

Analysing brokers' expertise: did analysts fully anticipate the impact of IFRS adoption on earnings? The European evidence

F. Aubert, Pascal Dumontier

▶ To cite this version:

F. Aubert, Pascal Dumontier. Analysing brokers' expertise: did analysts fully anticipate the impact of IFRS adoption on earnings? The European evidence. 2009, 21p. halshs-00533080

HAL Id: halshs-00533080 https://shs.hal.science/halshs-00533080

Submitted on 5 Nov 2010

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



CAHIER DE RECHERCHE n°2009-06 E2

Analyzing brokers' expertise: did analysts fully anticipate the impact of IFRS adoption on earnings? The European evidence.

AUBERT François, DUMONTIER Pascal





Analyzing brokers' expertise: did analysts fully anticipate the impact of IFRS adoption on earnings? The European evidence

François Aubert*

Assistant Professor

Université d'Auvergne - IAE, France

Pascal Dumontier

Professor

University of Grenoble – CERAG-IAE, France

Abstract

Since 2005, all European Union listed firms must comply with IFRS. The resulting mandatory changes in accounting methods have substantially affected reported earnings. Using the FactSet/JCF database that collects 2005 earnings forecasts based on both IFRS and local GAAP for a set of European listed companies, this research documents whether financial analysts were sophisticated enough to anticipate the impact of the new accounting rules on the determination of earnings. Results indicate that analysts were not able to efficiently forecast the consequences of the IFRS adoption on earnings, forecast errors being significantly associated with the actual impact of the new financial reporting standards on reported earnings.

Authors sincerely and gratefully thank the company FactSet for providing data used in the study taken from FacSet/JCF database. Support from the Swiss National Science Foundation (grant # 100012109524/1) is gratefully acknowledged.

This paper is part of the iBEACON project "Effects of US GAAP/IFRS convergence and its impact on changes in corporate governance". iBEACON is jointly organized by the School of Accountancy, CIBER and the College of Business Administration at San Diego State University (SDSU).

*Corresponding author: François Aubert, Faculté des Sciences Economiques et de Gestion IAE 41. Bd. François Mitterrand, BP 54, 63002 ClermontFerrand, France. Phone : (+0033) 4 73 177 585 ; Email: françois.aubert@ecogestion.uclermont1.fr

1. Introduction

Since 2005, all European Union listed firms must comply with IFRS. The resulting mandatory changes in accounting methods may substantially affect reported numbers as well as financial analysts' earnings predictions. Although much has been written in the literature on financial analysts, little has been documented on the analysts' ability of anticipating the impact of newly applicable GAAPs. This study addresses this issue by examining how analysts reacted when they faced to the mandatory use of IFRS in anticipating earnings. Forecasting earnings per share (EPS) is a function performed by most analysts in their assessment of future firm performance. All over the world, financial analysts serve as information intermediaries between corporations' managers and the investment community. Investors count on analyst forecasts of EPS and other forward looking information in decisions to trade securities. In other words, analysts' suggestions and recommendations are relied on, not only by domestic investors, but by foreign investors as well. From a sample of European companies that complied with IFRS for the first time in 2005, this paper documents the magnitude of differences in earnings resulting from the adoption of IFRS. Relying on the requirements of IFRS 1 that prescribes at least one year of comparative information, we analyse how the firm's accounting specific features and its domestic accounting regime prior to the IFRS adoption (proxied by the country of origin where the firm operates), affect its consolidated accounting figures. In order to determine the extent to which the impact of the IFRS adoption on accounting figures was predictable, we investigate how the switch from local GAAP to IFRS has affected financial analysts' forecasts accuracy. Analysts are generally seen as sophisticated processors of financial information who are supposed to fully understand the real meaning of accounting figures for future prospects. This research uses the mandatory switch from local GAAPs to International Financial Reporting (hereafter IFRS) for all European listed companies from 2005 onwards to explore financial analysts' expertise with respect to accounting data in conjunction with IFRS. Our goal is to determine whether analysts fully appreciate the accounting rules that drive the determination of net incomes. Thanks to a data taken from an international financial provider dealing with both preIFRS and postIFRS estimates of earnings, this paper describes that analysts were disturbed in 2005 when European companies switched from their domestic GAAPs to IFRS. The remainder of this paper is organized as follows. The next section provides background information concerning the role financial analysts in predicting the impact of IFRS in Europe. This is followed by a description of the research design and the development of the tests. Next, the results of the study are presented. The paper concludes with a summary of the findings, and the limitations of the study.

1. Research question about analysts' earnings forecasts around IFRS adoption

This research uses the mandatory switch from local GAAPs to International Financial Reporting Standards (hereafter IFRS) in 2005 for all European listed companies to explore financial analysts' expertise with respect to accounting data. Our goal is to determine whether analysts fully appreciate the accounting rules that drive the determination of net incomes. We take advantage that FactSet asked its subscribers, i.e. brokers providing and receiving earnings forecasts, to precise whether their forecasted data relative to 2005 accounting figures, i.e. EPS, sales, cash flow, and net assets, were calculated in application of domestic GAAP prevailing in the country where the company prepares its financial statements or in compliance with International Financial Reporting Standards. As a consequence, for all listed European firms adopting IFRS in 2005, the FactSet/JCF database contains earnings forecasts both in local GAAPs and in IFRS. This allows us to appreciate the relevance of both IFRS earnings forecasts and local GAAP forecasts. This enables us also to determine whether IFRS forecast errors are positively correlated with the impact of IFRS adoption on reported earnings. Such a positive correlation would indicate the weak ability of analysts to appreciate how accounting figures are affected by accounting rules.

Although they are generally seen as sophisticated processors of financial information who are supposed to fully understand the real meaning and implications of accounting figures, several studies suggest that analysts are not always as sophisticated as expected. Dechow et al. (1999) find that they fail to fully take mean-reverting abnormal accruals into consideration. More surprisingly, they suspect investors to be aware of the analysts' systematic forecast error since it is not reflected in stock prices. In the same line, Bradshaw et al. (2001) show that working capital accruals and forecast errors are negatively related, suggesting that analysts do not adjust forecasts for earnings transitory accrual components. Investigating whether analysts use the financial information that is relevant for predicting future earnings, Abarbanell and Bushee (1997) find evidence suggesting that analysts' forecasts do not fully incorporate this information. Focusing on SEOs, Teoh and Wong (2002) show that analysts tend to misinterpret the information conveyed by abnormal accruals, earnings forecasts of issuing firms being overly too optimistic when discretionary accruals are highly positive the year preceding the stock issue. In the same line, Louis (2004) finds that analysts do not adjust post-merger forecasts when acquiring firms' accruals have been aggressively manipulated prior to a merger.

2. Research design ans ample selection

2.1. Research design

FactSet/JCF made a huge effort linked to its strategy of measuring the impact of International Financial Reporting Standards adoption to enter a maximum of information in its database to determine whether that switch was an evolution or a revolution, at least in terms of financial analysis. As a methodology, FactSet was tracking the IFRS guidelines announced by a specific company. This can be a conference call on IFRS, a quick view on the impact of IFRS done by a company, or the release of the 2004 restated statements based on IFRS. As a result, several items on 'IFRS' have been included into the FactSet/JCF database:

FactSet/JCF made a huge effort linked to its strategy of measuring the impact of International Financial Reporting Standards adoption to enter a maximum of information in its database to determine whether that switch was an evolution or a revolution, at least in terms of financial analysis. As a methodology, FactSet was tracking the IFRS guidelines announced by a specific company. This can be a conference call on IFRS, a quick view on the impact of IFRS done by a company, or the release of the 2004 restated statements based on IFRS. As a result, several items on IFRS have been included into the FactSet/JCF database.

The FactSet/JCF database contains financial analysts' forecasts and realizations for various accounting figures, such as sales, EBIT, EBITDA, net income, cash flow per share, and earnings per share (hereafter EPS). The database is updated periodically with data provided by its subscribers. For each of the forecasted items, the database provides both the mean value and the standard deviation of forecasts issued or confirmed by analysts during the 45 days preceding each update.

As 2005 was the year of the first adoption of IFRS for most European listed companies, FactSet/JCF has decided to report specific information on the impact of this adoption for European firms that have switched to IFRS in 2005. First, as soon as January 2005, analysts were asked to indicate whether forecasts sent to FactSet/JCF were based on IFRS or on another set of standards. Second, an IFRS guideline date was established. This is the date when a company has released the first information on the impact of IFRS on its accounts. Third, a 45-day period starting one day before the IFRS guideline date was defined. For each analyst and each company, the last forecast based on domestic GAAP issued before or during the period and the first forecast based on IFRS issued during the period were collected. Fourth, using only forecasts issued by analysts having provided both a domestic GAAP forecast and an IFRS forecast for a given company, FactSet/JCF disclosed both the

mean and the standard deviation of domestic GAAP forecasts and the mean and the standard deviation of IFRS forecasts. Last, once 2005 earnings were announced, analysts were asked to estimate the actual impact of IFRS adoption on earnings of companies having switched to IFRS. Consequently, for each IFRS adopter in 2005, we have at our disposal: the last mean forecast of 2005 earnings based on domestic GAAP, the first mean forecast of 2005 earnings based on IFRS, the number of analysts having issued each of these two forecasts, the actual 2005 earnings resulting from the application of IFRS, and the impact of IFRS adoption of 2005 earnings. From these items, we define the following variables.

- EPSIFRSi is the 2005 earnings per share (EPS) of firm i resulting from the adoption of IFRS.
- IMPACTi measures the impact of IFRS adoption on firm i actual EPS, the information is given by FactSet/JCF analysts.
- EPSLGi[EPSIFRSi-IMPACTIFRSi] is the 2005 earnings per share of the firm i that would have resulted from the application of domestic GAAP.
- FIFRSi is the forecast of 2005 EPS of firm i based on IFRS
- FLGi is the forecast of 2005 EPS of firm i based on local GAAP
- FEIFRSi [EPSIFRSi FIFRSi] is the forecast error of firm i IFRS-based EPS.
- FELGi [EPSLGi-FLGSi] is the forecast error of firm i local GAAP-based EPS.
- FIMPACTi [FIFRSi-FLGi] is the forecasted impact of IFRS adoption on EPS.

If analysts, as sophisticated experts, were able to appreciate the impact of the IFRS adoption using the IFRS guidelines released by the 2005 adopters, the forecasted impact of IFRS on reported earnings should not differ from the actual impact. Furthermore, the average spread between IFRS-based EPS forecast errors and local GAAP-based errors should not differ from zero. This is our first hypothesis.

H1: The forecasted impact of IFRS adoption on reported earnings does not differ from the actual impact.

To test H1, we run t-tests for paired samples aimed at comparing for each company under study the forecasted impact of IFRS adoption on EPS [FIMPACT] with the actual impact of

the adoption [IMPACT]. These two metrics are scaled by the absolute actual EPS resulting from the adoption of IFRS.

Furthermore, if analysts have been able to anticipate the impact of accounting changes resulting from the switch from local GAAP to IFRS, IFRS-based EPS forecast errors should not be associated with the impact of IFRS adoption on EPS. This is our second hypothesis.

H2: IFRS-based forecast errors are not related to the impact of IFRS adoption on earnings.

To provide evidence on how analysts impounded the impact of the adoption of IFRS in their forecasts, we run a regression using the absolute forecast error of IFRS-based EPS [FEIFRS] as the dependent variable, and the absolute impact of IFRS adoption on actual IFRS-based EPS [IMPACT] as the independent variable. The regression also takes into consideration other variables expected to influence forecast errors.

An abundant literature has focused on the determinants of earnings forecasts. These are of two types. The first ones deal with analysts' characteristics such as experience (Mikhail et al., 1997; Clement, 1999), the analyst's turnover (Mikhail et al., 1999), the number of firms covered by the analyst (Clement, 1999), potential conflicts of interest (Dugar and Nathan, 1998; Lin and McNichols, 1999). The second ones deal with the complexity of the forecasting task. Dunn and Nathan (2000) suggest that forecast accuracy is affected by industrial diversification. The more concentrated the firm's activities, the more accurate the earnings forecasts. Duru and Reeb (2002) provide evidence suggesting that international diversification complicates analyst task. Furthermore, larger firms having richer information environments, Collins et al. (1987) and Freeman (1987) find that forecast accuracy increases with firm size. Hwang et al. (1996) and Brown (2001) show that forecasts of losses are less accurate than forecasts of profits. Land and Lundholm (1996) observe less accurate forecasts in case of large earnings changes. At last, Lys and Soo (1995) and Gu and Wu (2001) provide evidence suggesting that analyst following and forecast dispersion are two proxies for forecasting complexity: the higher the number of analysts following the firm and the lower forecast dispersion, the more accurate the forecast. As a result, if analysts have been able to "see through" earnings changes implied by IFRS adoption, IFRS-based forecast errors should be positively associated with the magnitude of earnings changes, the variability of past earnings, and the dispersion of forecasts across analysts. They should be negatively associated with the size of the firm and with the number of analysts following the firm. They should not be associated with the magnitude of the impact of the IFRS adoption on the firm's earnings. Consequently, to test H2, we estimate the following model:

$$|FEIFRSi| = a_0 + a_1 |IMPACT_i| + a_2 \Delta EPSi + a_3 DISPEPSi + a_4 DISPERSIONi + a_5 LnCAPIi + a_6 LOSSi + a_7 FOLLOWINGi + \epsilon i$$
 (1)

|FEIFRS|| denotes the absolute value of IFRS-based EPS forecast errors. |IMPACT| is the absolute value of the impact of the IFRS adoption on earnings per share. ΔEPS is the difference between local GAAP-based EPS reported in 2005 and EPS reported in 2004. DISPEPS measures the standard deviation of earnings over the 2001-2005 period. All these variables are scaled by the firm stock price as of 12/31/2004. DISPERSION is the standard deviation of IFRS-based EPS forecasts divided by the mean forecast. The standard deviation of forecasts and the mean forecast are based on forecasts issued during the 45-day period surrounding the IFRS guideline date. LnCAPI refers to the logarithm of the equity market value of the firm at the end of 2004. LOSS is a dummy variable that equals one if actual IFRS-based earnings are negative. It equals zero otherwise. FOLLOWING is the average of the number of analysts having provided both a local-GAAP-based and an IFRS-based forecast.

2.2. Sample selection

Our initial sample consisted of 2,812 European firms listed in Europe in 2005, the year of the mandatory switch from local GAAP to IFRS. The sample includes firms from France, Great Britain, Switzerland, Norway, Spain, Italy, Germany, Ireland, Austria, Finland, Danemark, Greece, Hungaria, Luxembourg, Netherlands, Portugal, Lituania, Estonia, Slovaquia, Slovenia, Sweden and Belgium. Using the information provided by the Factset/JCF, we first selected firms that have adopted IFRS for the first time within the 2005 fiscal year. Indeed, that database details an 'IFRS' universe containing few information dealing with 'IFRS adoption', 'postIFRS' and 'preIFRS' data as well as 'IFRS impact'. This reduced the sample to 1,412 companies. Unfortunately, all the data was not usable because of a problem of heterogeneity in terms of forecasts' reliability. Indeed, the implementation of IFRS methodology at FactSet required all the brokers to precise whether their EPS forecasts were calculated or not in application of IFRS. Although publiclytraded companies had to comply with IFRS in 2005, few analysts went on pursuing issuing earnings estimates under local GAAP. That situation led to that few analysts provided the company with local GAAP earnings predictions, others provided FactSet with earnings estimates using IFRS calculation while other analysts provided the consensus with both domestic GAAP and IFRS earnings estimates. We applied a selection in removing all the firms whose both IFRS and local GAAPs were not issued by at least 3 analysts, and all the firms having several financial

instruments traded (A and B, common shares vs ordinary shares for instance). To make sure we could directory compare the impact of IFRS on analysts' forecasts error, we were required to select the only firms whose the EPS forecasts were calculated in accordance with both local GAAP and IFRS, encompassing then predictions formulated by the same analysts. This choice enables us to avoid introducing a selection bias based on the risk to take different brokers into account and then comparing heterogeneous forecasts. Then, our final sample related to homogeneous IFRS items consists of 217 European firms.

3. The analysts' ability to anticipate the impact of IFRS adoption on reported earnings

3.1. The forecasted and the actual impact of IFRS adoption on reported earnings

Table 1 provides results on hypothesis 1. The mean value of the impact of the adoption of IFRS deflated by the absolute value of IFRS-based EPS comes to -2.11 percent suggesting that, on average, the adoption of IFRS had a negative impact on earnings per share. In contrast, analysts anticipated that the adoption of IFRS would have resulted in higher EPS than those reported under local GAAP. The mean value of the forecasted impact of the adoption deflated by the absolute value of IFRS-based EPS comes to 1.54 percent. The difference between the actual impact and the expected impact of the IFRS adoption (3.66 percent) is statistically positive at the 5 percent level. This suggests that expectations of the IFRS impact on reported earnings were significantly upwardly biased, which can be seen as an effect of analysts' systematic optimism documented in prior research¹.

[Insert table 1 about here]

3.2. Analysts' forecasts of the impact of IFRS on reported earnings

If analysts were able to anticipate the earnings impact of accounting changes associated with the adoption of IFRS, forecast errors of IFRS-based earnings should not be affected by this impact. Model 1 described above is aimed at assessing whether IFRS-based forecast errors are related *ceteris paribus* with the magnitude of the impact of IFRS adoption on reported earnings. We take the absolute value of the IFRS-based forecast error as the dependent

¹ See Fried and Givoly (1982), O'Brien (1988), Butler and Lang (1991), Francis and Philbrick (1993),

variable, and the absolute value of the IFRS impact as an independent variable to neutralize the effects of the direction of IFRS impacts. In addition to the control variables discussed in the previous section, we also introduce fives dummies [FRANCE, NETHERLANDS, NORWAY, SWEDEN, and UK] to control for country fixed effects. Such effects are expected because domestic GAAP of some of the countries under study are much closer to IFRS than those of other countries. As analysts are expected to be less disturbed by the adoption of IFRS when these are not too distant from domestic GAAP, forecasts of IFRS-based EPS should be less affected by the adoption of the new accounting standards if they do not differ strongly from domestic ones. Table 2 provides descriptive statistics of the variables under study.

[Insert table 2 about here]

Table 3 reports regression results of model 1. They are based on the White procedure to control for heteroskedasticity. The tested model exhibits a high adjusted- R^2 of 58.67%. The coefficient of the variable |IMPACT| is positive and statistically significant at the 1 percent level. The absolute impact of IFRS adoption on reported earnings is therefore positively correlated with the absolute forecast errors, suggesting that the IFRS-based forecast accuracy decreases with the magnitude of the impact of IFRS adoption on earnings. This indicates that analysts did not fully anticipate the earnings consequences of the switch to IFRS. As expected, the coefficient of the variable DISPEPS is significantly negative while those associated with DISPERSION and LOSS are both significant and positive, indicating that firms reporting a loss and the ones subject to a highly volatile 'market consensus' are associated with less accurate forecasts. FOLLOWING and SIZE are both not significantly related to earnings forecast errors. At last, the dummy variable 'Netherlands' is positively associated with the error, documenting analysts had more difficulties to anticipate the consequences of IFRS adoption in this country.

[Insert table 3 about here]

4. Factors associated with forecast accuracy and impact of IFRS

To take a step further, we now investigate factors that might influence the association between IFRS-based forecast errors and the impact of IFRS adoption on earnings. Considering that the association may vary across firms, we use the following regression to examine three factors posited to affect EPS forecast error:

$$\begin{aligned} &|\text{FEIFRS}_i| = \alpha_0 + \alpha_1 &|\text{IMPACT}_i| \times \text{DUMA} + \alpha_2 &|\text{IMPACT}_i| \times \text{DUMB} \\ &+ \sum_{k=1}^5 \beta_k &|\text{Control Variable}_k| + &|\sum_{k=1}^5 \gamma_k &|\text{Country Dummy}_k| + e_i \end{aligned} \tag{2}$$

Model 2 only expands model 1. Control variables are the same as the ones in model 1: DISPEPS, DISPERSION, LnCAPI, LOSS, and FOLLOWING. As in model 1, country dummies are aimed at introducing country fixed effects. The dummy variables [DUMA]

and DUMB] are included to allow different regression coefficients for different characteristics of the sample firms. DUMA equals 1 if the firm exhibits the characteristics under study. It equals 0 otherwise. DUMB equals 1 if the firm does not exhibit the characteristics under study. It equals 0 otherwise. The three factors predicted to affect the association between |FEIFRS| and |IMPACT| are respectively the direction of the impact of IFRS adoption on earnings, the size of the impact, and the informational environment of the firm.

Their optimism bias should lead analysts to overstate the positive impacts of IFRS adoption on earnings and to understate negative ones. We therefore expect a stronger association between the absolute forecast errors and the absolute impact of the IFRS adoption when the latter is positive than when it is negative. To take the direction of the IFRS impact on earnings into consideration, we define a first dummy variable DUMMY1, which equals 1 if the IFRS impact is positive, 0 if it is negative. We define a second dummy variable, DUMMY2, which equals 1 if the IFRS impact is negative, 0 if it is positive. DUMMY1 and DUMMY2 play the role of DUMA and DUMB in model 2.

Results in table 4 show that the coefficients associated with |IMPACT|×DUMMY1 and with |IMPACT|×DUMMY2 are both significant and positive. The coefficient of the interaction variable |IMPACT|×DUMMY1 does not differ from the one of the interaction variable |IMPACT|×DUMMY2 [p-value = 0.11], indicating that the direction of the impact of IFRS on earnings did not affect forecast errors.

[Insert Table 4 about here]

To avoid unpleasant surprises, firms may have provided more information to market participants on the potential impact of the IFRS adoption on their earnings when the impact was large than what they did when the impact was negligible. In the same way, analysts may have invested more resources to study the impacts of the IFRS adoption when these are large than when they are weak. Consequently, analysts may have forecasted large IFRS

impacts more accurately than small ones. We therefore define a dummy variable, DUMMY3, which is coded one if the absolute impact of the IFRS adoption is greater than the median impact for the firms under study, which comes to 0.04. It is equal to zero otherwise. As a result, DUMMY4 is equal to one when the absolute impact of the IFRS adoption is lower than 0.04. It is equal to 0 otherwise.

Table 5 reports results qualitatively similar to those of the previous model. The interaction terms on |IMPACT_{IFRS}|×DUMMY3 and |IMPACT_{IFRS}|×DUMMY4 are both positively associated with forecast errors, but the coefficients associated with these two variables do not differ [p-value = 0.12]. These results suggest that analysts are somewhat insensitive to the magnitude of IFRS impact on earnings.

[Insert Table 5 about here]

Similarly, we investigate whether the informational environment of the firm may explain analysts' accuracy in predicting the impact of IFRS adoption. We capture the quality of the informational environment with two variables: firm size and the number of analysts following the firm. We therefore define a first set of dummy variables [DUMMY5, and DUMMY6] to capture analyst following. DUMMY5 (DUMMY6) takes the value of one (zero) if the number of analysts following the firm is higher than the median number of analysts following firms in the sample (i.e., 7). DUMMY5 (DUMMY6) equals zero (one) otherwise. In the same way, we define a second set of dummy variables [DUMMY7, and DUMMY8] to capture firm size. DUMMY7 equals one or zero depending on whether the market value of the firm equity is lower or higher than the median market value of the sample firms (€ 7.87 Millions). DUMMY8 equals one or zero depending on whether the market value of the firm equity is higher or lower than the median market value.

The coefficients of the interaction variables |IMPACT_{IFRS}|×DUMMY5 and |IMPACT_{IFRS}|×DUMMY6 displayed in table 6 are both positive and significant, but they do not differ [p-value = 0.11]. Consequently, the number of analysts following the firm does not affect their ability to forecast the impact of IFRS adoption on earnings.

[Insert Table 6 about here]

Results in table 7 are more informative. The coefficient associated with the fist interaction variable, |IMPACT|×DUMMY7, is statically positive. In contrast, the coefficient associated with the second one, |IMPACT|×DUMMY8, is negative but insignificant. However, these two coefficients differ statistically at the usual level [p-value = 0.03]. This indicates that EPS

forecast errors increase with the impact of the IFRS adoption on earnings if the firm is small. Forecast errors are not affected by the impact of the IFRS adoption if the firm is large. Consequently, analysts have not been able to forecast the impact of IFRS adoption for small firms. It is not the case for large firms.

[Insert Table 7 about here]

5. Conclusion

European listed firms had to comply with IFRS from 2005. Since the end of 2004, they provided to market participants various information on how the adoption of IFRS could affect their financial statements. As professional investment intermediaries and sophisticated users of accounting information, financial analysts were expected to process this information to issue earnings forecasts that were not biased by the effects of the IFRS adoption.

In order to investigate whether financial analysts have anticipated the impact of IFRS adoption on European firms' earnings, we compared in a first step the forecasted impact with the actual impact of IFRS adoption. We find that, while IFRS were on average expected to have a positive impact on earnings, the actual impact of IFRS adoption was negative. The positive difference between the expected and the actual impact of IFRS adoption on earnings is statistically significant. This indicates that, despite the information provided by firms on the consequences of the adoption of IFRS on their accounts, analysts provided positively biased forecasts on the IFRS impact on earnings.

In a second step, considering that earnings forecast errors should not have been affected by the impact of the IFRS adoption, if this impact was unbiasedly forecasted, we run regressions aimed at determining the variables that have affected forecast errors. Unsurprisingly, absolute forecast errors appear to be positively associated with the absolute impact of IFRS adoption, illustrating the weak analysts' forecast accuracy with regard to the consequences of the IFRS adoption on accounting figures. Interestingly, this is not the case for large firms. As large firms are expected to disclose more information than small ones, this result suggests that large firms provided an effective support to analysts to help them issue earnings forecasts that were not upwardly biased by too optimistic expectations on the impact of the IFRS adoption of their reported earnings.

References

- Abarbanell, J. and B. Bushee. (1998). Abnormal returns to a fundamental analysis strategy, The Accounting Review 73(1), 19-45.
- Bradshaw, M.T., S.A. Richardson and R.G. Sloan. (2001). Do analysts and auditors use information in accruals? Journal of Accounting Research, 39, 45-74.
- Brown L. (2001). A temporal analysis of earnings surprises: profits versus losses. Journal of Accounting Research, 39, 221-242.
- Clement, M. (1999). Analyst forecast accuracy: do ability, resources, and portfolio complexity matter? Journal of Accounting and Economics, 27, 285-303.
- Dechow, P.M., A.P. Hutton and R.G. Sloan (1999). An empirical assessment of the residual income valuation model. Journal of Accounting and Economics, 26, 1-34.
- Dugar, A. and S. Nathan. (1995). The effect of investment banking relationships on financial analysts' forecasts and investment recommendations. Contemporary Accounting Research, 11, 131-160.
- Duru, A. and D. Reeb. (2002). International diversification and analysts' forecast accuracy and bias, The Accounting Review, 77, 415-433.
- Gu, Z. and J. Wu. (2003). Earnings skewness and analyst forecast bias. Journal of Accounting and Economics, 35, 5-29.
- Hwang, S.G., C. Jan and S. Basu (1996). Loss firms and analysts' earnings forecast errors. Journal of Financial Statement Analysis, 1, 18-30.
- Lin, H. and M. McNichols (1998). Underwriting relationships, analysts' earnings forecasts and investment recommendations. Journal of Accounting and Economics 25(1), 101-127.
- Lys T. and L. Soo (1995). Analysts' forecast precision as a response to competition. Journal of Accounting, Auditing and Finance, 10, 751-763.
- Louis, H. (2004). Earnings management and the market performance of acquiring firms. Journal of Financial Economics, 74, 121-148.

- Mikhail, M.B., B.R. Walther and R.H. Willis (1997). Do security analysts improve their performance with experience? Journal of Accounting Research, 35, 131-157.
- Mikhail, M.B., B.R. Walther and R.H. Willis (1999). Does forecast accuracy matter to security analysts? The Accounting Review, 74, 185-200.
- Teoh, S.H. and T.J. Wong (2002). Why new issues and high-accrual firms underperform: The role of analysts' credulity. The Review of Financial Studies, 15, 869-900.

Table 1 -Forecasted vs. actual impact of IFRS adoption on reported EPS

Variables		T tests for p	paired samples	
IMPACT	mean =	-0.0211	mean diff.=	0.0366
EPSIFRS	std. dev. =	0.2021	std. dev. =	0.3158
FIMPACT	mean = std. dev. =	0.0154	t-statistics =	1.709
EPSIFRS		0.2828	p-value =	0.044

Table 2. Descriptive statistics

	Mean	Median	Maxi	Mini	Std. Dev.	Skewness	Kurtosis	N
FEIFRS	0.00295	0.00046	0.04902	0.00000	0.00662	4.07009	22.8312	192
IMPACT	0.00703	0.00325	0.08768	0.00000	0.01181	4.01717	22.1949	192
ΔΕΡS	0.01332	0.00949	0.26290	-0.08604	0.03211	3.07532	23.3255	192
DISPERSION	0.12411	0.06113	2.00782	-0.45725	0.25159	5.00156	33.3000	192
DISPEPS	0.04150	0.01501	1.70944	0.00194	0.15337	9.375226	94.3416	192
FOLLOWING	8.7994	7.50000	32.5000	3.00000	4.34086	1.47919	6.85671	192
LnCAPI	8.0096	7.83842	12.1630	4.19748	1.69933	0.19735	2.31916	192

<u>Table 3 - Financial analysts' ability to anticipate the impact of IFRS adoption on earnings</u>

Variables	Coefficient	Std. Error	t-Statistic	<i>p</i> -value
Intercept	-0.000450	0.001942	-0.231463	0.8172
IMPACT	0.186425***	0.028307	6.585892	0.0000
ΔEPS	-0.001158	0.012745	-0.090825	0.9277
DISPEPS	0.022298***	0.002816	7.918650	0.0000
DISPERSION	0.004311***	0.001283	3.360023	0.0010
LNCAPI	9.38E-05	0.000361	0.259831	0.7953
LOSS	0.005541**	0.002460	2.252807	0.0255
FOLLOWING	-0.000165	0.000133	-1.246708	0.2141
FRANCE	0.000569	0.001086	0.524150	0.6008
NETHERLANDS	0.002994**	0.001334	2.244301	0.0260
NORWAY	0.001014	0.001975	0.513391	0.6083
SWEDEN	0.002177	0.001710	1.273086	0.2046
UK	0.001477	0.001074	1.375899	0.1706
R-squared	0.6127	F-statistic		23.59
Adjusted R-squared	0.5867	Prob(F-statistic	c)	0.000

^{*} Significant at the 0.10 level (two-tailed); ** Significant at the 0.05 level (two-tailed); *** Significant at the 0.01 level (two-tailed). We estimate the following model:

$$\begin{aligned} \left| \text{IFRS_FE} \right|_{i} &= a_{0} + a_{1} \left| \text{IMPACT}_{\text{IFRS}} \right| + a_{2} \Delta \text{EPS} + a_{3} \text{DISPEPS} + a_{4} \text{DISPERSION} + a_{5} \text{LNCAPI} + a_{6} \text{LOSS} \\ &+ a_{7} \text{FOLLOWING} + a_{8} \text{FRANCE} + a_{0} \text{NETHERLANDS} + a_{10} \text{NORWAY} + a_{11} \text{SWEDEN} + a_{12} \text{UK} + \epsilon \end{aligned}$$

IMPACT = impact of IFRS on EPS scaled by stock price as of December 31, 2004; ΔEPS is the change in EPS reported in 2005 and 2004 deflated by the ending-of-period stock price 2004; DISPEPS = variance of actual EPS over the 2001-2005 period; DISPERSION = cross-sectional standard deviation of forecasted EPS 05 divided by the mean analyst consensus; LNCAPI = logarithm of the firm equity market value (market capitalization); LOSS is a dummy variable that is equal to 1 if actual EPS are negative in 2005, zero otherwise; FOLLOWING = average number of analysts providing a pre-IFRS or a post-IFRS earnings forecast; FRANCE, NETHERLANDS, NORWAY, SWEDEN and UK are dummy variables.

<u>Table 4 - Factors associated with IFRS forecast accuracy and impact of IFRS: Positive</u>
<u>vs. negative IFRS impact</u>

Variables	Coefficient	Std. Error	t-Statistic	<i>p</i> -value
Intercept	-0.000150	0.001943	-0.077387	0.9384
IMPACT ×DUMMY1	0.215914***	0.033591	6.427723	0.0000
IMPACT ×DUMMY2	0.137161***	0.041556	3.300651	0.0012
ΔEPS	-0.002115	0.012702	-0.166510	0.8679
DISPEPS	0.023259***	0.002866	8,115590	0.0000
DISPERSION	0.004016***	0.001290	3.113054	0.0022
LNCAPI	1.61E-05	0.000363	0.044382	0.9646
LOSS	0.006185**	0.002481	2.493027	0.0136
FOLLOWING	-0.000146	0.000132	-1.104729	0.2708
FRANCE	0.000746	0.001086	0.686797	0.4931
NETHERLANDS	0.003203**	0.001335	2.399699	0.0174
UK	0.001769*	0.001084	1,631764	0.1045
NORWAY	0.001404	0.001981	0.708552	0.4795
SWEDEN	0.002615	0.001724	1.516753	0.1311
R-squared	0.618	F-statistic		22.17
Adjusted R-squared	0.590	Prob(F-statistic))	0.000

^{*} Significant at the 0.10 level (two-tailed); ** Significant at the 0.05 level (two-tailed); *** Significant at the 0.01 level (two-tailed). We estimate the following model:

$$\begin{split} \left| \text{FEIFRS}_i \right| &= b_0 + b_1 \left| \text{IMPACT} \right| \times \text{DUMMYI} + b_2 \left| \text{IMPACT} \right| \times \text{DUMMY2} + b_3 \Delta \text{EPS} + b_4 \text{DISPEPS} + \\ & b_5 \text{DISPERSION} + b_6 \text{LNCAPI} + b_7 \text{LOSS} + b_8 \text{FOLLOWING} + b_9 \text{FRANCE} + \\ & b_{10} \text{NETHERLANDS} + b_{11} \text{NORWAY} + b_{12} \text{SWEDEN} + b_{13} \text{UK} + e \end{split}$$

DUMMY1 is equal to one if IMPACT is positive or nil, zero otherwise DUMMY2 is equal to one if IMPACT is negative, zero otherwise

ΔEPS is the change in EPS reported in 2005 and 2004 deflated by the ending-of-period stock price 2004; DISPEPS = variance of actual EPS over the 2001-2005 period; DISPERSION = cross-sectional standard deviation of forecasted EPS 05 divided by the mean analyst consensus; LNCAPI = logarithm of the firm equity market value (market capitalization); LOSS is a dummy variable that is equal to 1 if actual EPS are negative in 2005, zero otherwise; FOLLOWING = average number of analysts providing a pre-IFRS or a post-IFRS earnings forecast; FRANCE, NETHERLANDS, NORWAY, SWEDEN and UK are dummy variables.

<u>Table 5 - Factors associated with IFRS forecast accuracy and impact of IFRS: Strong</u>
<u>vs. weak IFRS impact on EPS</u>

Variables	Coefficient	Std. Error	t-Statistic	<i>p</i> -value
ntercept	-0.000127	0.001947	-0.065232	0.9481
IMPACT ×DUMMY3	0.213522***	0.033426	6.387852	0.0000
IMPACT × DUMMY4	0.139588***	0.041915	3.330296	0.0011
ΔEPS	-0.001716	0.012705	-0.135092	0.8927
DISPEPS	0.023137***	0.002860	8.089033	0.0000
DISPERSION	0.004072***	0.001288	3.161645	0.0018
LNCAPI	1.82E-05	0.000363	0.050030	0.9602
LOSS	0.006230	0.002493	2.499184	0.0134
FOLLOWING	-0.000148	0.000133	-1.115179	0.2663
FRANCE	0.000729	0.001087	0.670701	0.5033
NETHERLANDS	0.003181**	0.001335	2.382223	0.0183
JK	0.001731	0.001083	1.598723	0.1117
NORWAY	0.001340	0.001980	0.676624	0.4995
SWEDEN	0.002571	0.001724	1.491392	0.1376
R-squared	0.617	F-statistic		22.11
Adjusted R-squared	0.589	Prob(F-statistic	c)	0.000

^{*} Significant at the 0.10 level (two-tailed); ** Significant at the 0.05 level (two-tailed); *** Significant at the 0.01 level (two-tailed). We estimate the following model:

$$|FEIFRS_i| = b_0 + b_1 |IMPACT| \times DUMMY3 + b_2 |IMPACT_{IFRS}| \times DUMMY4 + b_3 \Delta EPS + b_4 DISPEPS + b_5 DISPERSION + b_6 LNCAPI + b_7 LOSS + b_8 FOLLOWING + b_9 FRANCE + b_{10} NETHERLANDS + b_{11} NORWAY + b_{12} SWEDEN + b_{13} UK + e$$

DUMMY3 is equal to one if IMPACT is greater than the median, zero otherwise DUMMY4 is equal to one if IMPACT is lower than the median, zero otherwise

ΔEPS is the change in EPS reported in 2005 and 2004 deflated by the ending-of-period stock price 2004; DISPEPS = variance of actual EPS over the 2001-2005 period; DISPERSION = cross-sectional standard deviation of forecasted EPS 05 divided by the mean analyst consensus; LNCAPI = logarithm of the firm equity market value (market capitalization); LOSS is a dummy variable that is equal to 1 if actual EPS are negative in 2005, zero otherwise; FOLLOWING = average number of analysts providing a pre-IFRS or a post-IFRS earnings forecast; FRANCE, NETHERLANDS, NORWAY, SWEDEN and UK are dummy variables.

<u>Table 6 - Factors associated with IFRS forecast accuracy and impact of IFRS:</u>
Financial analysts' following effectiveness

Dependent variable: FEIFRS						
Variables	Coefficient	Std. Error	t-Statistic	<i>p</i> -value		
Intercept	-0.000792	0.001952	-0.406022	0.6852		
IMPACT × DUMMY5	0.227472	0.040416	5.628268	0.0000		
IMPACT ×DUMMY6	0.153539	0.036522	4.204016	0.0000		
ΔEPS	-0.002536	0.012746	-0.199005	0.8425		
DISPEPS	0.023281	0.002892	8.049815	0.0000		
DISPERSION	0.003960	0.001303	3.038963	0.0027		
LNCAPI	0.000111	0.000360	0.307022	0.7592		
LOSS	0.006153	0.002490	2.470910	0.0144		
FOLLOWING	-0.000132	0.000134	-0.983869	0.3265		
FRANCE	0.000414	880100.0	0.380740	0.7039		
NORWAY	0.000954	0.001970	0.484063	0.6289		
J K	0.001501	0.001071	1.401418	0.1628		
NETHERLANDS	0.002809	0.001337	2.101040	0.0370		
SWEDEN	0.002117	0.001706	1.240966	0.2163		
R-squared	0.61	F-statistic		22.065		
Adjusted R-squared	0.589	Prob(F-statistic)	0.0000		

^{*} Significant at the 0.10 level (two-tailed); ** Significant at the 0.05 level (two-tailed); *** Significant at the 0.01 level (two-tailed). We estimate the following model:

$$\begin{split} |\text{FEIFRS}_i| &= b_0 + b_1 |\text{IMPACT}| \times \text{DUMMY5} + b_2 |\text{IMPACT}| \times \text{DUMMY6} + b_3 \Delta \text{EPS} + b_4 \text{DISPEPS} + \\ & b_5 \text{DISPERSION} + b_6 \text{LNCAPI} + b_7 \text{LOSS} + b_8 \text{FOLLOWING} + b_9 \text{FRANCE} + \\ & b_{10} \text{NETHERLANDS} + b_{11} \text{NORWAY} + b_{12} \text{SWEDEN} + b_{13} \text{UK} + \text{e} \end{split}$$

DUMMY5 is equal to one if the number of analysts is greater than the median (7), zero otherwise DUMMY6 is equal to one if the number of analysts is lower than the median (7), zero otherwise ΔEPS is the change in EPS reported in 2005 and 2004 deflated by the ending-of-period stock price 2004; DISPEPS = variance of actual EPS over the 2001-2005 period; DISPERSION = cross-sectional standard deviation of forecasted EPS 05 divided by the mean analyst consensus; LNCAPI = logarithm of the firm equity market value (market capitalization); LOSS is a dummy variable that is equal to 1 if actual EPS are negative in 2005, zero otherwise; FOLLOWING = average number of analysts providing a pre-IFRS or a post-IFRS earnings forecast; FRANCE, NETHERLANDS, NORWAY, SWEDEN and UK are dummy variables.

<u>Table 7 - Factors associated with IFRS forecast accuracy and impact of IFRS: Control</u> for size effects

Variables	Coefficient	Std. Error	<i>t</i> -Statistic	<i>p</i> -value
ntercept	-0.003637	0.001987	-1.830903	0.0688
IMPACT × DUMMY7	0.226527***	0.028457	7.960322	0.0000
IMPACT × DUMMY7	-0.086995	0.067737	-1.284306	0.2007
ΔEPS	0.000971	0.012147	0.079955	0.9364
DISPEPS	0.021480***	0.002688	7.990434	0.0000
DISPERSION	0.005126***	0.001236	4.147887	0.0001
LNCAPI	0.000569	0.000360	1.579203	0.1161
LOSS	0.004855**	0.002348	2.068117	0.0401
FOLLOWING	-0.000190	0.000126	-1.505825	0.1339
FRANCE	0.000832	0.001036	0.803683	0.4227
NORWAY	0.000884	0.001881	0.469716	0.6391
JK	0.001418	0.001023	1.387022	0.1672
NETHERLANDS	0.002998**	0.001271	2.359778	0.0194
SWEDEN	0.002057	0.001629	1.262900	0.2083
R-squared	0.650	F-statistic		25.50
Adjusted R-squared	0.625	Prob(F-statistic)		0.000

Significant at the 0.10 level (two-tailed); ** Significant at the 0.05 level (two-tailed); *** Significant at the 0.01 level (two-tailed).

We estimate the following model:

$$\begin{aligned} \left| \text{IFRS_FE} \right|_{i} &= b_{0} + b_{1} \left| \text{IMPACT}_{\text{IFRS}} \right| \times \text{DUMMY7} + b_{2} \left| \text{IMPACT}_{\text{IFRS}} \right| \times \text{DUMMY8} + b_{3} \Delta \text{EPS} + b_{4} \text{DISPEPS} + \\ & b_{5} \text{DISPERSION} + b_{6} \text{LNCAPI} + b_{7} \text{LOSS} + b_{8} \text{FOLLOWING} + b_{9} \text{FRANCE} + \\ & b_{10} \text{NETHERLANDS} + b_{11} \text{NORWAY} + b_{12} \text{SWEDEN} + b_{13} \text{UK} + e \end{aligned}$$

DUMMY7 equals one if the firm market value is lower than the median market value (\in 7.87 Millions), zero otherwise

DUMMY8 equals one if the firm market value is higher than the median, zero otherwise

ΔEPS is the change in EPS reported in 2005 and 2004 deflated by the ending-of-period stock price 2004; DISPEPS = variance of actual EPS over the 2001-2005 period; DISPERSION = cross-sectional standard deviation of forecasted EPS 05 divided by the mean analyst consensus; LNCAPI = logarithm of the firm equity market value (market capitalization); LOSS is a dummy variable that is equal to 1 if actual EPS are negative in 2005, zero otherwise; FOLLOWING = average number of analysts providing a pre-IFRS or a post-IFRS earnings forecast; FRANCE, NETHERLANDS, NORWAY, SWEDEN and UK are dummy variables.