.90e-06 [4.77e-06]</td>
</tr>
<tr>
<td>LNPR(_C) (unweighted score)</td>
<td>(−)</td>
<td>−.78 [.51]</td>
<td>−8.60*** [2.24]</td>
</tr>
<tr>
<td>LNPR(_C^2)</td>
<td>(+/−)</td>
<td>−.10 [.19]</td>
<td>−3.05*** [.76]</td>
</tr>
<tr>
<td>D2000 (year 2000 indicator)</td>
<td>(+/−)</td>
<td>.38* [.20]</td>
<td>.59 [.34]</td>
</tr>
<tr>
<td>Number of observations</td>
<td></td>
<td>2,725</td>
<td>1,610/805 (^b)</td>
</tr>
</tbody>
</table>

\(^a\) Standard errors beside the coefficients [in brackets]. The standard errors are adjusted for within-firm correlation, which are robust to the assumption of independence of analysts' forecasts.

\(^b\) There are 1,610/2 = 805 observations for the fixed-effects estimation.

\(^c\) Test of the significance of analyst fixed effects, i.e., that all \(\alpha_{i,j} = \alpha\), \(F = 1.38^{***}\).

\(^*\) Significant at the .05 level.

\(^**\) Significant at the .01 level.

\(^***\) Significant at the .001 level.
Table 5
Estimation results Eq. (6): SAIDIN weighted score

<table>
<thead>
<tr>
<th>Variables</th>
<th>Expected sign</th>
<th>Pooled OLS</th>
<th>OLS with fixed effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNSIZE (firm size)</td>
<td>(-)</td>
<td>.39 [.97]</td>
<td>-9.04** [3.61]</td>
</tr>
<tr>
<td>LNSIZE^2</td>
<td>(+/-)</td>
<td>-0.02 [.02]</td>
<td>.29** [.10]</td>
</tr>
<tr>
<td>LOB (lines of business)</td>
<td>(+/-)</td>
<td>.04 [.21]</td>
<td>.38 [.57]</td>
</tr>
<tr>
<td>LOB^2</td>
<td>(+/-)</td>
<td>-0.01 [.02]</td>
<td>-0.03 [.04]</td>
</tr>
<tr>
<td>LOSS (loss firms indicator)</td>
<td>(+)</td>
<td>.75* [.39]</td>
<td>-0.49 [.74]</td>
</tr>
<tr>
<td>LNFOLLOW (analyst following)</td>
<td>(-)</td>
<td>1.40 [.87]</td>
<td>2.42 [1.87]</td>
</tr>
<tr>
<td>LNFOLLOW^2</td>
<td>(+/-)</td>
<td>-0.38** [.20]</td>
<td>-0.61 [.37]</td>
</tr>
<tr>
<td>USLIST (U.S, listing indicator)</td>
<td>(-)</td>
<td>.36 [.26]</td>
<td>-0.06 [.82]</td>
</tr>
<tr>
<td>INTDIV (international diversification)</td>
<td>(+)</td>
<td>-0.31 [.24]</td>
<td>-2.72** [.99]</td>
</tr>
<tr>
<td>INTDIV^2</td>
<td>(+/-)</td>
<td>.04 [.02]</td>
<td>.47*** [.12]</td>
</tr>
<tr>
<td>MICRO (micro vs. macro indicator)</td>
<td>(+)</td>
<td>1.06** [.44]</td>
<td>dropped (time-invariant)</td>
</tr>
<tr>
<td>LNEARNCHG (earnings change)</td>
<td>(-)</td>
<td>.34*** [.06]</td>
<td>.19* [.09]</td>
</tr>
<tr>
<td>LNEARNCHG^2</td>
<td>(+/-)</td>
<td>-0.00 [.01]</td>
<td>-0.06* [.03]</td>
</tr>
<tr>
<td>AGE (forecast age)</td>
<td>(+)</td>
<td>.007*** [.001]</td>
<td>.004** [.002]</td>
</tr>
<tr>
<td>LNSAIDIN (weighted score)</td>
<td>(-)</td>
<td>-7.27e-06** [2.99e-06]</td>
<td>-2.35e-06 [4.75e-06]</td>
</tr>
<tr>
<td>LNSAIDIN^2</td>
<td>(+/-)</td>
<td>-0.03 [.09]</td>
<td>-2.13*** [.45]</td>
</tr>
<tr>
<td>Number of observations</td>
<td></td>
<td>2,725</td>
<td>1,610/805b</td>
</tr>
<tr>
<td>(F)-statistic</td>
<td></td>
<td>12.14***</td>
<td>9.75***</td>
</tr>
</tbody>
</table>

\[ \text{LNAFE}_{i,j,t} = \alpha_{i,j} + \beta_1 \text{LNSIZE}_{j,t} + \beta_2 \text{LNSIZE}^2_{j,t} + \beta_3 \text{LOB}_{j,t} + \beta_4 \text{LOB}^2_{j,t} + \beta_5 \text{LOSS}_{j,t} + \beta_6 \text{LNFOLLOW}_{j,t} + \beta_7 \text{LNFOLLOW}^2_{j,t} + \beta_8 \text{USLIST}_{j,t} + \beta_9 \text{INTDIV}_{j,t} + \beta_{10} \text{INTDIV}^2_{j,t} + \beta_{11} \text{MICRO}_{j,t} + \beta_{12} \text{LNEARNCHG}_{j,t} + \beta_{13} \text{LNEARNCHG}^2_{j,t} + \beta_{14} \text{AGE}_{i,j,t} + \beta_{15} \text{AGE}^2_{i,j,t} + \beta_{16} \text{LNSAIDIN}_{j,t} + \beta_{17} \text{LNSAIDIN}^2_{j,t} + \beta_{18} \text{D2000}_{j,t} + \mu_{i,j,t}. \]

\(a\) Standard errors beside the coefficients [in brackets]. The standard errors are adjusted for within-firm correlation, which are robust to the assumption of independence of analysts’ forecasts.

\(b\) There are 1610/2=805 observations for the fixed-effects estimation.

\(c\) Test of the significance of analyst fixed effects, i.e., that all \(\alpha_{i,j}=\alpha, F=1.45***.\)

\(*\) Significant at the .05 level.

\(**\) Significant at the .01 level.

\(***\) Significant at the .001 level.

\([-8.6 + 2(-3.05)\ln(.68)].^{14}\) The \(R\)-squared statistic for the fixed-effects model is .17, notably large given that we are regressing change in LNAFE on the change in the regressors.

The results of Eq. (5) suggest a negative, highly significant, non-linear relationship between LNAFE and LNPR\(_C\), and provide strong evidence in support of H2. Tests of Eq. (5) are consistent with the idea that increasing levels of disclosure compliance (as measured by an unweighted compliance score) provide more useful information to financial analysts and thereby decrease forecast error.

4.2. Forecast error and the weighted IFRS compliance score (SAIDIN)

Table 5 presents a summary of the results of Eq. (6), which tests H1 and H2 using our weighted measure of IFRS disclosure compliance (SAIDIN). As is the case with Eq. (5), we use OLS to test H1, and fixed-effects estimation to test H2. The \(R\)-squared statistics for Eq. (6) are consistent with those of Eq. (5). The coefficients for our unweighted IFRS compliance measure (LNSAIDIN) and its quadratic (LNSAIDIN^2) are not significant. However, a test of the joint significance (not tabulated) of the two coefficients shows them

\(^{14}\) Note that the coefficients for LNPR\(_C\) and LNPR\(_C^2\) imply that the marginal effect of PR\(_C\) on AFE is positive when PR\(_C\) takes on values below the 2nd percentile of PR\(_C\). For all higher values of PR\(_C\) the marginal effect is negative. The marginal effect is negative for values of PR\(_C\) greater than .24 (LNPR\(_C=−1.41\)) which lies between the 1.5th and 2nd percentiles of PR\(_C\). Thus the range of values at which the marginal effects of PR\(_C\) on AFE is positive is so limited as to be of no consequence.
to be very significant ($p < .01$). Thus, consistent with the results for Eq. (5), we find evidence that supports H1.

Table 5 also reveals that after controlling for analyst fixed effects, the coefficients for LNSAIDIN and LNSAIDIN$^2$ again increase dramatically. The coefficient on LNSAIDIN, for instance, increases from $-0.53$ to $-8.71$. As was the case with LNPR$_C$, the coefficient for LNSAIDIN reveals that IFRS compliance has an increasingly negative effect on forecast error. Thus, Eq. (6) also suggests a negative, highly significant, non-linear relationship between LNAFE and LNSAIDIN, and provides strong evidence in support of H2.\footnote{As was the case with PR$_C$, the marginal effect of SAIDIN on AFE is positive when SAIDIN takes on values below the 2nd percentile of SAIDIN.}

5. Summary and implications

We examine the impact of compliance with the disclosure requirements of IFRS on analysts’ earnings forecast errors. Using a sample of non-U.S. firms that claim to comply with the disclosure requirements of IFRS, we examine whether varying levels of disclosure compliance in 1999 and 2000 annual reports affect analysts’ forecasts of earnings for the years ending December 2000 and 2001, respectively. We utilize an innovative measure of IFRS compliance based upon the Saidin index found in Spetz and Baker (1999). Future research may find it beneficial to incorporate a weighted disclosure measure such as that used in this study.

Using data on individual analysts’ forecasts from IBES, we find that our measures of compliance with IFRS disclosure requirements (both weighted and unweighted) are negatively associated with individual analysts’ earnings forecast errors, controlling for other factors cited in the literature as having a likely impact on the characteristics of analysts’ forecasts. Furthermore, the magnitude of the estimated effect of compliance on forecast error increases remarkably when we control for unmeasured, analyst-specific effects by using information from the change in compliance and the change in forecast error. These results provide evidence of the benefits firms receive from the use of IFRS. Specifically, for firms that provide all or most of the financial disclosures required by IFRS, financial analysts are better able to predict earnings per share, a variable relevant to the valuation of a firm’s securities.

Our findings are important to researchers, as they corroborate the results of prior studies that find disclosure is an important determinant of forecast accuracy (Ashbaugh & Pincus, 2001; Hope, 2003a, 2003b; Lang & Lundholm, 1996). A further contribution of our study is that unlike prior studies that examine forecast error using the consensus or mean forecast, we examine forecast error at the individual-analyst level. We further control for the myriad of time-invariant factors particular to each analyst using a fixed-effects specification, thereby avoiding potential sources of omitted-variable bias. Our methodology may be of interest to academic researchers interested in controlling for time-invariant factors in their studies. Our study may also be of interest to accounting educators who might consider including the application of panel-data statistical methods in their graduate accounting courses.

Our results should also be of interest to practitioners in the area of accounting standard setting and regulation, as we argue that the adoption of IFRS alone, unaccompanied by full compliance of the disclosure requirements, limits the effectiveness of the standards. The issue of compliance continues to be a contentious issue, with the U.S. SEC, for instance, indicating that rigorous interpretation and application are prerequisites to the acceptance of IFRS for use in U.S. capital markets (SEC, 1997). Hence, the extent to which accounting standards are complied with is as important as the standards themselves.

Lastly, our findings have important public policy implications, which may be of interest to accounting standard setters and regulators. The results of our study reinforce the importance of developing mechanisms (e.g., enforcement mechanisms, auditing, or corporate governance structures) to encourage compliance with IFRS. The increasing focus by regulators (e.g., the EU) on compliance issues is a positive move in this direction.

6. Limitations

Certain limitations should be considered when interpreting the results of this study. One concern may be the relatively small number of firms (89) examined. The sample, while being of sufficient size to perform statistical analysis,
nonetheless small relative to the universe of firms that may at this time be using IFRS or may be anticipating the use of IFRS.

Also of concern is the inherent subjectivity of our disclosure measures. In an effort to ameliorate the possibility of penalizing a company for not providing inapplicable disclosures, the entire annual report and financial statement footnotes was reviewed. A disclosure is deemed not applicable for the firm if it appears that disclosure of information is not mandatory. For example, if there is mention in the accounting policies footnote that the company follows the revaluation model for property, plant and equipment, it will then be evident that the specific disclosures required by IAS 16 are applicable. Other indications that the company must provide IAS 16 disclosures include the presence of a revaluation surplus account for property, plant and equipment. The unfortunate limitation of such an approach lies in its unavoidable subjectivity, given that judgments must be made as to the applicability of certain required disclosures. Nonetheless, we believe our approach provides a valid measure of disclosure compliance, and is consistent with prior studies.

Another limitation may be the use of panel data with only two time periods. The use of panel data with two time periods is the simplest form of panel data analysis, and is sufficient for fixed-effects estimation and interpretation. The use of data from more time periods might provide more compelling evidence of the relationships studied here, given that IFRS disclosure compliance appears to be improving over time.

Finally, another limitation of this study may be the inability to specifically identify the unobservable effects that are statistically significant in the fixed-effects models. The fixed-effects models indicate that there are statistically significant analyst fixed effects. That is, the results indicate that there are other variables particular to each analyst that may explain forecast error. The question remains as to the origin of these effects, and points to the need for more research into analyst-specific factors that influence forecast error.

Similarly, individual analyst characteristics that are not time-invariant are not controlled for in this study. While the fixed-effects estimation controls for time-invariant analyst characteristics, such as innate ability, familiarity with a company, location/nationality of the analyst, etc., it cannot control for individual characteristics that do change over time, such as experience and education.

In spite of the above limitations, the findings of this study provide further insight into the importance of compliance with the disclosure requirements of IFRS. The findings of this study might be of interest to standard setters and regulators, as well as academic researchers and educators, and the investment community at large.

References


