CORPORATE GOVERNANCE AND MANAGEMENT EARNINGS FORECAST QUALITY: EVIDENCE FROM FRENCH IPOS

Anis Mnif

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Anis MNIF

University of Sfax

High School of Commerce

Airport Road

Sfax, Tunisia

Tel: 00 216 99950125

E-mail: anis.mnif@fsegs.rnu.tn

Abstract

This study examines whether corporate governance attributes have an effect on the quality of financial disclosure. Specifically, we examine the association between board attributes, ownership retained, auditor quality, and underwriter reputation and management earnings forecast quality measured by management earnings forecast accuracy and bias. Using 117 French IPOs, we find that management earnings forecast quality is significantly associated with some corporate governance attributes. For the board of directors, we find that IPO firms are more likely to issue less accurate and more optimistic earnings forecast when the board size is large. We also find that IPO firms are more likely to issue more accurate and more conservative earnings forecast when the proportion of independent directors on the board is higher. However, CEO duality is not significantly associated with management earnings forecast quality. For ownership retained, we find that IPO firms are more likely to issue more accurate and more conservative earnings forecast when the proportion of shares retained by insiders is higher. With respect to auditor quality, our results show that auditor quality has no significant influence on management earnings forecast quality. Finally, concerning underwriter reputation, our results show that IPO firms are more likely to issue less accurate but more conservative earnings forecast when the IPO firm is underwritten by a more prestigious underwriter. Our results provide evidence that financial disclosure quality is higher in firms with properly structured board of directors. These findings have implications for policy makers and market participants. Potential investors should consider the firm specific as well as corporate governance characteristics as they evaluate management earnings forecast quality.

Key words: Corporate governance, management earnings forecast quality, Initial public offerings.

1. INTRODUCTION

Management earnings forecast contained in prospectuses for initial public offerings (IPOs) provide useful information about future firm performance (Firth, 1998). However, management earnings forecasts are vulnerable to information asymmetry because less information for an IPO firm is publicly available than for a listed firm. In addition, management may have incentives to overestimate earnings forecast for the purpose of raising more proceeds from an IPO. A significant overestimate of earnings forecast may mislead investors. Thus the credibility of management earnings forecast contained in IPO prospectuses has been a major concern to market participants.

The objective of this study is to examine the association between the quality of management earnings forecast, as measured by management earnings forecast accuracy and bias, and corporate governance attributes as well as firm-specific characteristics in France. Corporate governance attributes examined in this study consist of board of directors attributes (including board composition, board size and leadership structure (CEO duality)), auditor quality and corporate governance attributes specific to the IPO context (ownership retained and underwriter reputation).

This study allows answer to the research question relating to why firms issue lower management earnings forecast quality than do others. This study investigates the determinants of accuracy and bias of management earnings forecast contained in IPO prospectuses in France. We try, first, to highlight the relationship between board of directors attributes as well as corporate governance attributes specific to the IPO context and the quality of management earnings forecast contained in IPO prospectuses. Then we investigate the ability of firm-specific characteristics to explain the bias and accuracy of management earnings forecast in France. By identifying the characteristics of corporate governance and firms-specific characteristics which have the more effect on the credibility of management earnings forecast, as measured by earnings forecast accuracy and bias, our study could help regulators and policy makers to take the necessary measures in order to improve board effectiveness regarding the reliability of financial disclosure process. Our study should also be of particular interest to the potential investors who can reasonably anticipate the quality of the management earnings forecast published in the prospectus from corporate governance attributes as well as firm characteristics.

A large body of research has examined the association between board attributes and financial reporting quality (Beasley, 1996; Peasnell et al., 2001; Klein, 2002, Xie et al., 2003; Abbott et al., 2004; Uzun et al., 2004; Davidson et al., 2005; Chen et al., 2006; Kelton and Yang, 2008). The results of these studies indicate that a properly structured board improves financial reporting quality in general. In this study, we test whether these board attributes effects extend to the financial disclosure process and more precisely into the field of management earnings forecast. Very few studies have sought to answer this question and have investigates the link between board attributes and the quality of management earnings forecast quality. Using a sample of US firms that announced earnings forecasts between 1995 and 2000, Karamanou and Vafeas (2005) investigate whether board attributes as well as audit committee characteristics are associated with financial disclosure quality. They find that firms with greater fraction of independent directors issue more accurate earnings forecast. Using a sample of US firms making annual earnings forecast from 1997 to 2002, Ajinkya et al. (2005) investigate the relation between fraction of independent directors as well as ownership

structure and management earnings forecast quality. Their results show that firms with higher proportion of independent directors on the board make more accurate and more conservative earnings forecast. These two studies have primarily used US data and focused on listed firms and ignored environments where information asymmetry and agency problems are the highest and where monitoring mechanisms may play a critical role in management oversight. I extend prior research by examining the influence of corporate governance on the quality of management earnings forecast using IPO firms. My study also contributes to the small but growing body of literature that examines the association between corporate governance and financial disclosures quality by examining such a relationship in a French setting. France provides an interesting setting in which to study such relationship because corporate governance is less regulated than in other regimes such as the United States (Piot, 2004; Piot and Jeninn, 2007). Indeed, at the time of the present study, there are no formal requirements relating to board structure. In contrast, United States favors a "rules-based approach" to corporate governance that asks companies to fully comply with requirements suggested by, for example, NYSE and NASDAQ. For instance, US companies are required to establish corporate boards with a majority of independent directors. France also differs from the United States in its corporate ownership. Moreover, ownership is highly concentrated in French firms but widely dispersed in US firms. Many French firms are still controlled by their founders or their families (Broye and Schatt, 2003). These controlling shareholders use dual class shares to separate ownership and voting rights. Furthermore, France is one of the codified law countries in which the level of protection of minority interests is low (LaPorta et al., 1999). Accordingly, the separation of ownership and control of voting rights leads to agency conflicts between majority and minority shareholders. This form of conflict is much less present in the Anglo-Saxons countries. The high corporate ownership concentration, the low level of protection of minority interests and the voluntary corporate governance approach make France an interesting setting in which to examine the relationship between board attributes and the quality of management earnings forecast. This study also contributes to the IPO literature on management earnings forecast quality in two ways. First, we are not aware of any prior studies that test the impact of corporate governance mechanisms, and more specifically board of directors mechanisms, on the quality of management earnings forecast contained in IPO prospectuses. Prior studies on the determinants of management earnings forecast quality focus on firms-specific characteristics, on auditor quality and on governance mechanisms specific to the IPO context such as ownership retained and underwriter reputation. None of them investigate the effect of board of directors on the quality of management earnings forecast provided in the IPO prospectuses. Second, this is the first comprehensive study that examines the quality management earnings forecast contained in IPO prospectuses in France. Prior studies on management earnings forecast quality use data for commonwealth countries.

We examine the links between corporate governance as well as specific-firm characteristics and management earnings forecast quality using a sample of 117 firms that went public between 2000 and 2004 on Euronext Paris stock exchange. Our study provides some support to the idea that board attributes are associated with the quality of management earnings forecast contained in IPO prospectuses. Our findings show that IPO firms are more likely to issue less accurate and more optimistic earnings forecast when the board size is large. We also find that IPO firms are more likely to issue more accurate and more conservative earnings

forecast when the proportion of independent directors on the board is higher. These findings highlight the importance of board of directors' effectiveness as a corporate governance mechanism that helps align potential investors' and managers' interests through its monitoring activities. As expected, we also document that IPO firms are more likely to issue more accurate and more conservative earnings forecast when the proportion of shares retained by insiders is higher. Furthermore, we find that IPO firms are more likely to issue less accurate but more conservative earnings forecast when the IPO firm is underwritten by a more prestigious underwriter. However, our results show that auditor quality has no significant influence on management earnings forecast quality. With regard to firm-specific characteristics, our results show that larger firms tend to provide less accurate and more optimistic earnings forecast. We also find that IPO firms with higher financial leverage provide more optimistic earnings forecast. However, the firm age, forecast horizon and firm growth have no significant effect on management earnings forecast quality. These results add to the ongoing international debate about the determinants of the quality of management earnings forecast contained in IPO prospectuses.

The reminder of the paper is organized as follows. The next section presents the relevant literature as well as our research hypotheses. The third section explains the research design and methodology employed to test the research hypotheses while the fourth presents and discuss the empirical findings. The final section provides the concluding comments.

2. LITERATURE REVIEW AND HYPOTHESES

Corporate governance attributes examined in this study consist of board attributes (including board composition, board size and leadership structure (CEO duality)), auditor quality, ownership retained and underwriter reputation.

2.1. Management earnings forecast quality and board attributes

The board of directors is the key mechanism for disciplining the managers (Fama, 1980; Fama and Jensen, 1983). However, the ability of the board to act as an effective monitoring mechanism depends upon its structure. Previous studies identify three main board attributes affecting the monitoring efficiency i.e. board size, board composition and board leadership structure (CEO duality).

2.1.1. Board size

Several studies focus on the board size and its impact on the effectiveness of its functioning (Jensen, 1993; Yermack, 1996). These studies recommend that firms avoid large boards. Indeed, Jensen (1993) and Yermack (1996) argue as boards grow, they become less likely to function effectively and easier for CEO to control. To support their proposition, they cite group productivity studies by Steiner (1972) and Hackman (1990), which show that as groups add members they become less effective because coordination and information-processing costs outweigh the benefits of drawing on more people's expertise. Jensen (1993) proposes that "when boards get beyond seven or eight people they are less likely to function

effectively". Yermack (1996) argues that firms with smaller boards, consisting of less than ten directors, are better performers. A number of empirical studies support this presumption. Beasley (1996) examines the relationship between fraud and board size. The author reports that the likelihood of financial statement fraud is positively associated with board size. Abbott et al. (2004) find a positive association between the probability of earnings restatement and board size. However, Xie et al. (2003) find that board size is negatively associated with short-term earnings management, proxied by abnormal working capital accruals. The findings are inconsistent with the proposition that large boards are poor monitors of financial reporting. However, with regard to earnings informativeness and board size, Vafeas (2000) provides evidence that the returns-earnings relation is greater for the firms with smaller board size. More recently, Ahmed et al. (2006), based on 604 NZ firms, find that earnings informativeness, as measured by returns-earnings relation, is negatively related to board size. Moreover, using a sample of US firms that announced earnings forecasts between 1995 and 2000, Karamanou and Vafeas (2005) examine the association between board attributes and management earnings forecast quality. They find that firms with smaller board issue more conservative earnings forecast.

Our first hypothesis is as follows:

H1: There is a negative relationship between board size and management earnings forecast quality.

H1_a: IPO firms with smaller board of directors issue more accurate earnings forecast.

H1_b: IPO firms with smaller board of directors issue more conservative earnings forecast.

2.1.2. Board composition

The researchers on corporate governance always argue that independent directors are better placed to control the CEO than the non-independents (Fama and Jensen, 1983). Indeed, the latter, being subordinate to the CEO, are less inclined to take position against him, even if the shareholders interests are threatened (Fredrickson et al., 1988; Hoskisson et al., 1994). In this sense, Fama (1980) and Fama and Jensen (1983) argue that the success and viability of the board of directors as an internal mechanism of control are strengthened by the inclusion of independent member. Moreover, a number of researchers argue that independent directors serve as more effective monitors of managerial behaviour, due to greater opportunities and incentives to exercise control (Weisbach, 1988; Byrd and Hickman, 1992). Specifically, it is argued that board independence may decrease managerial perquisite consumption (Brickley and James, 1987). Further, independent directors are less likely to be intimidated by the CEO (Weisbach, 1988). Weisbach (1988) finds that the probability of CEO replacement following a period of poor corporate performance is higher for firms with more independent directors. Similarly, Kosnick (1987) argues that demands for greenmail payments are more likely to be resisted by boards with a higher proportion of independent directors.

Prior research examining the association between board attributes and financial reporting quality document that board independence is positively associated with higher financial reporting quality. For instance, Beasley (1996) analyses 75 firms that report financial statement frauds, matched with non-fraud firms, during 1980-1991. Results indicate that the proportion of independent directors on the board has a significant negative impact on the probability of fraudulent financial reporting. Uzun et al. (2004) find also that a greater proportion of independent directors on the board is significantly associated with a lower

occurrence of financial fraud. Peasnell et al. (2001) investigate a matched-pairs sample of 47 firms sanctioned by the Financial Reporting Review Panel for defective financial statements during 1990-1998. Their results suggest that the percentage of independent directors on the board has a marginal negative impact on the probability of disclosing low quality financial information. Song and Windram (2004) report a similar association for a matched-pairs sample of 27 Financial Reporting Review Panel firms during 1991-2000. Using 31 fraud enforcements in Australia during 1988-2000, Sharma (2004) finds that the probability of fraudulent reporting decreases with the proportion of independent directors on the board. Chen et al. (2006), using 169 fraud enforcements in China during 1999-2003, find that percentage of independent directors on the board is negatively associated with financial fraud occurrence. Klein (2002) examines whether board attributes are related to earnings management among S&P 500 firms for the period 1992-1993. She finds a significant and negative association between the incidence of abnormal accruals and (a) the percentage of independent directors on the board and (b) the fact that outsiders account for the majority of board members. Peasnell et al. (2000) examine the management of working capital accruals to meet earnings target thresholds, for a sample of 630 UK firms before and after the Cadbury report's appearance. Their results are consistent with the notion that higher proportion of independent directors mitigates earnings management to avoid losses, especially in the post-Cadbury period. Similar results are found by Peasnell et al. (2005) for UK firms during the period 1993-1996. In addition, the presence of a majority of independent directors on the board is found to mitigate earnings management activities in Australia (Davidson et al., 2005), to result in more conservative accounting earnings in the UK (Beekes et al., 2004), and to improve disclosure transparency in US (Kelton and Yang, 2008).

While there is large body of research examining the association between board independence and financial reporting quality, very few studies address the effect of board independence on financial disclosure quality. Using a sample of US firms that announced earnings forecasts between 1995 and 2000, Karamanou and Vafeas (2005) investigate whether board attributes are associated with financial disclosure quality. They find that firms with greater fraction of independent directors issue more accurate earnings forecast. Using a sample of US firms making annual earnings forecast from 1997 to 2002, Ajinkya et al. (2005) investigate the relation between fraction of independent directors and management earnings forecast quality. Their results show that firms with higher proportion of independent directors on the board make more accurate and more conservative earnings forecast.

Since prior studies investigating the association between board attributes and earnings forecast quality reveal a positive relationship between board independence and earnings forecast quality, I can expect the proportion of independent directors to be associated with higher quality management earnings forecast. Our second hypothesis is as follows:

H2: There is a positive relationship between proportion of independent directors and management earnings forecast quality.

H2_a: IPO firms with higher proportion of independent directors on the board issue more accurate earnings forecast.

H2_b: IPO firms with higher proportion of independent directors on the board issue more conservative earnings forecast.

2.1.3. CEO duality

The board of directors is the supreme body of control at the firm level. This body has the power to hire, to remove and to pay the CEO and also to ratify and monitor the important decisions. Fama and Jensen (1983) stipulate that the board of directors can be an effective means of control only if it is able to limit managers' discretionary behavior. Because of that, these authors argue that separating management and control functions in the organization allows reduce agency costs. The combination of the roles of CEO and chairman appears then as an obstacle to the separation between the management and control functions. Jensen (1993) argues that it is difficult for a board to discipline a CEO who is also the board chairman. He recommends then to separate the two functions. Loebbecke et al. (1989) argue that firms whose CEO is also the chairman are likely to exhibit lower financial reporting quality because the CEO can manipulate financial reporting to achieve their own aims. In 75% of the fraud cases they examine, a single person controls the firm's operating and financial decisions. Similarly, Patton and Baker (1987) state that the combination of CEO and chairman functions creates a climate in which it is easy to the CEO to dominate the board. Besides, a number of studies provide evidence of a negative effect of CEO duality on financial reporting process (Dechow et al., 1996, Abbott et al., 2000; Carcello and Nagy, 2004a; Carcello and Nagy, 2004b). Dechow et al. (1996) report greater earnings management by firms with CEO duality. Carcello and Nagy (2004a) and Carcello and Nagy (2004b) find that CEO duality is positively associated with the probability of financial statement fraud. In addition, Abbott et al. (2000) report a weak positive association between CEO duality and the probability of companies attracting SEC sanctions for aggressive reporting or fraud.

The reports Viénot (1995, 1999) also recommend separating the CEO and chairman roles. These reports emphasize the importance for the board of directors, to operate in an independent manner from the CEO. Indeed, the CEO and chairman have different roles. The combination of these two roles constitutes a high concentration of power. Finally, these reports indicate that the separation of roles is a means, among others, to the independence of the board, expressing a reference to the separation of these two roles.

Our third hypothesis is as follows:

H3: There is a negative relationship between CEO duality and management earnings forecast quality

> H3_a: IPO firms adopting a dual leadership structure issue less accurate earnings forecast.
>
> H3_b: IPO firms adopting a dual leadership structure issue more optimistic earnings forecast.

2.2. Management earnings forecast quality and auditor quality

There is general consensus that the external audit constitutes a key of corporate governance (Palmrose, 1988; Krishnan and Schauer, 2000), in that external auditors serve as gatekeepers who monitor managerial behavior in behalf of the shareholders. Moreover, there is theoretical as well as empirical support for the proposition that Big5 audit firms provide audits of a higher quality as compared to non-Big5 audit firms. For example, Simunic and Stein (1987) argue that Big5 audit firms produce high quality audits. Consistent with this argument, DeAngelo (1981) shows that the Big5 audit firms are incited to provide high quality services

to maintain their reputations. Empirical evidence also suggests that discretionary accruals for clients of non-Big5 audit firms are higher as compared to clients of Big5 audit firms (Becker et al., 1998). In addition, there is also evidence that auditor quality is positively associated with management earnings forecast quality in some countries including Australia and Hong Kong (Hartnett and Romck, 2000; Cheng and Firth, 2000). Clarkson (2000) also documents a positive association between auditor quality and management earnings forecast accuracy in Canada.

In France, earnings forecasts provided in IPO prospectuses are also needed to be audited. We hypothesize that firms audited at the time of IPO by one of the BIG 5 should issue more accurate and more conservative earnings forecast compared with IPO firms that are not audited by one of the BIG 5. Our fourth hypothesis of current study is as follows:

H4: There is a negative relationship between auditor quality and management earnings forecast quality

H4_a: IPO firms choosing a higher quality auditor issue more accurate earnings forecast

H4_b: IPO firms choosing a higher quality auditor issue more conservative earnings forecast

2.3. Management earnings forecast quality and ownership retained

When the original shareholders retain a higher proportion of shares, the manager is motivated to show some prudence and to provide lower biased earnings forecast for at least two reasons. On the one hand, the original shareholders risk legal sanctions, which correspond to the costs of potential litigation if the potential investors bring lawsuits against the IPO firms due to providing "false" information. As they have a higher proportion of shares after IPO, they bear higher litigation costs, which discourage them from providing inaccurate earnings forecast and incite them to show less optimism. On the other hand, the financial market may also sanction the firms have not been prudent. The investors lose confidence if they feel they have been misled when the IPO firms fail to meet earnings forecast and they find that the earnings forecasts are optimistic. Then, they can sell in large quantities the securities which leads to reducing firm value and then damaging the original shareholders' wealth (Chen et al., 2001; Jog and McConomy, 2003). In this case, the amount of original shareholder wealth lost is larger as the proportion of shares retained is higher. However, when the proportion of shares retained by the insiders is lower, the manager may tray to get a higher offer price to obtain a large amount of proceeds. To achieve this, the manager issue more optimistic earnings forecast (Firth, 1998). The possibility of the litigation costs and a possibility of a decline in the share price are less likely to deter managers from issuing optimistic earnings forecast since they retain lower fraction of shares and thus the amount of their wealth lost is small.

If the risk of legal sanction is currently relatively low in France for institutional and legal environment reasons, we have to admit that the main penalty for issuers providing inaccurate and optimistic earnings forecast is that imposed by the financial markets. The above arguments point to an association between the proportion of shares retained by insiders and management earnings forecast quality. The fifth hypothesis proposed in current study is as follows:

H5: There is a positive relationship between fraction of shares retained by insiders and management earnings forecast quality

H5_a: IPO firms whose insiders retain higher proportion of shares issue more accurate earnings forecast.

H5_b: IPO firms whose insiders retain higher proportion of shares issue more conservative earnings forecast.

2.4. Management earnings forecast quality and underwriter reputation

Previous research on signaling studies in the context of IPO suggests the importance of underwriter reputation as a signal of firm quality. Previous research reveals that reputable underwriters are associated with more accurate information, higher fees for their services, and are involved in more flotation compared with the non-reputable underwriters.

Titman and Trueman (1986) and Keasey and McGuinness (1991) argue that the choice of a reputable underwriter can be viewed as a signaling mechanism where more reputable underwriters is chosen by firms with more favorable information. They suggest that an entrepreneur with more favorable information is willing to pay the fee of a more credible advisory body.

Firth and Smith (1992) and Brown et al. (2000) document that the earnings forecast issued by IPO firm underwritten by a reputable underwriter is more accurate, as it is likely that the earnings forecasts are based on information provided by underwriters. A reputable underwriter is argued to have lower agency costs and come at a lower risk for the firm.

More reputable underwriters are expected to face greater expected loss to reputation, in the case of a misrepresentation. Chen et al. (2001) suggest that large earnings forecast errors damage underwriter reputation and thus there is clear incentive to closely monitor management earnings forecast. The previous studies stipulate that underwriters add credibility to firms when raising capital. According to the above arguments, our sixth hypothesis is as follows:

H6: There is a positive relationship between underwriter prestige and management earnings forecast

H6_a: IPO firms underwritten by a more prestigious underwriter issue more accurate earnings forecast

H6_b: IPO firms underwritten by a more prestigious underwriter issue more conservative earnings forecast.

2.5. Control variables

Prior literature identifies a number of other factors also likely to have an impact upon management earnings forecast accuracy and bias. The control variables included in the model are firm size, firm age, financial leverage, forecast horizon and firm growth.

2.5.1. Firm size

Previous studies consider firm size as a potential factor affecting management earnings forecast quality. For example, Hagerman and Ruland (1979) find that larger firms can produce more accurate earnings forecast since they are usually diversified, and therefore are better

able to cope with changes in economic conditions compared with smaller firms. Other studies document that larger firms are less susceptible to economic fluctuations as they have better control over their market settings (Firth and Smith, 1992). Cox (1985) and Pedwell et al. (1994) argue that larger firms have a permanent earnings process which is more predicted and they can usually employ many resources within the firm to make high quality earnings forecast. Evidence that larger firms produce more accurate earnings forecast than smaller one is documented by Clarkson (2000) on Canadian IPO firms and by Firth et al. (1995) on Singaporean IPO firms.

However, Firth and Smith (1992) find contrary results in their study conducted in New Zealand. Using Thai IPO firms, Lonkani and Firth (2005) document that management earnings forecast are less accurate for larger firms than for smaller firms. A potential explanation is that larger firms raise proportionately more capital in new issues, thus it is more difficult to predict income from the investment of large proceeds (Berlinger and Robbins, 1986). Another possible explanation suggested by Herbig et al. (1993) is that the massive firm size could hamper its earnings forecasting effectiveness. Chan et al. (1996) also argue that the management of smaller firms might be incited to provide more accurate earnings forecast as the market is more tolerant of errors from larger firms. Additionally, a number of studies find evidence of no significant association between management earnings forecast quality and firm size in Australia (Hartnett and Romcke, 2000), Hong Kong (Chan et al. 1996; Jaggi, 1997; Cheng and Firth, 2000), Malaysia (Mohamad et al., 1994; Jelic et al., 1998), and Jordan (El-Rajabi and Gunasekaran, 2006).

Despite the mixed evidence in prior research, a traditional expectation is developed as follows: firm size is positively associated with management earnings forecast quality.

2.5.2. Firm age

Previous studies argue that the older a firm is, the more earnings forecast are accurate, predominately because the predictions for earnings for younger firms are extremely difficult compared to a firm with a solid earnings history.

Jelic et al. (1998) and Jog and McConomy (2003) note that the earnings of firms with no prior operating history are more likely to be difficult to predict, given the fact that historical data are a very important input to the earnings forecast process. Mak (1994) shows that even if a new firm relies on the operating history of other firms in the same or a related industry, the available information on the operating history of those firms is likely to be a less reliable predictor of future earnings than one's own operating history.

Chen et al. (2001) document that older firms may be viewed as being less risky as they have more experience to draw on when making earnings forecast. On the other hand, Jaggi (1997) reports that the younger firms may not be able to fully understand and appreciate the environmental effect on their future performance, and the lack of historical bases may hamper their capability to provide accurate earnings forecast.

For this, our model controls for the possible effect of firm age on management earnings forecast quality.

2.5.3. Forecast horizon

It is argued that a crucial determinant of earnings forecast quality is forecast horizon, that is, the time length between the issuing date and the end of the period for which the earnings

forecast is made (Pedwell et al. 1994; Chan et al., 1996). A negative association between earnings forecast quality and forecast horizon is reported in previous US studies (Collins and Hopwood, 1980). Since earnings forecast is a naturally uncertain process, the longer the forecast horizon the greater the probability that unanticipated and unexpected events will occur. In addition, earnings forecast made on a date close to the end of the forecast period may include a better set of information and data on which the earnings forecast are based. Consistent with the above assumptions, previous IPO studies document a significant and negative association between forecast horizon and management earnings forecast in the contexts of Canada (Clarkson, 2000), New Zealand (Mak, 1989), UK (Keasey and McGuinness, 1991), Australia (Hartnett, 1993), Singapore (Firth et al., 1995), and Thailand (Lonkani and Firth, 2005). However, Ferris and Hayes (1977) find that earnings forecast quality is positively associated with forecast horizon in the UK. The authors assume that with a longer forecast horizon, managers would have greater opportunities to exert discretion on capital decisions in order to meet the earnings forecast. An insignificant relationship between management earnings forecast quality and forecast horizon is also found in Hong Kong (Chan et al., 1996; Jaggi, 1997; Cheng and Firth, 2000), Malaysia (Mohamad et al., 1994; Jelic et al., 1998), and Jordan (El-Rajabi and Gunasekaran, 2006). Despite the mixed findings, we predict that forecast horizon is negatively associated with management earnings forecast quality.

2.5.4. Financial leverage

The financial leverage can also be another determinant of management earnings forecast quality in IPO setting. Clarkson (2000) reports that management earnings forecast are less accurate for firms with high leverage in Canada although the results are sensitive to alternative specifications. Eddy and Seifert (1992) suggest that higher leverage may cause greater variability in earnings and thus make earnings forecast process more difficult.
It is argued that firms with relatively high financial leverage are likely to experience more volatile earnings. For example, Francis et al. (1998) find that even a modest decline in sales relative to management expectations is likely to result in a large earnings shortfall for a firm with high financial leverage. Firms with high financial leverage could also be affected more considerably by deteriorating economic conditions. Additionally, corporate financial policy may affect corporate decision making and accounting policies, which could be related to management earnings forecast. Thus, it is still warranted to examine this potential determinant in the French context although prior research finds no significant evidence on the association between management earnings forecast quality and financial leverage in New Zealand (Firth and Smith, 1992), Hong Kong (Chan et al., 1996; Jaggi, 1997; Cheng and Firth, 2000), Malaysia (Jelic et al. 1998), Thailand (Lonkani and Firth, 2005), and Jordan (El- Rajabi and Gunasekaran, 2006). We expect that financial leverage is negatively associated with management earnings forecast quality.

2.5.5. Firm growth

Another potential determinant of management earnings forecast quality is firm growth. Porter (1982) reports a negative association between firm growth and management earnings forecast quality in US. Using IPO firms from Hong Kong, Chan et al. (1996) find that firm growth is negatively related to management earnings forecast. However, prior studies also document an

insignificant relationship between management earnings forecast quality and firm growth in Hong Kong (Jaggi, 1997; Cheng and Firth, 2000) and Thailand (Lonkani and Firth, 2005).
Despite the mixed findings, we predict that firm growth is negatively associated with management earnings forecast quality.

3. RESEARCH DESIGN AND METHODOLOGY

3.1. Firm sample selection procedure and data collect method

The sample of firms for this study includes firms that went public from January 2000 to December 2004 and were traded on Euronext Paris. The firms are identified from the annual reports published by the "Commission des Opérations de Bourse" and the "Autorités des Marchés Financiers". During this period, 292 firms made initial public offerings. Out of those 292 IPOs, we exclude 101 IPOs because of the lack of accessible information, mergers and acquisitions (9). Eight firms that transferred from a market to another, and sixteen firms that previously traded on a foreign stock market are excluded. We drop 14 financial services firms because their corporate governance attributes and regulation are different from those of other IPO firms. We also eliminate 26 firms which did not issue any earnings forecast.
Finally, we exclude from our sample aberrant observations which are likely to bias the results of the multivariate analysis. To do that, we use two criteria to identify these aberrant observations which are: the deleted residue and the cook distance. The computation of these two criteria for all firms in our sample leads to eliminate 1 firm from the study.
Then, the data set for this study is composed of 117 firms. The following Table 1 describes the procedure for sample constitution.

Table 1: Sample constitution procedure

Sample	**Number of firms**
Initial public offerings on Euronext Paris during 2000-2004 period (139 in 2000; 65 in 2001; 34 in 2002; 17 in 2003; 37 in 2004)	**292**
Firms excluded because of the lack of accessible information (prospectus missing; information missing)	101
Mergers and acquisitions	9
Foreign firms	16
Firms belonging to financial industry	14
Transfers	8
Firms did not issue any earnings forecasts	26
Aberrant observations	1
Finale sample	**117**

The size of our sample is comparable to other studies. For example, Jelic et al. (1998) analyze earnings forecast accuracy of 124 operations in Malaysia between 1984 and 1995. The work of Keasey and McGuiness (1991) focus on 121 UK IPOs between 1984 and 1986.
All information about corporate governance as well as the characteristics of the issuers are hand-collected from the IPO prospectuses which are downloaded form either the Authority of Financial Market (AMF)’s web site or the firm’s web site itself.

The forecasted and realized results are respectively collected from the prospectus and from the annual report.

3.2. Research Models

The aim of this study is to examine whether the potential investors can reasonably anticipate the quality of the management earnings forecast published in the prospectus from corporate governance mechanisms as well as firm characteristics. Management earnings forecast quality is measured by earnings forecast error as well as earnings forecast bias. To do that, we focus on the two following models:

$$|EFE| = \beta_0 + \beta_1 BSIZE + \beta_2 INDEAD + \beta_3 DUALITY + \beta_4 AUDITQ + \beta_5 RETENT + \beta_6 AGE + \beta_7 FSIZE + \beta_8 GROWTH + \beta_9 HORIZON + \beta_{10} LEV + \beta_{11} UNDWR + \varepsilon \quad (1)$$

$$EFE = \beta_0 + \beta_1 BSIZE + \beta_2 INDEAD + \beta_3 DUALITY + \beta_4 AUDITQ + \beta_5 RETENT + \beta_6 AGE + \beta_7 FSIZE + \beta_8 GROWTH + \beta_9 HORIZON + \beta_{10} LEV + \beta_{11} UNDWR + \varepsilon \quad (2)$$

Where:

$|EFE| = |(ER - EF)| / |EF|$

$EFE = (ER - EF) / |EF|$

BSIZE: the total number of directors on the board.

INDEAD: the proportion of independent directors on the board.

DUALITY: a categorical variable that equals 1 if the CEO is also the chairman and 0 otherwise

AUDITQ: a categorical variable that equals to 1 if one of the auditors at the time of the IPO is one of a Big 5 firm, and 0 otherwise.

RETENT: the proportion of shares retained by the founders, the managers, and their families after IPO.

AGE: number of years from the date of incorporation until the date of prospectus

FSIZE: firm size measured by the natural log of pre-IPO total assets.

GROWTH: revenue growth in the two years preceding the IPO.

HORIZON: number of months from the prospectus date to the end of the period for which the earnings forecast is made

LEV: total of debts/total of assets.

UNDWR: a categorical variable that equals 1 if the underwriter is one of the following banks: CREDIT LYONNAIS, CERDIT AGRICOLE, BNP, BANQUE POPULAIRE, and 0 otherwise.

- β_i: represents the regression coefficients.
- ε: is a standard error term of an OLS regression.

In equation (1) absolute earnings forecast error ($|EFE|$) is used to measure earnings forecast accuracy, and in equation (2), EFE is a proxy of the magnitude of earnings forecast bias. Thus, equation (1) allows us to examine the determinants of earnings forecast accuracy while equation (2) allows us to investigate the factors explaining earnings forecast bias. We note that the more significant $|EFE|$ is, the less accurate earnings forecast is; and the less significant $|EFE|$ is, the more accurate earnings forecast is.

The two models are estimated by Ordinary Least Square (OLS). This allows us to determine the significance of every variable and thus to know if corporate governance variables as well as firm-specific variables have an impact on management earnings forecast quality in French context. In other words, if the potential investors can predict the accuracy and the bias of management earnings forecast by looking into corporate governance variables as well as firm-specific characteristics.

4. EMPIRICAL FINDINGS AND DISCUSSION

4.1. Descriptive statistics

We use two proxies for management earnings forecast quality: earnings forecast error and earnings forecast bias. The descriptive statistics relative to these two variables are shown in the following Table 2:

Table 2: Descriptive statistics for earnings forecast error and bias

Variable	**|EFE|**	**EFE**
N	117	117
Mean	.2733769	-.1385068
Median	.0934	.0278
Standard-deviation	.4662078	.5334809
T		-2.8083***
Z		-4.938***

- $|\boldsymbol{EFE}| = |(ER - EF)| / |EF|$
- $\boldsymbol{EFE} = (ER - EF) / |EF|$

Where, ER is earnings realized by the IPO firm; and EF, is the earnings forecast as given in the IPO prospectus.

- The t designates the test of Student; the Z designates the Wilcoxon rank test. They allow us to determine whether the average and median of earnings forecast differ significantly from 0 at the level of 1% (***), 5% (**), and 10% (*).

The mean of earnings forecast error is a measure of earnings forecast bias. It allows us to examine whether manager systematically over or underestimates earnings for IPO firms in France. By examining the sign of the mean of earnings forecast error (positive or negative), we can conclude whether the IPO firm is optimistic or conservative (pessimistic) about its earnings forecast (i.e., whether the earnings are overestimated or underestimated). The manager is optimistic (the earnings are overestimated) if the mean of earning forecast error is negative and is pessimistic (the earnings are underestimated) if the mean of earnings forecast error is positive (Chin et al., 2006).

The descriptive statistics concerning earnings forecast error show that, in average, the earnings forecast exceed earnings realized. In fact, from the Table 3, the average earnings forecast error is negative (-13.85%) and significant at the level of 1%. This finding allows us to conclude that there is some optimism from French IPO firms. Furthermore, the Table 3 shows that 80 earnings forecast errors are negative and are thus optimistic, 37 are positive and therefore are pessimistic. The optimistic managers are significantly more than pessimist managers (Z = -4.938) at the level of 1%.

The manager could be incited to issue optimistic earnings forecasts in interest of the pre-IPO shareholders: on the basis of the expected growth of the results, he could negotiate the offer price increase and thus allows the seller shareholders to obtain a better price for the sold securities and for the others, to limit the dilution of their stake (Teoh and al., 1998). The prospect of a strong earnings growth could also attract more easily potential investors and thus assure the success of the operation.
As we have mentioned above, in absolute value, the earnings forecast error (|EFE|) is used to judge on the accuracy of the earnings forecast contained in the prospectus. The average value of |EFE| is equal to 27.34 % (Table 2).

Table 3: Distribution of earnings forecast error in relative values

Sign	**N**	**Frequency**
EFE<0	80	68.38%
EFE>	37	31.62%
Total	117	100%

- $|\boldsymbol{EFE}| = |(ER - EF)| / |EF|$
- $\boldsymbol{EFE} = (ER - EF) / |EF|$

Where, ER is earnings realized by the IPO firm; and EF, is the earnings forecast as given in the IPO prospectus.

4.2. Multivariate analysis

In our study, to verify the absence of multicolinearity between these variables, we use the matrix of Pearson correlations. To assess the absence of multicolinearity between the explanatory variables, Kennedy (1985) suggests that the coefficients of correlation must be lower than 0.8.
From the results reported in the Table 4, we notice that all the coefficients of correlation present values lower than 0.8. Therefore, we can draw the conclusion that the problem of multicolinearity between the continuous explanatory variables does not exist.
To verify whether the disturbance terms are homoscedastic, we perform the test of White (1980). It consists in regressing the squared residuals on all distinct regressors, the squared values and the cross products of regressors. The test statistic, a Lagrange multiplier measure is distributed chi-squared (p) under the null hypothesis of homoscedasticity. If p-value of the assumption of the coefficients are equal to 0 is superior to 10 %, we can not reject the null hypothesis and confirm that the coefficients are different from 0. So, we can say that the residuals have the character of homoscedasticity.
In our case, the results show that residuals for the two models are heteroscedastic. Indeed, the statistics of chi-square presents a value of 100.0767 with a level of significance of .0235 for the model (1) and a value of 98.37074 with a level of significance of .0307 for the model (2). To correct for heteroscedasticity, White's (1980) technique is used, which produces unbiased, efficient estimates in the presence of heteroscedastic errors.

In sum, the results of the specification tests show that the adoption of the method of Ordinary Least Square (OLS) seems to be adequate. We, in what follows, use this method in the analysis of the regressions.

Table 4: Matrix of Pearson correlations

	BSIZE	INDEAD	DUALITY	RETENT	AGE	FSIZE	UNDWR	LEV	HORIZON	GROWTH	AUDITQ
BSIZE	1,000										
INDEAD	,196**	1,000									
DUALITY	,357***	,041	1,000								
RETENT	-,147	,021	-,088	1,000							
AGE	-,054	-,088	-,175*	-,162*	1,000						
FSIZE	,316***	-,100	,380***	-,253***	,279***	1,000					
UNDWR	-,376***	-,125	-,507***	,198**	,148	-,331***	1,000				
LEV	-,233**	-,247***	-,300***	,236**	,096	-,136	,371***	1,000			
HORIZON	-,068	-,147	-,146	,057	,649***	,034	,094	,266	1,000		
GROWTH	,055	-,009	-,272***	,078	-,002	-,063	,107	,107	-,044	1,000	
AUDITQ	-,084	-,103	,007	-,079	-,077	-,032	,084	,023	-,130	-,015	1,000

- BSIZE: the total number of directors on the board.
- INDEAD: the proportion of independent directors on the board.
- DUALITY: a categorical variable that equals 1 if the CEO is also the chairman and 0 otherwise
- RETENT: the proportion of shares retained by the founders, the managers, and their families after IPO.
- AGE: number of years from the date of incorporation until the date of prospectus
- FSIZE: firm size measured by the natural log of pre-IPO total assets.
- UNDWR: a categorical variable that equals 1 if the underwriter is one of the following banks: CREDIT LYONNAIS, CERDIT AGRICOLE, BNP, BANQUE POPULAIRE, and 0 otherwise.
- LEV: total of debts/total of assets.
- HORIZON: number of months from the prospectus date to the end of the period for which the earnings forecast is made.
- GROWTH: revenue growth in the two years preceding the IPO.
- AUDITQ: a categorical variable that equals to 1 if one of the auditors at the time of the IPO is one of a Big 5 firm, and 0 otherwise.

* The correlation is significant at .1 level (bilateral).
** The correlation is significant at .05 level (bilateral).
*** The correlation is significant at .01 level (bilateral).

Table 5 presents the empirical findings of the multivariate regression models given in equation (1) and equation (2) above. More specifically, the left side of the Table 5 reports the results of the regression of earnings forecast error (|**EFE**|) on corporate governance variables as well as control variables (Equation 1) whereas the right side of the Table 5 shows the results of the regression of earnings forecast bias (**EFE**) on corporate governance variables as well as control variables (Equation 2). The explanatory power of the two models (tested regressions) is found to be acceptable given that the adjusted R-squared seems to be satisfactory (the adjusted R-squared is around 40% for the model (1) and 45% for the model (2)). Furthermore, all the statistics of Fisher (F) are significant at the level of 1 %. Therefore, the global significance of the two models is confirmed.

The analysis of the results is performed in two parts. The first part contains the interpretation of the results of the model relative to the management earnings forecast accuracy. Regarding the second part, it focuses on the results of the model concerning management earnings forecast bias.

As discussed above, management earnings forecast error is the inverse of accuracy. In addition, a positive value of earnings forecast bias means that managers are optimistic in their earnings forecast whereas a negative value of earnings forecast bias suggests that managers are pessimistic (or conservative) in their earnings forecast.

Table 5: Multivariate regression results of the effects of corporate governance characteristics on the quality of management earnings forecast (Accuracy and Bias)

	|EFE| (Model 1)				**EFE (Model 2)**			
	Predicted sign	Coef.	t	P>|t|	Predicted sign	Coef.	t	P>|t|
BSIZE	(+)	.0645675	2.69	0.008	(-)	-.042544	-2.24	0.027
INDEAD	(-)	-.3809011	-2.89	0.005	(+)	.2462146	2.28	0.025
DUALITY	(+)	.0106689	0.10	0.922	(-)	-.0267405	-0.29	0.774
AUDITQ	(-)	-.1125536	-1.44	0.152	(+)	.0284532	0.42	0.672
RETENT	(-)	-.825008	-4.80	0.000	(+)	.7832531	5.21	0.000
UNDWR	(-)	.3831023	2.77	0.007	(+)	.2540777	2.22	0.029
AGE	(-)	-.0121831	-1.50	0.136	?	.0090214	1.26	0.211
FSIZE	(-)	.1611837	1.94	0.055	?	-.1701037	-2.34	0.021
LEV	(+)	.0036067	1.14	0.255	?	-.0046913	-2.17	0.032
HORIZON	(+)	.0112643	1.04	0.301	?	-.0061861	-0.65	0.516
GROWTH	(+)	-.0176118	-0.72	0.471	?	.0257833	1.23	0.220
_cons		-1.292561	-1.96	0.052		1.190794	2.22	0.028
N = 117; Adj R-squared = 0.4054; F = 3.75; P = 0.0002					N = 117; Adj R-squared= 0.4453; F = 3.60; P = 0.0003			

- |***EFE***| = | (ER - EF) | / | EF |; where, ER is earnings realized by the IPO firm; and EF, is the earnings forecast as given in the IPO prospectus.
- ***EFE*** = (ER - EF) / | EF |; where, ER is earnings realized by the IPO firm; and EF, is the earnings forecast as given in the IPO prospectus.
- ***BSIZE:*** the total number of directors on the board.
- ***INDEAD:*** the proportion of independent directors on the board.
- ***DUALITY:*** a categorical variable that equals 1 if the CEO is also the chairman and 0 otherwise
- ***AUDITQ:*** a categorical variable that equals to 1 if one of the auditors at the time of the IPO is one of a Big 5 firm, and 0 otherwise.
- ***RETENT:*** the proportion of shares retained by the founders, the managers, and their families after IPO.
- ***UNDWR:*** a categorical variable that equals 1 if the underwriter is one of the following banks: CREDIT LYONNAIS, CERDIT AGRICOLE, BNP, BANQUE POPULAIRE, and 0 otherwise.
- ***AGE:*** number of years from the date of incorporation until the date of prospectus
- ***FSIZE:*** firm size measured by the natural log of pre-IPO total assets.
- ***LEV:*** total of debts/total of assets.
- ***HORIZON:*** number of months from the prospectus date to the end of the period for which the earnings forecast is made.
- ***GROWTH:*** revenue growth in the two years preceding the IPO.

4.2.1. Accuracy of management earnings forecast

The results from the left side of the Table 5 show that the coefficient of board size (**BSIZE)** is positive (.0645675) and statistically significant ($p<0.01$). This implies that management earnings forecast accuracy is negatively associated with board size. The hypothesis 1a is then supported. Thus IPO firms are more likely to issue less accurate earnings forecast when the board size is large.

Consistent with our prediction, the coefficient on board independence (**INDEAD**) is negative (-.3809011) and statistically significant at the 1% level. This suggests that management earnings forecast accuracy is positively associated with the proportion of independent directors on the board. This finding lends support to the hypothesis 2a that IPO firms are more likely to issue more accurate earnings forecast when the proportion of independent directors on the board is higher. This is consistent with recent management earnings forecast studies (Karamanou and Vafeas, 2005; Ajinkya et al., 2005).

The coefficient on CEO duality (**DUALITY)** is positive (.0106689) but not significant ($p = 0.922$**)**. This suggests that board leadership structure has no significant impact on earnings forecast accuracy. The hypothesis 3a is then not supported. Thus, the separation of CEO and chairman titles does not contribute significantly to the accuracy of earnings forecast.

The coefficient on auditor quality (**AUDITQ)** is negative (-.1125536) but not significant ($p = 0.152$). The auditor quality has no significant impact on earnings forecast accuracy. The hypothesis 4a is then not supported. These results suggest that a higher auditor quality does not play a role to increase the accuracy of management earnings forecast in France. If the reputation of an auditor has no effect on the magnitude of abnormal accruals in France (Piot and Janin, 2007), and it is suggested that the realized earnings are the subject of a more comprehensive audit than the earnings forecast, then the absence of significance of the relationship between audit quality and management earnings forecast accuracy could be explained. Our result is consistent with the findings of El-rajabi and Gunasekaran (2006) on Jordanian firms but is in contrast with the findings of Jaggi (1997) and Cheng and Firth (2000) on Hong Kong firms and Clarkson (2000) on Canadian firms.

As expected, the coefficient on proportion of shares retained by insiders (**RETENT)** is negative (-.825008) and significant ($p<0.01$). This implies that management earnings forecast accuracy is positively associated with the proportion of shares retained by insiders. The hypothesis 5a is then supported. Thus IPO firms are more likely to issue more accurate earnings forecast when the proportion of shares retained by insiders is higher. This confirms the assumption that the issuer devotes more resources to make and to disclose reliable earnings forecasts when the original owners retain a higher fraction of shares after the IPO.

Contrary to our predictions, the results show that the coefficient on underwriter reputation (**UNDWR)** is positive (.3831023) and significant ($p<0.01$). This implies that management earnings forecast accuracy is negatively associated with more reputable underwriter. The hypothesis 6a is then not supported. Thus, IPO firms are more likely to issue less accurate earnings forecast when the IPO firm is underwritten by a more prestigious underwriter. This result is inconsistent with the findings of Chen et al. (2001) on Hong Kong firms, which suggest that firms that are handled by prestigious underwriter provide more accurate earnings forecast.

Regarding the control variables, the results show that the coefficient of firm size (FSIZE) in the model 1 (left-side of the Table 5) is significant at the 10% level, but contrary to our

expectation, it has positive sign. Thus, larger firms tend to provide less accurate earnings forecast. The available empirical evidence is inconclusive about whether firm size has a positive or negative effect on management earnings forecast accuracy. Our results confirm those of Ferris and Hayes (1977), Firth and Smith (1992), Chen and Firth (1999), Lonkani and Firth (2005). However, Mohamad et al (1994), Clarkson (2000), Chen et al (2001) find evidence that larger firms are more accurate in their earnings forecast than smaller one.

From the left-side of the Table 5, firm age (AGE) is not significantly associated with management earnings forecast accuracy. However, the coefficient of firm age (AGE) is, as predicted, negative suggesting that older firms issue more accurate earnings forecast. This result is in line with the findings of Jaggi (1997) on Hong Kong firms and Pedwell et al. (1994) and Clarkson (2000) on Canadian firms.

The results from the left-side of the Table 5 show that financial leverage has no significant effect on earnings forecast accuracy. However, the coefficient of financial leverage (LEV) is, as expected, positive, suggesting that IPO firms with higher level of leverage ratio tend to provide less accurate earnings forecast. This finding is consistent with the assumption that financial leverage increases the volatility of earnings, and therefore it would be difficult to predict them. Our result is in line with the findings of Clarkson (2000) on Canadian firms and Chen et al. (2001) on Hong Kong firms.

The left-side of the Table 5 reveals that the coefficient of HORIZON is positive, as predicted, but not significant. This suggests that forecast horizon has no effect on management earnings forecast accuracy. This result is consistent with the findings of Mohamad et al (1994) on Malaysian firms and Chan et al. (1996) on Hong Kong firms. Firth and Smith (1992) and Jelic et al (1998) attribute this lack of significance to the difficulty to anticipate, in the short term, the results of the use of funds raised during the IPO.

Finally, the coefficient of GROWTH is negative but not significant; suggesting that firm growth has no effect on management earnings forecast accuracy.

4.2.2. Bias of management earnings forecast

The results from the right side of the Table 5 show that the coefficient of board size (**BSIZE)** is negative (-.042544) and significant ($p<0.05$). This implies that managers' ability to optimistically bias earnings forecast increases with board size. The hypothesis 1b is then supported. Thus IPO firms are more likely to issue more optimistic earnings forecast when the board size is large. This is consistent with the findings of Karamanou and Vafeas (2005) who document that board size is associated with more optimistic earnings forecast.

Consistent with our prediction, the coefficient on board independence (**INDEAD**) is positive (.2462146) and significant ($p<0.05$). This suggests that managers' ability to optimistically bias earnings forecast decreases with the proportion of independent directors on the board. The hypothesis 2b is then supported. Thus IPO firms are more likely to issue more conservative earnings forecast when the proportion of independent directors on the board is greater. This is consistent with Ajinkya et al. (2005) who show that higher proportion of independent directors is associated with more conservative management earnings forecast.

The coefficient on CEO duality (**DUALITY)** is negative (-.0267405) but not significant (0.774). Board leadership structure does not seem to influence managers' ability to optimistically bias earnings forecast. The hypothesis 3b is then not supported.

The coefficient on auditor quality (**AUDITQ)** is positive (.0284532) but not significant (0.673). The auditor quality has no significant influence on managers' ability to optimistically bias earnings forecast. The hypothesis 4b is then not supported.
As predicted, the coefficient on proportion of shares retained by insiders (**RETENT)** is positive (.7832531) and significant ($p<0.01$). This implies that managers' ability to optimistically bias earnings forecast decreases with the proportion of shares retained by insiders. The hypothesis 5b is then supported. Thus IPO firms are more likely to issue more conservative earnings forecast when the insiders retain a higher proportion of shares after the IPO. This reflects the idea that the issuer takes into account the costs associated with issuing optimistic earnings forecast. These costs may be related to litigation or more likely to shares prices fall linked to the losing of investor confidence when the issuer fails to meet earnings forecast. These empirical findings suggest that ownership retained by insiders serves as an effective mechanism to reduce the conflicts of interest between majority and minority shareholders and increases the financial disclosure quality.
As expected, the results show that the coefficient on underwriter quality (**UNDWR)** is positive (.2540777) and significant ($p<0.05$). This suggests that managers' ability to optimistically bias earnings forecast bias decreases in issues managed by more prestigious underwriters. The hypothesis 6b is then supported. Thus firms that go public with more prestigious underwriters are more likely to issue more conservative earnings forecast.
Turning to the control variables, the results reveal that the coefficient of firm size (**FSIZE**) in the model 2 (right-side of the Table 5) is negative and significant at the 5% level. Thus, larger firms tend to issue more optimistic earnings forecast.
The left-side of the Table 5 reveals that firm age (**AGE**) is positive but not significant ($p = 0.211$), suggesting that firm age has no effect on management earnings forecast bias.
The coefficient on financial leverage (**LEV**) is negative and significant at the level of 5%. Therefore, IPO firms with higher financial leverage provide more optimistic earnings forecast.
Finally, the coefficient on forecast horizon (**HORIZON**) and on revenue growth (GROWTH) are not significant; suggesting that forecast horizon and firm growth have no effect on bias in management earnings forecast.

5. CONCLUSION

This study examines whether corporate governance attributes have an effect on the quality of management earnings forecast contained in French IPO prospectuses. We find that IPO firms are more likely to issue less accurate and more optimistic earnings forecast when the board size is large. We also find that IPO firms are more likely to issue more accurate and more conservative earnings forecast when the proportion of independent directors on the board is higher. Moreover, we find that IPO firms are more likely to issue more accurate and more conservative earnings forecast when the proportion of shares retained by insiders is higher. Our results also show that IPO firms are more likely to issue less accurate but more conservative earnings forecast when the IPO firm is underwritten by a more prestigious underwriter.

What lessons can potential investors take from the results? First, for potential investors, it is critical to be vigilant to management earnings forecast. As our results show, the potential

investors should assess management earnings forecast quality before they consider it when evaluating IPO firms.

Second, it is important, when assessing management earnings forecast quality to take into account firm specific characteristics. Finally, it is important for potential investors to recognize that strong corporate governance mechanisms are associated with higher management earnings forecast.

References

Abbott, L. J., S. Parker and G. F. Peters. 2004. Audit committee characteristics and restatements. *Auditing: A Journal of Practice and Theory* 23(1), 69−87.

Ahmed, K., M. Hossain and M. B. Adams. 2006. The effects of board composition and board size on the informativeness of annual accounting earnings. *Corporate Governance* 14(5), 418−431.

Ajinkya, B., Bhojraj, S., Sengupta, P. (2005), "The association between outside directors, institutional investors and the properties of management earnings forecasts", *Journal of Accounting Research*, Vol. 43, N°3, pp. 343-376.

Beasley, M. S. 1996. An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review* 71(4), 443−465.

Becker, C. L., DeFond, M. L., Jiambalvo, J. & Subramanyam, K. R. (1998). The effect of audit quality on earning management. Contemporary Accounting Research, 15, 1–24.

Beekes, W., P. Pope and S. Young. 2004. The link between earnings timeliness, earnings conservatism and board composition: evidence from the UK. *Corporate Governance* 12(1), 47−59.

Berlinger, R. W., Robbins, W. B., 1986. Using forecasts and projections to raise capital. Journal of Accounting, Auditing and Finance (1), 347-352.

Broye, G., Schatt, A. (2003), "Sous-évaluation à l'introduction et cession d'actions par les actionnaires d'origine: Le cas français", *Finance Contrôle Stratégie*, Vol.6, N°2, pp. 67-89.

Brickley, J. A. and C. James, 1987, The takeover market, corporate board composition, and ownership structure: The case of banking. *Journal of Law and Economics* 30, 161-190.

Brown, P., A. Clarke, J. How, and K. Lim. 2000. "The Accuracy of Management Dividend Forecast in Australia." *Pacific-Basin Finance Journal* 8: 309-331.

Byrd, J. and K. Hickman. (1992), Do outside directors monitor managers? Evidence from tender offer bids, *Journal of Financial Economics, Vol.* 32, pp. 195-221.

Carcello, J. V. and A. L. Nagy. 2004a. Client size, auditor specialization and fraudulent financial reporting. *Managerial Auditing Journal* 19(5), 651−668.

Carcello, J. V. and A. L. Nagy. 2004b. Audit firm tenure and fraudulent financial reporting. *Auditing: A Journal of Practice and Theory* 23(2), 55−69.

Chan, A. M., Sit, C. L., Tong, M. M., Wong, D. C., Chan, R. W., 1996. Possible factors of the accuracy of prospectus earnings forecasts in Hong Kong. The International Journal of Accounting (31), 381-398.

Cheng, T. Y., Firth, M., 2000. An empirical analysis of the bias and rationality of profit forecasts published in new issue prospectuses. Journal of Business Finance & Accounting (27), 423-446.

Chen, M. Firth and G. Krishnan. (2001) "Earnings Forecast Errors in IPO Prospectuses and their Association with Initial Stock Returns", *Journal of Multinational Financial Management*, 11, pp. 225-240

Chen, G., M. Firth, D. N. Gao and O. M. Rui. 2006. Ownership structure, corporate governance, and fraud: evidence from China. *Journal of Corporate Finance* 12, 424−448.

Chin, C.L.; G. Kleinman; P. Lee; and M.F. Lin. 2006. "Corporate Ownership Structure and Accuracy and Bias of Mandatory Earnings Forecast: Evidence from Taiwan." *Journal of International Accounting Research* Vol. 5, pp. 41-62.

Clarkson, P. M., 2000. Auditor quality and the accuracy of management earnings forecasts. Contemporary Accounting Research (17), 595-622.

Collins, W. A., Hopwood, W. S., 1980. A multivariate analysis of annual earnings forecasts of financial analysts and univariate time-series models. Journal of Accounting Research (18), 390-406.

Cox, C., 1985. Further evidence on the representativeness of management earnings forecasts. The Accounting Review (60), 692-701.

Davidson, R., J. Goodwin-Stewart and P. Kent. 2005. Internal governance structures and earnings management. *Accounting and Finance* 45, 241−267.

DeAngelo, L., 1981. Auditor size and audit quality. Journal of Accounting and Economics (3), pp. 183-199.

Dechow, P. M., R. G. Sloan and A. P. Sweeney. 1996. Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13(1), 1−36.

Eddy, A., Seifert, B., 1992. An examination of hypotheses concerning earnings forecast errors. Quarterly Journal of Business and Economics, Vol. 31, pp. 22-37.

EL-Rajabi, M. T. A., Gunasekaran, A., 2006. The accuracy of earnings forecast disclosed in the prospectuses of newly formed public companies in Jordan. Managerial Auditing Journal (21), pp. 117-131.

Fama, E. 1980. Agency problems and the theory of the firm. *Journal of Political Economy* 88, 288−307.

Fama, E. and M. Jensen. 1983. Separation of ownership and control. *Journal of Laws and Economics* 26, 301−325.

Ferris, K. R., Hayes, D. C., 1977. Some evidence on the determinants of profit forecast accuracy in the United Kingdom. The International Journal of Accounting Education and Research (12), pp. 27-36.

Firth M. (1998), "IPO profit forecasts and their role in signalling firm value and explaining post-listing returns", *Applied Financial Economics*, Vol.8, N°1, pp. 29-39.

Firth, M., Smith, A., 1992. The accuracy of profits forecasts in initial public offering prospectuses. Accounting and Business Research (22), 239-247.

Firth, M., Kwok, B. C. H., Liau-Tan, C. K., Yeo, G. H., 1995. Accuracy of profit forecasts contained in IPO prospectuses. Accounting and Business Review (2), 55-83.

Francis, J., Philbrick, D., K. Schipper, K., 1998. Earnings surprises and litigation risk. Journal of Financial Statement Analysis (3), 15-27.

Fredrickson J.W., Hambrick D.C. et Baumrinet S. (1988), "A Model of CEO Dismissal", *Academy of Management Review*, vol. 13, n° 2, p. 255-270.

Hackman, J. R. 1990. *Groups that work and those that don't: conditions for effective teamwork*. San Francisco, CA: Jossey-Bass.

Hagerman, R. L., Ruland, W., 1979. The accuracy of management forecasts and forecasts of simple alternative models. Journal of Economics and Business, 172-179.

Hartnett, N. A., 1993. Corporate financial forecast accuracy: an Australian study. The International Journal of Accounting (28), 248-258.

Hartnett, N. A., Romcke,J., 2000. The predictability of management forecast error: A study of Australian IPO disclosure. Multinational Finance Journal (4), 101-132.

Herbig, P., Milewicz, J., Golden, J. E., 1993. Who, what, when and how. Journal of Business Forecasting (12), 16-21.

Hoskisson R.E., R.A. Johnson and D.D. Moesel, (1994), "Corporate divestiture intensity in restructuring firms: Effects of governance, strategy and performance", *Academy of Management Journal*, Vol. 37, pp. 1207–1251

Jaggi, B. (1997), "Accuracy of forecast information disclosed in the IPO prospectuses of Hong Kong companies", *The International Journal of Accounting*, Vol. 32, N°3, pp. 301-319.

Jelic, R., Saadouni, B., Briston, R., 1998. The accuracy of earnings forecasts in IPO prospectuses on the Kuala Lumpur Stock Exchange. Accounting and Business Research, (29), 57-72.

Jensen, M. 1993. The modern industrial revolution, exist, and the failure of internal control systems. *Journal of Finance* 48(3), 831−880.

Jog, V., McConomy, B.J. (2003), "Voluntary disclosure of management earnings forecasts in IPO prospectuses", *Journal of Business Finance & Accounting*, Vol. 30, N°1-2, pp. 125-167.

Karamanou I., Vafeas N. (2005), "The association between corporate boards, audit committees, and management earnings forecasts: An empirical analysis", *Journal of Accounting Research*, Vol. 43, pp. 453-486.

Keasey, K., McGinness, P., 1991. An examination of the accuracy and bias of prospectus earnings forecasts: UK evidence. The International Journal of Accounting (26), 252-263.

Kelton A.S., Yang Y. W. (2008), "The impact of corporate governance on Internet financial reporting", *Journal of Accounting and Public Policy*, Vol. 27, pp. 62-87.

Kennedy, P. 1985. A Guide to Econometrics. Cambridge, MA: MIT Press.

Klein, A. 2002. "Audit committee, board of director characteristics, and earnings management", *Journal of Accounting and Economics* 33, 375−400.

Kosnick, R.D. 1987. Greenmail: A study of board performance in corporate governance. *Administrative Science Quarterly* 32: 163-185.

Krishnan, J. and P. Schauer. 2000. "The Differentiation of Quality Among Auditors: Evidence from the Not-for-Profit Sector." Auditing: A Journal of Practice & Theory 19(2): 9-25.

La Porta R., Lopez-de-Silanes F. and Shleifer A. (1999), "Corporate ownership around the world", *Journal of Finance*, Vol. 54, pp. 471-517.

Loebbecke, J. K., M. M. Eining and J. J. Willingham. 1989. Auditors' experience with material irregularities: frequency, nature, and detectability. *Auditing: A Journal of Practice and Theory* 9(1), 1-28.

Lonkani, R., Firth, M., 2005. The accuracy of IPO earnings forecasts in Thailand and their relationships with stock market valuation. Accounting and Business Research (35), 269-286.

Mak, Y. T., 1989. The determinants of accuracy of management earnings forecasts: A New Zealand study. The International Journal of Accounting (24), 267-280.

Mak, Y. 1994. The voluntary review of earnings forecasts disclosed in IPO prospectuses. *Journal of Accounting and Public Policy*, 13: 141-158.

Mohamad, S., Nassir, A., Kuing, T. K., Ariff, M., 1994. The accuracy of profit forecasts of Malaysian IPOs. Capital Markets Review (2), 46-69.

Palmrose, Z-V. (1988) "An Analysis of Auditor Litigation and Audit Service Quality." *The Accounting Review* pp. 55-73.

Patton, A. and J.C. Baker, 1987, "Why Won't Directors Rock the Boat?" Harvard Business Review (November-December), 10-18.

Peasnell, K. V., P. F. Pope and S. Young. 2000. Accrual management to meet earnings targets: UK evidence pre- and post-Cadbury. *British Accounting Review* 32, 415−445.

Peasnell, K. V., P. F. Pope and S. Young. 2001. The characteristics of firms subject to adverse rulings by the Financial Reporting Review Panel. *Accounting and Business Research* 31(4), 291-311.

Peasnell, K. V., P. F. Pope and S. Young. 2005. Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance and Accounting* 32(7) & (8), 1311−1346.

Pedwell, K., Warsame, H., Neu, D., 1994. The accuracy of Canadian and New Zealand earnings forecasts: A comparison of voluntary versus compulsory disclosures. Journal of International Accounting, Auditing & Taxation (3), 221-236.

Piot, C. (2004) 'The existence and independence of audit committees in France', *Accounting and Business Research*, 34(3): 223-46.

Piot, C. and R. Janin. 2007. External auditors, audit committees and earnings management in France. *European Accounting Review* 16(2), 429 – 454.

Porter, G. A., 1982. Determinants of the accuracy of management forecasts of earnings. Review of Business and Economic Research (Spring), 1-13.

Sharma, V. D. 2004. Board of director characteristics, institutional ownership, and fraud: evidence from Australia. *Auditing: A Journal of Practice and Theory* 23(2), 105−117.

Simunic, D., Stein, M., 1987. Product differentiation in auditing: a study of auditor choice in the market for unseasoned new issues. Canadian Certified General Accountants Research Foundation.

Song, J. and B. Windram. 2004. Benchmarking audit committee effectiveness in financial reporting. *International Journal of Auditing* 8, 195−205.

Steiner, I. D. 1972. *Group process and productivity*. Academic Press, New York.

Teoh, S. H., Welch, L. and Wong, T. J. (1998) 'Earnings management and the underperformance of initial public offerings', *Journal of Finance*, 53: 1935-74.

Titman, S., Trueman, B. (1986), "Information Quality and the Valuation of New Issues", *Journal of Accounting and Economics*, Vol. 8, N°2, pp. 159-172.

Uzun, H., S. H. Szewczyk and R. Varma. 2004. Board composition and corporate fraud. *Financial Analysts Journal*, May/June, 33−43.

Vafeas, N. 2000. Board structure and the informativeness of earnings. *Journal of Accounting and Public Policy* 19(2), 139−160.

Weisbach, M. S. 1988. Outside directors and CEO turnover. *Journal of Financial Economics* 20, 431−460.

Xie, B., W. N. Davidson III and P. J. DaDalt. 2003. Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance* 9, 295−316.

Yermack, D. 1996. Higher market valuation of companies with a small board of directors. *Journal of Financial Economics* 40, 185−212.

White, H. 1980. A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica*: 48 (4): 817-838.