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Article

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The effects of corporate governance mechanisms on earnings management of listed firms in Nigeria

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Abstract: This study basically examined the effects of corporate governance mechanism on earnings management in Nigeria. To achieve the objectives of this study, a total of 40 listed firms in the Nigerian stock exchange market were selected and analyzed for this study using the judgmental sampling technique. The choice of the selected firms arises based on the nature and extent of corporate financial failures and scandals that has been witnessed in the industry overtime. Also, the corporate annual reports for the period 2007-2011 were used for the study. The regression analysis method was employed as a statistical technique for analysing the data collected from the annual report of the selected firms. Findings from the study revealed that while board size and board independence have a significant negative impact on earnings management (proxied by discretionary accruals); On the other hand, CEO duality had a significant positive impact on earnings management for the sampled firms in Nigeria. Hence the paper concludes that firms with larger boards and diverse knowledge are more likely to be more effective in constraining earnings management than smaller boards since they are likely to have more independent directors with more corporate or financial expertise.

Keywords: corporate governance, earnings management, ceo duality, board size, discretionary accruals

JEL Code: M41

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1. Introduction

The integrity of financial disclosure has been an issue of constant concern among regulators, financial analyst and accounting practitioners; especially after the series of high-profile accounting scandals and frauds involving well-known firms such as Worldcom and Enron (US) and One Tel (Australia), Nortel (Canada), Parmalat (Italy) and Transmile Group Berhad (Malaysia), Oceanic bank, Intercontinental bank, Afribank and Cadbury (Nigeria). For firms in Nigeria, poor corporate governance practice have been cited as one of the causes of the corporate collapses noticed among firms in the financial sector (Adeyemi and Fagbemi, 2010). This phenomenon have waned the public confidence, most especially those in the accounting circle. It has consistently raised severe concerns about corporate governance practices in a broad-spectrum. More so, it has also brought to spotlight issues relating to quality of financial reporting and the weak internal control systems among firms (Ebrahim, 2007; Kanchanapoomi, 2005; Bello, 2011; Uwuigbe *et al.*, 2014). The corporate failures of such large organisations in the past have highlighted the intentional misconduct of managers in a wider-spectrum. In addition, there are apprehensions about the weaknesses of corporate governance in the past, as it was not effective enough to protect investors from expropriation.

The management of firms' earnings has also been an issue of continuous concern for several years for regulatory bodies and accounting practitioners (Levitt 1998). They are seen as an important summary statistic of a firm's financial performance and are often used in firm valuation. According to Leuz *et al.* (2003), earnings management is basically described as the alteration of a firms' reported economic performance by insiders either to mislead stakeholders or to influence contractual outcomes. In essences, it basically covers the true financial results and position of businesses and obscures facts that stakeholders ought to know (Loomis, 1999). However, earnings management basically occurs when managers use personal opinion in reporting financial information and in structuring accounting transactions to alter financial reports to either mislead stakeholders on the original economic performance of the company or to manipulate contractual outcomes that depend on reported accounting numbers (Healy & Wahlen, 1999). Thus, the very nature of accounting accruals gives managers a great deal of discretion in determining the earnings a firm reports in any given period because of the information asymmetry relationship that exist between managers and owners. Managers can manipulate or influence earnings in order to maximize their own interests or to signal their private information, thus influencing the informativeness of earnings (Chung *et al.*, 2002; Gul *et al.*, 2003).

Neverthelss, in an environment characterized by imperfect information, a variance in the interest between management and shareholders can lead to sub-optimal management decisions. Such decisions are possible because the actions of managers are largely unobservable and the goals of the managers and their

shareholders are not necessarily aligned. Managers are posited to opportunistically manage earnings to maximize their utility at the expense of other stakeholders. These problems are envisaged to be much more significant in an emerging market where many market imperfections continue to persist. This is particularly the case in Nigeria where despite the publication of a new corporate governance code in 2003 and 2011; there are still cases of misappropriation of fund and falsification of reports to suit management interest. However, this problem is not only adduced to poor corporate governance practice, but also, the low quality of financial information disclosure has led to series of corporate failures and scandals. Hence, this study adds to the body of existing knowledge by investigating the effects of corporate governance mechanisms on the earning management of listed firms in Nigeria. To achieve this objective, the annual reports for the period 2007-2011 were analyzed. In addition, the study considered a total of 40 listed firms in the Nigerian stock exchange market. The choice of the selected firms arises based on the nature and extent of corporate financial failures and scandals that has been witnessed in the industry overtime.

To gain more insight into this paper, the paper has been organized as follows. Section 2 presents an in-depth review of related relevant literatures and hypotheses development. While section 3 focused on the research methodology adopted for the study; section 4 and 5 discusses the findings and conclusion of study.

2. Literature review and hypotheses development

Corporate governance as the term implies is a mechanism that is employed to reduce the agency cost that arises as a result of the conflict of interest between managers and shareholders. The role of corporate governance according to Solabomi, and Uwuigbe (2013) is to reduce the divergence of interests between shareholders and managers. It remains one of the most important determinants in ensuring the quality of the financial reporting process. It is a set of mechanisms that affect how a corporation is operated. It deals with the welfare and goals of all the stakeholders, including shareholders, management, board of directors, lenders, regulators, and the economy as a whole. It has been in the front burners of recent discussions due to the series of highly publicized financial reporting frauds at Enron, WorldCom, Adelphia and Parmalat in particular, and a very high level of earnings restatements. While prior research in accounting literatures has looked at the relationship between different corporate governance variables and earnings management, the vast majority of these prior literatures has basically focused on the board and audit committee as proxy for corporate governance variables (Beasley, 1996; Peasnell, *et al.*, 2005). In addition, prior accounting research that specifically examined the impact of corporate governance on earnings management is quite limited especially in emerging markets (e.g. Nigeria). However, Klein (2002) addressed this phenomenon by focusing more on the extent than the

direction of earnings management. Klein opined that earning management is positively related to the CEO holding a position on the board's nominating and compensation committees. Similarly, Anderson et al. (2003) also observed that the separation between CEO and board chair positions appears to positively influence the information content of accounting earnings.

In U.S, Dechow *et al.* (1996) examined 96 firms subject to earnings manipulation enforcement action by the Securities and Exchange Commission and observed that firms whose CEO is also chair of the board of directors are more likely to be subjected to accounting enforcement action by SEC for alleged violations of GAAP. Also, Xie *et al.* (2003) examined the characteristics of the board in constraining earnings management using discretionary current accruals to measure earnings management for a sample of 282 US firms for the period 1992 to 1996. They observed that earnings management is less likely to take place in firms with larger boards. More so, Bedard *et al.* (2004) in their study found a significant negative relationship between measures of earnings management and the all-independent audit committees. However, they found no significant relationship between earnings management and audit committee proxied by annual meetings. Cheng and Warfield (2005) investigated whether the propensity for earnings management is lower when management interest's and owners' interests are aligned through higher managerial ownership. Their results confirmed that earnings management is lower for firms with higher managerial ownership. Shen and Chih (2007) in a related study observed that effective corporate governance mechanism tend to conduct less earnings management practices. Similarly, Abdul Rahman and Ali (2006) and Epps and Ismail (2008) confirmed that board characteristics are major determinants of earnings management.

In the UK, Peasnell *et al.* (2005), examined whether the association between board composition and earnings management differs between the pre and post-Cadbury periods. They found the evidence of accrual management to meet earnings targets in both periods. However, only the post Cadbury period indicates less income-increasing accrual management to avoid earnings losses or earnings declines when the proportion of non-executive directors is high. These results offer clear evidence of the impact of independent outside directors on constraining earnings management in the UK.

More recently, Osma (2008) explores different types of earnings manipulation and analyses the effect of independent boards on constraining research and development (R&D) spending manipulation. They considered the entire UK non-financial firms and their sample consisted of 3,438 firm-years, for the period 1990 to 2002. Results from there study indicated that independent directors are capable of identifying and constraining earnings management practices. In Canada, Park and Shin (2004) investigated the effect of board composition on the level of earnings management in a sample of 539 firm-years. Using the modified Jones

model as a proxy for earnings management, they observed that independent outside directors do not reduce discretionary accruals whereas outside directors from financial intermediaries and active institutional shareholders do reduce earnings management.

In the U.S, Cornett *et al.* (2006) basically examined whether corporate governance mechanisms affects earnings management at the largest publicly traded bank holding companies in the United States. Evidence from their findings showed that the use of discretionary accruals is positively related to a bank's unmanaged operating performance, capital ratios, and asset size. However, in contrast, the use of discretionary accruals is negatively related to a bank's non-discretionary accruals and market-to-book ratios. In a related study from China, Liu and Lu (2007) examined the relationship between earnings management and corporate governance by introducing a tunneling perspective. They observed that firms with higher corporate governance levels have lower levels of earnings management.

Also, Prencipe and Bar-Yosef (2009) examined the effectiveness of board independence on earnings management in family-controlled companies. Empirical results provided from their study indicated that the impact of board independence on earnings management is indeed weaker in family-controlled companies. The same result also holds for the lack of CEO/board chairman duality function. Similarly, Al-khabash and Al-Thuneibat (2009) provided empirical evidence concerning the existence of earnings management from the perspective of external and internal auditors in Jordan, and they believed that managers operated by either increasing or decreasing their earnings in order to legitimize their activities. Also, their study revealed that firms with boards and/or audit committees composed of independent directors are less likely to have larger abnormal accruals.

Al-Fayoumi *et al.* (2010) in the Jordanian context examined the relationship between earnings management and ownership structure for the period 2001-2005. They observed that managers' ownership is ineffective in aligning managers to take value maximizing decisions. In addition, they observed an insignificant role for bulk holders in monitoring managerial unethical behavior relating to earnings management.

In Nigerian, Umorem (2010) in a related study examined the relationship between corporate governance attributes and the level of voluntary disclosures among firms in Nigeria. Using t-test and analysis of variance technique the study observed that the level of voluntary disclosure among listed firms in Nigeria was low. Similarly, Uwuigbe (2011) using the Pearson correlation and regression analysis method of data analysis, observed that a significant negative relationship exists between board size, board composition and financial performance of listed firms in Nigeria. In addition, Bello (2011) using the probit analysis in a related study on earnings management observed that there was a positive significant relationship between

board size, board performance on ethical accounting practices. The study also observed that board composition has a significant negative effect on ethical accounting practices.

Although the relationship between corporate governance and earnings management has been the subject of an extensive research in developed economies, the same is not true in developing economies like Nigeria where there is a relatively dearth in literature. Hence this study therefore tends to fill this gap in literature by examining the effects of corporate governance mechanisms on earnings management of listed firms in Nigeria.

Drawing from the literature, the hypotheses to be tested in this study are stated below in their null forms:

- 1) H_o : *There is no significant relationship between board size and earnings management.*
- 2) H_o : *Board independence has no significant effect on the earnings management of firms.*
- 3) H_o : *CEO duality has no significant effect on the earnings management of firms.*

3. Methodology

To achieve the objectives of this study, the annual report for the period 2007-2011 were analyzed. The choice of these period arises based on the fact that it recorded a large number of corporate frauds arising from firms in Nigeria due to poor corporate governance practice. However, using the judgmental sampling technique; a total of 40 listed firms were analysed. This represents 20.5% of the total population. This is consistent with the propositions of Krejcie & Morgan (1970) where a minimum of 5% of a defined population is considered as an appropriate sample size in making generalization. The choice of the selected firms' arises based on the nature and extent of corporate failures and scandals that has bedevilled industry overtime. Nevertheless, in testing the research hypothesis, the ordinary least square (OLS) was used in the estimation of the regression equation under consideration.

3.1 Specifications of the Econometric model

3.1.1. Dependent Variable

The dependent variable in this study is earnings management. However, based on prior literatures, it was observed that the modified Jones model is the most famous and most frequently used model used to detecting earnings management. Thus it was adopted in this study in determining the discretionary component of accruals.

The model was adopted because it is easier to manage earnings via credit sales than cash collections. Also, it attempts to control for the endogeneity bias in the original. More so, it is one of the most commonly used models in addressing issues relating to management discretionary behaviours. In addition, the cash flows statement approach is adopted in this study for the calculation of total accruals.

$$TA/A_{(t-1)} = \beta_1 [1/A_{t-1}] + \beta_2 [(\Delta \text{ in REV} - \Delta \text{ in REC}) / A_{t-1}] + \beta_3 [PPE/A_{t-1}] + \epsilon_{it} \quad (i)$$

Where:

- TA_{it} = Total accruals in year t for firm i.
- ΔREV_{it} = Revenues in year t less revenues in year $t-1$ for firm i (change in revenue)
- ΔREC_{it} = Receivables in year t less receivables in year $t-1$ for firm i (change in receivables)
- PPE_{it} = Gross property, plant, and equipment in year t for firm i (property, plant & equipment).
- A_{it-1} = Total assets in year $t-1$ for firm i (total assets for the previous year)
- $\beta_1, \beta_2, \beta_3$ = Represents firms specific parameters.
- ϵ = Residual here represents the firm specific discretionary portion off accruals.

However, while the right side of the equation represents the non-discretionary accruals (NDA), the net result for the left side of the equation amounts to the total accruals (TA). Nevertheless, taking the difference between the total accruals and the non-discretionary accruals; it amounts to the discretionary accruals (DA) which is basically used in this study to represent earning management. Hence, the higher the value of discretionary accruals, the more likely the presence of earnings manipulation and vice versa as depicted in equation (2):

$$DA_{it} = TAC_{it}/A_{it-1} - \alpha_1 [1/A_{it-1}] + \alpha_2 [(\Delta REV - \Delta REC)/A_{it-1}] + \alpha_3 [PPE_{it}/A_{it-1}] + \epsilon_{it} \quad (ii)$$

3.1.2. Independent Variable

The independent variable in this study is corporate governance. The corporate governance variables adopted for this study includes board size, board independence and ceoduality. On the other hand, firm size proxied by total asset is used in this study to represent the control variable. Thus introducing the constructs of the dependent and independent variables, the regression equation adapted for this study is modeled in the following functional form as:

$$DA_{i-t} = \beta_0 + \beta_1 BS_{i-t} + \beta_2 BC_{i-t} + \beta_3 CEODUAL_{i-t} + FSIZE_{i-t} + \mu_{i-t} \dots \dots (iii)$$

Where

- DA = Discretionary Accruals (which is the proxy for earnings management)
- BSIZE = Board Size; (which represents the number of directors on the board).
- BDIND = Board Independence is the proportion of non-executive directors to total board composition.
- CEODUAL = CEO duality is captured by assigning 1 if the CEO serves also as the chairman and 0 if otherwise 0.
- FSIZE = Firm Size is measured by the Log of total asset (Control Variable).
- B_{1-3} = Coefficients to be estimated or the Coefficients of slope parameters.
- μ = Error term; it captures other explanatory variables not clearly included in the model.
- i-t = Where i and t represent all the 40 companies and the 5 years time period respectively.
The expected signs of the coefficients (i.e. a priori expectations) are such that β_1, β_2 while $\beta_3 < 0$.

Table 1. Averaged data for the selected listed firms used in the study for the period under consideration

<i>S/N</i>	<i>FIRMS</i>	<i>LOGDA</i>	<i>BSIZE</i>	<i>BIND</i>	<i>CEODUAL</i>	<i>FSIZE</i>
1	Evans Medical Plc	4.70	5.00	6.00	.00	4.40
2	G S K Consumer Plc	4.65	7.20	5.60	.00	4.95
3	May and Baker Nig. Plc	4.55	6.80	6.00	.00	4.37
4	Pharma - Deko Plc	4.95	7.40	6.00	.00	3.80
5	Guinness Nigeria Plc	4.59	10.40	6.00	.00	4.33
6	Nigerian Breweries Plc	4.40	11.80	6.00	.00	9.00
7	Jos International Breweries Plc	4.66	7.20	6.00	.00	4.42
8	Champion Breweries Plc	4.44	11.00	7.80	.00	9.92
9	International Breweries Plc	4.39	10.40	8.00	.00	9.20
10	Lafarge West African Portland Cement Plc	4.53	10.40	6.00	.00	4.62
11	Chemical & Allied Products Plc	4.62	9.20	4.00	.00	5.74
12	D N Meyer Plc	4.10	12.80	5.30	.60	8.85
13	Nigerian - German Chemical Plc	4.56	8.00	6.00	.00	3.75
14	Okitipupa Oil Palm Plc	5.50	5.60	4.00	1.00	4.43
15	Presco Plc	5.61	4.40	4.40	1.00	3.92
16	Okomu Oil Palm Plc	4.09	12.60	8.20	.00	4.00
17	Ellah - Lakes Plc	4.63	9.00	4.40	.00	2.02
18	Livestock Feeds Plc	4.66	12.60	6.00	.00	2.85

**The effects of corporate governance mechanisms
on earnings management of listed firms in Nigeria**

<i>S/N</i>	<i>FIRMS</i>	<i>LOGDA</i>	<i>BSIZE</i>	<i>BIND</i>	<i>CEODUAL</i>	<i>FSIZE</i>
19	Ashaka Cement Company Plc	4.62	8.20	4.40	.00	2.34
20	Benue Cement Company Plc (BCC)	4.59	9.60	4.00	.00	4.08
21	Cement Company of Northern (Nigeria) Plc	4.77	12.40	6.00	1.00	2.84
22	Ceramic Manufacturers Nigeria Plc	4.11	9.20	8.10	.00	9.80
23	African Petroleum Plc	5.59	5.00	4.00	1.00	2.73
24	Chevron Oil Nigeria Plc	5.45	4.00	4.00	1.00	3.70
25	Mobile Oil Nigeria Plc	4.67	7.80	4.00	.00	3.57
26	Conoil	4.32	9.80	6.60	.00	3.60
27	Oando Plc	4.71	8.60	3.00	.00	3.54
28	Total Nigeria Plc	4.71	12.60	3.20	.00	2.99
29	BOS Gases Plc	4.40	11.80	6.50	.00	9.28
30	African Paints (Nigeria) Plc	5.17	4.60	3.90	1.00	3.70
31	Ecobank Plc	4.62	7.80	5.40	.00	4.64
32	First Bank Plc	4.46	7.00	6.00	.00	9.88
33	Fidelity Bank	4.41	9.00	4.00	.00	9.20
34	Access Bank plc	4.58	9.60	6.00	.00	5.60
35	First Bank of Nigeria plc	4.61	8.80	6.00	.00	5.32
36	First inland bank plc	4.39	10.60	5.34	.00	3.20
37	Guaranty trust bank plc	4.62	10.80	6.00	.00	7.35
38	Oceanic bank international plc	4.39	9.00	5.80	.00	4.10
39	Berger Paints Plc	4.72	8.00	4.10	.00	3.37
40	BCN Plc	4.53	7.20	5.20	.00	3.62

Source: (2007-2011 Annual report)

4. Discussion of findings

The descriptive statistics for the sampled firms as shown in table (2) indicate that while the discretionary accruals for the selected firms have an approximate mean value of about 4.65; on the other hand, board size (BSIZE), board independence (BIND) and CEO duality (CEODUAL) had the mean values of 8.83, 5.43, and .165 respectively. This results implies that the board size for the selected listed firms is made up of an average of 9 persons which is about two third of the maximum 15 member board as specified in the Securities and Exchange Commissions' Code of Corporate Governance of 2003. Also, having an approximate mean value of about 2% for CEO duality basically indicates that 2% of the selected firms have the same individuals functioning as the Chairman and the CEO. In addition, having a mean value of about 54.3% for board independence depicts that on the average, there is a greater proportion of non executive directors than executive directors on the board.

Table 2. Descriptive statistics for selected listed firms

Variables	Observations	Mean	Std. Dev	Min.	Max
LOGDA	40	4.65175	.3617754	4.09	5.61
BSIZE	40	8.83	2.441332	4	12.8
BIND	40	5.431	1.308896	3	8.2
CEODUAL	40	.165	.3676328	0	1
FSIZE	40	5.0755	2.388595	2.02	9.92

Note: *Discretionary accruals were logged due to the large figures derived

Table 3. Correlations Matrix for Sampled firms

	LOGDA	BSIZE	BIND	CEODUAL	FSIZE
LOGDA	1.0000				
BSIZE	-0.6965	1.0000			
	0.0000				
BIND	-0.5639	0.3885	1.0000		
	0.0002	0.0132			
CEODUAL	0.7419	-0.4170	-0.3391	1.0000	
	0.0000	0.0074	0.0323		
FSIZE	-0.4461	0.2781	-0.4745	-0.2006	1.0000
	0.0039	0.0823	0.0020	0.2147	

Table 4. Anova

	SS	df	MS
Model	4.07780035	4	1.01945009
Residual	1.02657699	35	.029330771
Total	5.10437734	39	.13088147

Table 5. Regression analysis

LOGDA	Coefficients	Std. Err.	t	P > t	[95% Cof.	Interval]
BSIZE	-.056179	.0129829	-4.33	0.000	-.0825357	-.0298222
BIND	-.0480436	.0254387	-1.89	0.067	-.0996868	.0035996
CEODUAL	.4850691	.0839784	5.78	0.000	.3145838	.6555543
FSIZE	-.0241358	.0131317	-1.84	0.075	-.0507946	.0025229
_CON	5.4512	.1527819	35.68	0.000	5.141036	5.761364
No. of obs	40					
F (4, 35)	34.76					
Prob > F	0.0000					
R-squared	0.7989					
Adj R-squared	0.7759					

Table 6. Variance Inflation Factor

Variables	VIF	1/VIF
<i>BIND</i>	1.47	0.678360
<i>BSIZE</i>	1.34	0.748616
<i>FSIZE</i>	1.31	0.764421
<i>CEODUAL</i>	1.27	0.789033
<i>Mean VIF</i>	1.35	

Furthermore, results on the correlation matrix for the sampled firms are depicted in table (3). The table presents a correlation coefficient (r) result for board size (BSIZE) as it relates to firm's discretionary accruals to be (-0.6965). This outcome implies that there is a significant negative correlation between board size and the discretionary accruals of the selected listed firms. Similarly, the table also shows a significant negative correlation between board size and discretionary accruals with a correlation coefficient value of about -0.5639. This indicates a significant negative association between board size and earnings management proxied by discretionary accruals for the sampled firms. However, the outcome of the correlation coefficient (r) result for CEO duality (CEODUAL) as it relates to the discretionary accruals of the sampled firms as depicted in table (3) was (0.7419). This outcome basically connotes the fact that there is a significant positive association between CEO duality and firms discretionary accruals.

Table (5) displays the result of the regression equation model used to test all the stated hypotheses (i.e. $H_1 - H_3$) for this study. The use of multivariate hypothesis test is based on the assumption of no significant multicollinearity between the explanatory variables. Thus, to investigate the existence of multicollinearity, the variance inflation factors (VIFs) for each of the explanatory variables are computed as depicted table (6). The mean VIF as reported from table (6) is 1.35, which is lower than ten (10), a number that is used as a rule of thumb as an indicator of multicollinearity problems (Field, 2000). Thus, these results support the lack of presence of multicollinearity in the research model. The results of the regression analysis can, therefore, be interpreted with a greater degree of confidence. Hence, the results for the goodness of fit test as shown in table (5) present an adjusted R^2 value of about 0.7759. This in a nutshell implies that the value of the dependent variable can be explained by about 78% of the independent variables. This value can be considered sufficient because earnings management can also be influenced by other factors beside the attributes of corporate governance. More so, the F- test statistics as presented in table (4) shows a p-value that is less than 0.05 (i.e. p-value < 0.05). This outcome suggests clearly that simultaneously the explanatory variable (i.e. BSIZE, BIND and CEODUAL) are significantly associated with the dependent variable.

Furthermore, a review of the regression analysis results for the sampled firms shows that all the outcomes are consistent with our initially stated a priori expectations (i.e. $b_1, b_2 < 0$ and $b_3 > 0$). Empirical findings for this study show that there is a significant negative relationship between board size and earnings management (proxied by discretionary accruals) for the sampled firms. This is evident in the probability and t-values of 0.000 and -4.33 respectively. Hence, we accept the alternate hypothesis and reject the null hypothesis. This result basically indicates that there is an inverse relationship between board size and earnings management. This result is indicative of the fact that firms with the large board size of directors are more effective in the control of the managers' discretionary latitude. It connotes the fact that larger boards with diverse knowledge are more effective for constraining earnings management than smaller boards. In addition, large boards with various experts are more likely to have a higher degree of independence and expertise than smaller boards in constraining earnings management. More so, they are more likely to have independent directors with corporate or financial experience, and in turn, may be better at preventing earnings management. This outcome however contradicts the findings of Beasley (1996), Xie *et al.* (2003), Gulzar and Wang (2011) were they opined that the more the numbers of members on the board, the less effective the supervision to the managers, and the more possible managers are involved in earnings management.

Similarly, findings for the second hypothesis show that there is a significant negative relationship between board independence and earnings management (proxied by discretionary accruals) for the sampled firms in Nigeria. This is evident in the probability and t-values of 0.067 and -1.89 respectively. This result implies that there is an inverse relationship between board independence and 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, 1980; Fama & Jensen, 1983; Johnson *et al.*, 1996; Peasnell *et al.*, 2005 and Shah & Butt, 2009) were 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 earnings management tendencies and behaviour.

In contrast, findings for the third hypothesis show that there is a significant positive relationship between CEO duality and earnings management for the sampled firms in Nigeria. This is also evident in the probability and t-values of 0.075 and 5.78 respectively. Thus, as CEO duality dominance tendencies increases, earnings management also increases. That is, CEO duality has a significant positive impact on earnings management. Hence, the dual office structure of firms also permits the CEO to effectively control information available to other board members and thus

impede effective monitoring. Interestingly, despite the environmental and contextual differences, findings from this study is in tandem with the methodological juxtaposition of Klein (2002), Finkelstein and D'Aveni (1994) and Fama and Jensen (1983) were 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).

5. Conclusion

This study basically examined the effects of corporate governance mechanisms on earnings management of listed firms in Nigeria. The study used three hypotheses in testing the relationship between mechanism of corporate governance and earnings management. In each of the hypothesis, discretionary accruals was used as the criterion for earnings management in representing the dependent variable. On the hand, board size, board independence and CEO duality (proxied by BSIZE, BIND and CEODUAL) respectively were used to represent the independent variables. The result from our determination test indicates that 78% change in earnings management of firms can be explained by corporate governance variables. The study further revealed that while a positive relationship existed between CEO duality and earnings management; on the other hand, board size and board independence had a significant negative impact on the earnings management of listed firms in Nigeria. Hence the study concludes that that firms with larger boards and diverse knowledge are more likely to be more effective in constraining earnings management than smaller boards. More so, larger boards with various experts are more likely to have a higher degree of independence and expertise than smaller boards in constraining earnings management behavior among firms since they are likely to have more independent directors with more corporate or financial expertise. The study further concludes that based on the fact that board independence can be achieved through the inclusion of disinterested parties, (that is outside directors); the independence of the board will basically increase the boards' ability to be more efficient in monitoring the top management activities relating 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. Thus an independent board of directors may provide a better oversight of management in reducing earnings management. The study therefore recommends that firms should embrace a well established

corporate governance structures that will assist them in reducing financial statement fraud.

This study is however limited by the fact that the sample only covers five (5) years data from the Nigerian stock exchange market. Also, only three corporate governance variables were considered in this study. However, future research could consider other corporate governance variables not considered in this study. In addition, based on the demerits of the modified Jones model adopted in this study, future research could examine other models relating to earnings management and corporate governance.

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