

## Do CEO characteristics affect earnings management? Evidence from France

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**ABSTRACT:** This study attempts to add to the small body of existing literature relating Chief executive officer characteristics to earnings management. Our research was carried out on 153 French listed companies during 2008. Using discretionary accruals as a proxy for earnings management, we found a significant positive relationship between CEO characteristics and earnings management. This suggests that since reputed CEOs are well compensated, they are more afraid to lose their compensation level, and their incentive to manipulate their firm's earnings therefore increases. Findings also indicate that the dual CEO-chair relationship encourages CEOs to manage earnings, particularly when CEO-chairs hold the major proportion of equity in the firm. This finding suggests that CEO-chairs use their managerial power and the freedom from control to extract private yields. Finally, we present new on the relationship between CEO expertise and earnings management, showing that expertise positively affects CEO's behavior leading to their using aggressive earnings management.

**KEYWORDS:** CEO reputation, duality, management ownership, CEO expertise, earnings management.

### 1 INTRODUCTION

The eyewitness of the late of the 1990s and the early years of the 2000s notice the misreporting by companies on a large scale. The legendary wrecks of Enron, WorldCom and Parmalat stand out as landmarks in recent economic history. Those scandals involve managers' manipulation in financial reports (i.e. misstatements of incomes), accounting standards' choices and management decisions. For example, as accrual accounting attempts to match the initial cash flow against the future inflows from the investment, managers may allocate excessive amounts for provisions or generous reserve accounting. Another method of manipulating earnings is to take expenses that are not expected to generate future cash flows and label them as investment expenditures. WorldCom is a striking example of such misapplication of accrual accounting.

With these corporate scandals 'aftermath, major researches focused on the variables that affect CEOs' earnings management decisions. Our study adds new evidence to the few studies discussing whether executive managers affect their firm's accounting outcomes. Previous literature have provided little evidence on the extent to which differences in managerial attitudes such as CEO overconfidence and charisma are reflected in earnings management (Davidson, Jiraporn, Kim & Nemeč, 2004; DeFond, Hann & Hu,, 2005; Hribar & Yang, 2010). Other academic researches have studied concurrent associations among CEO reputation, CEO tenure and CEO duality, and such issues as, corporate governance, firm performance and compensation (Allgood & Farrell, 2000; Milbourn, 2003; Karuna, 2009). However, there has been much little evidence of the impact of management characteristics on earnings management. Francis, Huang, Rajgopal & Zang (2008), for instance, demonstrate a significant relationship between managerial reputation and quality of earnings. They identify three competing explanations of such association: rent extraction, matching explanation and efficient contracting.

The rent extraction explanation considers reputed managers' use of earnings quality as a way to manage labor and stock market perceptions. The matching explanation predicts that selection on the part of firms gives rise to a demand for reputed CEOs for firms where earnings quality is poor. Ultimately, the efficient contracting view suggests that reputed CEOs take actions resulting in good earnings quality. The authors document a negative relationship between CEO press coverage and the quality of accruals, suggesting that firms that are more challenging to manage earnings require more reputed CEOs.

Earnings management is the use of the flexibility in accounting principles that allow managers to influence reported earnings, thereby causing reported income to be larger or smaller than it would be otherwise. We contribute to the literature by presenting further evidence that CEO characteristics have significant explanatory power for earnings management. Specifically, we propose that the decision making by CEOs can be influenced by their characteristics, in practically their reputation, expertise and duality share ownership.

Our investigation of the association between CEO characteristics and earnings management is motivated by two main reasons. First, users of financial statements rely on the managerial human aspects in their assessment of the financial reporting statements. Second, the executives' tendency to consistently manage earnings, especially the case of Jack Welch the CEO of General Electric, raise substantial questions about whether highly reputed top managers with long tenure exercise their managerial discretion to maintain their reputation as well as to report strong financial performance to the stock market. In this context, Malmendier & Tate (2009) argue that superstar CEOs manage earnings to inflate reported performance to meet market expectations of "superstar performance".

Our tests are performed on 153 French listed firms over the year 2008. We study the French context because it is characterized by weak legal institution, large number of family controlled firms, and managers usually member of the controlling family. This enable us to build our assumption for duality share ownership. We use discretionary accruals as a proxy for earnings management, and we use the frequency of press coverage as a measure of CEO reputation. Using the modified Jones (1995) model, we find that earnings management measure is significantly and positively associated with press coverage, which is the reputation proxy, with executive manager's expertise, and with duality share ownership. These findings suggest that reputed CEOs are more likely to manage earnings than less reputed CEOs. This influence intensifies when the CEO holds the largest portion of firm's equity at the same time he holds the same position as chairman of the board in the firm. Consistently, reputed executive managers are well compensated, and in order to maintain their compensation, they are more willing to manipulate their firm's reported earnings. On the other hand, CEO-chairman who acts as the majority shareholder benefits from lack of monitoring, and he is more likely to use his managerial discretion to maximize his welfare. Besides, as the French civil law fails to consistently enforce basic minority investor protection, earnings management tend to be higher when legal protection is low, because in such a country, insiders benefit from greater private control advantages which may result in stronger incentives to obscure firm performance (Leuz, Nanda & Wysocki, 2002).

The remainder of the paper is organized as follows: The first section presents theoretical background. The second reviews related research and literature that relate CEO characteristics with earnings management, specifically with CEO reputation, expertise and with duality share ownership. The next section provides a discussion of the research hypotheses., followed by the description of the empirical methodology used to test the hypotheses. Finally, we discuss the main results and report conclusions.

## **2 LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **2.1 CEO REPUTATION AND EARNINGS MANAGEMENT**

CEO reputation has never been more commendable. It can be seen as an "intangible" asset thought of as a sort of "brand" that CEOs be able to develop. In the manager's market, the reputation of managers is not only a long-term success in management line of work, but also an important proof of its ability of operating and managing. Moreover, CEO reputation plays a major role in determining company's reputation (Gaines-Ross, 2000)<sup>1</sup>. Consistent with Diamond (1989), Holmstrom (1999) and Milbourn (2003), the CEO reputation is the market assessment of his ability. Though identifying a set of measures to capture the CEO's perceived ability seems not to be a trivial work, Milbourn (2003) and Rajgopal, Shevlin & Zamora (2006)

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<sup>1</sup> The author shows that CEO reputation accounts for up to 50% of corporate reputation.

are the only authors that have aimed to empirically proxy for CEO reputation. They find that more reputed CEOs are mentioned by the financial press more often than less reputed CEOs.

Agency theory predicts that managers are motivated by their own interest and states that monitoring is crucial to evaluate their performance. However, it could not reveal why managers engage in earnings management in first place. Watts & Zimmerman (1978, 1986) applied agency theory and developed the Positive Accounting Theory (PAT) which focuses on internal contractual incentives. Compensation contract provides insight for opportunistic driven earnings management. Managers try to influence contractual outcomes of bonus plan by exercising judgment over accounting items. Furthermore, shareholders use management compensation contracts to reduce agency costs and to motivate managers to act for maximizing firm value. However, managers may expropriate investors and distort firm's true performance to gain on their performance-based contracts. Bergstresser & Philippon (2006) find that higher levels of earnings management stem from the increase of the sensitivity of CEO's overall compensation to firm share prices.

The association between CEO reputation and earnings management depends on the CEO compensation. Since a reputed CEO is, by design, well compensated (incentives such as option packages or stock-based compensation), and, in order to sustain his compensation, the CEO will increase the incentive to manipulate their firm's reported earnings. Though, Milbourn (2003) proves that, as the optimal stock-based contract depends on the CEO's reputation defined as CEO's perceived ability, the stock-based pay sensitivities are increasing in a priori reputed CEO. Furthermore, Malmendier & Tate (2009) argue that an award-winning CEO - pointed to as "superstar" CEO - extorts significantly more compensation from their firm just after the award compared with other top executives in the same company regardless the firm performance. They suggest that one external effect of having a celebrity CEO is that market and analyst perspectives for potential firm performance increase. In the current study, we expect that CEO attributes play a vital role in the design of earnings management in the firm. In fact, a CEO's reputation as a rule suffers when the firm's value is shrinking. So a reputed manager brings all his efforts together to enhance the firm's operating income giving the fact that the stock price represents the expected cash flow potentially earned.

Superstar CEO is more likely to engage in earnings management (Malmendier & Tate, 2009). Subsequent to winning an award, the incidence of earnings management increases both relative to years before the CEO won the award and relative to CEOs who do not win awards. They prove that award winning CEOs underperform after becoming celebrities. In particular, after five years since their last award, award winning CEOs are more likely to have negative earnings, which may pressure them to manage earnings in order to maintain "superstar performance" and to meet analyst expectations. The authors suggest that the pressure on celebrity CEO to report high-level performance dominates their concerns about reputation loss when their opportunistic reporting is detected. A more recent research by Francis et al. (2008) examines the direct link between CEO reputation and earnings quality. The authors prove through the rent extraction contracting that reputed CEO manipulate earnings more than non-reputed CEO, and thus firms managed by reputed CEO have poorer discretionary earnings quality.

However, the informational asymmetry between managers and shareholders leads to a lack of CEO credibility when the reputation of the executives is relatively low. Thus the latter has much to lose in terms of his/her own human capital if he/she engages himself in opportunistic rent-seeking activities (Fama, 1980, Kreps, 1990; Hayward, Rindova & Pollock, 2004). Hence, the driven force behind poor earnings management is preserving his reputation. This presumption is built on the statement of Fama (1980) that past behavior is indicative of future behavior; the manager's reputation can be considered as a state that may affect his future opportunities. The evolution of that state depends on the history of one's actions. The above discussion leads to the following first hypothesis:

**Hypothesis 1:** *There is a positive relationship between CEO reputation and earnings management.*

## 2.2 DUALITY SHARE OWNERSHIP AND EARNINGS MANAGEMENT

One of the more recent issues in European corporate governance is whether firms' CEOs also serve as the chairman of the board of directors. The literature reveals a board structure typology, the one-tier system and the two-tier system. In the one-tier system the Chief Executive Officer is also the chairman of the board, while in the two-tier system the two functions are separate. In the one-tier system type, CEO-chairman has more power to dominate, and therefore boards are thought to be as weaker monitors of executive managers than when the two roles are split, thus giving preference for the two-tier system. Davidson et al. (2005) predict that firms whose CEO held the role of chairman at once are more likely to engage in earnings management. Further, Bowen et al. (2002) prove that smoothing earnings is higher for firms with a CEO-chairman duality.

The basic cornerstone of all corporate governance approaches is the separation between ownership from control in firms; shareholders own and management controls.

While there is a conflict of interests between the firm's management and shareholders, managers pursue self interest behavior in the opportunistic sense. Kreps (1990) discusses the distinction between utility maximizing and opportunistic behavior. Prior literature focuses on the managerial ownership to measure the extent of interest alignment between shareholders and managers if the latter holds a portion of equity ownership in a firm. Kim and Yi (2005) and Cheng and Wartfield (2005) provide evidence that managerial ownership is positively associated to earnings management. However, barely few studies examine the relationship between managerial ownership and earnings management when the chairman of the board is also the CEO of the company.

Duality share ownership is the interaction between CEO-chairman duality and management ownership. Bowen et al. (2002) indicates that the separation of roles between CEO and chairman of the board can prevent earnings management activities. They indicate that earnings smoothing are higher for firms with CEO duality. Generally, a chief executive officer is responsible for the strategic plans and policies decision, whereas the chairman of the board is responsible for monitoring and evaluation of executive directors including the CEO (Wei and Laing (2001)). Therefore, unifying the role of CEO and chairman may cause lack of monitoring. On the other hand, Jensen and Meckling (1976) state that managerial ownership align managers' interests with those of shareholders. Managers who hold a significant portion of firm's equity would not take advantage of their positions because they, along with other shareholders, bear the consequences of their actions. However, Morck et al (1988) affirm that high managerial ownership induce managers to act opportunistically in order to maximize their wealth to the detriment of minor shareholders. Higher portion of equity is consistent with significant voting right and power in the board of company. Therefore, CEOs' ability to escape from control may increase, resulting in more attempts to exercise income-increasing discretionary accruals. The French firms are mostly family controlled firms. They are characterized by a strong concentration of property in the manager's hands, who is usually member of the controlling family. Over a sample of almost 510 non-financial French firms, Faccio and Lang (2002) show that 70.92% of the firms are family controlled and that 62.20% of family controlled firms have top managers (CEO or/and chairman of the board) from the controlling family, said to be "in management" member.

Then we hypothesize that:

**Hypothesis 2:** *There is a positive relationship between duality share ownership and earnings management.*

### 2.3 CEO EXPERTISE AND EARNINGS MANAGEMENT

At the beginning of their careers, executive managers endeavor to develop their career, mainly for self-achievement satisfaction. Knowing that each decision may affect the rest of their career, CEOs would not bear the risk by reporting biased earnings. Typically, CEOs with greater expertise are more able to estimate future earnings and assets accurately, to understand the complex standards and norms, and, ultimately, to apply them (Plumlee and Yohn (2010)). Nevertheless, experienced managers become more confident than non experienced managers, which lead them to upwardly biased earnings forecasts, and then to use aggressive accounting practices to meet or beat their forecasts. Hribar and Yang (2010) argue that CEO's overconfidence affects their decisions to manage earnings in two ways. The first suggests that overconfident manager issues too optimistic forecasts. So, to meet their forecasts, he will use income increasing discretionary accruals. As for the second, it stems from the argument of Miler and Ross (1975). Specifically, it indicates that, faced with biased forecasts, overconfident managers will need to attribute such earnings deficit to bad luck due to earnings management, with the belief that he will make it up in the following periods.

In critical times, seeing CEO's experience, outsiders and analysts would expect from him/her positive and proficient reactions to the confounded situation. Thus, experienced managers would benefit from their knowledge to utilize discretionary component of accruals so as to report inflated numbers.

Matsunaga and Yeung (2008) find that CEO's expertise has an impact on the firm's discretionary accruals, specifically, they find that CEOs who have experience served as CFOs in other companies have more income-decreasing discretionary accruals. On the other hand, Finkelstein (1992) classified CEO power into structural, ownership, expertise, and prestige powers, and suggesting that the expertise power affect particular managerial strategic decision making. Thus, we expect that governance expertise has significant positive effects on controlling manager behavior, specifically on the use of earnings management..

**Hypothesis 3:** *There is a positive relationship between CEO expertise and earnings management.*

### 3 SAMPLE SELECTION AND VARIABLES

#### 3.1 SAMPLE SELECTION

The sample consists of CEOs of companies listed on CAC ALLShares index of the 426 largest France companies over one-year period 2008. We mean by CEO the top ranking executive officer in the firm. When the position of CEO is held by more than one person in the event year, we consider the name of the one who held the position for most of the fiscal year. The executives' companies had to satisfy the following criteria: first, the firm is not a financial institution (SIC codes 6000-6999)<sup>2</sup>. And second, the firm's financial data are available. Two hundred and fifty seven firms are excluded from the final sample. We exclude firms belonging to financial industries due to their special accounting practices that make discretionary accruals' estimation difficult (Peasnell, Pope & Young, 2000, 2005). Even though they are privately held, these firms have to make their financial statements publicly available. Consequently, we left with 153 firms.

*Table 1. Sample Selection Procedure*

Description	Number of firms
Number of firms listed on CAC ALLShares index	426
Financial and Banking firms	96
Firms with missing financial data	58
Firms with missing data concerning their CEOs	119
<b>Firms used in the full sample</b>	<b>153</b>

We collect data on French listed companies from the AMF web site. We collect data on the number of articles containing the CEO's name and company affiliation that appear in the major European and International newspapers from Lexis Nexis database. Measure of CEO reputation based on only financial newspapers can be a noisy measure since reputation is built on manager's different aspects. We choose to refer to diverse type of newspapers, which include both financial and non-financial newspapers. Miller (2006) finds that the financial press provides economic information that is useful to firm stakeholder. Hamilton & Zeckhauser (2004) prove that in addition to the financial and business CEO news, major "entertainment" newspapers across market places offer a highly percentage of CEO stories about their personal lives, classified as "soft news" stories.

The numbers of total business-related articles are extracted from different European newspapers, and from the major International newspapers. We refer to the European newspaper articles as *EURPress* while the International newspaper articles as *INTPress*. Finally, all these articles sources are referred hereafter as *TotPress*. In total, there are 18 different International newspapers; 12 different French language newspapers; 11 different Spanish language newspapers; 13 German language newspapers; 7 Italian language newspapers and 5 Dutch language newspapers. We record the article press once regardless how often the CEO's name appears in the article.

#### 3.2 VARIABLES MEASUREMENT

##### (1) Discretionary accruals measure

Estimates of discretionary current accruals (lagged by total assets) serve as a proxy for earnings management. We use the modified Jones model to estimate the non-discretionary level of total accruals. The Jones model (1991) uses two-stage procedure to partition total accruals into expected and unexpected components. In the first stage, total accruals are regressed on the sales change and the gross level of property, plant and equipment. While in the second stage, the estimated parameters from this regression are combined with total accruals, changes in sales and plant and equipment data from the event year in order to determine the non-discretionary component of total accruals. Jones model shows its inability to capture sales-based manipulations. In an attempt to correct the model's misspecification, Dechow, Sloan & Sweeney (1995) proposed a model identical to the standard-Jones model except that the change in non-cash sales is subtracted from changes

<sup>2</sup> Financial-industry firms have different earnings reporting incentives than their non-regulator counterpart

in sales. Hence, our measure of discretionary accruals estimation is the residuals from firm-specific regression of changes in non-cash sales and gross level of property, plant and equipment.

(2) CEO's characteristics measures

- (a) CEO Reputation. Consistent with Milbourn (2003) and Rajgopal et al. (2006), the use of media coverage serves as a proxy for reputation. There is a large trend in literature to show the role of media as an information intermediary (e.g. Mullainathan & Shleifer, 2005; Tetlock, 2007). This information intermediary is crucial in reducing information asymmetry between the firm and its investors (Bushee, Core, Guay & Hamm, 2010). Other studies find that the content of business media can predict future stock returns and their volatilities, and firm asset prices (Tetlock, 2007). Milbourn (2003) presents four proxies for CEO reputation including the number of business-related articles, the matter whether the executive is being appointed from inside or outside of the firm and the industry-adjusted firm performance. To measure CEO reputation, we use European and international press releases on CEOs. The intuition behind press coverage is that it captures how parties external to the firm view the CEO. We classify CEO's with a larger number of total press coverage (CEO\_REP) as more reputed than CEO's with small number of mention in articles.
- (b) Duality share ownership. CEO duality refers to the extent that the CEO and chairman exercise the same function in the firm. It takes the value of 1 if the role of CEO and chairman are jointed, and zero otherwise. DUAL-Maj is measured as CEO's ownership divided by the firm's total ordinary shares when the CEO holds the major proportion of equity ownership in the firm and when he also acts as chairman of the board, and zero otherwise. We expect the coefficient to be positive.
- (c) CEO Expertise. Finkelstein (1992) define expertise as a way to assess manager's ability based power. He uses three proxies to measure expert power: the critical expertise power, the functional areas and positions in firm. We measure CEO expertise through functional expertise, and is defined as a binary variable that takes the value of one if the CEO holds (or used to) one of the top senior positions within other firms (CEO-chairman, CEO, COO, CFO, and President), and zero otherwise

(3) Control variables

Consistent to prior literature, we include several firm-specific characteristics that may have an impact on earnings management (e.g. Watt & Zimmerman, 1978; DeFond & Jiambalvo, 1994; Hirst, 1994; Peasnell et al., 2000).

- (a) Operating Cash Flow: Managers of firms with strong cash flow performance from operating activities are less likely to exercise income increasing discretionary accruals to increase earnings, because they are already performing well. However, firms with poor operating cash flow are more likely to manipulate earnings to mislead investors about the real numbers (Becker, DeFond, Jiambalvo & Subramyan, 1998; Lobo & Zhou, 2006). We include cash flow from operating activities as a control variable. We expect the relationship to be negative.
- (b) Market-to-book: When growth slows, managers have more incentive to misstate financial statements in order to preserve the appearance of the steady growth (Summer & Sweeney, 1998). The market to book ratio is defined as the market value of equity over its book value. It represents market expectations of future profitability growth. Thus, CEO's manage earnings using discretionary accruals in an attempt to meet such expectations. We expect a positive relationship between growth opportunities and earnings management.
- (c) Audit Quality: We include audit quality as one important control variable because prior studies found that this variable influences the magnitude of earnings management (DeAngelo, 1981; Francis, Maydew & Sparks, 1999; Gul, Lyn & Tsui, 2001). Hirst (1994) find that auditors are able to detect incentive to manage earning. The extent to which auditors are expected to detect earnings management depends on most part on the quality of audit. Big 4 auditors<sup>3</sup> are identified in the literature as higher quality auditors. Prior studies proved that Big 4 auditors are less likely to allow earnings management from their clients than non-Big 4 auditors (DeFond & Jiambalvo, 1994; Francis et al., 1999; Frankel, Johnson & Nelson, 2002; Ashabaugh, LaFond, & Mayhew, 2003). Audit quality is equal to 1 if the sample firm is audited by a Big 4 company and to zero otherwise. We expect the coefficient to be negative.

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<sup>3</sup> The Big 4 includes KPMG, PricewaterhouseCoopers, Ernst & Young and Deloitte & Touche.

- (d) Firm size: DeFond & Subramanyam (1998) and Park & Shin (2004) shows that larger firm tend to generate fewer accruals. Larger firms are more subject to scrutiny from financial investors than small firms since larger firms have greater influence on stock market (Watt & Zimmerman, 1978). Besides, larger firms usually have more sophisticated internal control systems as compared to smaller companies, which reduce the likelihood of manipulating earnings by management. However, Lobo & Zhou (2006) note that large firms may have more opportunities to overstate reported numbers since overstatement is quite hard to detect because of the complexity of their operations. This is due mainly to the evidence that large firms face more pressure to meet or beat market's expectations than smaller firms (Barton & Simko, 2002). Firm size is measured as the natural logarithm of total assets. We make no prediction about the sign of the variable coefficient.
- (e) Financial Leverage Ratio: An association between financial leverage and discretionary accruals has been reported by many researchers. For instance, DeFond & Jiambalvo (1994) prove that CEOs of highly leverage firms are more likely to employ income increasing discretionary accruals to avoid debt contract violation. More generally, firms that need to finance their investment from external capital markets are more sensitive to the implication of reported earnings on firm's equity price (Baker & Wurgler, 2002). Leverage is calculated as the ratio of total liabilities to total assets. We predict a positive coefficient for this variable.

Table 2. Variable Definitions

Variables	Definition
<i>DA</i>	Discretionary accruals
<i>EM</i>	Earnings management measured by discretionary accruals
<i>EURPress</i>	The number of articles in European newspapers in which the CEO's name appears
<i>INTPress</i>	The number of articles in International newspapers in which the CEO's name appears
<i>TotPress</i>	The total number of articles in which the CEO's name appears
<i>CEO_REP</i>	The natural logarithm of total number of publications in which the CEO's name appears at least once
<i>EXPERTISE</i>	A binary variable that takes the value of one if the CEO holds (or used to) one of the top senior positions within other firms (CEO-chairman, CEO, COO, CFO, and President), and zero otherwise
<i>DUAL_Maj</i>	The percentage of direct and indirect holding by a majority CEO when he exercises the same function as chairman of the board of directors
<i>M/B</i>	Market-to-book ratio= (Number of outstanding shares*market price) / (total assets - total liabilities)
<i>Size</i>	The natural logarithm of firm's total assets
<i>Audit</i>	A dummy variable equal to 1 if the firm is audited by a big 4 firm and 0 otherwise
<i>Leverage</i>	(Value of liabilities) / (Total assets)
<i>CashFlow</i>	Operating Cash flow scaled by Total Assets

### 3.3 STATISTICAL METHOD

To distinguish between the expected and unexpected components of total accruals, we use the modified version of Jones (1991) model introduced by Dechow et al. (1995). To set the analysis, we estimate an OLS regression models with the measure of discretionary accruals (proxy for earnings management) specified as a linear function of CEO characteristics and  $k$  control variables over the year of 2008. The regression's model is as follow:

$$EM_{i,t} = \beta_0 + \beta_1 CEO\_REP_{i,t} + \beta_2 DUAL\_Maj_{i,t} + \beta_3 EXPERTISE_{i,t} + \sum_j \varphi_{j,t} CONTROL(k)_{i,t} + \varepsilon_{i,t}$$

eq(1)

Where :

$CEO\_REP_{i,t}$ ,  $DUAL\_Maj_{i,t}$  and  $EXPERTISE_{i,t}$  are described in 3.1.2.

$CONTROL(k)_{i,t} \in \{M/B, Size, CashFlow, Leverage, Audit\ quality\}$ .

The definitions of the above variables are given in Table 1. EM represents the earnings management measure that is discretionary accruals. The coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  measure how EM proxy varies with CEO reputation, dual-maj and expertise, respectively. We predict the coefficients  $\beta_1$ ,  $\beta_2$  and  $\beta_3$  to be positive.

We use *signed* measures of earnings management. The term “signed” refers to the fact that these measures differentiate income-increasing from income-decreasing earnings management. Signed discretionary accruals are appealing for questions that specify a particular direction of earnings management (Hribar & Nichols, 2007).

We measure each firm’s total accruals directly using the following equation:

$$TA_{i,t}^* = (E_{i,t} - CFO_{i,t}) / A_{i,t-1} \quad \text{eq (2)}$$

Where,  $TA^*$  is the total accruals scaled by lagged total assets; E represents earnings and is measured using net income before extraordinary items and discontinued operations, and CFO represents cash flow from operations.

Once total accruals are calculated, we estimate discretionary accruals using the cross-sectional modified Jones model as the difference between total accruals and estimated non-discretionary accruals:

$$DA_{i,t} = TA_{i,t}^* - N\hat{D}A_{i,t} \quad \text{eq (3)}$$

NDA are estimated during the event year<sup>4</sup> with an OLS regression using the modified Jones model (1995), where changes in sales, changes in sales receivable and the level of property, plants and equipment are included as explanatory variables:

$$TA_{i,t}^* = \frac{1}{A_{t-1}} \left[ \alpha + \beta (\Delta REV_t - \Delta REC_t) + \gamma PPE_t \right] + \varepsilon_t \quad \text{eq (4)}$$

Where  $\Delta REV$  represents changes in sales;  $\Delta REC$  represents net accounts receivable and PPE represents gross property, plants and equipment and the residual term represent the Non-Discretionary Accruals.

The parameter estimates from eq (4) is then combined with data from the test period to generate the non-discretionary accruals:

$$NDA_{i,t} = \hat{\alpha} + \hat{\beta} \left( \frac{\Delta REV_t - \Delta REC_t}{A_{t-1}} \right) + \hat{\gamma} \left( \frac{PPE_t}{A_{t-1}} \right) \quad \text{eq (5)}$$

### 3.4 DISCUSSION OF RESULTS

Earnings management can be achieved by different means such as changes in accounting methods or use of accruals. This study focuses on discretionary accruals as the way to manage earnings. The methodology follows in partial the paper of Francis et al. (2008), in which they study the possible effect between manager reputation and the quality of firm’s earnings, and the paper of Karuna (2009), in which he studies the relationship between corporate governance and CEO reputation.

#### (1) Descriptive analysis and validity tests

Descriptive statistics on the press coverage are reported in Panel A of Table 3. CEO received on average 471.66 references in *TotPress*, consisting of 471.94 mentions in major European newspapers and 14.98 mentions in major International newspapers. The sample distribution is highly skewed to the right; its mean value of 471.66 is much larger than its median value of 189.5. Therefore, we use its natural log transformation and we label this measure CEO\_REP.

<sup>4</sup> i.e. during period in which earnings management is hypothesized

Table 3. Descriptive statistics on proxy variables for CEO reputation

Panel A. Proxies for CEO reputation <sup>a</sup>

	<u># Obs</u>	<u>Mean</u>	<u>std.dev</u>	<u>Min</u>	<u>Max</u>	<u>Median</u>
<i>EURPress</i>	153	471.94	736.64	0	5018	202.5
<i>INTPress</i>	153	14.98	82.31	0	1000	0
<i>TotPress</i>	153	471.66	792.95	0	6018	189.5

Panel B: Correlation among CEO reputation measures <sup>b</sup>

	<i>EURPress</i>	<i>INTPress</i>	<i>TotPress</i>
<i>EURPress</i>	1.000		
<i>INTPress</i>	0.661 (p=0.000)	1.000	
<i>TotPress</i>	0.983 (p=0.000)	0.720 (p=0.000)	1.000

Panel C: Descriptive information on press coverage <sup>c</sup>

<u>Subject</u>	<u>#articles</u>	<u>%favorable</u>	<u>%neutral</u>	<u>%unfavorable</u>	<u>%non negative</u>
CEO	200	28.00%	65.00%	7.00%	93.00%
Firm	200	41.00%	42.00%	17.00%	83.00%

**NOTES:**

Variables definitions: *EURPress* = the number of articles appearing in major European newspapers that mention the CEO's name; *INTPress* = the number of articles appearing in major newspapers which mention the CEO's name; *TotPress* = *EURPress* + *INTPress*.

<sup>a</sup> Panel A reports the mean value of each variable, where the mean is calculated across all firm-year observations.

<sup>b</sup> Panel B reports Pearson correlation. All correlations are statistically significant at the level of 0.01.

<sup>c</sup> Panel C presents descriptive analyses of 200 randomly selected articles mentioning CEOs. Articles analyzed are classified as favorable, neutral or unfavorable with respect to notes taken about the CEO in articles.

Measures of CEO reputation based on European press coverage only can be noisy since many CEO's "good" reputation is generally developed worldwide. To resolve this critical issue, the correlation between the different press coverage proxies appears to be crucial. Panel B shows that the correlations between the European, International and TotPress newspapers are positive (statistically significant at 1% level). These results signify that expanding reputation measures over worldwide newspapers do enhance the CEO's extent of reputation.

To test the validity of the press coverage-based proxy for CEO reputation, we investigate the implicit assumption that the CEO's are mentioned to underline their positive attributes. CEOs are cited in media for their contribution to their firm's performance. However, they can be mentioned otherwise to announce bad attributes such as scandals or recessions. Therefore, a higher number of press articles that mention the CEO may not reflect higher reputation.

Panel C of table 3 provides summary statistics of article quality mentioning CEO for random subsample of articles that are hand collected. Specifically, we randomly select 10 CEOs, and for each CEO we read the tone of 20 randomly-selected articles. We classify the tone of the resulting 200 articles analysis as favorable, neutral or unfavorable with respect to the CEO. We refer to the extent that CEO's content media coverage is favorable (unfavorable) to them as positive (negative) content. Based on the percentage of total articles that are favorable, and the percentage of articles that are nonnegative, 28% of these articles on average associated with these 10 CEOs are favorable, and 93% of articles are nonnegative. The results are consistent with results found by Francis et al. (2008) who find that 99% of articles read are significantly neutral to positive with respect to the CEO. This evidence confirms the idea of Park & Berger (2004) that coverage in business publications is associated with favorable assessments of the CEO on average.

A related concern with the press-coverage proxy is that it may be biased toward a particular firms or particular CEOs. CEOs in larger firms may be covered in a higher level than CEOs in smaller firms regardless his ability perceiving. This study is

not affected by such a bias since our sample includes a sample of the largest listed companies that may display quite comparable sizes in the French market.

Panel A of Table 4 summarizes CEO duality characteristics of the full sample. 59.48% of the sample of French firms have their CEO who also acts as chairman, whereas only 40.52% of the firms with separate roles. This result is consistent with the finding of Daily & Dalton (1993) who evaluate the performance for 186 smaller firms and find that 67% of the firms run *via* CEO-chairman position. However, it is quite lower compared to the results presented by Brickley, Coles & Jarrell (1997) and Xie, Davidson & Dadalt (2003) who found that more than 80% of their US sample firms have CEO duality. Joint CEO-chairmen are above twice as likely to have tenure, about 12.17 years, as compared to the separate CEO with 5.3 years. Besides, numbers show that CEO also serving as chairman holds more stocks in the firm with an average of 24.6%.

Further, unreported statistics show that 50.1% of the firms with dual positions have their CEO-chairman who acts as the majority shareholder. The results indicate that, in the French context, the incidence of CEO duality is higher for management ownership and tenure.

Summary statistics about all firm-level variables and CEO-specific variables are reported in Panel B of Table 4. First, the mean (median) for the discretionary accruals are  $-0.041$  ( $-0.037$ ) respectively with the inter quartile difference ranging from  $-0.047$  to  $-0.032$ . The mean (median) for the CEO reputation's measure are 2.25 (2.27), as compared to 3.99 (4.26) reported by Karuna (2009). The significant dwindling in the mean value is expected since my sample is smaller in term of newspapers sources<sup>5</sup>. The average of CEO-chairman duality variable is 0.161 (0.047), while the average of CEO expertise variable is 0.718 (1).

**Table 4. Descriptive Statistics about earnings management, CEO characteristics and firm-specific variables**

**Panel A: CEO duality parameters<sup>a</sup>**

Characteristics	Separate CEO and chair	Dual CEO and chair
Percentage of total firms	40.52%	59.48%
Ownership of firm's equity	5.7%	24.6%
Tenure within the firm (years)	5.3	12.17
Expertise	66.12%	81.92%

**Panel B: Descriptive statistics of the full sample<sup>b</sup>**

EM measure	# Obs	Mean	percentile 25	percentile 75	Median	std. dev
Discretionary accruals	153	-0.041	-0.047	-0.032	-0.037	0.012
<b>Independent variables</b>						
CEO_REP	153	2.258	1.897	2.277	2.298	0.684
DUAL_Maj	153	0.161	0	0.293	0.047	0.209
EXPERTISE	153	0.718	0	1	1	0.450
<b>Control variables</b>						
CashFlow	153	0.066	0.032	0.104	0.068	0.089
M/B	153	2.029	1.015	2.11	1.535	3.936
Size	153	2.668	1.882	3.334	2.559	1.072
Audit	153	0.5	0	1	0.5	0.501
Leverage	153	0.221	0.104	0.329	0.191	0.161

**NOTES:**

<sup>a</sup> Panel A reports CEO duality characteristics of the full sample, including %of total firms, managerial ownership of the CEO, CEO expertise and the CEO-chairman person.

<sup>b</sup> Panel B reports summary statistics of the discretionary accruals, CEO-specific characteristics and firm-specific characteristics.

<sup>5</sup> We use 66 major European and International newspapers, whereas Karuna (2009) uses 50 US newspapers and 112 international publications

Managers with expertise in management decision, decision control and investment strategies are more likely to hold the position of CEO-chairman. Results reported in Panel A of Table 4 show that 81.92% of the CEO-chairman of the French sample firms were, either managers of other firms or important decision agents in other companies, whereas 66.12% of the separate CEOs have a professional backgrounds.

## (2) Univariate analysis

The Pearson correlation matrix reported in Table 5 illustrates the correlations among the variables of the sample. To investigate the relation between CEO-specific characteristics and discretionary accruals, we include control variables inherent to the firm that prior research shows influence on earnings management. Across panel A, the pairwise correlations between all firm-specific control variables are relatively low (ranges between  $-0.178$  and  $0.273$ ) except for those between DUAL-MAJ and Log(Assets); Leverage and Log(Assets) and between CEO\_REP and Log(Assets) where the correlation coefficients varies between  $-0.306$  and  $0.625$ .

**Table 5. Pearson Correlation among model's independent and firm-specific variables**

	CEO_REP	EXPERTISE	DUAL_Maj	CashFlow	M/B	Size	Audit	Leverage
CEO_REP	1.000							
EXPERTISE	0.079	1.000						
DUAL_Maj	-0.178*	-0.037	1.000					
CashFlow	0.094	0.106	-0.012	1.000				
M/B	0.038	0.036	-0.010	-0.069	1.000			
Size	0.625*	0.137	-0.306*	0.112	-0.031	1.000		
Audit	0.041	-0.110	-0.145	0.107	-0.068	0.273 *	1.000	
Leverage	0.117	0.171*	0.018	-0.188*	0.134	0.323 *	0.070	1.000
VIF	1.64	1.09	1.04					

This table reports the Pearson correlation among different model's variables, and the variance inflate factor (VIF) values.

Moreover, no significantly strong correlations among the independent variables. We include all the independent variables in one regression since no problem of multicollinearity exists. The Variance Inflation Factor test confirms these results. The VIF values are around 1 which is far below the critical value of 10 (Neter, Wasserman & Kunter, 1989).

## 3.5 REGRESSION RESULTS

Table 6 shows the regression results. Our primary focus is in the coefficient estimates ( $\beta_1$ ), ( $\beta_2$ ) and ( $\beta_3$ ) relating earnings management to managerial characteristics. Specifically, relating discretionary accruals to CEO's reputation, majority CEO-chairman relationship and CEO expertise, respectively. This table provides the results for the OLS regression conducted on equation (1), where we report the coefficient estimates and t-statistics obtained from the regression.

Table 6. Estimation of Earnings Management on CEO Duality, Expertise and Reputation

	Predicted sign	coefficient estimation	t-tatistics
Intercept	?	- 0.041 ***	- 10.30
<b>Independent Variables</b>			
CEO_REP	+	0.002 *	1.71
DUAL_Maj	+	0.013 ***	3.08
EXPERTISE	+	0.004 **	2.12
<b>Control Variables</b>			
CashFlow	-	- 0.013	- 1.42
M/B	+	0.002***	3.58
Size	+/-	- 0.001	- 1.40
Audit	-	- 0.001 **	- 1.69
Leverage	+	- 0.027***	- 3.90
<b>R-squared (%)</b>		<b>25.66</b>	
<b>Adjusted R<sup>2</sup> (%)</b>		<b>20.40</b>	

## NOTES:

\*\*\*, \*\*, and \* represent significance levels at 1%, 5% and 10% levels respectively.

This table reports the coefficient estimates and t-statistics from estimating equation (eq 1). We use CEO\_REP as the proxy for CEO reputation and is measured as the natural logarithm of total number of publication in which CEO's name appears at least once; EXPERTISE is a binary variable that takes the value of one if the CEO holds (or used to) one of the top senior positions within other firms (CEO-chairman, CEO, CFO, or President), and zero otherwise; DUAL-Maj is the percentage of direct and indirect holding by a majority CEO when he exercise the same function as chairman of the board of directors; CashFlow is the firm's operating cash flow scaled by total assets; M/B is the market-to-book ratio and measures firm' growth opportunities; Log(Assets) is the proxy for firm's size; Audit is dummy variable equal to 1 if the firm is audited by a Big 4 firm and 0 otherwise, and Leverage is the financial leverage ratio.

The results show a significant positive value of  $\beta_1$ <sup>6</sup> ( $\beta_1 = 0.0029$  and t-statistics = 1.71). The positive value of  $\beta_1$  confirms that the more reputed CEOs, the more CEOs manipulate earnings with the use of discretionary accruals. This finding corroborates Hypothesis 1. Reputed executive managers are well compensated, and in order to maintain their compensation, they are more willing to manipulate their firm's reported earnings. Let's suppose an executive manager who have a performance contract, then his overall compensation is tied to firm performance (Jensen & Murphy, 1990), and, thus is based on firm's stock price. Since stock prices are the central measure of CEO performance, then the manager will endeavor to enhance the firm's operating income to inflate the stock prices. This desire to increase the value of the stock prices gave him an incentive to manipulate the accounting numbers. In other words, the sensitivity of manager wealth to stock prices shapes the propensity to engage in aggressive accounting practices. On the other hand, the stock price represents the expected future cash flows. At the end of contract or at the time of dismissal, terminal cash flow depends on the ability of the firm's CEO. Thus, efficient stock prices depends on the informativeness of the CEO contribution, which is affected in the equilibrium by the CEO perceived ability. This is why, at the time of contracting, optimal stock-based contract depends on the manager's reputation. Thus, the stock-based pay sensitivities are increasing in a priori reputed CEO (Milbourn, 2003).

Further, while there is little evidence on CEO duality share ownership and earnings management, the significant coefficient of  $\beta_2$ <sup>7</sup> ( $\beta_2 = 0.0132$  and t-statistics = 3.08) proves new evidence on the association between duality share ownership and earnings management. More specifically, the positive value of  $\beta_2$  indicates that joined CEO-chair is more likely to manipulate earnings when he/she holds higher portion of firm's equity, consistent to H2. This finding confirms the premise that dual CEO-chairman benefits from lack of monitoring, and tends to act opportunistically using his managerial discretion in

<sup>6</sup> We find the coefficient estimates of the CEO reputation variable are significant at the level of 10%.

<sup>7</sup> We find the coefficient estimates of the duality share ownership variable are significant at the level of 1%.

order to maximize his welfare. Such behavior is likely to be more announced by CEO-chair who holds the largest stake in their firms.

As for CEO expertise, results show a positive and significant coefficient estimates of  $\beta_3$ <sup>8</sup> ( $\beta_3 = 0.004$  and t-statistics = 2.12), evidence in support with our third hypothesis that experienced executive managers tend to manipulate earnings more than less experienced managers. This behavior can be explained by the evidence that overconfidence affects experienced managers' forecasting behavior which leads them to issue biased optimistic forecasts. And according to our findings<sup>9</sup> that CEOs of large French companies who have greater professional background (CEO, Chairman or CFO) happen to be more likely to hold the position of joint CEO-Chairman, they fear no control on them by internal control committee or supervisory board. Eventually, they tend to use income increasing discretionary accruals so the numbers meet their former forecasts, and, thus, preserve their prominence.

In terms of firm-specific control variables, the results show differences in significance of the coefficient estimates on the variables. We find that the coefficient of the market-to-book, as a proxy of growth opportunities, audit quality and the financial leverage variables are significantly different from zero, whereas the rest of the coefficients are not significant. The coefficient estimates of the leverage variable are not in the predicted direction. This could be interpreted by the fact that CEOs who engage in earnings management are those of lower leverage firms. The positive coefficient of the market-to-book ratio confirm prior prove of Frank Yu (2006) that firms with relative high opportunity growth tend to engage more in earnings management as compared to firms with low growth opportunities. In tough periods, when growth slows, managers may be induced to misstate financial statement in order to preserve the appearance of consistent growth (Summers & Sweeney, 1998). With regard to audit quality, we find that the coefficient of the audit quality variable is negative and significant at the level of 10%. This implies that Big 4 auditors are less likely to allow earnings management from their clients than non-Big 4 auditors. This finding corroborates the results of DeFond & Jiambalvo (1994) and Francis et al. (1999).

Finally, and as unexpected, we find that the size of the firm has negative but no significant coefficient in the regression.

To sum up, descriptive statistics and multivariate analyses are coherent with our predictions, noting that variables integrated in the model capture much of the key features of earnings management. Our tests show that CEO reputation, CEO expertise and duality share ownership explain earnings management. Our results show that experienced executive directors tend to manage earnings more than less experienced managers. It also shows that more reputed CEOs are associated with the use of discretionary accruals, which is consistent with Hypothesis 1. This impact is more accentuated when the CEO who acts also as the chairman of the board, holds the majority of firm's equity.

### 3.6 ROBUSTNESS TESTS

As a robustness check we set two additional tests. The first test is based on the first hypothesis that reputed executive managers increase their managerial discretion incentive to enhance their compensation grants. The second test verifies a simultaneous relationship between CEO reputation and CEO compensation.

#### (1) CEO compensation

Executive compensation packages contain several components which include the cash salary, stock options, restricted stock and the annual performance-based bonuses. Substantial evidence relates option and restricted stock compensation to higher degree of earnings management.

Salary-based compensation appears not, or barely, to explain earnings management<sup>10</sup>. Managers who received fixed base annual salaries would not indulge in a costly behavior, where the costs are increasing in the extent of earnings management. However, stock options component of compensation design boost the managerial incentive to use discretionary accruals in order to maximize their overall compensation. Given the convexity of the option sensitivity to share price, and at a point in time, the manager is faced with a timing option between reporting higher earnings and thus maximize his wealth, and reporting deflated numbers.

<sup>8</sup> We find the coefficient estimates of CEO expertise variable are significant at the level of 5%.

<sup>9</sup> In the previous section we find that 81.92% of the CEO-chairman are quite experienced, whereas 66.12% of the separate CEOs have a professional backgrounds

<sup>10</sup> Bergstresser & Philippon (2006) and Cheng & Waterfield (2005).

Summary statistics about executive manager compensation for the French firms sample are reported in Panel A of Table 7. The mean of total compensation is about € 1.372 million, of which around 52% is awarded in bonus and fixed salary payments, and 47% in restricted stocks and stock options. Restricted stock is present in 18.10% of French firms; stock options are present in 20.91% of French firms, while bonuses are present in 66.66% of the firms' sample. These statistics confirm the findings of Murphy (1999) that levels of pay and pay-performance sensitivities have increased over the past decades. In the US, this increase is driven primarily by a leap in stock-option compensation. However, in France, the increase is driven primarily by bonus compensation<sup>11</sup>. Thus, we measure manager's compensation, labeled *COMPENSATION*, as the sum of euro value of compensation accounted for fixed salary, stock options, restricted stocks and bonuses granted for the year of 2008, and the Black-Scholes value of unexercised stock options at the beginning of the same year.

To capture the effect of manager's wealth on earnings management, we interacte *COMPENSATION* with the measure of CEO reputation, and we test again our model in Table 6. We label the new variable as *Reputation*. The results reported in Panel B of Table 7 indicate a positive and significant association between CEO overall compensation and earnings management. Accordingly, we find a further support of our assumption predicted in the first hypothesis. CEO's compensation are intended to align the interests of managers with those of owners. However, when the CEOs remuneration depend on their reputation, this can be persuasive to boost their use of earnings management.

Table 7. CEO compensation, CEO expertise, duality share ownership and earnings management

**Panel A: Summary statistics on CEO compensation**

	Mean	Median	Max	Min	Std. Dev.	Freq (%)
Salary (€ Thousand)	469.801	274.463	3 230.600	39.318	478.879	100
Bonus (€ Thousand)	447.817	209.000	2 500.000	0	478.337	66.66
Salary and bonus payment (€ Thousand)	721.155	374.167	3 866.200	39.318	782.959	-
Stock Options (€ Thousand)	767.563	557.000	3 500.000	0	710.947	20.91
Unexercised Options (€ Thousand)	362.591	468.858	620.220	0	295.824	2.61
Restricted Stock (€ Thousand)	924.579	375.680	7 237.200	0	1 612.934	18.10
<b>Total Compensation (€ Thousand)</b>	<b>1 372.303</b>	<b>558.491</b>	<b>9 537.200</b>	<b>39.318</b>	<b>1 736.038</b>	-

**Panel B: The interaction of CEO compensation and CEO reputation and earnings management (N=153)**

	Coefficient estimation	t-statistics
Intercept	- 0.031 ***	- 6.31
<b>Independent variables</b>		
<i>Reputation</i>	0.000 *	1.76
<i>Dual_maj</i>	0.008 **	2.40
<i>EXPERTISE</i>	0.004**	1.85
<b>Control variables</b>		
<i>CashFlow</i>	- 0.000	- 0.72
<i>M/B</i>	- 0.000	- 0.41
<i>Size</i>	- 0.003 **	- 2.18
<i>Audit</i>	- 0.001 **	- 2.06
<i>Leverage</i>	- 0.020 ***	- 3.02
<b>R-squared (%)</b>		<b>21.34</b>
<b>Adjusted R<sup>2</sup> (%)</b>		<b>19.31</b>

\*\*\*, \*\*, and \* represent significance levels at 1%, 5% and 10% levels respectively.

<sup>11</sup> Brown (2002) indicates that in the US, the percentage of the CEO's remuneration paid in stock options rose from 27% in 1992 to 60% in 2000. However, according to the report of the Towers Perrin consultancy (2005), the use of stock options increased only by 5% in France between 2001 and 2004. This is due to the difference in corporate governance systems. In France, ownership is concentrated and control is exercised mainly by families, that is why CEO's stock options-based compensation have been considered to be less necessary to solve the agency problem.

## (2) Endogeneity test : Simultaneous relationship

In the robustness test, we verified that the level of CEO compensation may influence the reputed CEO's decision to manage earnings. However, it remains crucial to verify whether CEO compensation have a reversed impact on CEO reputation. To test the endogeneity of CEO reputation, we set the following simultaneous equations:

$$\left\{ \begin{array}{l} CEO\ reputation_{i,t} = \alpha_0 + \alpha_1 CEO\ compensation_{i,t} + \sum_j \phi_{i,t} CONTROL(l)_{i,t} + \mu_{i,t} \quad eq(6) \\ CEO\ compensation_{i,t} = \omega_0 + \omega_1 CEO\ reputation_{i,t} + \sum_j \psi_{i,t} CONTROL(p)_{i,t} + \nu_{i,t} \quad eq(7) \end{array} \right.$$

Where

Control(l)<sub>i,t</sub> ∈ { Gender, Age, Tenure, Size, M/B}

Control(p)<sub>i,t</sub> ∈ { Duality, ROE, CashFlow, ROA, Size, σ(Sales)}

As CEO Reputation is an insubstantial asset, it can be easily affected by other human factors as well as by external factors inherent to the firm. We include CEO specific characteristics in equation (6) as control variables that encroach on the market assessment of the CEO's ability, and we use firm-specific variables to encompass the external factors. Older CEOs and CEOs that holds in their position with the firm for long periods are more likely to build and then develop better reputation than younger and less seasoned CEOs. Though, in equation (7), executive manager's compensation grants depends mainly to CEO performance.

Residual from estimations of eq (6) and (7) are correlated, which lead to inflated t-statistics. To resolve this issue, we estimate (6) and (7) simultaneously using 3SLS model and we use the Hausman test to examine the endogeneity of CEO reputation and CEO compensation. The estimation results of the simultaneous equations system are reported in table 8.

**Table 8. Additional test: Simultaneous estimation of CEO reputation and CEO compensation**

	Endogeneous Variable			
	CEO Reputation		CEO Compensation	
	Coefficient Estimation	z-statistics	Coefficient Estimation	z-statistics
Intercept	-5.359	-0.61	3.497	3.22***
COMPENSATION	0.290	2.41**		
Gender	0.790	0.42		
Age	0.032	1.17		
Tenure	0.163	2.05**		
Size	0.277	5.18***		
M/B	0.049	0.44		
CEO-Rep			0.611	0.76
ROE			0.000	0.02
σ(Sales)			0.362	4.03*
ROA			-0.023	-0.26
Size			0.123	2.37**
CashFlow			0.000	0.92
Duality			0.064	1.35
<b>P-value (Hausman Test)</b>	<b>&gt; 5%</b>			

## NOTES:

\*\*\*, \*\*, and \* represent significance levels at 1%, 5% and 10% levels respectively.

This table reports the coefficient estimates and z-statistics from estimating system of simultaneous equation (eq 6 and 7). Compensation is the sum of euro value of CEO's total compensation; Gender is a binary variable that takes the value of 1 if the CEO is a man and 0 otherwise; Age is the CEO's age; Tenure is the number of years the CEO held in his position as CEO within his firm; ROA is the return on average assets,  $\sigma(\text{Sales})$  is the standard variation of firm's sales and ROE is the return on equity.

Results reported in Panel B of Table 8, show positive and significant coefficient estimates of CEO compensation (z-statistics = 2.41), evidence in support with our assumption that CEO compensation grants induce reputed executive managers to manipulate reported earnings.

In terms of CEO-specific control variables in equation (6), we find that CEO tenure is significant and positive. Approximately, 2.7% of the executives in our sample are female, where none of them occupies the function of joint CEO-chairman. As for firm-specific factors, firm size explain a significant part of the variation on CEO reputation.

However, in equation (7), seeing the coefficient estimates of executive director reputation are non significant (z-statistics = 0.76), we do not find consistent evidence of a relation between CEO compensation and their reputation. In other words, executive reputation remains untouchable no matter the manager's compensation package.

#### **4 CONCLUSION**

Overall, earnings management literature is a recent issue that appeared in the last thirteen years and provides only modest insights for standard regulators. Prior research have tested the existence of earnings management and examined why it does occur. Others examine the association of earnings management to firm-specific characteristics such as performance, size, and board structure among others. However, earnings management may be affected by many other factors such as CEO-specific characteristics. This study tackles an interesting and important research question of whether CEO-specific characteristics, specifically reputation, expertise and duality share ownership, affect earnings management. We use discretionary accruals as proxy for earnings management and press coverage as proxy for CEO reputation. To ensure that the articles do not reflect CEO infamy rather than reputation and to investigate the implicit assumption that the CEO's are mentioned to underline their positive attributes, we provide a validity test of CEO reputation measure.

Our empirical study conducted on a sample of 153 French firms observed over the year of 2008 leads to two main conclusions. First, we find that there is a significant positive relation between level of discretionary accruals and CEO reputation. This result indicates that the more reputed CEO, the more CEO manipulates the reporting earnings with the use of discretionary accruals. The association between CEO reputation and earnings management depends on the CEO compensation. So, as reputed CEO is, by design, well compensated (incentives such as option packages or stock-based compensation), and, in order to sustain his compensation, the CEO will increase the incentive to manipulate their firm's reported earnings. Second, consistent with previous finding of Daily & Dalton (1993), we show that 59.48% of the sample firms have their CEO who also acts as chairman of the board and 24.6% of these CEO-chairmen act as majority shareholders, and we find that, in the French market, earnings management is more likely to occur in firm whose CEO also join the same function of chairman and when he holds the higher portion of firm's equity. This suggests that dual CEO-chairman benefits from lack of control and uses his managerial discretion to maximize his benefits. Such behavior is likely to be more announced by CEO-chair who holds the largest stake in their firms. Finally, results provide evidence on the relationship between CEO expertise and the use of earnings management. specifically, it shows that expertise affects positively CEO's behavior to use aggressive earnings management. Experienced managers tend to display biased optimistic estimations. Alternatively, when real numbers appears to be disparate with the former forecastings, they end up with income increasing earnings manipulation in order to meet the upward estimated numbers.

It is difficult to infer from the study clear answers to questions of interest to both standard setters and investors, such as how CEO's characteristics affect earnings management and what are the channels through which managerial characteristics affect earnings management. This limitation in this study suggests that there is opportunity for further research on this field.

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