The Impact of Non Executive Directors Fees, Board Meeting Frequency and Non Executive Directors Meeting Frequency on Earnings Management

Sinan Abbadi and Abd Al-Nasser Al-Zyoud

ABSTRACT

This paper investigates whether the extent of opportunistic earnings management (measured by discretionary accruals) is related to non executive directors’ commitment. Based on a sample of UK companies, we find that non executive directors’ commitment is an important factor in constraining the inclination of managers to engage in earnings management which supports the argument that not only the independence of directors but also their commitment that reduces earnings management.

Our findings have implications for stakeholders and policymakers in that we find non executive directors’ remuneration is an important mechanism of corporate governance. This result criticizes the loose chairman independence criteria recommended by the code.

Keywords: Earnings Management; Non Executive Directors’ Commitment; Corporate Governance.

INTRODUCTION

The last two decades have witnessed a series of recent corporate accounting scandals across the United States and Europe (e.g. Enron, HealthSouth, Parmalat, Tyco, WorldCom, and Xerox). A central part of these accounting scandals was usually the phenomenon of earnings management (Goncharov, 2005). Earnings management (hereafter, EM) has been a great and consistent concern among practitioners and regulators and has received substantial consideration in the accounting literature. It has been argued that EM behaviour veils the true financial results and position of businesses and blocks out facts that stakeholders ought to know (Loomis, 1999).

EM occurs when managers purposely intervene in the external financial reporting process to manipulate the reported accounting numbers to mislead stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers in order to obtain personal gains or specific interests at the expense of shareholders (e.g. Schipper, 1989; Healy and Wahlen, 1999; Dechow and Skinner, 2000).

The current study is important for three main reasons. First, although many prior studies have investigated the relationship between corporate governance mechanisms and the inclination of managers to engage in EM in recent years, it is not quite clear there is much greater understanding of this issue now than there was when the matter was first considered. The empirical investigation of this relationship has produced a very wide literature that used different samples,

---

1 Management may have various incentives to manage their firm’s earnings. These include when a firm reported a loss in the previous financial year; influencing short-term share prices and fulfilling capital market expectations; carrying out lending contracts clauses, and obtaining bonus in presence of management compensation contracts (Healy and Wahlen, 1999; Dechow and Skinner, 2000).
covered many time-periods, and revealed mixed results. Second, Prior literature is mainly US-based. To the best of our knowledge, there is little research into the relationship between corporate governance mechanisms and managers’ engagements in EM in the UK (see for instance, Peasnell et al. 2000, 2005). Hofstede (2001) documents that, while the U.K. and U.S. are similar in many respects, various organizational differences exist. In terms of corporate governance recommendations numerous international accounting research identifies a number of differences in the structure and composition of boards, executive compensation levels and audit committees functions (Monks and Minow 2004; Coffee 2005; Ferguson et al. 2004).

Not only corporate governance but also the notion of earnings management is different from the two countries. Brown and Higgins (2001) argue that the extent to which U.S. managers manage earnings is significantly higher than their counterparts in the U.K. It is thus considered useful to extend the prior empirical evidence by reference and comparison to the UK context.

We use an alternative measure of board activity by examining the association between number of meetings of non-executive directors, without the presence of executive directors, and the tendency of managers to engage in EM. Additionally, the present paper examines the potential impact of non-executive directors’ fees on EM.

Using a sample of UK firms, we examine whether the magnitude of discretionary accruals (the proxy for EM) is related to non executive directors (hereafter NED) commitment. We find that NED fees significantly reduce EM. However, we find no significant relation between other NED commitment measures and the likelihood of EM.

The remainder of the paper is organised as follows. The next section discusses the relevant empirical literature and the hypotheses development. A further section describes the research design and the empirical predictions. The main findings are then discussed. In the final section conclusions are drawn.

1. **Prior Studies and Hypotheses**

On theoretical grounds, it has been argued that managers are required to produce reliable and relevant financial statements to communicate with shareholders to reduce the asymmetric information. Jensen and Meckling (1976) model the contractual relationship between agents (managers), who may manage and manipulate accounting choices to affect earnings and, therefore, exploit their accessibility to the firm private information to pursue their own interests, and principals (shareholders), who do not have sufficient monitoring power over management decisions. Such absence of control may stimulate managerial opportunistic behaviour and increase agency costs.

Fama and Jensen (1983) argue that firms need a system that can limit these costs. We argue that board characteristics are important mechanisms of that can constrain EM, as a proxy for agency costs.

### 2.1.1 NED Commitment–Board Meeting Frequency

Many studies have examined the relationship between corporate governance effectiveness and EM and found that governance practices effectively monitor managerial decisions and, therefore, limit managerial opportunistic behaviour (see for example, Beasley 1996; Dechow et al. 1996; McMullen and Raghunanadan, 1996; Peasnell et al. 2000, 2005; Xie et al. 2003; Park and Shin, 2004; Kim and Yi, 2006; Chtourou et al. 2008).

One perspective of corporate governance not sufficiently explored is NED commitment. NED commitment can be measured by several governance mechanisms such as their involvement in board meetings...
and their activity fees. Prior research has extensively investigated independent and size mechanisms such as board independence and board size. Notwithstanding, to the best of our knowledge there are few studies that have investigated the impact of board meeting frequency on EM. We argue that this governance practice is extremely important as active boards that meet frequently should be able to devote more time in monitoring the integrity of financial reporting, and therefore effective boards are more likely to constrain EM.

Supporting this view, Xie et al. (2003) argue that a board that rarely meets may only have time for signing management plans and listen to presentations and, therefore, may not have the time to focus on issues such as EM. Xie et al. (2003) used a sample of 282 firm-year observations and found that EM is negatively related to board number of meetings.

However, Ebrahim (2007) used a sample of manufacturing firms for years 1999 and 2000 and expected the negative relation between EM and both board and audit committee independence to be mediated by their activity. His results support the expectation that abnormal accruals are even much lower when independent audit committees are more active but they do not show any evidence that board activity mediate the relation between EM and board independence. This leads to our first hypothesis, stated in its alternative form:

H1: There is a negative association between board meeting frequency and earnings management.

2.1.2 NED commitment – Non-executive Directors Meeting Frequency

We also examine whether NED meeting frequency, without the presence of executive directors, could constrain managerial opportunistic behaviour toward the firm earnings. According to the Combined Code on Corporate Governance (2003), one of the responsibilities of NED is to satisfy themselves on the integrity of financial information and that financial controls and systems of risk management are robust and defensible.

The Code also emphasizes that “The chairman should hold meetings with the non-executive directors without the executives present” (p5). The NED responsibilities should have a direct impact on shareholders’ perception of the firm’s financial reporting integrity and quality which in turn may constrain the inclination of managers to engage in EM. NED meetings can give some freedom and courage for those directors to discuss controversial issues they may not be raised in normal board meetings.

Song, et al. (2004) conduct a survey of FT 500 UK company on the operations of UK audit committees. They report that independence is the most significant attribute of an audit committee member. Lack of time is perceived to be the greatest impediment to audit committee effectiveness. They added that pressure from executives is still one of the prevalent problems even after corporate governance reforms.

It seems that NED is the key element to resolve these shortcomings (dependence, Lack of time, pressure from executives). NED is supposed to be independent and his independence would lead to less pressure from other parties, as well as independent NED meeting is a single for devoted time and efforts for the firm affairs which resolve the previous shortcomings.

A common feature for NED is that the majority of them are part time employed directors as they usually have another full time directorship. For strategy making purpose as one of NED roles2, these various positions and experience make many NED so well suited for such a strategic role.

2 However, academics have not been able to provide convincing evidence (Dechow and Skinner 2000).
However, for their monitoring role this can be a drawback as they are involved in a number of businesses that may clash and they may miss some board meetings or cannot be as involved as they suppose to be. In our study, we are more concern about the monitoring role of NED rather than their strategic making role as the monitoring role is the one which may constrains EM practices.

Charles, (2005) argue that NED must rely on the information they receive from staff and external advisers and this has not previously been a problem since their role has traditionally been one of strategic guidance. But with corporate governance high on today's agenda, it's questionable whether non-executive directors should be so reliant on what they are told; it follows that the time non-executive directors need to dedicate to the role will be significantly increased.

Thus, holding their confidential meetings besides attending the normal board meeting is essential source of their firm information that they cannot afford to miss.

On the other hand, the promising role of NED can be deterred by some reality facts such as, Higgs' (2003) study that cover more than 600 executive and non-executive directors of UK-listed companies and found that 48% NED were appointed through personal contact with a board member, while only 4% were appointed through a formal interview. He added that 62% of NED had never had any training for the job and only 38% were given objectives for the role. This leads to our second hypothesis, stated in its alternative form:

\[ H_2: \text{There is a negative association between non-executive directors meeting frequency and earnings management.} \]

2.1.3 NED commitment - Non-executive Directors Fees

Many empirical studies find negative associations between NED share ownerships and EM (see for example, Beasley, 1996; Chtourou et al. 2008). In this paper, we use the NED fees, as a proxy for NED efforts and activity. NED is usually working full-time in another firm. Taking into account the highly competitive market for those directors, it is plausible to believe that effective NED would usually set in highly paid firms’ boards. Otherwise, they may not devote the time and commitment to efficiently conduct their role.

We assume that the workload of NED contributes to the determination of the fees paid. NEDs are required to spend more time and efforts in the role and they will expect to be remunerated accordingly. This leads to our fourth hypothesis, stated in its alternative form:

\[ H_4: \text{There is a negative association between non-executive directors fees and earnings management.} \]

3. Research design and empirical predictions

3.1 Sample Description

The initial sample population chosen for this study included FTSE250, the largest 250 companies by market capitalization listed on the London Stock Exchange (LSE), in 2006. An important justification for choosing these companies is that they cover a broad range of industrial and commercial activities and account for a significant portion of the UK economic output.

Financial sectors were left out of the study because the discretionary accruals model does not apply to financial industries (e.g. Peasnell et al., 2000; Chtourou et al., 2008). We further exclude companies working in regulated and mining industries because of the differing practice of income recognition in regulated industries and the market value of mining firms differs from other firms as it includes other major factors, such as value of any real operating options (e.g. Brennan and Schwartz, 1985).

Corporate governance and earnings management variables were obtained from corporate annual reports and DataStream respectively. Deleting firms with
missing variables left a final sample of 91 usable observations, for which all appropriate data was available.

3.2 Dependent Variable Measurement

The dependent variable used in this study is a discretionary accrual estimate that measures the extent of opportunistic earnings management. In order to estimate the discretionary accruals, it is first necessary to estimate total accruals. Using cash flow approach, total accruals of firm $i$ in year $t$ ($TACC_{it}$) are computed as follows:

$$EARN_{it} - CFO_{it} = TACC_{it}$$

Where $EARN_{it}$ is the earnings before extraordinary items and discontinued operations of firm $i$ in year $t$, $CFO_{it}$ is the net cash flows from operating activities of firm $i$ in year $t$, and $t = year$. Total accruals ($TACC_{it}$) are regressed against its components (i.e. change in revenue and property, plant, and equipment) using the cross-sectional version of the original Jones model (Jones, 1991) to obtain parameter estimates. The model takes the form:

$$TACC_{it} / TA_{it-1} = \alpha_1 \left(1 / TA_{it-1}\right) + \alpha_2 \left(\Delta \frac{REV_{it}}{TA_{it-1}}\right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}}\right) + \epsilon_{it}$$

Where $TA_{it-1}$ is the book value of total assets of firm $i$ at the end of year $t-1$, $\Delta \frac{REV_{it}}{TA_{it-1}}$ is sales revenues of firm $i$ in year $t$ less revenues in year $t - 1$ scaled by $TA_{it-1}$, $\frac{PPE_{it}}{TA_{it-1}}$ is gross property, plant and equipment of firm $i$ at the end of year $t$ scaled by $TA_{it-1}$, and $\epsilon_{it}$ is the residual or error term.

Coefficient estimates of $\alpha_1, \alpha_2, \alpha_3$ obtained from the Equation (2) are then used to calculate discretionary accruals ($DACC_{it}$). The change in revenues is adjusted for the change in receivables ($\Delta REC_{it}$) for each sample firm, in order to provide some control for the effect of changing economic conditions on the level of non-discretionary accruals (Gaver et al. 1995).

As Jeter and Shivakumar (1999: 3) explain, the Equation 2 “treats revenues as entirely non-discretionary. However, if earnings are managed by shifting revenues from future periods, then $\Delta \frac{REV_{it}}{TA_{it-1}}$ would be endogenous to the model”. In order to control for this endogeneity bias, Dechow et al. (1995) propose a modification to the Jones model. The modified Jones model takes the form:

$$DACC_{it} = \frac{TACC_{it}}{TA_{it-1}} - \left[\hat{\alpha}_1 \left(1 / TA_{it-1}\right) + \hat{\alpha}_2 \left(\Delta \frac{REV_{it} - \Delta REC_{it}}{TA_{it-1}}\right) + \hat{\alpha}_3 \left(\frac{PPE_{it}}{TA_{it-1}}\right)\right]$$

Where $\hat{\alpha}_1, \hat{\alpha}_2$, and $\hat{\alpha}_3$ are estimated coefficients from the second Equation. As in the literature, we use the absolute measure of discretionary accruals as a proxy for the extent of opportunistic earnings management.

Explanatory and Control Variables Measurement

We measure the NED commitment by using the number of board meetings in a specific year. We also examine NED commitment using more specific measure by examining the association between number of meetings of non-executive directors, without the presence of executive directors, and the extent of EM. Also, we examine the potential impact of non-executive directors’ fees on EM.

While we are interested in examining how NED commitment can influence the extent of EM, we are aware that there are other firm characteristics that can influence the extent of EM and which need to be controlled for in the estimations. It has been argued that larger firms have more potential for earnings management (e.g. Bartov, 1993). Watts and Zimmerman (1990) states that larger firms face higher political costs and hence have stronger incentives to manage earnings in order to reduce the potential political risk.

Additionally, Kothari et al. (2002) argue that tests related to accounting discretion that do not control for effect of performance are often miss-specified. Therefore, we control for corporate size (as measured by total assets) and firm performance (as measured by
return on assets). These variables may affect the magnitude of earnings management and previous research provided evidence of their effects.

Bartov et al. (2000) argue that the financial difficulties provide firms with more incentive to engage in earnings management, they control for financial difficulties using book to market ratios and financial leverage. Many prior studies find leverage is related to earning management (Becker et al., 1998; DeAngelo et al., 1994)

In addition, Matsumoto (2002) document that highly growing firms are more likely to manage earnings. Growth is measured by the market-to-book ratio (MTBV). Other studies found growth is related to EM including Abdularahman and Ali(2006).

Model Specification

In the light of the above discussion, the various hypotheses and variables are combined into a function relation to explain the relationship between NED commitment with the extent of opportunistic earnings management. The empirical form of the model is set out below:

\[
DACC = \beta_0 + \beta_1 BRDMEET + \beta_2 NEDMEET + \beta_3 NEFEE + \beta_4 SIZE + \beta_5 ROA + \beta_6 MTBV + \beta_7 LEV + \varepsilon
\]  

Where

\[
\beta_0: \text{intercept}; \beta_1-\beta_7: \text{coefficient of slope parameters}; \varepsilon: \text{error term.}
\]

Dependent variable:

DACC: earnings management as measured by discretionary accruals (estimated using Equation: 3).

Explanatory variables:

BRDMEET: number of board meetings in 2006;

NEDMEET: number of meetings between non-executive directors without executive director;

NEDEFEES: natural logarithm of non-executive directors fees divided by the total number of non-executive directors;

Control variables:

LEV Natural log of total debt/ net assets 2006.

ASSETS Log of total assets in 2006

ROA Return on assets in 2006

MTBV Natural log of the market to book value ratio in 2006

3. Results and Discussions

Descriptive statistics and Pearson correlations among the primary variables of interest are provided in Table 1. The mean discretionary accruals estimation is – 2 percent. Table 1 also shows that the average board meeting is about 9 times a year. Table 1 show relatively sufficient evidence that companies included in our sample shows high level of compliance with the Combined Code on Corporate Governance (2003).

Table 2 also shows that board activity, as measured by number of board meetings and number of meetings between non-executives, is negatively correlated with earnings management behavior, as measured by discretionary accruals. Additionally, consistent with prior literature, there is a strong positive correlation between discretionary accruals and return on assets. This correlation was expected given that the emphasis of the recent research on the importance of controlling for financial performance when examining earnings management (Kothari et al. 2002).
The following model (equation 5) presents the regression results from the estimate of Equation (4). Results are also displayed in table 3, inconsistent with our expectation in H1 and H2 the co-efficient on BRDMEET and NEDMEET are insignificantly related to EM in all models examined (not reported). Although there is limited empirical evidence on the relationship between active boards and earnings management, our result is in contrast with that in Xie et al. (2003).

\[
\text{DACC} = .230^{(1.38)} \cdot 0.02 (-1.15) \cdot 0.011^{(-1.1)} \cdot \text{BRDMEET} - 0.74^{**} (-2.14) \cdot \text{NEDMEET} + 0.02^{(1.39)} \cdot \text{NEDFEE} + 0.02^{(1.39)} \cdot \text{SIZE} + 0.002^{(2.63)} \cdot \text{ROA} - 0.071^{(-1.74)} \cdot \text{MTBV} - 0.002 \cdot \text{LEV} + \varepsilon (5)
\]

Dependent variable, DACC. Numbers in parentheses are t-statistics based on White’s (1980) heteroscedasticity consistent estimation matrix; ***p < 0.01, **p < 0.05, *p < 0.10. DACC, discretionary accruals; BRDMEET, number of board meetings; NEDMEET, number of meetings between non-executive directors without executive director; NEDFEE, natural logarithm of non-executive directors fees divided by the total number of non-executive directors; ASSETS, natural logarithm of total assets; ROA, return on assets. MTBV, log of market t

However, as expected in H3, the co-efficient of NEDFEES is significantly negative in all models examined. This indicates that firms with higher non-executive director’s fees have lower levels of managerial opportunistic behaviour. This suggests that highly paid NED is more committed to involve in the firm details which may minimize the firm engagement in earnings management.

A final finding from equation (5) is that, as expected, ROA has a positive and strong relationship to DACC. This suggests that companies with high financial performance are more inclined to manage their earnings. Firms with higher growth rate show less inclement in EM behaviour as reported by Abdulrahman and Ali (2006).

2. Conclusion

This study investigated whether some corporate governance characteristics, for UK FTSE250 index in book value. LEV, Total debt/net assets (logged)

\[F\text{ value} = 4.32, \text{ Adjusted } R^2 = .32, \text{ and } N = 91.\]
The Impact of…  Sinan Abbadi and Abd Al-Nasser Al-Zyoud

2006, are associated with earnings management. As the majority of the previous research has examined the independence of the board and audit committee, we focus on commitment rather than independence measures of corporate governance. In particular, we examine the boards meetings, non executive directors meetings without the presence of executive directors and non executive directors’ fees association with the absolute value of discretionary accruals. We find that board members commitment (measured by NED fees) significantly reduces earnings management. However, we find no relation between other commitment measures (board meetings, NED meetings) and EM.

Taken together, our findings suggest that, it is not only the independence of directors but also their commitment that reduces earnings management. Comparing our findings with those in previous studies in the UK, it might be suggested that the implementation of the UK corporate governance combined code 2003 has contributed in further reduction of the likelihood of earnings management.

(Table 1) Descriptive statistics Correlation matrix

<table>
<thead>
<tr>
<th></th>
<th>DACC</th>
<th>BRDMEET</th>
<th>NEDMEET</th>
<th>NEDFEES</th>
<th>ASSETS</th>
<th>ROA</th>
<th>MTBV</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-0.021</td>
<td>8.8242</td>
<td>0.5934</td>
<td>4.5713</td>
<td>5.89976</td>
<td>8.259</td>
<td>0.2294</td>
<td>0.724731</td>
</tr>
<tr>
<td>Std</td>
<td>0.0528</td>
<td>2.5368</td>
<td>0.4939</td>
<td>0.1251</td>
<td>0.337746</td>
<td>7.7126</td>
<td>0.1657</td>
<td>1.806802</td>
</tr>
<tr>
<td>Min</td>
<td>-0.174</td>
<td>4</td>
<td>0</td>
<td>4.2304</td>
<td>5.132698</td>
<td>-11.05</td>
<td>0</td>
<td>-13.923</td>
</tr>
<tr>
<td>p50</td>
<td>-0.023</td>
<td>9</td>
<td>1</td>
<td>4.5533</td>
<td>5.867041</td>
<td>6.78</td>
<td>0.1985</td>
<td>0.6059</td>
</tr>
<tr>
<td>Max</td>
<td>0.126</td>
<td>15</td>
<td>1</td>
<td>5.0212</td>
<td>6.733959</td>
<td>36.66</td>
<td>0.6599</td>
<td>5.4225</td>
</tr>
</tbody>
</table>

Data before Transformation

<table>
<thead>
<tr>
<th></th>
<th>DACC</th>
<th>BRDMEET</th>
<th>NEDMEET</th>
<th>NEDFEES</th>
<th>ASSETS</th>
<th>ROA</th>
<th>MTBV</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>-0.174</td>
<td>4</td>
<td>0</td>
<td>423%</td>
<td>13573692%</td>
<td>-1105%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>p50</td>
<td>-0.023</td>
<td>9</td>
<td>1</td>
<td>455%</td>
<td>73627660%</td>
<td>678%</td>
<td>158%</td>
<td>404%</td>
</tr>
<tr>
<td>Max</td>
<td>0.126</td>
<td>15</td>
<td>1</td>
<td>502%</td>
<td>541949725%</td>
<td>3666%</td>
<td>457%</td>
<td>265%</td>
</tr>
</tbody>
</table>

Table (3) Regression Output

<table>
<thead>
<tr>
<th></th>
<th>R²</th>
<th>constant</th>
<th>BRDMEET</th>
<th>NEDMEET</th>
<th>NEDFEE</th>
<th>SIZE</th>
<th>ROA</th>
<th>MTBV</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient</td>
<td>0.23</td>
<td>0.002</td>
<td>0.11</td>
<td>0.074</td>
<td>0.221</td>
<td>0.002</td>
<td>0.71</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>t- statistics</td>
<td>1.38</td>
<td>-1.15</td>
<td>-1.1</td>
<td>-2.14</td>
<td>1.39</td>
<td>3.63</td>
<td>-1.74</td>
<td>-1.14</td>
<td></td>
</tr>
<tr>
<td>significant p&lt;.05</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>significant p&lt;.1</td>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DACC, discretionary accruals; BRDMEET, number of board meetings; NEMEET, number of meetings between non-executive directors without executive director; NEDFEES, natural logarithm of non-executive directors fees divided by the total number of non-executive directors; ROA, return on assets. MTBV, percentage of market to book value. LEV, Log of Total debt/net assets.
*p <0.05.
REFERENCES


Goncharov, I. (2005), Earnings management and its determinants: Closing gaps in empirical accounting research (Frankfurt am Main: Peter Lang).
Public Oversight Board (POB) (1993), In the public interest: A special report by the Public Oversight Board of the SEC Practice Section (Stamford, CT: POB).
**فخر الثاني نجوم**

**دراسة**


* Assistant professor, Faculty of Planning, Al-Balqa’ Applied University .

** Associate professor, Faculty of Finance and Business, The World Islamic Sciences University.*

---

.2012/1/4 مكرمة عبد وعالم/12 عن د. محمد عبد الله

- 207 -