CORPORATE GOVERNANCE ATTRIBUTES AND EARNINGS MANAGEMENT: A STUDY OF LISTED COMPANIES IN NIGERIA

Onatuyeh Aruobogha Edwin  
B.sc, M.sc, MA, ACA, ACTI, FCCA, CPFA, MCIA  
Department of Accountancy, School of Business Studies, Delta State Polytechnic, Ozoro, Delta State

Proso Timothy  
B.sc, M.sc.  
Department of Accounting, Delta State Polytechnic, Otefe Oghara, Delta State

Abstract
This study examines the relationship between corporate governance attributes and earnings management, using some selected listed companies at the Nigerian Stock Market (NSE) as a reference point. In particular, this study seeks to examine the effectiveness of three attributes of corporate governance in constraining earnings management practices in Nigeria. These attributes include CEO duality, board composition/independence and board size. Earnings management proxied by discretionary accruals was quantified using Modified Cross Sectional Jones Model. Control variables such as firm’s size and return on assets were introduced into the model to reduce any bias of the explanatory variables. Based on a sample 60 non-financial listed Nigerian companies for the year 2014, the results of the multivariate regression revealed that while CEO duality and board size variables exert a significant negative impact on earnings management, board composition/independence had a significant positive impact on earnings management. The paper concludes that smaller boards are most appropriate to reduce earnings management because they promote prompt decision making and they make effort to reduce earnings management and agency conflicts. We therefore recommend that the compensation package of the executives should be less aggressively linked to performance so that it does not induce managers to manipulate reported earnings in order to improve those packages.

Keywords: Corporate Governance, Earnings Management, Discretionary Accruals, Modified Jones Model, Nigeria

1 Introduction
The International Financial Reporting Standards (IFRSs) allow managers the flexibility in choosing from among alternative accounting treatments. These choices can have different effects on the reported income of an organization. Islam, Ali, and Ahmad (2011) argue that managers tend to prefer accounting choices that are economically beneficial. This opportunistic behavior (also called earnings management) is exhibited when governance structures are weak, thereby causing the quality of reported earnings to deteriorate and reducing investors’ confidence in financial reports (González and García-Meca, 2014). It entails the creative use of accounting techniques to construct financial reports that reflect positive picture of business activities and financial position of an organization. It basically covers the true financial results and position of...
businesses and obscures facts that stakeholders ought to know (Loomis, 1999), and may include changes in the estimated amount of assets impaired, the volume of irrecoverable debts written off, the amount of inventory recorded, the estimated useful life of non-current assets, and estimated post-employment benefits and warranty costs (McKee, 2005).

Prior studies have demonstrated that effective corporate governance is vital in monitoring managerial activities because it helps is to reduce conflict of interests between shareholders and managers. Such conflict of interests could border on the management of earnings through the use of accounting accruals (González & García-Meca, 2014; Roodposhti and Chashmi, 2009). Good governance, according to Alzoubi and Selamat (2012) cannot only effectively constrain managers from being involved in earnings management practices but improve investors’ confidence in the performance of the firm of which earnings is a key index. This study is motivated by two considerations. First, investment is crucial for an emerging economy such as Nigeria where the domestic saving rate is quite low and does not guarantee increased economic growth in the country. Second, the country’s investment climate is not attractive, given that companies involved in earnings management are liable to spread false information in the market, thereby leading to a situation in which investors make sale or purchase decisions that result in losses, ultimately eroding their confidence. In order to attract more capital investment and enhance investor confidence, companies need to provide an attractive investment climate and good governance, increase overall transparency, and reduce information asymmetry.

In view of the above, the main objective of this study is to examine the effectiveness of corporate governance mechanisms in constraining earnings management by looking at the following corporate attributes: CEO duality, board size and board composition/independence. The remaining part of this paper is organized as follows: The next section focuses on the review of related literature and hypotheses development. The ensuing section highlights the theory on which the study is anchored. Section four discusses the research methodology and presents the specific measure used to test the hypotheses developed in the study. A section on data analysis, discussion and synthesis precedes the final section, which lays out some concluding remarks and recommendations that would be useful for both scholarship and practice.

2 Literature Review

2.1 Concept of Corporate Governance

The concept of corporate governance (CG) is very wide considering the way and manner it has penetrated the minds of numerous researchers. Thus, the concept has various definitions from the accounting, economic, political and legal points of view. Despite these, CG can be broadly divided into at least two; the narrow and the broad view. The narrow view, which is the Anglo-Saxon view is concerned with the structures within which corporate enterprise receive its basic orientation and direction (Rwegasira, 2000). The proponents of the narrow view considers the interest of the shareholders, issues relating to shareholders protection, management control and the popular principal-agency problem of economic theory are given prominent attention. They affirmed that CG deals with the relationship between corporate managers and shareholders. They also posited that providers of finance have a unique relationship to the firm as they allow their investment to be placed at risk, (Hart and More, 1990) while the productive asset they finance remains the property of the corporation (Shliefer and Vishny 1997).
The second category consists of the proponents of the broader view referred to as Franco-German which is also said to be the heart of both market economy and a democratic society (Sullivan, 2000). The Franco-German considers the interest of the stakeholders, that is, the shareholders, managers, directors, payables (creditors), customers, society, government and legal authorities/agents. In addition to this, Sullivan (2000) concluded that the resultant problems of the privatization crusade, transition economy, issues of institutional, legal and capacity building as well as the rule of law are at the very heart of CG. From the stakeholders perspective, Aguilera (2005) broadly defined CG as the study of the distribution of rights and responsibilities among different participants in the corporation such as managers, shareholders, the board of directors and other stakeholders such as employees, suppliers, and customers. He however ignored crucial issues such as management and social responsibility. CG can also be defined as the act of safeguarding the interest of stakeholders as they ensure that all parties interested in the wellbeing of the firm attempts to ensure that managers adopt mechanism that safeguards the interest of stakeholders (Sanda et al, 2005). According to Shleifer and Vishny (1997), CG is the system by which companies are directed and managed. It influences how the objectives of the companies are set and achieved, how risk is monitored and assessed, and how performance is optimized. A good Corporate Governance structure encourages companies to create value through entrepreneurism, innovation, development and exploration and provide accountability and control systems commensurate with the risk involved. The Commonwealth Business Forum representing the private and state-owned corporate sector emphasized the significance of CG in 1997. A resolution was passed by the forum to the effect that capacity should be established in every Commonwealth country to create or reinforce institutions to promote best practice in corporate governance; in particular, codes of good practice establishing standards of behavior in the public and private sector should be agreed to secure greater transparency and to reduce corruption (Anyaoku, 2000). However, in spite of these emphases, the CG codes of best practice that were laid down but not strictly adhered to, led to a series of systemic collapse and financial crises around the world. During this period companies and banks in Nigeria record earnings, apparently, many also reported earnings that existed only briefly on their accountants ledgers (Beasley, 1996).

For a business to effectively and efficiently progress good CG principles need to be inculcated into the way and manner the activities of the enterprise are carried out. To achieve this, the organization must play a very significant role in encouraging the managers to exercise their rights by effectively communicating transparent, understandable and accessible information to the shareholders. Unfortunately, this is hardly the case as managers tend to abuse the latitude of choice by hiding under the cover of creative accounting to manipulate figures through window dressing or smoothening income, which is called earnings management- the practice of using accounting tricks to mask a firm’s true operating performance (Warrick, 1999). The quality of earnings is usually assessed from the financial reports while publicly reported accounting information can be used as important input information in various corporate governance mechanisms (Bushman and Smith, 2001). The codes of CG came up to solve the problems as it has address issues of board of directors (BOD), shareholders, audit committee Board Size (BS), Board Composition (BC), Power Separation (PS), Audit Committee (AC), Institutional Ownership (IO), Managerial Ownership (MO), Institutional Shareholdings (IS).
2.2 Concept of Earnings Management

Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting practices (Healy and Wahlen, 1999). It is a process of taking deliberate steps within the constraints of generally accepted accounting principles desired to bring about a level of reported earnings (Davidson, Stickney, and Weil (1987). Discretionary accruals are the most important earnings management instruments that are used by managers to either increase or decrease reported income. This is because they are “components of earnings that are not reflected in current cash flows and a great deal of managerial discretion goes into their construction” (Bergstresser and Phillippon, 2006).

The incentives for earnings manipulation have been discussed in extant literature in several contexts. Bhat (1996) linked it to the attempt by management to enhance shareholders’ value and to maximize executive compensation through income smoothing and earnings management respectively. Healy and Wahlen (1999) note that the incentives to “window dress” financial statements include the motivation to enhance managers’ compensation and job security, avoid the breach of debt covenants, and reduce regulatory costs or increase regulatory benefit. Not too long, Chang, Shen and Fang (2008) highlighted three incentives to earnings management. Firstly, capital market motivation, which includes initial public offerings, seasoned equity offerings, management buoyant plans and plans for mergers to meet earnings forecast, to smooth earnings, etc. Secondly, contracts motivation such as management compensation, debt agreement or job security also constitutes the incentive for earnings management. Thirdly, laws and regulations such as import regulation, industrial regulation, anti-trust laws, e.t.c., also can serve as an incentive. Cornett, McNutt and Tehranian (2009) noted that managers use discretionary accruals as a motivation for options (the incentive for bonus income by attaining some level of performance) and affecting stock prices to enhance managers’ wealth through restricted stock compensation. Other incentives for the opportunistic behaviour of managers that are documented in the literature include bonus plans, meeting the expectations of analyst as well as raising funds on favourable terms (Shah, Zafar and Durrani, 2009).

Even in the absence of fraudulent reporting, firms can manipulate reported accounting earnings because GAAP allows alternative representations of accounting events (Park & Shin, 2004). This is a potential occurrence in countries like Nigeria that observe principle based accounting which creates room for managers to apply professional judgement and discretion. Ajayi (2006) provides evidence of such abuses in the private sector in Nigeria. However, a study such as this reveals whether or not such occurrences are still prevalent, or whether or not the corporate governance mechanisms put in place are yielding expected results of curbing fraudulent reporting by those charged with corporate governance. Weber (2004) investigated two earnings management strategies - directional earnings management, in which the objective is to shift the mean value of reported earnings, and income smoothing earnings management, where the objective is to decrease the time series variance of reported earnings. Lo (2008) classified earnings management into two broad categories - real earnings management (i.e., affecting cash flows) and accruals management through changes in estimates and accounting policies.
As already noted, the basic tool used as a proxy for earnings management is discretionary accruals. All over literature the most popular six models used to measure discretionary accruals are the DeAngelo Model, Healy Model, the Jones Model, the Modified Jones Model (Dechow, Sloan, and Sweeney, 1995), the Industry Model (Dechow et al., 1995), and the Cross-Sectional Jones Model (DeFond and Park, 1997). Dechow et al. (1995) evaluated the relative performance of five of these models in detecting earnings management by comparing the specification and power of commonly used tests across discretionary accruals generated by the models. Dechow et al. (1995) reveals that the Modified-Jones Model has outperformed other discretionary accrual models in detecting earnings management.

2.3 Corporate governance and Earning Management

Broadly, corporate governance refers to the processes, rules, or laws under which a company is directed. These are intended to ensure fairness, transparency, and accountability in its relationship with all stakeholders. The concept of corporate governance has assumed considerable importance in recent years following a wave of high-profile financial scandals of large companies such as Enron and WorldCom (Larcker, Richardson & Tuna, 2004; Standard and Poor’s, 2003; Wu, 2002), most of which have been traced to earnings management. Apparent in earnings management literature is juxtaposition between earnings management and corporate governance which suggests that corporate governance can control the practice of earnings management. The corporate governance indices adopted in this study are CEO duality, board size, and board composition/independence. These attributes are selected, to a reasonable extent, based on the stipulation of the Securities and Exchange Commission’s code of corporate governance in Nigeria (2003).

2.3.1 CEO Duality

The separation of the offices of the Chairman and the Chief Executive officer is an essential element of corporate governance so as to prevent undue concentration of powers (Securities and Exchange Commission, 2003). Also, agency theory discourages the combination of the offices known as CEO duality because it impedes the system of checks and balances whereas stewardship theory proposes it because it enhances leadership. Thus, combining the positions of CEO and board chairperson weakens boards' effectiveness in controlling and monitoring functions, thereby increasing agency costs (Klein, 2002; Fama and Jensen, 1983; Kim, Al-Shammari, Bongjin, & Lee, 2008). CEO duality becomes problematic if the interests of the CEO are different from interests of shareholders (Roodposhti & Chashmi, 2010). In bifurcated roles, two individuals can share the responsibilities such as the CEO running company operations and the board chairman addressing board issues such as strategic responsibilities (Callaghan, 2005).

Several empirical studies that have measured the impact of CEO duality on earnings management yielded mixed results. Sarkar, Subrata, and Kaustav (2006); Liu and Lu (2007); Roodposhti and Chashmi, (2010) all find that there is an inverse significant relationship between CEO duality and earnings management. Whereas, Hashim and Devi (2008); Johari, Saleh, Jaffar, and Hassan (2008); Garcia-Meca and Sanchez-Ballesta (2009); Chen and Liu (2010) all provide evidence that the separation of the roles of Chairman and CEO, doubtedly has an effect on earnings management. Saleh, Iskandar, & Rama (2005) result show that CEO duality is positively related to earnings management but not significant. A study done by Abdul Rahman
and Haniffa (2005) reveals significant evidence that companies with CEO duality did not perform as better as their competitors. Although it is expected that in order to limit agency problem, there needs to be a positive relationship between CEO duality and earnings management, however, as there are mixed outcomes in empirical literature, this study hypothesizes that:

**HO1:** CEO duality has no significant relationship with earnings management.

### 2.3.2 Board Size

Another significant characteristic that can influence the monitoring ability of the board is Board Size. The debate still remains until this day on whether large or small boards are more effective at restraining earnings management. Empirical research has shown that board size can be related to the level of discretionary accruals. While Chin, Firth, and Rui, (2006); Dalton, Daily, Johnson, and Ellstrand (1999); Gulzar and Wang (2011) all demonstrated a positive association between board size and earnings management, Peasnell, Pope, and Young(2001) and Xie, Davidson and DaDalt (2003) found a negative relationship between board size and earnings management. The results on the role of board size are inconclusive. Some argued that a smaller board provides better financial reporting monitoring because some authors discovered that a board size of four to six members might be more effective as they are able to effectively communicate and make timely strategic decisions (Eisenberg, Sundgren, and Wells 1998; Yermack, 1996). Others argued that a larger board may be able to draw from a broader range of combined experiences. For instance, Xie *et al.* (2003) stated that a larger board may be more likely to have independent directors with corporate or financial experience, and in turn, may be better at preventing earnings management.

Agency theory proposes smaller boards and as put by Ning, Davidson, & Wang (2010), when board size increases, agency problems in the boardroom increase simultaneously, therefore leading to more director free-riding problems and internal conflicts among directors. Larger boards are generally perceived to be less effective in the exchange of ideas and they increase the coalition costs amongst board members (Firth, Fung, and Rui, 2007). On the other hand, resource dependency theory support larger boards because of the wealth of expertise, skill, and resources the board members are likely to make accessible to the organization. Rashidah and Fairuzanana (2006) in a Malaysian study support the view that larger boards are ineffective in their oversight duties relative to smaller boards because they find that board size is positively related to earnings management. Given these conflicting results, it is difficult to draw a directional expectation between earnings management and board size. The expectation is that board size would have a positive significant relationship with earnings management. A positive relationship purports a reduction in agency problems in terms of a lower board size resulting in reduced earnings management and vice versa. Therefore, the study hypothesizes that:

**HO2:** Board size has no significant positive relationship with earnings management.

### 2.3.3 Board Composition/Independence

There is a considerable literature regarding the effect of the composition of the board of directors (i.e., inside versus outside directors). Agency theory supports the idea that board independence should be denominated by outside director. Dunn (1987) highlighted that board dominated by outsiders is in a better position to monitor and control managers. Fama and Jensen
(1983) argued that the role of the board of directors is to protect shareholder interests by monitoring managers. An important factor that may affect the board’s ability to monitor the firm’s managers is its composition and the percentage of independent directors on the board. A number of studies have linked the proportion of outside directors to financial performance and shareholder wealth (e.g., Brickley et al., 1994).

Moreover, the dominance of non-executive directors is more effective in monitoring management. Klein (2002), Xie et al. (2003), Sonda et al. (2003) and Peasnell et al. (2005) provided evidence concerning board independence and earnings manipulation and found that companies with independent boards are less likely to report abnormal accruals. Conversely, Park and Shin (2003), and Abdul Rahman and Ali (2006) found no relationship between outsider directors and earnings management. On the other hand, other studies propose that completely independent boards may not be effective in monitoring management. For example, Agrawal and Knoeber (1996) found a negative relationship between independent board and firm performance, leading them to conclude that boards that have too many outsiders lose the expertise associated with officers serving on the board. The study thus hypothesizes that:

**H03**: Board composition/Independence is not positively associated with earnings Management

### 3. Theoretical framework

The theories put forward with respect to corporate governance include agency theory, stakeholder theory, Resource dependency theory, and stewardship theory. Of these, agency theory has been the most influential, and this is theory upon which this study is anchored. Agency problem arises because in an agency arrangement the goal of the principal is at variance with that of the agent, and it is difficult or costly for the principal to monitor the activities of the agent. Managers (in this case, agents) pursue self-interested strategies and would not act to maximize shareholders’ wealth unless an appropriate governance structure is implemented to safeguard the interests of the latter (Jensen & Meckling, 1976). The agency theory, therefore, seeks to resolves this agency problem between managers and their principals (shareholders). Codes of corporate governance support the concept of independence and a balance of power in the boardroom; they seek to protect shareholders’ rights and recognize the importance of transparency and disclosure. Jiang et al. (2008) opine that corporate governance is critical to better financial reporting, and suggest that higher levels of corporate governance are associated with lower discretionary accruals (i.e., earnings management) and higher-quality earnings.

### 4. Methodology and Robustness Test

Data used for this study was sourced from published financial statements of sixty 60 non-financial firms listed on the Nigerian Stock Exchange for the year 2014 and analyzed using content analysis. The financial year 2014 only is selected based on the availability of annual reports and accounts. The financial institutions are excluded because the industry is highly regulated and the behaviour of their accruals differs from other industries (Saleh, Iskandar, 2005; Syed, Safdar, & Arshad, 2009).

The annual financial statements are deemed reliable and were the most available source of data collection. The significant aspects of the annual reports are the statements of financial position,
statement of profit or loss, the statement of cash flows, the corporate governance report, and the auditor’s report. The hard copies of the annual reports for year 2014 were readily available for use for this enquiry. The sample size of 60 companies is chosen based on the availability and accessibility of data. The cross sectional data is further analyzed using the ordinary least square regression.

4.1 Measuring Earnings Management

The research adopts discretionary accruals as a proxy for earnings management based on common usage in literature (Hashim and Devi, 2008; Islam, Ali, and Ahmad, 2011; Peasnell, Pope and Young, 2005). In literature, two prominent approaches are used to measure discretionary accruals: namely the statement of financial position approach and the statement of cash flow approach (Ali Shah, Zafar, and Durrani, 2009). The statement of financial position approach incorporates measures from the statement of financial position while the statement of cash flow approach uses measures from the cash flow statement. The feature that is common to both approaches is that total accruals are determined first before non-discretionary accruals are deducted to arrive at the discretionary accruals.

4.1.1 Statement of Financial Position Approach

The total accruals can be calculated using the following formula as recommended by Hribar and Collins (2002):

\[ TA = \Delta CA - \Delta Cash - \Delta CL + \Delta STDEBT - DEPTN \]

Where:
- \( \Delta CA \) equals change in current assets in year \( t \)
- \( \Delta Cash \) equals the change in cash and cash equivalents in year \( t \)
- \( \Delta CL \) equals the change in current liabilities in year \( t \)
- \( \Delta STDEBT \) equals the current maturities of long-term debt and other short-term debt included in current liabilities during period \( t \)
- \( DEPTN \) equals depreciation and amortization expense during period \( t \)

4.1.2 Statement of Cash Flow Approach.

The formula for the statement of cash flow approach was provided by Ali Shah, Ali Butt, & Hassan (2009) as follows:

\[ TA_t = NI_t - CFO_t \]

Where:
- \( TA_t \) equals total accruals in year \( t \)
- \( NI_t \) equals Net Income in year \( t \)
- \( CFO_t \) equals Net cash flow from operating activities

Hribar & Collins (2002) empirically noted that the statement of financial position approach to testing for earnings management is punctuated with measurement errors in accruals estimates. For this reason, the statement of cash flow approach was used in the present study. Ali Shah, Zafar, and Durrani, (2009) opined that the statement of cash flow approach is superior to the statement of financial position approach and it is easy to apply. While there are many ways to estimate discretionary accruals [i.e. the Healy Model (1985); the DeAngelo Model (1986); the Jones Model (1991); the Modified Jones Model; and the Industry model (1991)], this study employs the Cross-sectional Modified version of Jones (1991). This model version is consistent with the work of Klein (2002), Xie et al. (2003) and Dechow et al. (1995). The Modified-Jones
Model has been demonstrated to be more effective than any other discretionary accrual models in detecting earnings management (Dechow et al., 1995; Guay et al., 1996) and is frequently used in the accounting literature (DeFond and Subramanyam, 1998; Guidry et al., 1999). Based on this model, discretionary accruals are measured by subtracting nondiscretionary accruals from total accruals (standardized by lagged total assets):

Discretionary Accruals = Total accruals - Nondiscretionary Accruals

Since the error terms of this regression exhibit heteroskedasticity, the present study follows the work of Teoh, Welch, and Wong (1998) and Jones (1991) and deflates each variable in the model by the carrying value of total assets from the preceding year.

\[
NDA_t = \frac{\alpha_1}{Assets_{t-1}} + \frac{\alpha_2}{Assets_{t-1}} (\Delta REV_t - \Delta REC_t) + \frac{\alpha_3}{Assets_{t-1}} (PPE_t)
\]

Discretionary accrual (DAC) is defined as the residual from the regression of total accruals on non-discretionary accruals as given in the cross sectional model:

\[
TA_t = \frac{\alpha_1}{Assets_{t-1}} + \frac{\alpha_2}{Assets_{t-1}} (\Delta REV_t - \Delta REC_t) + \frac{\alpha_3}{Assets_{t-1}} (PPE_t) + \varepsilon_t
\]

Where:
- \( TA_t \) equals total accruals in current year scaled by lagged total assets
- \( \Delta REV_t \) equals revenues in current year less revenue in previous year scaled by lagged total assets
- \( PPE_t \) equals gross property plant and equipment at the end of year \( t \) scaled by lagged total assets
- \( \Delta REC_t \) equals net receivables in current year less net receivable in previous year scaled by lagged total assets
- \( Assets_{t-1} \) equals total assets at the end of year \( t-1 \)
- \( \alpha_1, \alpha_2, \alpha_3 \) are firm specific parameters
- \( \varepsilon \) equals the residual, which represents the firm specific discretionary portion of total accruals.

### Explanatory and Control Variables

The explanatory variable in this study is corporate governance and proxies for the variable include CEO-duality, board size, and board composition/independence. In order to measure the effect of other external factors that can be responsible for any disparity in the relationship between corporate governance and earnings management, there was the need for the introduction of control variables. The control variables selected in this study are firm size and return on assets. Firm size is often used as a proxy for information availability in the market (Siregar & Utama, 2008). Firm size is controlled for internal economies of scale and accessibility to market information. Fagiolo & Luzzi (2006) stated that total assets is one of the alternative measures of firm size. Hence firm size was proxied with log of total assets. The return on assets was captured to control for firm’s performance. Wu & Huang, (2011) demonstrated a positive relation between return on assets and earnings management. In an Australian study, Sun & Rath (2009) observed a negative relationship between return on asset and earnings management.
4.3 Model Specification

Introducing the constructs of the dependent and explanatory variables while controlling for firm size and return on assets, the regression equation adapted for this study is modeled in the following functional form as:

\[ DAC = \beta_0 + \beta_1 BRDSIZE + \beta_2 CEODUA + \beta_3 BCOMM + \beta_4 FISIZE + \beta_5 ROA + e \]

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variables</th>
<th>Definition</th>
<th>Type</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DAC</td>
<td>Discretionary accruals</td>
<td>Dependent</td>
<td>Income-increasing and income-decreasing accruals</td>
</tr>
<tr>
<td>2</td>
<td>BRDSIZE</td>
<td>Board size</td>
<td>Independent</td>
<td>Number of directors on the board</td>
</tr>
<tr>
<td>3</td>
<td>CEODUA</td>
<td>CEO duality</td>
<td>Independent</td>
<td>Equals 1 if CEO is also chairperson of the board, and 0 if otherwise</td>
</tr>
<tr>
<td>4</td>
<td>BCOMM</td>
<td>Board composition</td>
<td>Independent</td>
<td>number of Non-executive directors to total board composition</td>
</tr>
<tr>
<td>5</td>
<td>FISIZE</td>
<td>Firm size</td>
<td>Independent (control)</td>
<td>Log of total assets</td>
</tr>
<tr>
<td>6</td>
<td>ROA</td>
<td></td>
<td>Independent (control)</td>
<td>Return on assets (profit after tax/total assets)</td>
</tr>
<tr>
<td>7</td>
<td>e</td>
<td></td>
<td></td>
<td>An error term</td>
</tr>
</tbody>
</table>

Table 1 – Measurement of Variables

Authors’ compilation, 2016

4.4 Results and Discussions

4.4.1 Descriptive statistics

The descriptive statistics for the sampled firms as shown in table (2) below indicate that while the discretionary accruals for the selected firms have a mean value of about 4.45; board size (BSIZE), board composition/independence (BCOMI), CEO duality (CEODUAL), return on assets (ROA) and Firm size (FSIZE) had the mean values of 5.78, 4.33, 0.171, 0.160 and 4.15 respectively. This result shows that the board size for the selected listed firms is made up of an average of 6 persons which is about three fifth of the maximum 15 member board as specified in the Securities and Exchange Commissions’ Code of Corporate Governance of 2003. Also, having a mean value of about 2% for CEO duality basically indicates that 2% of the sampled firms have the same individuals functioning as the Chairman and the CEO. This means that about 98% of the sample firms have the positions of the chairman and chief executive officer separated and managed by different persons. The low level of CEO duality is an indicator to effective implementation of the code of corporate governance for best practices which should in turn reduce the incidence of earnings management.
Table 2: Descriptive Statistics for Selected Listed Companies

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGDAC</td>
<td>60</td>
<td>4.453</td>
<td>0.261332</td>
<td>4.12</td>
<td>5.73</td>
</tr>
<tr>
<td>CEO DUA</td>
<td>60</td>
<td>0.171</td>
<td>0.319915</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>BSIZE</td>
<td>60</td>
<td>5.782</td>
<td>1.408921</td>
<td>3.00</td>
<td>8.14</td>
</tr>
<tr>
<td>BCOMI</td>
<td>60</td>
<td>4.331</td>
<td>1.053387</td>
<td>2.00</td>
<td>7.08</td>
</tr>
<tr>
<td>FSIZE</td>
<td>60</td>
<td>4.654</td>
<td>2.658712</td>
<td>6.07</td>
<td>9.21</td>
</tr>
<tr>
<td>ROA</td>
<td>60</td>
<td>0.160</td>
<td>0.145321</td>
<td>-0.73</td>
<td>2.84</td>
</tr>
</tbody>
</table>

Discretionary accruals were logged due to the large figure derived.

Besides, having a mean value of about 43.3% for board composition/independence demonstrates that on the average the proportion of non executive directors on the board is significant compared with that of the executive directors. A board that has more significant number of non-executive directors is considered to be more independent than the one with less significant number of executive directors. A highly independent board results in low earnings management (Zahn & Tower, 2004). Whereas an averagely independent committee would likely result in earnings management. The return on assets as a measure of performance and profitability reflects a mean of 16% which is relatively low. The rationale for this is that most firms make little profits and others make losses while increasing their total assets base. The size of the firm is surrogated by the log of total assets. It is thus observed that the firms have access to more information in the market because they are relatively large. This large size also suggests that the firms benefit from activities that are related to increased firm size such as technological benefits, reduced cost of production, and a larger market.

4.4.2 Correlation Analysis

The results on the correlation matrix for the sampled companies are presented in table (3). The table shows a correlation coefficient (r) result for board size (BSIZE) as it relates to firm’s earnings management proxied by discretionary accruals to be (0.8985). This outcome implies that there is a significant positive correlation between board size and the discretionary accruals of the selected companies. Similarly, the table shows a significant positive correlation between board composition/independence and discretionary accruals with a correlation coefficient value of about (0.6642). This indicates a significant positive association between board composition and earnings management for the sampled firms. Also, the outcome of the correlation coefficient (r) result for CEO duality (CEODUAL) as it relates to earnings management of the sampled firms as depicted in table (3) was (0.6114). This outcome basically connotes the fact that there is a significant positive association between CEO duality and earnings management.
### Table 3: Correlation Matrix for Selected Listed Companies

<table>
<thead>
<tr>
<th>Variables</th>
<th>LOGDAC</th>
<th>CEODUA</th>
<th>BSIZE</th>
<th>BCOMI</th>
<th>FSIZE</th>
<th>ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGDAC</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEODUA</td>
<td>0.6114</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0005</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSIZE</td>
<td>0.8985</td>
<td>0.2514</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0000</td>
<td>0.0016</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BCOMI</td>
<td>0.6642</td>
<td>-0.5137</td>
<td>0.4312</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0001</td>
<td>0.0032</td>
<td>0.0123</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.0145</td>
<td>0.2651</td>
<td>0.2145</td>
<td>-0.4561</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0008</td>
<td>0.0049</td>
<td>0.0146</td>
<td>0.0032</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ROA</td>
<td>0.7497</td>
<td>0.3110</td>
<td>0.3318</td>
<td>0.4687</td>
<td>0.4221</td>
<td>1.0000</td>
</tr>
<tr>
<td></td>
<td>0.0012</td>
<td>0.0238</td>
<td>0.0032</td>
<td>0.0321</td>
<td>0.0081</td>
<td></td>
</tr>
</tbody>
</table>

Authors’ compilation, 2016

#### 4.4.3 Multivariate Regression Results and Synthesis

Table (5) displays the result of the regression equation model used to test all the hypotheses developed in this study. The use of multivariate hypothesis test is based on the assumption that no significant multicollinearity exists between the explanatory variables. The applicability of this test is that if such exists, it may lead to a phoney regression result. Thus, to investigate the existence of multicollinearity, the variance inflation factors (VIFs) for each of the explanatory variables were computed as portrayed in table (6). The mean VIF as reported from table (6) is 1.43, which is lower than ten (10), a number that is used as a rule of thumb as an indicator of multicollinearity problems (Field, 2000). These results show that there is no case of multicollinearity in the research model. Therefore, the results of the regression analysis can be interpreted with a greater degree of confidence.

### Table 4: ANOVA

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>6.11670053</td>
<td>5</td>
<td>1.22334011</td>
<td>42.90</td>
<td>0.0000</td>
</tr>
<tr>
<td>Residual</td>
<td>1.53986549</td>
<td>54</td>
<td>0.02851603</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7.65656602</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Authors’ compilation, 2016

Table (5) reveals some test statistics at the lower segment such as the R² and adjusted R² values of about 0.7880 and 0.7014 respectively. In effect, this means that 70% change in dependent variables (earnings management proxied by discretionary accruals) is explained by the independent variables (corporate governance variables). This value can be considered sufficient because earnings management can also be influenced by other factors beside the attributes of corporate governance. For example, the correlation between board composition/independence and earnings management is positive (0.6642), when included alongside the corporate governance mechanisms and the control variables the relationship turns negative. This is evident in the probability and t-values of 0.012 and -2.83 respectively. The reason for the difference in the sign
of the coefficient is because the correlation test measures the bivariate relationship between board composition and discretionary accruals.

However, regression test is multivariate and therefore the relationship between board composition and discretionary accruals is influenced by the other variables present in the model. The result from the descriptive statistics of a 43.3% board composition/independence (ratio of non-executive directors to total board composition) on the average, seems to be appropriate in this model since the greater the independence, the lower the earnings management. We therefore accept the hypothesis which proposes that board composition/independence is not positively associated with earnings management. That is, the more independent a board is, the lesser the level of earning management. This result is consistent with the findings (Fama & Jensen, 1983; Johnson et al., 1996; Peasnell et al., 2005 and Shah et al., 2009) where they opined that establishing a board that provides effective monitoring of management actions depends on its independence. Thus from an agency perspective, an independent board is more likely to be vigilant for agency problems as it includes a substantial number of non-executive directors (NEDs) who are dedicated to monitoring management’s performance and behaviour. Hence, an independent board has the potential to detect or reduce the level of earnings management tendencies and behaviour.

The findings for the second hypothesis developed in this study show a significant positive relationship between CEO duality and earnings management (proxied by discretionary accruals). This is evident in the probability value of 0.095 and a t-value of 7.78. This means that as CEO duality dominance tendencies increases, earnings management also increases. Drawing from the result from the descriptive statistics, it could be argued that the reduced level of CEO duality (2%) and a greater separation of the roles of chairman and CEO (98%) among the sample firms in Nigeria does have some significant impact on earnings management. Hence, the effective dual office structure of the firms also permits the CEO to effectively control information available to other board members and thus impede monitoring. Therefore, the hypothesis which proposes that CEO duality has no significant relationship with earnings management is rejected. Interestingly, this finding is in agreement with the methodological juxtaposition of Klein (2002), Kim, Al-shammari, Bongin and Less, (2008), and Fama and Jensen (1983) where they opined that the existence of CEO duality in a firm will lead to a weaker monitoring function of the board and thus would also lead to more earnings management in such firms. Thus, they argued that CEO dominance combines decision management and decision control functions, which could basically erode the board’s ability to exercise effective control. In addition, the existence of CEO duality (CEO dominance) role in a firm is likely to lead to more opportunistic managerial behavior due to the reduction in effective board monitoring over executives. However, this result contradict the findings provide in Xie et al. (2003).
Table 5: Multivariate Regression Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coef.</th>
<th>Std. Err.</th>
<th>t</th>
<th>P &gt;</th>
<th>t/</th>
<th>95% Conf. Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEODUA</td>
<td>0.67640</td>
<td>0.01392</td>
<td>7.78</td>
<td>0.095</td>
<td>0.07325</td>
<td>0.03561</td>
</tr>
<tr>
<td>BSIZE</td>
<td>0.79623</td>
<td>0.02447</td>
<td>4.38</td>
<td>0.000</td>
<td>0.09712</td>
<td>0.00843</td>
</tr>
<tr>
<td>BCOMI</td>
<td>-0.66024</td>
<td>0.04328</td>
<td>-2.83</td>
<td>0.012</td>
<td>-0.08732</td>
<td>-0.00774</td>
</tr>
<tr>
<td>FSIZE_Con</td>
<td>-0.42231</td>
<td>0.01148</td>
<td>-2.68</td>
<td>0.086</td>
<td>-0.05123</td>
<td>-0.07422</td>
</tr>
<tr>
<td>ROA_Con</td>
<td>0.78364</td>
<td>0.03314</td>
<td>44.39</td>
<td>0.001</td>
<td>8.07891</td>
<td>8.12785</td>
</tr>
</tbody>
</table>

No of obs   60
F(5, 54)    42.90
Prob > F    0.0000
R-squ’d     0.7880
Adj. R-squ’d0.7014

Furthermore, findings of this study show that board size exerts a significant positive impact on earnings management, with a probability of 0.000 and a t-value of 4.38. This is as a result of the tendency of larger boards to increase agency costs one of which is earnings management. Also, larger boards are perceived to contribute to agency conflicts because the more the board members, the longer the time spent in decision making, and the greater the conflict of personalities. This result is consistent with the findings of Rashidah & Fairuzanana (2006) who stated that a positive relationship exists between corporate governance and earnings management. The positive relationship suggests that smaller boards are most appropriate to reduce earnings management. Hence the hypothesis proposing no positive significant relationship between board size and earnings management is rejected.

Table 6: Variance Inflation Factor (VIF)

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEODUA</td>
<td>1.42</td>
<td>0.704225</td>
</tr>
<tr>
<td>BSIZE</td>
<td>1.32</td>
<td>0.757576</td>
</tr>
<tr>
<td>BCOMI</td>
<td>1.44</td>
<td>0.694444</td>
</tr>
<tr>
<td>FSIZE_Con</td>
<td>1.68</td>
<td>0.595238</td>
</tr>
<tr>
<td>ROA_Con</td>
<td>1.30</td>
<td>0.769231</td>
</tr>
</tbody>
</table>

Mean VIF 1.43

With respect to the control variables, while return on assets is significant, firm size is insignificant. The return on assets shows a positive significant relationship with earnings management. This suggests that the performance of the sample firms affects earnings management primarily. Lee, Li, & Yue (2005) and Wu & Huang (2011) have found out same that a higher return on assets results in higher earnings managementFirm size is found to have no effect on earnings management. This suggests that the benefits of economies of scale accruing to firms as a result of the size has no effect on earnings management.
5. Conclusion
This study basically examined the effects of corporate governance attributes on earnings management, using some selected listed firms in Nigeria as a reference point. Earnings management was quantified by discretionary accruals using the modified cross sectional Jones Model. The study used three hypotheses to test the relationship between mechanism of corporate governance and earnings management. In each of the hypothesis, discretionary accrual was used as the measure for earnings management (the dependent variable). On the hand, board composition/independence, CEO duality and board size, (proxied by BCOM, CEODUAL and BSIZE) respectively were used to represent the explanatory variables. Return on assets and firm size (surrogated by ROA and FSIZE) represent the control variables. The result from our determination test indicates that 70% change in earnings management of firms can be explained by corporate governance variables.

The study revealed that while a significant negative relationship exist between board composition and earnings management; both the CEO Duality and board size variables exert a significant negative impact on the earnings management in the sampled Nigerian firms. Hence the study concludes that firms with larger boards are perceived to contribute to agency conflicts because the more the board members, the longer the time spent in decision making, and the greater the conflict of personalities. The study therefore noted that smaller boards are most appropriate to reduce earnings management.

The study further revealed, in the correlation analysis, that board size and return on assets exhibit the highest associativity with earnings management. This also translates to the multivariate regression result where it is apparent that both variables are the most statistically significant variables. This does not come as a surprise, given that these are the areas where corporate governance in Nigeria faces the greatest challenge of probity and accountability. The more profitable a company is, the more there is the opportunity for corporate governance abuses. The average Nigerian executive considers the funds of his/her company as just another piggy bank from where all sorts of personal expenses are taken care of and every imaginable purchase is made. Appointments to boards in Nigeria most often than not have socio-cultural and political connotations.

The study concludes that based on the fact that board composition/independence can be achieved through the inclusion of outside directors, the independence of the board will basically increase the ability of board to be more efficient in monitoring the top management activities that relate to earnings management. In addition, an independent board is likely to have more incentive to effectively monitor management because of a strong need to develop their reputations as expert decision makers. In this way, an independent board of directors can provide a better oversight of management in reducing earnings management.

6. Recommendations
Based on the findings of this study, the following recommendations are therefore suggested:

Firstly, the board of directors should ensure that an internal audit function is in place to review the risk management strategy of the listed company, internal auditing and the effectiveness of governance and report on these to the audit committee.

Secondly, listed companies should make effort to embrace a well established corporate governance structures that will assist them in reducing financial statement malpractices.
Thirdly, although this study recognizes the massive role external auditors play in the country in adding credibility to corporate reports, we recommend that auditors need to do more in their audit assignments. Audit personnel should be properly and timely rotated to avoid or reduce self-review and familiarity threats.

Fourthly, the board of directors of the listed companies should be composed in such a way as to ensure diversity of experience without compromising compatibility, integrity, availability and independence. The members of the board should be individuals with upright personal characteristics and relevant core competences, preferably with a record of tangible achievement, knowledge on board matters, a science of accountability, commitment to the task of corporate governance and institution building as well as having an entrepreneurial bias to enable them check made the unethical accounting of management.

Finally, the compensation package of the executives should be less aggressively linked to performance to the extent that it does not induce managers to manipulate reported earnings to improve their compensation as its influence on corporate performance is perceived to have been exaggerated.

References


