

The Effect of Independence Audit Committee on Earnings Management: The Case in French

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Abstract *Corporate failures and accounting scandals (e.g. Enron, Worldcom cases etc.) have provided a strong incentive to regulators to consider the major role that audit committees can play. This current study extends the Piot and Janin (2007) study and examines the relationship between independence audit committee and the proceeded measures of earnings management. Using a sample consisting of 279 firm-year observations concerning the years ranging from 2002 to 2005, the results of this study shows that the audit committee independence is linked to earnings management. Yet, contrary to the intentions of new directives promulgated by several ruling bodies, it seems clear to us that a totally-independent audit committee does not influence earnings management.*

Key words Earnings management - Audit committees – Independence

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1. Introduction

In front of the recurrent developments noticed in the business environment, the market requirements along with the flexibility accorded by the accounting systems, company managers are more and more incited to manage earnings numbers. For the sake of restricting discretion practised by firm managers, a control mechanism of internal type has to be implanted within the board of directors, that is, the audit committee.

Earnings management has been the major preoccupation of the ruling bodies even before the accounting scandals (e.g., Enron, WorldCom) took place. Indeed, for several years, the ruling bodies have highlighted the importance of audit committees for obtaining more reliable financial states. The purpose of reports, recommendations and principles (e.g. the Blue Ribbon Committee (1999) and the Sarbanes-Oxely Act (U.S. Congress, 2002, Sec. 407) in the United States, the Smith Committee report in the United Kingdom (2003) and the “Viénot, 1995, 1999” and Bouton (2002) reports in France) dealing mainly with the efficiency of control systems was to develop a systematic way to reduce earnings management. Consequently, the majority of ruling bodies have come up with the recommendation of setting up independent, competent and active audit committees.

In this respect, the present research highlights the idea that audit committees consisting mainly of members who are independent from the company can reduce earnings management practised in an opportunistic way by the firm managers (Klein, 2002, Yang and Krishnan, 2005, Bradbury et al., 2006 etc.). Within the framework of their research made on a sample consisting of 120 major French listed firms from 1999 to 2001, Piot and Janin (2007) have demonstrated that the presence of an audit committee (but not the committee's independence) curbs upward earnings management. In this study we extend the Piot and Janin (2007) study and we examine the effect of audit committee's independence on earnings management in the French context from the period 2002 to 2005.

The empirical evidence obtained from our study shows that the audit committee independence is linked to earnings management. Yet, contrary to the intentions of new directives promulgated by several ruling bodies, it seems clear to us that a totally-independent audit committee does not influence earnings management. Thus, our results and empirical observations might indicate that the proposed corporate governance rules in France (The bouton (2002) report, The *Financial Security Law (2003) etc.*) have improved the integrity of financial reporting.

The remainder of this article is organized as follows. In the next section, a general review of empirical literature will be presented for the purpose of deducing the main hypotheses of this research. Next, we define our methodological approach and empirical model. The last section presents our achieved results as well as the research conclusions.

2. Related research and hypothesis development

Based on the implicit hypothesis indicated by the SEC, the NYSE and the NASDAQ stating that earnings management and weak governance mechanisms are positively interrelated, Klein (2002) has intended to examine the relationship between earnings management and the audit committees' independence. The author advanced the hypothesis that the independence of audit committees is negatively linked to earnings management. Indeed, in her empirical study, she resorted to a sample consisting of 692 firm-year observations. After establishing certain links among the major control variables (relative to discretionary accruals and audit committees composition) and earnings management (measured by discretionary accruals), Klein (2002) has noticed that earnings management is less pronounced with audit committees predominantly formed by independent administrators. She has also discovered a negative link between discretionary accruals and the percentage of audit committee's external administrators.

Bradbury *et al.* (2006) have, in turn, examined the relationship existing between the audit committees' independence and earnings management. Given the fact that independence constitutes an essential quality for the audit committee to be able to carry out its supervisory role, the authors have supposed the existence of a negative relationship between the percentage of external administrators within the audit committee and discretionary accruals. As a conclusion to their empirical research, they have stressed the fact that the exclusively-independent audit-committee members are closely connected with weak discretionary accruals. This is, indeed, conforming to the requirements of the regulating organisms relative to audit committees' independence.

Piot and Janin (2007) have investigated the impact of various audit quality dimensions (i.e. audit committee existence and independence) on earnings management for a sample of 120 major French listed firms during the period of 1999-2001. By using an OLS regression, the authors found that the presence of an audit committee (but not the committee's independence) curbs upward earnings management. The Bouton report (2002) recommends that the committee should be composed of independent directors (Two-thirds of the audit committee consist of independent members who can understand the operations and financial statements of the firm). Thus, we predict a significant negative association between independence audit committee and earnings management in the French context during a more recent time. Therefore:

Hypothesis: There is a negative relationship between the presence of independent audit committee and earnings management.

3. Research methodology

3.1. Research sample and data

The sample relative to this study comprises some French firms disposing each of an audit committee within its board of directors. We have followed the recommendations of some specialized works in the accounting area (see, for instance, Yang and Krishnan, 2005) which have excluded firms belonging to particular regulation industries because of their special regulatory environments and unique financial structures. Having checked information provided by our data sources, we have retained a sample consisting of 77 French firms of the SBF 250 regarding the period ranging from 2002 to 2005. Owing to the lack of data, our sample includes just 279 firm-year observations.

3.2. Empirical model

Our study examines the relationship between earnings management and the audit committees' independence. As far as our empirical investigation is concerned, we are making appeal to the modified Jones model for the sake of estimating the discretionary accruals. It is presented in the following way:

$$TA_{it}/A_{it-1} = \alpha_0 (1/A_{it-1}) + \alpha_1 [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \alpha_2 (PPE_{it}/A_{it-1}) + e_{it} \quad (1)$$

where, A represents total assets, ΔREV is the change in revenues, ΔREC is the change in net receivables, PPE represents the amount of property, plant, and equipment.

Discretionary accruals are calculated as being the residues of regression (1). By referring to the previous works specialized in the accounting area (Becker et al., 1998, Klein, 2002, etc.), we are making use of discretionary accruals absolute value. These residues are considered as being the dependent variable of our empirical model, presented as follows:

$$ACCRUALS_{it} = \beta_0 + \beta_1 ACIND100_{it} + \beta_2 ACIND67_{it} + \beta_3 ACNUMBER_{it} + \beta_4 LEV_{it} + \beta_5 SIZE_{it} + \beta_6 BIG_{it} + \varepsilon_{it} \quad (2)$$

With:

ACCRUALS: discretionary accruals absolute value.

ACIND100: 1 for firms that have a 100 percent independent audit committee and 0 otherwise.

ACIND67: 1 for firms where two-thirds of the directors on the audit committee are independent and 0 otherwise.

ACNUMBER: the number of audit committee directors.

LEV: total debt divided by total assets;

SIZE: natural logarithm of the firm's total assets.

BIG: 1 if the firm is audited by at least one Big auditor, 0 otherwise

4. Empirical results

4.1. Descriptive statistics

The descriptive statistics for the independent variables used within the scope of this empirical analysis are reported in tables 1. Concerning the period ranging from 2002 to 2005, the table gives the mean, minimum and maximum values as well as the standard deviations of variables introduced in our empirical models.

Table 1. Descriptive statistics for the independent and the control variables

Variables	Obs	Minimum	Maximum	Mean	Std. Dev.
ACIND100	279	0	1	0.3189	0.4669
ACIND67	279	0	1	0.5698	0.4959
ACNUMBER	279	1	10	3.8960	1.5172
LEV	279	0.00014	2.1213	0.3786	0.2560
SIZE	279	10.1782	25.1852	17.4012	3.8157
BIG	279	0	1	0.8494	0.3582

As indicated in table 1, ACIND100 mean value is equal to 0.3189. This result suggests that the mean value of independent administrators within the audit committee is roughly of the order of 30 %, while at the level of Klein's (2002) paper this value is 43.4 %. In the same respect, it is worth clarifying that 56.98 % of companies constituting our sample of study have set up audit committees consisting mostly, more than 2/3, of independent members. Hence, the first ensuing observation to be made is that: companies in question are aware of the importance of setting up audit committees within their boards of directors consisting mainly of independent administrators. Thus, they are implementing, consequently, the recommendations reports elaborated by the ruling bodies seeking to improve the efficiency of the audit committees. The audit committees consist, on average, of 4 members, as indicated by the ACNUMBER's mean value (3.8960). This figure represents, generally, a minimum required by the recommendations and reports produced by the ruling organisms.

4.2. Analysis of the correlations matrices

In the following part, we are presenting the Pearson's correlations coefficients among the various independent variables of the empirical model. These correlations are exposed in table 2, as follows:

Table 2. Correlation among variables in regression (2)

	ACIND100	ACIND67	ACNUMBER	LEV	SIZE	BIG
ACIND100	1.000					
ACIND67	0.5946 ^{***}	1.000				
ACNUMBER	-0.0800	-0.0405	1.000			
LEV	-0.0285	-0.0159	-0.0983	1.000		
SIZE	0.0914	0.1443 ^{**}	0.3202 ^{***}	-0.3558 ^{***}	1.000	
BIG	-0.0345	-0.0620	-0.0157	0.1327 ^{**}	-0.1553 ^{***}	1.000

With:

* Significant coefficient at 10 %.

** Significant coefficient at 5 %.

*** Significant coefficient at 1 %.

As explained by the above-mentioned tables, all the correlation coefficients are inferior to 0.75, which is the limit drawn by Kennedy (1985), a level starting from which the co-linearity phenomenon becomes more and more stressed. It follows from this that the correlation among the explaining variables introduced throughout our models can be considered to be acceptable.

4.3. Results of the multivariate analyses

We are using equation (2) for the aim of examining the impact of the audit committees' characteristics on earnings management. The multivariate results of equation (2), employing as a dependent variable the absolute value of discretionary accruals, are supplied in table 3.

While examining the specialized literature in the field of accounting, we can notice that the proportion of independent administrators in the audit committee influences negatively the earnings management. For the aim of examining this relationship, we are going to refer to several recommendations made by some ruling bodies relative to the proportion of independent administrators within the audit committee. ACIND100 is coded 1 if the company has an audit committee composed of an absolute majority of independent administrators, and 0 otherwise. ACIND67 is coded 1 if the company has an audit committee containing 2/3 of independent administrators, and 0 otherwise. In fact, within the framework of our study, and by referring to Klein's (2002) and Bradbury et al. (2006) works, we are not introducing these variables within the same empirical model, as shown in table 3. ACIND100 and ACIND67 are introduced into models 1 and 2 respectively.

Table 3. The effect of audit committee characteristics on earnings management

Variables	Expected Sign	Model 1	Model 2
Constant		0.038 (0,676)	0.042 (0,634)
Independent variables			
ACIND100	-	0,012 (0,408)	
ACIND67	-		-0,054 ^{***} (0,000)
Control variables			
ACNUMBER	-	-0,008 ^{**} (0,043)	-0,007 [*] (0,062)
LEV	+	-0.015 (0,595)	-0.018 (0,513)
SIZE	-	-0,003 (0,500)	-0.001 (0,713)
BIG	-	0,067 ^{**} (0,013)	0,067 ^{**} (0,011)

With:

* Significant coefficient at 10 %.

** Significant coefficient at 5 %.

*** Significant coefficient at 1 %.

As table 3 indicates, coefficient associated to ACIND67 is negative and statistically significant at a threshold of 1 %. This result consolidates the idea that the audit committee independence is linked to earnings management. Yet, contrary to the intentions of new directives promulgated by several ruling bodies, it seems clear to us that a totally-independent audit committee does not influence earnings management. Indeed, the coefficient associated with the variable ACIND100 has a positive sign (0,012) and is statistically non significant (t = 0,408). These first results seem to us confirming with the Klein's (2006) conclusions. Indeed, according to her, there exists no significant relationship between earnings management and the fact of having an audit committee entirely made up of independent administrators.

The obtained results allow us to confirm the existence of a negative relationship between the audit committee's size and earnings management. Indeed, the coefficient associated to the variable ACNUMBER is negative and statistically significant. This result is in conformity with the works elaborated by Choi *et al.* (2004) as well as Yang and Krishnan (2005) and reveals to us the importance of increasing the number of administrators taking part in the audit committees to better perform its role of control. Similarly, our empirical results suggest that the ruling bodies need to increase the minimum size of the audit committee set within the board of directors for the aim of improving its performance.

Finally, the other control variables do not conform to the theoretical predictions. These results are consistent with the findings of Abaoub and Ben Amar (2009). The level of debts (LEV) and the company size (SIZE) are not connected to earnings management. Consequently, the hypotheses formulated at the level of positive theory are not confirmed. This result can be explained by the fact that the checking of both hypotheses within the French context (other than the Anglo-Saxon one) does not seem to be relevant (Breton and Schatt, 2003). The coefficient associated to the variable BIG has a positive sign at the level of the two empirical models and is statistically significant. This does not confirm the work results made on a sample of American companies (see for instance Becker *et al.*, 1998 and Francis *et al.*, 1999's works) which demonstrate that an audit with high quality is likely to limit the scope of discretionary accruals. Hence, our result is coherent with the least judicial risk incurred by the renowned audit firms in France, with respect to the U.S environment more active at this level (Piot and Janin, 2004). Moreover, the setting up of audit committees within the boards of directors constitutes a first filter enabling to restrict earnings management. In other words, as indicated by Piot and Janin (2004), the audit committees would be more associated to a greater firm accounting carefulness. Within the framework of their research made on a sample consisting of 102 French firms of the SBF120 over the period 1999-2001, these authors have demonstrated that this carefulness would correspond to roughly 5% of the asset.

4.4. Robustness test

Discretionary accruals are often measured with noise (Kothari *et al.*, 2005). In order to check the robustness of our results, we estimate the discretionary accruals by means of the modified Jones model with ROA (proposed by Kothari *et al.*, 2005). Table 4 presents the results of the regression (2) by measuring the discretionary accruals through the Kothari *et al.* (2005) model. Thus, it seems that the already-mentioned results remain largely unchanged.

Table 4. The effect of audit committee characteristics on earnings management +++

Variables	Expected Sign	Model 1	Model 2
Constant		0.025 (0,686)	0.029 (0,639)
Independent variables			
ACIND100	-	0,011 (0,296)	
ACIND67	-		-0,033*** (0,001)
Control variables			
ACNUMBER	-	-0,005* (0,082)	-0,004 (0,114)
LEV	+	-0.011 (0,570)	-0.013 (0,489)

Variables	Expected Sign	Model 1	Model 2
SIZE	-	-0,001 (0,606)	-0.0008 (0,816)
BIG	-	0,030** (0,104)	0,030* (0,098)

With:

* Significant coefficient at 10 %.

** Significant coefficient at 5 %.

*** Significant coefficient at 1 %.

+++ Earnings management is measured by means of the modified Jones model with ROA (proposed by Kothari et al., 2005). It is presented in the following way:

$$TA_{it}/A_{it-1} = \alpha_0 (1/A_{it-1}) + \alpha_1 [(\Delta REV_{it} - \Delta REC_{it}) / A_{it-1}] + \alpha_2 (PPE_{it}/A_{it-1}) + \alpha_3 ROA_{it} + e_{it} \quad (1)$$

where, A represents total assets, ΔREV is the change in revenues, ΔREC is the change in net receivables, PPE represents the amount of property, plant, and equipment, ROA is defined as the net income before extraordinary items scaled by lagged total assets.

5. Conclusion

Following prior work, managers have incentives to manage earnings. An audit committee plays an important monitoring role to restrict discretion practised by firm managers. Within the framework of their research made on a sample consisting of 120 major French listed firms from 1999 to 2001, Piot and Janin (2007) have demonstrated that the presence of an audit committee (but not the committee's independence) curbs upward earnings management. In this study, we extend the Piot and Janin (2007) study and we examine whether corporate governance, as measured by independence audit committee, is associated with less income-increasing earnings management in the French context from the period 2002 to 2005.

Empirical results have shown that the audit committee independence is linked to earnings management. Yet, contrary to the intentions of new directives promulgated by several ruling bodies, it seems clear to us that a totally-independent audit committee does not influence earnings management. Thus, our results and empirical observations might indicate that the proposed corporate governance rules in France (The Bouton (2002) report, The *Financial Security Law (2003) etc.*) have improved the integrity of financial reporting. Hence, the ruling bodies have to pursue more effort on audit committees, and above all to stiffly intensify the recommendations relative to the characteristics of this committee.

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