

The Effect of IFRS Enforcement Factors on Analysts' Earnings Forecasts Accuracy

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Abstract

This paper examines the effect of IFRS mandatory adoption by French companies on analysts' earnings forecast accuracy. In addition, we consider the impact of corporate governance mechanisms, as IFRS enforcement factors, on earnings forecasts. Using a sample of 98 companies over the period from 2003 to 2007, our results show increased forecast accuracy after the mandatory adoption of IFRS. We also find that the independence, the international competency and the efficiency of the board members, the board size, and the quality of external audit are important factors for the implementation of IFRS and, these factors improve earnings forecast accuracy.

1- Introduction:

There is an increasing debate about the impact of international financial reporting standards (IFRS) mandatory adoption on earning quality. At the time of this study more than 120 countries permit or require publicly traded companies to use IFRS. In this context, the European Union (EU) has taken the first initiative of harmonization by the implementation of Seventh Directive for consolidated accounts. The second essay on harmonization was decided by Regulation 1606/2002 of 16 July 2002 that impose European listed companies to adopt international GAAP produced by the IASB (International Accounting Standards Board) a private organization (Chiapello, 2005; Jermakowicz and Gornick - Tomaszewski, 2006). Furthermore, in the United States (US) the security exchange commission has allowed foreign companies to use IFRS instead of reconciling their financial statements to US generally accepted accounting principles (SEC, 2010). This study aims to examine the impact of IFRS mandatory adoption on the quality of financial statements. In particular, we examine factors that contribute to the enforcement of IFRS and consequently to the improvement of analyst's earnings forecasts accuracy.

Disclosure quality has attracted the interest of both academics and professional accountants in various contexts, especially when they adopt international accounting standards. Accounting literature show several approaches that could be used to investigate the impact of international standard on disclosure quality. Some authors analyse the effect of different standards on the

value relevance that measure by information asymmetry. (Leuz, 2003; Daske, 2006; Armstrong et al, 2010). Other research has examined the impact of IFRS on reliability of financial disclosure that approximate by earnings management (Zimmerman and Goncharov, 2007; Titas and Dipanjan, 2012). A final approach to analyse IFRS effectiveness consider its effect on comparability. (DeFond et al, 2011; Jones and Finley, 2011). Moreover, previous literature has concentrated mainly on the effect of IFRS voluntary adoption by German companies (Barth et al, 2008; Van Tendeloo and Vanstraelen, 2005) on earning quality focusing on the properties of earnings (e.g. earnings management) and where IFRS enforcement factors are not controlled for (Zimmerman and Goncharov, 2007; Titas and Dipanjan, 2012). This research contributes to this debate by examining the effect of IFRS mandatory adoption on forecast earnings accuracy by analysts a sophisticated users of financial statements. As an aggregate measure of performance, earnings number is one of the most important items disclosed by firms. It allows decision makers, especially analysts, to evaluate a firm efficiency, its financial and competitive position. Considering the analysts' earnings forecasts accuracy as a direct measure of the usefulness of accounting information which is an important qualitative characteristic (IASB Framework, Jiao et al, 2012), we use this variable to approximate earnings quality.

Since the majority of studies focuses on the US stock exchange markets and investigates the effect of cross listings on the properties of analyst's forecasts (Lang et al, 2003; Ciccone, 2005; Heflin et al, 2003), we address this issue in the setting of French capital market where IFRS are mandatorily adopted by all European Union (EU) listed companies. France is a code law country characterized by regulatory rigidity and a legalistic prospect that differs largely from international accounting standard marked by conceptual framework that protects shareholder interests. To the best of our knowledge, there is no study examining the effect of IFRS on analysts' forecast accuracy in the French market. In this sense, this paper is one of the first to study whether the analysts' earnings forecasts accuracy increases in France capital market

following mandatory IFRS adoption, and conditions and enforcement factors that let increases to occur.

Furthermore, previous research shows that the implementation of international accounting system reinforces the quality of financial reporting by meeting the information needs of investors (Van Tendeloo and Vanstraelen, 2005; Hung and Subramanyam, 2007; Iatridis, 2010). Nevertheless, earnings quality cannot be determined by the quality of accounting standards alone because their implementation requires judgment (Ball et al, 2000; Burgstahler et al., 2006). In fact, companies operating in the same economic context report financial earnings of significantly different quality (Watrin and Ullmann, 2012). So, our research contributes to this debate by examining factors that have entailed the enforcement of IFRS and improved the quality of financial reports.

Overall, we extend prior research in two principles ways:

- I- First, we test the impact of IFRS on analysts' earnings forecasts in France, a code-law country, which has undergone a major switch from following the stakeholder- oriented to the shareholder-oriented accounting system.

- II- Second, while previous studies examined the effect of institutional differences across countries on reporting quality (Ball et al, 2003; Lang et al, 2003; Bushman et Piotroski, 2006), we point out how IFRS enforcement factors influence earnings quality. So, we investigate at the firm level by choosing a sample of firms that are subject to the same institutional framework.

Our findings show improvements in the accuracy of analysts' earnings forecasts after mandatory IFRS adoption. In addition, the board independence, international competency and efficiency, the quality of external audit and the board size are important factors of IFRS

implementation and consequently contribute to the improvement of disclosure quality. These results are relevant to the debate on the decision of the current mandatory switch to a single set of accounting standards in Europe.

The remainder of this paper is organised as follows. Section 2 presents the theoretical framework and the development of the research hypotheses. The third section explains the research design. The results are reported and discussed in section 4. Section 5 concludes our paper and provides suggestions for further research.

2- Theoretical frameworks and hypotheses development:

Two theoretical frameworks can be used in this paper to explain the effect of IFRS enforcement factors on analyst's earnings forecasts. These are agency theory and signalling theory.

2.1 Agency theory:

The agency theory is formalised by Jensen and Meckling (1976) to highlight both the agency relationship between shareholders, creditors and managers and interest conflict that arise from the separation of ownership and control of public companies. This theory considers the firm as organisational form searching to reduce agency conflicts and costs involved. Based upon agency theory, disseminating high quality accounting and financial information is commonly used by firms to reduce agency costs.

Furthermore, this theory is implicitly proposed as a framework by IASB. In fact, the IFRS conceptual framework acknowledges that investors are privileged financial users (Colasse, 2006). It encourages firms to enhance the transparency and the level of financial information disclosed in order to limit discretionary power of managers, and earnings forecasted will be improved as a result. Moreover, corporate governance mechanisms are established by shareholders in order to align managers' actions with shareholders' interest. That's why many

previous empirical research (Zéghal et al, 2011; Hussainey and Al Najjar, 2011; Tauringana and Mangena, 2009) focus on this settlement as determinants of high quality disclosure in accordance with agency theory.

2.2 Signalling theory:

It is argued that there are several similarities between agency theory and signalling theory (Morris, 1987; Sun et al, 2010). Signalling theory was developed by Akerlof (1970) to alleviate problems due to the existence of information asymmetry in the capital markets. These problems may be reduced when the party who detains more information signals it to other parties less informed. The reduction of uncertainty and information asymmetry would improve the communication between managers and other interested parties such as shareholders, regulatory and supervisory authorities, lenders, financial analysts, etc. This allows, therefore, reducing the related agency costs that might otherwise arise (Healy and Palepu, 2001). That's why signalling prospects can be considered as explaining the agency theory assumptions.

Furthermore, IFRS are issued by IASB in order “to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions” (Epstein and Mirza, 2002). The EU objective of mandating IFRS was to improve the capital market functioning. In fact, the implementation of IFRS, a single set of high quality accounting standards, would lead to more transparent financial reports and reduce the information asymmetry between informed and uninformed investors (Armstrong et al, 2010; Jiao et al, 2012). Hence, the IFRS adoption and enforcement could be considered as positive signal to the stakeholders as information disclosed under international standards is of high quality and improves analysts' earnings forecasts.

2.3 Impact of the mandatory adoption of IFRS on analysts' earnings forecasts accuracy:

Earnings number is the summary measure on which analysts, the most important users of financial reports, focus (Barker and Imam, 2008; Dechow et al 1998).

Thereby, to infer the effect of IFRS mandatory adoption on earning quality, we use analysts forecast properties rather than earning properties measure such as earnings management largely used in last research.

A wide literature has addressed the issue of relation between financial reporting quality and analysts' forecast accuracy. Most research in this field provides evidence that increased disclosure level¹ is associated with decrease of information asymmetry and hence higher analyst forecast accuracy (Lang and Lundholm, 1996; Hope, 2003). Also, the increased disclosure quality decreases the information asymmetry (Healey and Palepu, 2001; Frankel and Li, 2004; Watrin and Ullmann, 2012). Financial statements are the most important source of information for different users, particularly, the financial analysts (Capstaff et al, 1995; Barron et al, 2002; Barker and Imam, 2008). This implies that any change in accounting information related to the transition from domestic GAAP (Generally Accepted Accounting Principles) to IFRS, is reflected in the accuracy of analysts' forecasts.

A growing body of literature claimed that IFRS is a high quality accounting standard allowing transparency and credibility of financial reports (Ball et al., 2003; Van Tendeloo and Vanstraelen, 2005; Kohlbech and Warfield, 2010). Using different methods of measuring financial information quality, several studies investigate the effect of IFRS adoption on disclosure quality. Indeed, approximating earning quality by earnings management and timeliness of losses, Iatridis (2010) finds that the adoption of IFRS is related to a decreased

¹ Level of disclosure is considered as proxy of disclosure quality (Botosan, 1997; Beattie et al, 2002)

earnings management, more timely loss recognition and consequently higher value relevance of financial disclosure for British companies. In addition, Barth et al (2008) report a decrease in the practice of earnings management after the switch to IFRS. Nevertheless, other studies, focused on earnings management and timeliness of losses, report a decrease of accounting quality after transition to IFRS (Ahmed et al, 2013; Chen et al, 2010; JeanJean and Stolowy, 2008). Based on a sample of Indian firms, Titas and Dipanjan (2012) find a negative relationship between the adoption of IFRS and earnings management. Hence, the earnings management practice increases significantly after IFRS transition.

Examining the literature on the effect of IFRS adoption on analysts' earnings forecasts provides mixed evidence. Dask (2005) evidence shows lower accuracy and higher dispersion among analysts' forecasts for German firms which adopted international accounting standards before mandatory period. In addition, Bae et al (2008) find evidence that the extent to which local GAAP differs from IFRS are negatively associated with analysts' forecasts accuracy in the post-IFRS adoption period. However, by measuring investor response to earnings, some prior research document numerous capital benefits of IFRS adoption including reduced cost of capital and improved liquidity (Li, 2010; Daske et al, 2008), greater analyst following and reduced analyst forecast dispersion (Horton and Serafeim, 2010; Tan et al 2011). In addition, Byard et al (2011) study the variation of the forecast error committed by analysts after IFRS adoption. They find a decrease of the absolute error value showing that accounting information is becoming more relevant. This decrease is very significant for IFRS mandatory adopting countries whose local GAAP (Generally Accepted Accounting Principles) are widely different from those of the IASB conceptual framework. These results were confirmed by Armstrong et al (2010) concerning the mandatory adoption of IFRS in the European context. These authors examine the reaction of financial market to sixteen events related to the adoption of IFRS in Europe. They find that investors expect an incrementally improvement in the value relevance

of financial disclosure after the mandatory transition to IFRS. In addition they conclude that financial market reacts positively to any event promoting the adoption of IFRS.

Voulgaris et al (2014) examine the effect of IFRS on the type of performance measures that firms use to evaluate and reward their managers. Their findings suggest that, while under IFRS, accounting earnings could be more informative for valuation purposes, this might be achieved at the expense of other purposes that accounting serves such as stewardship or performance contracting.

Using a sample of 19 European countries where UK firms are the most represented², Jiao et al (2012) analyzed the effect of IFRS mandatory adoption on analysts' earnings forecast accuracy. They document that analysts' earnings forecasts have become more accurate and less dispersed after IFRS switch. So, researchers conclude that international standards allow an improvement in the value relevance of disclosure.

La Bruslerie and Gabteni (2014) investigated the relationship between mandatory and voluntary information and whether the introduction of IFRS influenced the content and level of discretionary information disclosed by firms. Referring to 2003-2008 period gives a long term perspectives and allow them to identify communication policy. Their results show that voluntary disclosure policies improve with the introduction of IFRS. This study also shows that, after IFRS, the discretionary communication policies of French firms follow both a long term and short term component to meet analysts' demand for information permitting an increase in earning's forecasts accuracy.

Following this literature, it is clear that the question relating to the impact of IFRS on financial statement disclosure quality was subject of controversies. Accordingly, if the transparency and

² UK firms represent 37% of the sample

the value relevance of financial statements improve under IFRS, more accurate information will be available to analysts which might lead to an improvement in analysts' earnings forecasts accuracy (Tong, 2007; Cheong et al, 2010).

Our first objective in this research is to investigate the impact of IFRS mandatory adoption on analysts' earnings forecasts in France a code law country. To achieve this objective, we assume that IFRS mandatory adoption helps analysts in forecasting future earnings. Thus our first hypothesis is:

H1: The mandatory adoption of IFRS in France improves the analysts' earnings forecasts accuracy.

2.4 IFRS enforcement factors:

Much attention in current accounting research³ is given to the effect of accounting standard especially the international standards on disclosure quality. Nevertheless, the quality of financial statements does not depend on the quality of these standards alone. Indeed, the quality of disclosure could be attributed to both the quality of IFRS and their high enforcement and implementation (Van Tendeloo and Vanstraelen, 2005; Ball et al, 2003; Li, 2010, Byard et al, 2011). Moreover, Hail and Leuz (2010) and Barth et al (2008) suggest that lax enforcement of IFRS may lead to a lower compliance to these standards, which therefore limits their effectiveness in improving the quality of disclosure.

Schipper (2005, P106) states that: "The quality of financial reporting is crucially dependent on vigorous enforcement that is separate from the financial reporting standard setting function".

³ Zimmerman and Goncharov (2007), Titas and Dipanjan (2012), DeFond et al (2011), Jones and Finley (2011)

Hence, we can deduce that the quality of IFRS is a necessary but not sufficient condition to obtain high disclosure quality.

Daske et al (2008) document heterogeneity across firms in the economic effects of IFRS adoption. This heterogeneity is related either to differences in firms reporting incentives or corporate governance factors. In addition, Jones and Finley (2011) suggest that in the absence of effective enforcement, the major impact of IFRS on decreasing international reporting diversity could be much reduced. Also, Brown and Tarca (2005) emphasize the need of appropriate enforcement mechanisms to ensure compliance with IFRS.

Alali and Foote (2012) support the regulatory initiative of compliance and enforcement of IFRS such as governance system in order to better financial reporting transparency and trust which let analysts more associated with accounting information than speculations and rumors.

Furthermore, Zéghal et al (2011) examine whether mandatory adoption of IFRS by French companies is related to lower earnings management. They also analyse two categories of enforcement factors of IFRS: corporate governance and dependence on international markets. They find that mandatory adoption of IFRS has reduced significantly the level of earnings management for firms with good corporate governance and those depending on foreign financial markets.

Similar to Zéghal et al (2011) we contribute to this literature by examining the corporate governance as IFRS enforcement factors and its impact on improving earnings forecast accuracy after IFRS mandatory adoption .

An extensive amount of research has examined the effect of corporate governance on financial reporting quality (Bédard et al, 2004; Peasnell et al, 2005; Jiraporn and Gleason, 2007; Zéghal et al, 2011; Verriest et al, 2013). The board of directors is often considered as one of the most important corporate governance and its control role in firms is essential and depends on several

attributes as board size, separation of the role of CEO and board chairman, independence and competency of board members and existence of an independent audit committee (Zhara and Pearce, 1989; Vafeas, 1999).

Firms with more independent boards are likely to engage in less fraud or earnings management and are found to have better reporting quality (Xie et al, 2003; Jiraporn and Cleason, 2007; Peasnell et al, 2005; Beasley, 1996; Bédard et al, 2004). Moreover, Wang and Campbell (2012) declare that the number of independent board members significantly decreases earnings management for companies without state ownership.

Ebrahim (2007) finds that the relationship between board independence and earnings management is more significant for more active boards, as measured by the frequency of annual board meetings. Empirical evidence by Marra et al (2011) indicates that, under international standards, independent board and audit committee play significant role in decreasing earnings management.

Audit committee effectiveness and independence is positively associated with financial reporting quality (Klein, 2002) and negatively related with fraud (Carcello et al, 2011; Abott et al, 2004).

The Viénot's reports 1995, 1999 in France recommend the separation of decision- making and control role. In addition, a number of research papers has found a bad effect on financial statement quality of combination of the two functions (Peasnell et al, 2005; Beasley, 1996; Bédard et al, 2004).

Another characteristic that seems to have a significant influence on the board's performance and efficiency is the board size. Results of research that has focused on the influence of board size on financial statement quality are mixed. Some studies find a positive relation between the number of directors and disclosure quality (Xie et al, 2003; Kent and Stewart, 2008; Zéghal et

al, 2011). In contrast, other studies indicate that smaller boards are more efficient in monitoring management, reducing managerial discretion and improving disclosure quality (Beasley, 1996). From an agency theory view, larger board is an effective corporate governance mechanism in monitoring managers.

Board of directors needs to be active and to meet frequently in order to carry out its role of monitoring and ensuring high-quality and transparent reporting in annual reports (Xie et al, 2003; Conger et al, 1998; Vafeas, 1999). Using a sample of Australian listed companies, Kent and Stewart (2008) find that companies with more frequent board meeting have more disclosure after IFRS transition.

Furthermore external audit quality is also a guarantee of control management effectiveness and a very important factor for good corporate governance. In fact, Tsalavoutas (2011), Iatridis (2011) and Dimitropoulos et al (2013) indicate that IFRS compliance is positively associated with audit quality.

Prior studies focus on the post IFRS period to analyze the effect of corporate governance on the financial statement quality. In this sense, Goodwin et al (2009) find that companies with stronger governance show lower managerial forecast errors stemming from IFRS adoption in Australia.

Previous literature has also considered the importance of international experience of board members (Luo, 2005). A company with high internationally competent board members has the opportunity to reduce the information costs of globalization. Holm et al (2012) state that IFRS implementation is related to the board international competency and professional background in accounting and finance. International experience and competence can be accomplished by native board members that have board membership subsidiaries or by including foreign members on the board.

Verriest et al (2013) investigate the relation between corporate governance and financial reporting quality for first time IFRS adopters. They state that (P66): “Stronger governance firms engage in more transparent IFRS restatements, provide better disclosure quality and comply with IFRS more rigorously than weaker governance firms.” Their results show also that firms with better functioning and independent board and more effective audit committees publish higher quality financial statements.

Similarly, Zéghal et al (2011) show that the independence and effectiveness of the board, the existence of an independent audit committee, the quality of external audit and the dependence on foreign financial markets are important factors for the implementation of IFRS in France.

From an agency perspective and based on previous research evidence, we predict that mandatory adoption of IFRS in France has greater and positive effect on analysts’ earnings forecast accuracy when firms have stronger corporate governance mechanisms. Thus our second hypothesis is:

H2: The mandatory adoption of IFRS leads to a better improvement in analysts’ earnings forecasts accuracy when firm’s corporate governance is strong and effective.

This hypothesis can be broken down as follow:

H2-1 The mandatory adoption of IFRS leads to a better improvement in analysts’ earnings forecasts accuracy when a firm’s board of directors is independent competent and active.

H2-2 The mandatory adoption of IFRS leads to a better improvement in analysts’ earnings forecasts accuracy when there is separation of the roles of CEO and board chairman.

H2-3 The mandatory adoption of IFRS leads to a better improvement in analysts’ earnings forecasts accuracy when a firm’s audit committee is independent.

H2-4 The mandatory adoption of IFRS leads to a better improvement in analysts' earnings forecasts accuracy when external audit is of high quality.

H2-5: The board of directors' size has a positive effect on improving analysts' earnings forecasts accuracy after mandatory adoption of IFRS.

3- Empirical Research:

In this section, we first provide a description of the data and variables applied. Second, we present the models used to test the hypothesis developed in the previous sections.

3.1 Sample:

The sample is drawn from the population of French non-financial groups listed on the French stock exchange during the period before mandatory adoption of IFRS (2003-2004) and the period after mandatory adoption of IFRS (2006-2007). Similar to Zéghal et al (2011) and Jiao et al (2012), we eliminate the transitory year 2005 because firms reports differently according to IFRS1 that allows many exemptions in order to facilitate transition to international standards. In addition, we study the period before 2008, date of financial crisis, to avoid its effects on the implementation of international standards and the application of fair value assessment.

The principal sources of data were obtained from annual reports available in the SBF 250 and from the IBES databases. Financial companies (41) are excluded because of their specific regulation and their special accounting practices. Also, we have excluded firms without a December 31 fiscal year-end (50), firms publishing their financial statements under IFRS before 2004 (6), firms without necessary data to calculate forecast accuracy (55). The final sample consists of 98 companies.

3.2 Data and variables:

Data are referred to corporate governance attributes particularly board of directors characteristic and analyst information for French publicly traded companies.

Forecast Error: the dependent variable in our study is the accurateness of forecasts. Nevertheless, following previous research (Ashbaugh and Pincus, 2001; Jiao et al, 2012) we use the reverse of accuracy namely forecast error to measure forecast accuracy. Forecast error is determined as the absolute value of the difference between final consensus earnings forecast and real earning scaled by the stock price at the end of one year before the forecasted year

$$FE = \frac{\text{Consensus.forecast}_{t,i} - \text{Real EPS}}{P_{t-1,i}}$$

EPS: earning per share

Consensus forecast retained in our study is the final one and is defined as the average of available analyst earning forecast just before the announcement of annual earnings. Data concerning this variable is obtained from the database IBES. We examine the effect of our hypotheses on the forecast error through the following independent variables:

- **IFRS** a dummy variable coded as 1 for years after 2005 and 0 otherwise.
- **Size (ln Assets):** it has been argued in prior research that large firms are widely followed by analysts. Indeed, they are expected to be more transparent, disclosing more reliable information and providing financial analysts with access to some private information, which in turn lead to more accurate earning forecast (Brown et al, 1987; Hope, 2003; Lang and Lundholm, 1996; Jiao et al, 2012). The proxy for firm size is the natural logarithm of total assets [ln assets] (Godard, 2002; Fernández and Arrondo, 2005).
- **Performance volatility (σ ROE):** earning forecast accuracy is largely affected by the volatility of firm's performance. Indeed, it is not easy to predict a profit when firm

performance is volatile. Therefore, it is likely that the accuracy of forecasts is lower for firms with more volatile performance. Hence we include this variable to control the performance volatility effect. This variable is calculated as standard deviation of return on equity (ROE) based on the five years before the forecast year (Jiao et al, 2012).

- **Number of analyst forecast (NEstimate):** another variable that permit to control the analyst forecast accuracy is analyst following. In fact, the forecast accuracy improves when the number of analysts increases as there is more competition among them and, therefore, analysts will be more encouraged to forecast accurately (Lys and Soo, 1995; Jiao et al, 2012). Hence, it is expected that this variable will be negatively correlated with forecast errors. Following this studies, we measure this variable using natural logarithm of the number of analysts' forecast included in the final consensus from IBES.

- **Board of directors attributes** are measured as:
 - ❖ **International competency (COMPETENT):** Holm et al (2012) coded as 1 if one or more members of the board have international experience such as board membership in foreign firms and 0 otherwise. Due to the lack of variability, this variable will be measured by the percentage of foreign directors or board membership in foreign firms. According to prior studies (Holm et al, 2012; Verriest et al, 2013), it is expected that this variable will be positively correlated with earnings forecasts accuracy.
 - ❖ **Independence of board (INDEP):** the independence of board members improve the disclosure quality (Xie et al, 2003; Jiraporn and Cleason, 2007; Bédard et al, 2004). Hence, it is likely that this variable is positively associated with earnings forecasts

accuracy. We measure board independence by the percentage of independent external directors serving on the board. (Abott et al, 2004; Beasley, 1996; Peasnell, 1995).

- ❖ **Independent audit committee (AUDIT COM):** based on previous literature, it is expected that this variable will be positively correlated with earning quality and, particularly with the accuracy of earnings forecasts (Klein, 2002; Carcello et al, 2011; Abott et al, 2004, Xie et al, 2003; Zéghal et al, 2011; Holm et al, 2012). The same studies allow us to code this variable as 1 if the company has established an independent audit committee and 0 otherwise.
- ❖ **Separation of the roles of CEO and board chairman (SEP):** following previous studies (Beasley, 1996; Peasnell et al, 2005; Xie et al, 2003), separation of the roles of CEO and chairman of the board was measured by a dummy variable that take 1 if there is separation of function and 0 otherwise.
- ❖ **External audit quality (EXT.AUDIT):** Big 4 auditors have more knowledge, specialized personnel and IFRS-related experience and show higher requirement for compliance with accounting regulation and for higher accounting quality in financial reporting. Moreover, they could provide greater assistance in the implementation and transition to IFRS compared to other audit firms. Hence, they should be considered as IFRS enforcement factors and contribute to the improvement of earning forecast accuracy. (DeFond and Jiambalvo, 1994; Van Tendeloo et Vanstraelen, 2005; Zéghal et al, 2011; Iatridis, 2011; and Dimitropoulos et al, 2013). This study is conducted in the French context where legislation requires for companies to appoint two auditors. So, this variable will be coded as 1 if there is at least one big 4 that audited the firm; 0 otherwise. This measure was also used by (Xie et al, 2003; Zéghal et al, 2011; Iatridis, 2011).

- ❖ **B.Size:** From an agency perspective, larger boards are more efficient in monitoring management, reducing managerial discretion and improving disclosure quality. We, therefore, expect that board size will be positively associated with earnings forecasts accuracy. According to previous studies (Xie et al., 2003; Bédard et al., 2004; Zéghal et al, 2011), board size (B.SIZE) was measured by the number of directors serving in the board.
- ❖ **Frequency:** board activity, measured by the number of board meeting. Frequency is an important dimension of board efficiency. Vafeas (1999) show that operating performance improves following years of abnormal board activity. Xie et al (2003) argue that board meeting frequency is an important factor in constraining the propensity of managers to engage in earnings management. Hence, we expect that board activity will be positively associated with earning quality disclosed.
- ❖ **Industry and Year Dummies:** we also include industry and year dummies to control for unobservable factors associated with the characteristics of industries and years that might influence the analyst's forecast accuracy.

3.3 Models

In order to examine if mandatory adoption of IFRS improves the analysts' forecast accuracy the following model was estimated.

$$\mathbf{M1: FE}_{t,i} = \alpha_0 + \alpha_1 \mathbf{IFRS}_{t,i} + \alpha_2 \ln \mathbf{Assets}_{t,i} + \alpha_3 \mathbf{N.Estimate}_{t,i} + \alpha_4 \mathbf{ROE}_{t-1,i} + \alpha_5 \mathbf{Industry Dummies}_{t,i} + \alpha_6 \mathbf{Year Dummies}_{t,i} + \varepsilon_{t,i}$$

To test our second hypothesis, we estimate the Model 2

$$\begin{aligned}
\text{M2: } FE_{t,i} = & \beta_0 + \beta_1 \text{IFRS}_{t,i} + \beta_2 \ln \text{Assets}_{t,i} + \beta_3 \text{N.Estimate}_{t,i} + \beta_4 \sigma \text{ROE}_{t,i} + \beta_5 \\
& \text{INDEP}_{t,i} + \beta_6 \text{COMPETENT}_{t,i} + \beta_7 \text{AUDIT.COM}_{t,i} + \beta_8 \text{B.Size}_{t,i} + \beta_9 \text{SEP}_{t,i} + \\
& \beta_{10} \text{EXT.AUDIT}_{t,i} + \beta_{11} \text{Frequency}_{t,i} + \beta_{12} (\text{IFRS} * \text{INDEP})_{t,i} + \beta_{13} \\
& (\text{IFRS} * \text{COMPETENT})_{t,i} + \beta_{14} (\text{IFRS} * \text{AUDIT.COM})_{t,i} + \beta_{15} (\text{IFRS} * \text{B.Size})_{t,i} + \beta_{16} \\
& (\text{IFRS} * \text{SEP})_{t,i} + \beta_{17} (\text{IFRS} * \text{EXT.AUDIT})_{t,i} + \beta_{18} (\text{IFRS} * \text{Frequency})_{t,i} + \beta_{19} \\
& \text{Industry Dummies}_{t,i} + \beta_{20} \text{Year Dummies}_{t,i} + \varepsilon_{i,t}
\end{aligned}$$

We summarize the definition of variables in the table below.

Variables	Definition	Expected sign
Forecast Error	Forecast Error is the error in analysts' consensus forecasts. It is the absolute difference between the consensus forecast of EPS and actual EPS scaled by the stock price at the end of year t-1	
IFRS	IFRS is a dummy, which equals to 1 for years after 2005 and 0 otherwise.	-
In Assets	It is a firm's size	-
N.Estimate	N.Estimate stands for the number of estimations contained in consensus forecasts.	-
σROE	It is a variable control for the volatility of firm performance. It is calculated as the standard deviation of ROE based on the five years before year t	+
INDEP	Independence of board members measured by the percentage of independent external directors serving on the board	-
COMPETENT	International competency coded as 1 if one or more members of the board have international experience such as board membership in foreign firms and 0 otherwise.	-
AUDIT.COM	Independent audit committee is code this variable as 1 if the company has established an independent audit committee and 0 otherwise.	-
B. Size	Board size measured by the number of directors serving in the board.	-
SEP	Separation of the roles of CEO and Chairman of the board was measured by a dummy variable	-

	that take 1 if there is separation of function and 0 otherwise.	
EXT.AUDIT	External audit quality approximated by Big 4. This variable will be coded as 1 if there is at least one big 4 that audited the firm; 0 otherwise.	-
Frequency	Board activity, measured by the number of board meeting.	-
IFRS* INDEP Competent AUDIT COM B.Size SEP EXT.AUDIT Frequency	Interaction term between the IFRS variable and each corporate governance attributes. These variables are included to highlight the factors that contribute to the implementation and enforcement of IFRS.	-

4- Results:

This section, present the empirical results relating to the first hypothesis. Next, we present the results of our second model testing the second hypothesis.

4.1 Analysis of results relating to the first hypothesis:

4.1.1 Comparison of forecast accuracy in the PRE and POST IFRS mandatory adoption:

Our first hypothesis to be tested is that mandatory adoption of IFRS in France improves the analyst's forecast accuracy. Hence, we compare forecast accuracy level between two periods: the period before mandatory IFRS (PRE.IFRS: 2003-2004) and the period after mandatory adoption of IFRS (POST.IFRS: 2006-2007).

We begin this analysis by checking the normality of variable in order to choose the appropriate statistical test. The Kolmogorov-Smirnov test show that the dependent variable "forecast error" doesn't follow the normal law. So, we used the Wilcoxon non parametric test of mean equality.

Table 1

Forecast error: test of difference between PRE and POST

	Mean PRE. IFRS	Mean POST.IFRS	Wilcoxon test	P-Value
FE (Forecast error)	0.0471	0.0132	11.829***	0.000

The results of this test are presented in table 1.

Table 1 shows that mean of forecast error for the POST.IFRS period is significantly smaller than for the PRE.IFRS period.

Therefore, on average, the accuracy of analysts' forecasts increases after the mandatory adoption of IFRS by French companies.

4.1.2 Multivariate tests of forecast accuracy PRE and Post IFRS:

4.1.2.1 Descriptive statistics

Table 2 shows the descriptive statistics of the variables. On average, earnings forecasts accuracy is about 2% of stock prices, which is in line with prior studies (Bae et al, 2008; Jiao et al, 2012). The number of analysts forecasts ranges from 3 to 45 with on average 10 forecasts underlying a consensus forecast. On average, the earnings volatility is about 0.16 with a Min of 0.001 and a Max of 13. The earnings volatility is low; hence it is expected that this variable has no effect on earnings forecast accuracy.

Table 2: Descriptive Statistics

Variables	Obs	Mean	Min	Max	Std deviation
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FE(Forecast error)	392	0.0200698	0.0000549	0.9039548	0.0829078
ln Assets	392	20.97527	10.77553	27.12777	2.781205
σ ROE	392	0.1578444	0.001	12.70317	0.8841007
NEstimate	392	10.75719	3.000000	45.00000	2.114951

Table 3 presents the correlations between the independent variables. The number of estimations contained in consensus forecasts is negatively associated with σ ROE and positively and significantly associated with companies size (ln assets) which is in line with prior researches suggesting that large firms are highly followed by analysts (Jiao et al, 2012).

Table 3: Correlation matrix

	FE	IFRS	ln Assets	σ ROE	NEstimate
FE	1				
IFRS	-0.2055***	1			
ln Assets	-0.1940*	0.0795*	1		
σ ROE	0.2204**	-0.0802**	-0.1396	1	
NEstimate	-0.1313***	0.0409*	0.3775**	-0.0076	1

In addition, Table 3 presents the correlations between independent and dependent variables. Correlation reports that forecast error is negatively correlated with firm size and analyst coverage (NEstimate). This result is consistent with previous studies suggesting that analysts' forecasts are more accurate for firms with high analyst following and for large firms (Lang and Landholm, 1996; Lys and Soo, 1995; Jiao et al, 2012). Furthermore, the coefficient of variable "IFRS" is negative which indicates that after mandatory IFRS adoption, analysts' forecasts accuracy are better. Moreover, the positive correlation between forecast error and the performance volatility (σ ROE) is expected. In fact, as the performance volatility is high as the earnings forecasts are less accurate. The correlations are relatively low suggesting the absence

of multicollinearity in the multivariate regression. We also calculate Variance Inflation Factors (VIFs) to determine the severity of multicollinearity in the subsequent regression analyses. VIFs above ten indicate a serious multicollinearity problem (Belsley et al, 1980). We find that none of the VIFs are above two, which shows that multicollinearity does not pose problem to our regression analyses.

4.1.2.2 Results of regression analysis:

Table 4 presents the results of regression analysis in 2003 to 2007. Regression 1 shows that IFRS has a negative and significant (at the level 10%) effect on analyst forecast error. In fact, the coefficient of this variable is (-0.0302). This implies that the analysts' forecast accuracy increases after mandatory adoption of IFRS by French companies. Regression 2 presents the results controlling for Industry Dummies. Regression 3 presents the results controlling for both Industry Dummies and Year Dummies effects. From the first regression to the third one, IFRS is negative and significant at the level 10% and increases in magnitude. Overall, the findings are consistent with our previous results showing that IFRS mandatory adoption improve the level of earnings forecasts accuracy (Zéghal et al, 2011; Jiao et al, 2012; Tan et al 2011; La Bruslerie and Gabteni, 2014). They are also in line with both agency and signalling theory suggesting that the improvement of disclosure quality in the financial statement after IFRS mandatory adoption reduces the asymmetry information which better the analysts' earnings forecast accuracy. Consequently, we can conclude that our first hypothesis is accepted: mandatory adoption of IFRS in France improves the analysts' forecasts accuracy.

Table 4: Regression Results Model 1

	Regression 1	Regression 2	Regression 3
IFRS	-0.0302* (0.0053)	-0.0303* (0.0053)	-0.1768* (0.0058)
In Assets	-0.0014 (0.0025)	-0.0015 (0.0027)	-0.0010 (0.0027)
σ ROE	0.0157*** (0.0039)	0.0156*** (0.0039)	0.0157*** (0.0039)
NEstimate	-0.0052* (0.0028)	-0.0053* (0.0029)	-0.0059** (0.0029)
Const	0.1297** (0.0467)	0.1484** (0.0740)	0.1439* (0.0744)
Industry Dummies	No	Yes	Yes
Year Dummies	No	No	Yes
Obs	392	392	392
R. squared	0.1015	0.1231	0.1409

Standard errors in parentheses; *significant at 10%; **significant at 5%; ***significant at 1%,

In addition, the results of three regressions show that the coefficient of performance volatility (σ ROE) is positive and significant at the 1% level. Therefore, volatility of performance has a negative and significant effect on analysts' forecast accuracy.

Company size (ln assets) has a negative but insignificant effect on the analysts forecast accuracy. This finding is consistent with the study of Jiao et al (2012) and Lang and Lundholm (1996). Nevertheless, the number of analysts following (NEstimate) is negatively and significantly related to the earning forecast accuracy. According to prior studies' findings (Lys and Soo, 1995; Jiao et al, 2012), this result shows that the increase in the analysts following improves the accuracy of forecast earning.

4.2 Empirical findings relating to second hypothesis:

In this section, we present model 2 used to test the second hypothesis. Then, we check for the absence of multicollinearity and finally we present the main results.

4.2.1 Research model

We analyzed the following Model 2 in order to test our second hypothesis.

$$\begin{aligned}
 \text{M2: FE}_{t,i} = & \beta_0 + \beta_1 \text{IFRS}_{t,i} + \beta_2 \ln \text{Assets}_{t,i} + \beta_3 \text{N.Estimate}_{t,i} + \beta_4 \sigma \text{ROE}_{t,i} + \beta_5 \\
 & \text{INDEP}_{t,i} + \beta_6 \text{COMPETENT}_{t,i} + \beta_7 \text{AUDIT.COM}_{t,i} + \beta_8 \text{B.Size}_{t,i} + \beta_9 \text{SEP}_{t,i} + \\
 & \beta_{10} \text{EXT.AUDIT}_{t,i} + \beta_{11} \text{Frequency}_{t,i} + \beta_{12} (\text{IFRS} * \text{INDEP})_{t,i} + \beta_{13} \\
 & (\text{IFRS} * \text{COMPETENT})_{t,i} + \beta_{14} (\text{IFRS} * \text{AUDIT.COM})_{t,i} + \beta_{15} (\text{IFRS} * \text{B.Size})_{t,i} + \beta_{16} \\
 & (\text{IFRS} * \text{SEP})_{t,i} + \beta_{17} (\text{IFRS} * \text{EXT.AUDIT})_{t,i} + \beta_{18} (\text{IFRS} * \text{Frequency})_{t,i} + \beta_{19} \\
 & \text{Industry Dummies}_{t,i} + \beta_{20} \text{Year Dummies}_{t,i} + \varepsilon_{i,t}
 \end{aligned}$$

4.2.2 Descriptive Statistics

Independence of board members on average is 43%. The mean of board meeting frequency is about 8. On average, the mean of the board size is 16 with a minimum of 3 and a maximum of 22. These results are similar to those of Godard and Shatt (2005). The mean of board members competency is about 38%.

Table 5 shows that although 92.5% of firms in the sample have an independent audit committee and 73% have been audited by Big 4, 95% of firms choose the separation CEO and chairman roles.

Table 5: Descriptive statistics

Variables	Obs	Proportion	Mean	Min	Max	Std deviation
INDEP	392	-	0.4354683	0	0.9545454	0.2431233
COMPETENT	392	-	0.3777735	0	0.9090909	0.2397666
B.Size	392	-	16.04337	3	22	3.443465
AUDIT.COM	392	0.925	-	-	-	0.0244831
EXT.AUDIT	392	0.7295918	-	-	-	0.0224627
Frequency	392	-	8.77551	3	15	2.94721
SEP	392	0.95	-	-	-	0.0218984

The correlation analysis shows that corporate governance variables are negatively correlated with forecast error. It also shows that the interaction effect between IFRS and corporate governance variables are strongly and positively correlated with earnings forecast accuracy (negatively with forecast errors). This result showed that corporate governance is an important factor that contribute to the improvement of forecast earning accuracy after IFRS mandatory adoption. It is notable that board size is positively correlated with firm size (Ln Assets), (AUDIT.COM), (SEP) and (Frequency), suggesting that large firms have large boards. It also indicates that large boards might create audit committee and might separate between the management and control. In addition, as the size of board increases, the more active it becomes.

The results of this analysis show that all the correlation coefficients are below 0.7. Consequently, we note the absence of serious problem of multicollinearity. In addition, we calculate the Variance Inflation Factor (VIF) which also tests for the presence of collinearity between the explanatory variables. VIF's are below 1.8. Therefore, we can deduce the absence of any multicollinearity problems.

4.2.3 Results of multivariate regression:

Table 6 presents the results of three regressions used to test our second hypothesis. Regression 2 adds industry Dummies to regression 1. Regression 3 presents the results controlling for both industry and year Dummies. Three regressions show a positive and very significant influence of the percentage of independent outside directors (INDEP) on reducing the forecast error. This finding implies that as the board members are independents, the more accurate the earnings forecasts are and the best quality of financial disclosure we have. This result is in line with those of Abott et al (2004) and Zéghal et al (2011) studies. Table 6 also shows that international competency of board members (COMPETENT) is negative (-1.66) and significant at the 1% level. This finding is consistent with prior studies (Holm et al, 2012; Verriest et al, 2013).

Furthermore, from regression 1 to regression 3, board size, external audit quality and frequency of board meetings are strongly and negatively related to forecast error. The coefficients of these variables are respectively about -0.007 (p-value < 0.01), 0.024 (p-value < 0.01), 0.008 (p-value < 0.05). This is in line with prior findings that suggest large and active boards and Big 4 auditors contribute to the improvement of financial reporting quality which entail to better earnings forecast accuracy (Zéghal et al, 2011; Xie et al, 2003; Dimitropoulos et al, 2013). However, both separation of CEO and board chairman roles and audit committee are insignificantly associated with forecast errors. Hence, these variables do not appear to have any significant effect on increasing the level of earnings forecast accuracy. The possible explanation for these results is the lack of variation in practice relating to these variables among the companies in our sample. As evidenced by the descriptive analysis, most French firms now comply with corporate governance practice recommended by Viénot's reports in striving to have independent audit committee and to separate the CEO and board Chairman roles.

From regression 1 to regression 3, the earnings forecasts accuracy increase for firms with large, independent, competent and active boards. In addition, firms that have been audited by BIG 4 disclose financial information of better quality which lead to more accurate earnings forecasts.

According to table 6, when the interaction effect between IFRS and corporate governance variables are included within regression model, the effect of IFRS becomes highly significant. These results also provide support for hypothesis H2-1 concerning the positive and significant impact of IFRS mandatory adoption on analysts' earnings forecasts accuracy for companies whose board is independent, competent and active. These findings are in line with previous studies (Verriest et al, 2013; Zéghal et al, 2011; Holm et al, 2012).

According to hypothesis H2-4, table 6 shows a positive and very significant influence of the interaction term between IFRS and external audit quality (IFRS*BIG4) on increasing the

earning forecast accuracy. According to this table, the coefficient of this variable is negative (-0.2032) in regression 1; (-0.2035) in regression 2 and (-0.3025) in regression 3. All these coefficients are significant at 1% level. Mandatory adoption of IFRS leads to a better improvement in analyst's earnings forecasts accuracy when firm's external audit is of high quality. The findings of this analysis also show that the effect of the interaction term between IFRS and board size (IFRS*board size) on analyst's earnings forecast accuracy is positive and significant at 1% level. These results provide support to our hypotheses H2-5. They are consistent with prior research (Zéghal et al, 2011; Kent and Stewart, 2008).

As opposed to hypothesis H2-2 and H2-3, the interaction terms between IFRS and audit committee (IFRS*AUDIT COMM) and between IFRS and roles separation of CEO and Chairman (IFRS*SEP) remain insignificantly correlated to analysts forecast accuracy.

Table 6: Regression Results Model 2

	Regression 1	Regression 2	Regression 3
IFRS	-0.1057* (0.0455)	-0.1081* (0.0457)	-0.2009* (0.0671)
In Assets	-0.0010 (0.0018)	-0.0002 (0.0019)	0.0002 (0.0020)
σROE	0.0046** (0.0034)	0.0048** (0.0034)	0.0048** (0.0034)
NEstimate	-0.0019* (0.0021)	-0.0011* (0.0022)	-0.0016 (0.0022)
INDEP	-1.0311*** (0.1941)	-1.0316*** (0.1947)	-1.0446*** (0.1956)
COMPETENT	-1.0600*** (0.1861)	-1.0623*** (0.1864)	-1.0650*** (0.1874)
AUDIT.COM	-0.0148 (0.0100)	-0.0150 (0.0100)	-0.0153*** (0.0101)
SEP	-0.0281	-0.0281	-0.0281

	(0.0176)	(0.0177)	(0.0177)
EXT.AUDIT	-0.0234*** (0.0136)	-0.0233*** (0.0136)	-0.0241*** (0.0137)
B.Size	-0.0069*** (0.0011)	0.0071*** (0.0012)	-0.0072*** (0.0012)
Frequency	-0.0076** (0.0066)	-0.0079** (0.0067)	-0.0081** (0.0067)
IFRS*INDEP	-1.0639*** (0.3982)	-1.1064*** (0.4000)	-1.1067*** (0.4027)
IFRS*COMPETENT	-1.0903*** (0.3745)	-1.1258*** (0.3761)	-1.1361*** (0.3792)
IFRS*AUDIT.COM	-(0.0024) (0.0172)	-0.0032 (0.0172)	-0.0037 (0.0173)
IFRS*SEP	-0.0347 (0.0215)	-0.0344 (0.0216)	0.0345 (0.0218)
IFRS*EXT.AUDIT	-0.2032*** (0.0238)	-0.2035*** (0.0239)	-0.3025*** (0.0245)
IFRS*B.Size	-0.0014*** (0.0022)	-0.0016*** (0.0022)	-0.0017*** (0.0022)
IFRS*Frequency	-0.0033** (0.0101)	-0.0027*** (0.0102)	-0.0030*** (0.0103)
Const	0.3164*** (0.0413)	0.3849*** (0.0593)	0.3848*** (0.0598)
Industry Dummies	No	Yes	Yes
Year Dummies	No	No	Yes
Obs	392	392	392
R. squared	0.3464	0.4509	0.5512

Standard errors in parentheses; *significant at 10%; **significant at 5%; ***significant at 1%

From regression 1 to regression 3 most explanatory variables increase in significance and magnitude. Controlling for industry and year effect also implies an increase in R^2 level from 34.64% for regression 1 to 55.12% in regression 3.

4.3 Robustness tests:

To ensure the robustness of the results, we test the following model M3 for (2004-2006) period after discriminating between high and low corporate governance quality firms. We ranked our sample in increasing order of board members independence and competence. Then, we choose, for each year, the 20 highest corporate governance quality firms that have simultaneously the highest level of board independence and competence, BIG 4 auditors, independent audit committee and that separate CEO and Chairman roles. The 20 lowest corporate governance quality firms are those with lowest level of board independence and competence. These firms

also do not have separation of CEO and Chairman roles, independent audit committee or BIG 4 auditors. The discriminating process is similar followed in this section is similar to the research methods used by Zéghal et al (2011) and Elshandidy et al (2013).

$$\text{M3: } \mu_0 + \mu_1 \text{ IFRS}_{t,i} + \mu_2 \text{ CG Quality}_{t,i} + \mu_3 \text{ IFRS*CG Quality}_{t,i} + \mu_4 \text{ Industry Dummies}_{t,i} + \mu_5 \text{ Year Dummies}_{t,i} + \varepsilon_{i,t}$$

Where:

CG Quality: dummy variable that take 1 if the corporate governance quality of the firm is high. i.e if the firm with highest board independence and competence has simultaneously BIG 4 auditors, independent audit committee and separation of management and control roles. It takes 0 when firms with lowest board independence and competence do not have BIG 4 auditors or independent audit committee or separation of roles.

Table 7: Regression results Model 3

	Regression 1	Regression 2	Regression 3
IFRS	-0.0274* (0.0146)	-0.0298** (0.0146)	-0.1337** (0.0201)
CG Quality	-0.1484*** (0.0357)	-0.1552*** (0.0377)	-0.1642*** (0.0468)
IFRS* CG Quality	-0.0290*** (0.0206)	-0.0370*** (0.0206)	-0.0380*** (0.0466)
Const	0.1491*** (0.0253)	0.1833*** (0.0690)	0.1809*** (0.0693)
Industry Dummies	No	Yes	Yes
Year Dummies	No	No	Yes
Obs	80	80	80
R. squared	0.2745	0.2911	0.2961

Standard errors in parentheses; *significant at 10%; **significant at 5%; ***significant at 1%

Table 7 presents the results of regression analysis for model 3 in 2004 (before IFRS) and 2006 (after IFRS). We focused on only two years to facilitate the selection procedure of subsample. Regression 2 presents the results with Industry dummies. It shows that IFRS has negative and significant effect on analysts forecast error (-0.0298; p-value < 0.05). Conversely, Regression 1 shows that IFRS has negative but less significant effect on forecast error. This table also shows that corporate governance quality is strongly and positively correlated with analysts' forecasts accuracy. From regression 1 to regression 3, the effect of the interaction term between IFRS and corporate governance quality (IFRS*CG Quality) on earnings forecasts accuracy is positive and significant at 1% level. Regression 3 shows that this variable increases in magnitude compared to regression 1. Overall, the findings are consistent with our previous results showing that mandatory adoption of IFRS improves the analysts' earnings forecasts accuracy for firms with good corporate governance.

5. Conclusion

The purpose of this research was to examine if IFRS mandatory adoption by French companies contributed to the improvement of analysts' earnings forecasts accuracy. In addition, we analyzed enforcement factors that contributed to the implementation of IFRS.

Consistent with previous study, our results show that mandatory adoption of IFRS by French companies has improved the disclosure quality; particularly the accuracy of earnings forecasts. In addition, the independence and international competency, the quality of external audit, the board size and the frequency of meeting are important factors for the implementation of IFRS in France. These results are in line with prior research (Zéghal et al, 2011, Verriest et al, 2013; Dimitropoulos et al, 2013; Holm et al, 2012).

Our study contributes to the current debate about the quality of IFRS in several ways. First, unlike previous research that focus on the effect of voluntary adoption of IFRS (Barth et al, 2008; Van Tendeloo and Vanstraelen, 2005), our paper examines the IFRS mandatory adoption. Hence, this allows us to avoid the sample selection bias. Second, our paper examines the IFRS

enforcement factors that guarantee effective implementation of international accounting standards which improve the earnings forecasts accuracy.

In highlighting the existence of improvement in financial reporting quality, our results should be of interest to all parties seeking to evaluate the costs and benefits of IFRS mandatory adoption. We also expect our results to be of interest to academics involved in researching progress with international accounting harmonization, to the French regulatory and supervisory authorities, financial analysts, investors, government, accounting setters and practitioners since the study highlights the factors that have contributed to the enforcement of IFRS in relatively newer context of IFRS adoption such as France.

These findings should also be relevant for international regulatory authorities and institutions involved in the process (e.g. securities markets, IASB, European commission) since the results provide examples of how firms required to apply IFRS have approached the process in a continental European accounting system recognized by its regulatory rigidity and legal outlook. They may help the IASB in its efforts to encourage the worldwide adoption of IFRS. They could be relevant for many countries especially those that not yet decide and hope to move to IFRS.

Further, our study presents some limitations. We focused on value relevance of financial statements approximated by earnings forecasts accuracy. So, we did not refer in this study to other financial reporting quality attribute such as reliability, comparability, timeliness. Therefore, future research could analyse the impact of IFRS mandatory adoption on these other disclosure dimensions. Moreover, this study examined only the corporate governance as enforcement factor that contribute to the implementation of IFRS. We did not examine other enforcement factors such as dependence on foreign financial markets, culture and institutional

factors. Finally, we examine only the French context. It's interesting for future research to study the effect of IFRS mandatory adoption for several countries.

References

- Abbott, L., Parker, S. and Peters, G. (2004), "Audit committee characteristics and restatements", *Auditing: A Journal of Practice and Theory*, Vol. 23 No. 1, pp. 69–87.
- Ahmed, A.S., Neel, M. and Wang, D. (2013), "Does mandatory adoption of IFRS improve accounting quality: Preliminary evidence", *Comptemporary Accounting Research*, Vol. 30 No.4, pp. 1344-1372.
- Alali, F. and Foote, P.S. (2012), "The Value Relevance of International Financial Reporting Standards: Empirical Evidence in an Emerging Market", *The International Journal of Accounting*, Vol. 47 No. 1, pp. 85-108.
- Armstrong, C., Barth, M.E., Jagolinzer, A. and Riedl, E.J. (2010), "Market reaction to events surrounding the adoption of IFRS in Europe", *The Accounting Review*, Vol. 85 No. 1, pp.31–61.
- Ashbaugh, H. and Pincus, M. (2001), "Domestic accounting standards, international accounting standards, and the predictability of earnings", *Journal of Accounting Research*, Vol. 39 No. 3, pp.417–434.
- Ball, R., Kothari, S. P., and Robin, A. (2000), "The effect of international institutional factors on properties of accounting earnings". *Journal of Accounting and Economics*, Vol. 1 No.29, pp. 1–51.
- Ball, R., Robin, A. and Wu, J. S. (2003), "Incentives versus standards: properties of accounting income in four East Asian countries", *Journal of Accounting and Economics*, Vol. 36 No. 1-3, pp. 235–270.
- Barker, R. and Imam, S. (2008), "Analysts perception of earnings quality", *Accounting and Business Research*, Vol. 38 No. 4, pp. 313–329.
- Barron, O. E., Byard, D. and Kim, O. (2002), "Changes in analysts' information around earnings announcements", *The Accounting Review*, Vol. 77 No. 4, pp. 821–846.
- Barth, M.E., Landsman, W.R. and Lang, M.H. (2008), "International accounting standards and accounting quality", *Journal of Accounting Research*, Vol. 46 No. 3, pp.467–498.

- Bae, K.H., Tan, H. and Welker, M. (2008), "International GAAP differences: the impact on foreign analysts", *The Accounting Review*, Vol. 83 No. 3, pp. 598-628.
- Beasley, M.S. (1996), "An Empirical Analysis of the Relation between the Board of Directors Composition and Financial Statement Fraud", *The Accounting Review*, Vol. 71, pp. 443–465.
- Beattie, V., McInnes, B. and Fearnley, S. (2002), "Through the eyes of management: a study of narrative disclosures", Research Report, ICAEW, London.
- Bédard, J., Chtourou, S. M. and Courteau, L. (2004), "The effect of audit committee expertise, independence, and activity on aggressive earnings management", *Auditing: A Journal of Practice & Theory*, Vol. 23 No. 2, pp. 13–35.
- Belsley, D. A., Kuh, E. and Welsch, R. E. (1980). "*Regression Diagnostics: Identifying Influential Data and Sources of Collinearity*" New York: John Wiley.
- Botosan, C.A. (1997), "Disclosure level and the cost of equity capital", *The Accounting Review*, Vol. 72 No. 3, pp. 323-49.
- Brown, L., Richardson, G., and Schwager, S. (1987), "An information interpretation of financial analyst superiority", *Journal of Accounting Research*, Vol. 25 No. 1, pp. 49–67.
- Brown, P. and Tarca, A. (2005), "A commentary on issues relating to the enforcement of international financial reporting standards in the EU", *European Accounting Review*, Vol. 14 No. 1, pp. 181–212.
- Burgstahler, D., Hail, L. and Leuz, C. (2006), "The importance of reporting incentives: earnings management in European private and public firms", *The Accounting Review*, Vol. 81 No. 5, pp. 983–1016.
- Bushman, R.M., Piotroski, J.D. (2006), "Financial reporting incentives for conservative accounting: The influence of legal and political institutions", *Journal of Accounting and Economics*, Vol. 42 No.1-2, pp. 107-148.
- Byard, D., Li, Y. and Yu, Y. (2011), "The effect of mandatory IFRS adoption on analysts' Information Environment", *Journal of Accounting Research*, Vol. 49 No. 1, pp.69–96.
- Carcello, J. V., Neal, T. L., Palmrose, Z.V. and Scholz, S. (2011), "CEO involvement in selecting board members, audit committee effectiveness, and restatements", *Contemporary Accounting Research*, Vol. 28 No. 2, pp.396–430.

- Capstaff, J., Paudyal, K. and Rees, W. (1995), "The accuracy and rationality of earnings forecasts by UK analysts", *Journal of Business Finance and Accounting*, Vol. 22 No. 1, pp. 67-85.
- Ciccone, S. J. (2005), "Trends in analysts' earnings forecast properties", *International Review of Financial Analysis*, Vol.14, pp.1–22.
- Chen, H., Tang, Q., Jiang, Y. and Lin, Z. (2010), "The role of International Financial Reporting Standards in accounting quality: Evidence from the European Union", *Journal of International Financial Management and Accounting*, Vol. 21 No. 3, pp. 220–278.
- Cheong, C.S., Kim, S., Zurbrugg, R. (2010), "The impact of IFRS on financial analysts' forecast accuracy in the Asia-Pacific region. The case of Australia, Hong Kong and New Zealand", *Pacific Accounting Review*, Vol. 22 No.2, pp.124-146.
- Chiapello, E. (2005), "Les normes comptables comme institution du capitalisme. Une analyse du passage aux normes IFRS en Europe à partir de 2005", *Sociologie du travail* Vol.47, pp.362–382.
- Colasse, B. (2006), "IFRS : Un défi et une opportunité pour l'enseignement de la comptabilité" *Revue Française de Comptabilité, Ed. comptables-Malesherbes, No 385, pp 37-40.*
- Conger, J., Finegold, D. and Lawler III, E. (1998), "Appraising Boardroom Performance", *Harvard Business Review*, Vol. 76, pp. 136–148.
- Daske, H. 2005. Adopting international financial reporting standards in the European Union: Empirical essays on causes, effects and economic consequences Thesis, Johann Wolfgang Goethe-Universität Frankfurt am Main.
- Daske, H. (2006), "Economic benefits of adopting IFRS or US GAAP. Have the expected costs of equity capital really decreased?", *Journal of Business Finance and Accounting*, Vol. 33, pp. 329-373.
- Daske, H., Hail, L. and Verdi, R. (2008), "Mandatory IFRS reporting around the world: early evidence on the economic consequences", *Journal of Accounting Research*, Vol. 46 No. 5, pp.1085–1142.
- Dechow, P.M., Kothari, S.P., Watts, R.L. (1998), "The relation between earnings and cash flows", *Journal of Accounting and Economics* Vol. 25, pp.133-168.
- DeFond, M. L. and Jiambalvo, J. (1994), "Debt covenant violation and manipulation of accruals", *Journal of Accounting and Economics*, Vol. 17 No. (1-2), pp.145–176.

- DeFond, M., Hu, X., Hung, M., Li, S. (2011), "The impact of mandatory IFRS adoption on foreign mutual fund ownership: The role of comparability", *Journal of Accounting and Economics*, Vol. 51, pp.240–258.
- De La Bruslerie, H., Gabteni, H (2014), "Voluntary disclosure of financial information by French firms: Does the introduction of IFRS matter?" *Advances in Accounting*, Vol.30 No. 2. pp. 367-380.
- Dimitropoulos, P, E., Asteriou, D., Kousenidis, D.and Leventis, S. (2013), "The impact of IFRS on accounting quality: Evidence from Greece", *Advances in Accounting, incorporating Advances in International Accounting*.
- Ebrahim, A. (2007), "Earnings management and board activity: Additional evidence", *Review of Accounting and Finance*, Vol. 6 No. 1, pp. 42–58.
- Elshandidy, T., Fraser, I., Hussainey, K.(2013), "Aggregated, voluntary, and mandatory risk disclosure incentives: Evidence from UK FTSE all-share companies", *International Review of Financial Analysis*, Vol. 30, pp. 320-333
- Epstein, B.J. and Mirza, A. (2002), "*Interpretation and Application of International Accounting Standards*" Wiley, New York.
- Fernández, C.and Arrondo, R. (2005), "Alternative internal controls as substitutes of the board of directors", *Corporate Governance: An International Review*, Vol. 13 No. 6, pp. 856–866.
- Frankel, R. and Li, X. (2004), "Characteristics of a firm's information environment and the information asymmetry between insiders and outsiders", *Journal of Accounting and Economics*, Vol. 37 No. 2, pp. 229–259.
- Godard, L. and Schatt, A. (2005), "Caractéristiques et Fonctionnement des Conseils d'Administration Français : Un état des lieux", *Revue Française de Gestion*, Vol 5 No. 158, pp.69-87.
- Godard, L. (2002), "La taille du Conseil d'Administration : déterminants et impact sur la performance", *Revue Sciences de Gestion*. u-bourgogne.fr
- Goodwin, J., Karman, A. and Heanly, R. (2009), "Corporate governance and the prediction of the impact of AIFRS adoption", *Abacus* Vol. 45, pp. 124–145.
- Healey, P.M. and Palepu, K.G. (2001), "Information Asymmetry, Corporate Disclosure, and Capital Markets: A review of Empirical Disclosure Literature", *Journal of Accounting and Economics*, Vol. 31 No. (1-3), pp. 405–440.

- Heflin, F., Subramanyam, K. R., Zhang, Y. (2003), "Regulation FD and the financial information environment: Early evidence", *The Accounting Review*, Vol. 78, pp.1–37.
- Hodgdon, C., Tondkar, R.H., Harless, D.W., Adhikari, A (2008), "Compliance with IFRS disclosure requirements and individual analysts' forecast errors", *Journal of International Accounting, Auditing and Taxation*, Vol. 17, No.1, pp.1-13.
- Holm, C. and Schøler, F. (2012), "Board Competency Explanations for Differentiation in a Harmonisation Environment", *Review of European Studies*, Vol. 4 No. 1, pp. 52–72.
- Hope, O.K. (2003), "Disclosure practices, enforcement of accounting standards, and analysts' forecast accuracy: An international study", *Journal of Accounting Research*, Vol. 41 No. 2, pp. 235–272.
- Horton, J. and G. Serafeim. (2010), "Market reaction to and valuation of IFRS reconciliation adjustments: first evidence from the UK", *Review of Accounting Studies*, Vol.15 No. 4, pp. 725–751.
- Hung, M. and Subramanyam, K. R. (2007), "Financial statement effects of adopting International Accounting Standards: The case of Germany", *Review of Accounting Studies*, Vol. 12 No. 4, pp. 623–657.
- Hussainey, K. and Al-Najjar, B. (2011), "Future-oriented narrative reporting: determinants and use", *Journal of Applied Accounting Research*, Vol 12 No.2, pp.123-138.
- Iatridis, G. (2010), «International Financial Reporting Standards and the quality of financial statement information», *International Review of Financial Analysis*, Vol. 19 No. 3, PP. 193–204.
- Iatridis, G. (2011), "Accounting disclosures, accounting quality and conditional and unconditional conservatism", *International Review of Financial Analysis*, Vol. 20 No. 2, pp. 88–102.
- Iatridis, G. (2012), "Audit quality in common-law and code-law emerging markets: Evidence on earnings conservatism, agency costs and cost of equity", *Emerging Markets Review*, Vol. 13 No. 2, pp. 101–117.
- Jeanjean, T., Ding, Y. and Stolowy, H. (2008), "Why do French firms opt for alternative format financial statements?", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 24, pp.145–156.

- Jermakowicz, E. K., Gornik-Tomaszewski, S. (2006), "Implementing IFRS from the perspective of EU publicly traded companies", *Journal of International Accounting, Auditing and Taxation*, Vol. 15, pp.170–196.
- Jiao, T., Koning, M., Mertens, G. and Roosenboom, P. (2012), "Mandatory IFRS adoption and its impact on analysts' forecasts", *International Review of Financial Analysis*, Vol. 21, pp.56–63.
- Jiraporn, P. and Gleason, K. C. (2007), "Delaware incorporation and earnings management: An empirical analysis", *Journal of Applied Finance*, pp.40–51.
- Jones, S. and Finley, A. (2011), "Have IFRS made a difference to intra-country financial reporting diversity?", *The British Accounting Review*, Vol. 43 No. 1, pp. 22-38.
- Kent, P. and Stewart, J. (2008), "Corporate governance and disclosure on the transition to international financial reporting standards", *Accounting and Finance*, Vol. 48 No. 4, pp.649–671.
- Klein, A. (2002), "Audit committee, board of director characteristics and earnings management", *Journal of Accounting and Economics*, Vol. 33 No. 3, pp. 375–400.
- Kohlbeck, M. and Warfield, T. (2010), "Accounting standard attributes and accounting quality: Discussion and analysis", *Research in Accounting Regulation*, Vol. 22 No. 2, pp.59–70.
- Lang, M. H. and Lundholm, R. J. (1996), "Corporate disclosure policy and analyst behavior", *Accounting Review*, Vol. 71 No 4, pp.467–492.
- Lang, M. H., Lin, K. V., Miller, D. (2003), "ADRs, analysts, and accuracy: Does cross listing in the U.S. improve a firm's information environment and increase market value? ", *Journal of Accounting Research*, 41 No 2, pp.317–345.
- Leuz, C., Verrecchia, R. (2000). "The economic consequences of increased disclosure". *Journal of Accounting Research*, Vol. 38, pp. 91–136.
- Leuz, C. (2003), "IAS versus US GAAP: Information asymmetry-based evidence from Germany's new market", *Journal of Accounting Research*, Vol.41 No.3, pp. 445-472.
- Li, S. (2010), "Does mandatory adoption of international financial reporting standards in the European Union reduce the cost of equity capital?", *The Accounting Review*, Vol. 85 No. 2, pp. 607–636.
- Luo, Y. (2005), "How does Globalization affect Corporate Governance and Accountability? A Perspective from MNEs". *Journal of International Management*, Vol. 11 No.1, pp.19-41.

- Lys, T. and Soo, L. (1995), "Analysts' forecast precision as a response to competition", *Journal of Accounting Auditing and Finance*, Vol. 10 No. 4, pp.751–765.
- Marra, A., Mazzola, P. and Prencipe, A. (2011), "Board Monitoring and Earnings Management Pre- and Post-IFRS", *The International Journal of Accounting*, Vol. 46, pp. 205–230.
- Morris, R.D. (1987), "Signalling, agency theory and accounting policy choice", *Accounting & Business Research*, Vol. 18 No. 4, pp. 47-56.
- Peasnell, K. V., Pope, R. F. and Young, S. (2005), "Board monitoring and earnings management: Do outside directors influence abnormal accruals?", *Journal of Business Finance & Accounting*, Vol.32 No. 7-8, pp. 1311–1346.
- Schipper, K. (1991), "Analysts' forecasts", *Accounting Horizons*, Vol. 5, pp.105–121.
- Schipper, K. (2005), "The introduction of international accounting standards in Europe: Implications for international convergence", *European Accounting Review*, Vol. 14 No. 1, pp.101-126
- SEC (2010), Commission Statement in Support of Convergence and Global Accounting Standards, Commission Release No. 33–9109, pp. 34–61578.
- Sun, N., Salama, A., Hussainey, K. (2010), "Corporate environmental disclosure, corporate governance and earnings management", *Managerial Auditing Journal*, Vol.25 No. 7, pp.679-700.
- Tan, H., Wang, S. and Welker, M. (2011), "Foreign analysts following and forecast accuracy around mandatory IFRS adoptions", *Journal of Accounting Research*, Vol. 49 No. 5, pp. 1307-1357.
- Tauringana, V. and Mangena, M. (2009), "The Influence of the Business Review on Reporting Key Performance Indicators in the UK Media Sector", The Institute of Chartered Accountants of Scotland, Edinburgh, available at:
http://www.icas.org.uk/site/cms/download/res/Tauringana_report_KPI_Nov_09.pdf
- Titas, R. and Dipanjan, B. (2012), "Does IFRS Influence Earnings Management? Evidence from India", *Journal of Management Research*, Vol. 4 No. 1, pp.1-13.
- Tsalavoutas, I. (2011), "Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal?", *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 27, pp. 390–405.

- Tong, H. (2007), "Disclosure standards and market efficiency: evidence for analysts' forecasts", *Journal of International Economics*, Vol. 72 No. 1, pp. 222-41.
- Vafeas, N. (1999), "Board meeting frequency and firm performance", *Journal of Financial Economics*, Vol. 53 No. 1, pp. 113-142.
- Van Tendeloo, B. and Vanstraelen, A. (2005), "Earnings management under German GAAP versus IFRS", *European Accounting Review*, Vol. 14 No. 1, pp. 101–126.
- Verriest, A., Gaeremynck, A. and Thornton, D.B. (2013), "The Impact of Corporate Governance on IFRS Adoption Choices", *European Accounting Review*, Vol. 22 No. 1, pp. 39-77.
- Viénot, M. (1995), *Le conseil d'administration des sociétés cotées*, AFEP – CNPF.
- Viénot, M. (1999), *Rapport du comité pour le gouvernement des entreprises*, AFEP – MEDEF.
- Voulgaris, G., Stathopoulos, K., Walker, M. (2014), "IFRS and the use of accounting-based performance measures in executive pay", *The International Journal of Accounting*, Vol. 49 No.4, pp. 479-514.
- Wang, Y. and Campbell, M. (2012), « Corporate governance, earnings management, and IFRS: Empirical evidence from Chinese domestically listed companies » *Advances in Accounting, incorporating Advances in International Accounting*, Vol. 28, pp.189–192.
- Watrin, C. and Ullmann, R. (2012), "Improving earnings quality: The effect of reporting incentives and accounting standards", *Advances in Accounting, incorporating Advances in International Accounting*, Vol.28 No. 1, pp.179–188.
- Xie, B., Davidson, W.N., III. and DaDalt, P.J. (2003), "Earnings management and corporate governance: the role of the board and the audit committee", *Journal of Corporate Finance*, Vol. 9 No. 3, pp. 295-316.
- Zéghal, D., Chtourou, S. and Mnif Sallemi, Y. (2011). "An analysis of the effect of mandatory adoption of IAS/IFRS on earnings management", *Journal of International Accounting Auditing and Taxation*, Vol.20, pp. 61-72.
- Zhara, S.A., Pearce, J.A. (1989). "Boards of directors and corporate financial performance: A review and integrative model", *Journal of Management*, Vol.15, pp.291-334.
- Zimmermann, J., Gontcharov, I. (2007), "Do accounting standards influence the level of earnings management? Evidence from Germany", *Die Unternehmung: Swiss Journal of Business Research and Practice*, Vol. 61, pp.371-388.

