

## MODERATING EFFECT OF AUDIT COMMITTEE ON BOARD DIVERSITY AND EARNINGS MANAGEMENT IN NIGERIAN BANKS

Musa Adeiza Farouk and Muhammad Aminu Isa\*

---

### Abstract

*This study examines the impact of board diversity and audit committee on earnings management of listed deposit money banks and the effects of moderating factors that overcome the tendency of managers to engage in earnings manipulation. Using a population of fifteen listed deposit money banks in Nigeria, secondary data were obtained from the annual reports and accounts of the banks for the period 2008-2015. Multiple regression technique was adopted and Stata 13 used as the tool of data analysis. The findings revealed that before moderation all the variables, except board size, have significant effect on earnings management of banks. After moderation, the findings revealed that explanatory variables explained the extent of earnings management better than before moderation. The study recommends that the percentage of women director, shares held by directors and number of foreign directors should be increased, while the number of non-executive directors on audit committee should also be improved upon in order to mitigate the tendencies for manipulation of earnings management in banks. This study claims originality in the use of audit committee as moderating variable and the test of applicability and the usefulness of Chang, Shen and Fang (2008) model in Nigerian Banking Sector.*

---

**Keywords:** Earnings management, Audit Committee, Board Diversity, Echelon theory

### 1. Introduction

Corporate environment in Nigeria has experienced cases of earnings management, such as the reported manipulative accounting scandal in African Petroleum Plc, Cadbury Nigeria Plc in 2006 and also the case of Oceanic Bank Plc and Intercontinental Bank Plc. This has brought doubt on the credibility of financial reporting. Based on this series of reported accounting scandals, there arises the need to identify factors that could be used to mitigate the management tendencies to engage in manipulative accounting practices. Diversity of the board members is believed to be one of the factors that could be used to curtail the extent of manipulative accounting (Shehu & Farouk, 2014).

According to Marimuthu (2008), board diversity is the variation in age, race, ethnicity, gender, and social/cultural identities among employees within a specific corporation. These diversities have attracted researcher's attention due to their expected effect on earnings management. Participation of women on boards of directors (gender diversity) is expected to influence the extent of earnings management because of their

---

\* Department of Accounting, Bayero University, Kano, Nigeria

effectiveness in attendance of meeting and adherence to ethical codes and standards which they possess over their male counterparts on the board (Vafeas & Theodorou, 1998). Therefore, studies on ethics posit that women are less likely to engage in unethical behavior at place of work in order to obtain financial rewards (Rose, 2007).

Also, the percentage of shares owned by board of directors is expected to significantly affect the extent of earnings management. It is either the percentage of shares enables them to align their interest with that of the owners thereby reducing agency conflict or that the level of shares held by them might make them become entrenched since certain level of shares may put the managers in a dominant position. This may permit exploitation of external minority shareholders. In addition, nationality of the board members and their stake in the organization could also serve as an incentive to monitor the management in order to safeguard their investment (Hooghiemstra, Hermes, Oxelheim & Randoy, 2015).

Size and the composition of the board members was posited by Yu (2013) to be effective and efficient for board performance. Therefore, the size and the composition of the board are expected to serve as a driving force against manipulative activities of management in the banks.

Consequently, audit committee has been identified as core to financial reporting quality. Meanwhile, the basic function of audit committees is to oversee the financial reporting process, monitor managers' tendencies to manipulative earnings, increase the audit quality and to reduce the questioning of board of directors. Hence, there is an increasing advocacy for inclusion of women in audit committee because they are naturally less likely to engage or encourage manipulation. The assumption is that, if women serve on board and also in the audit committee, they may be able to mitigate the managers' tendencies towards earnings management. Also, since the audit committee may be composed of board members who have shares in the bank, it is expected that the multiple role of the board and the audit committee functions will affect the level of earnings management significantly. This justifies the use of audit committee to moderate the relationship between women director, board ownership and earnings management.

Studies such as Gulzar and Wang (2011), Guo, Huang, Zhang and Zhou (2014), Arun, Almahrog and Aribi (2015), Hussaini and Gugong (2015), Ibrahim (2015) and Ishaq, (2017) explored the influence of board diversity on earnings management in both developed and developing countries, but none of these studies consider the use of moderating effect of one variable on the relationship between board diversity and earnings management. As such, this study introduces audit committee as a moderating variable to examine its multiplicative role on the relationship between board diversity and earnings management in listed Deposit Money Banks in Nigeria.

Most of the studies (such as Gulzar & Wang, 2011; Qi & Tian, 2012; Saleh & Haat, 2014; Baccouche, Hadriche & Omri, 2014) were conducted in developed countries, while few of them (such as Razek, 2012; Shehu & Ibrahim, 2014; Kantudu & Samaila, 2015; and Ishaq, 2017) were carried out in Nigeria. Therefore, there is the need to add to the existing literature in another dimension using moderating variable.

The study is motivated by the fact that, corporate governance culture *ab-initio* in Nigeria has consistently failed to be responsible and accountable to the stakeholders. It has no deep-rooted mechanism to maintain a balance among the major players which have resulted in increasing levels of manipulation of reported accounting numbers as posited by Bello (2005) cited in Shehu (2012). This study therefore seeks to establish the effect of board diversity and audit committee on earnings management of banks in Nigeria.

The result would have an important policy implication for regulators who are striving to improve the transparency and quality of financial reporting in the financial sector especially in assessing the effectiveness and otherwise of the existing audit committee and the board in ensuring quality financial reports devoid of misstatement. Among the important policy implications is that, the study suggests the need by the management of the banks to encourage the full application of corporate governance codes in banks. However, this provides effective and efficient monitoring of financial reports most importantly the earnings, especially for those banks with high percentage of board ownership and foreign directors.

The main objective of the study is to examine the impact of board diversity and audit committee on earnings management of listed Deposit Money Banks in Nigeria. The specific objective is: to determine the moderating effect of audit committee on the relationship between women directors, board ownership and earnings management of listed Deposit Money Banks in Nigeria.

In order to achieve the objective of the research, this paper is organized into five sections, with this section being the introduction. Section 2 is dedicated to review of relevant literature. Section 3 is devoted to the methodology used by the study. Section 4 is concerned with presentation, interpretation, analysis and discussion of results. Finally, section 5 offers a conclusion as well as a set of recommendations drawn from the findings of the study.

## **2. Literature Review and Theoretical Framework**

**2.1 Earnings Management:** Earnings management is defined as the deliberate dampening of fluctuations about "some level of earnings considered being normal for the firm (Barnea, Ronen & Sandan, 1976). Also, Copeland (1968) defined earnings management to involve repetitive selection of accounting measurement or reporting rules in a particular pattern, which is aimed at reporting a stream of income with a smaller variation from a trend than would otherwise have appeared. For the purpose of this study, the definition given by Copeland (1968) is adopted for the study.

**2.2 Board Diversity:** Board diversity refers to the composition of the board by combining attributes, characteristics and expertise of individual board members that contribute to board processes and decision making in a positive way (Burton & Ryall, 1995). In addition, Mazur (2010) saw diversity as a subjective phenomenon, created by group themselves who on the basis of their different social identities categorize others as similar or dissimilar.

**2.3 Audit Committee:** Audit committee is a sub-committee which is created by the board of directors with the aim of making arrangements for the audit, carrying a regular check and overview of the financial statement. This committee enhances the ability of the board to fulfil its legal responsibilities and ensure that the credibility and objectivity of the financial reports are attained (CBN code of corporate governance for banks, 2006).

#### **2.4 Women Director and Earnings Management**

Applying panel least square regression to a set of data on a sample of listed manufacturing firms in Nigeria, Shehu and Ibrahim (2014) reported that women directors have significant positive impact on real activity manipulation. Similar results were reported by Oba (2014) based on multiple regression technique on Nigerian data. He found that gender diversity had significant negative impact on earnings management. This echoes the findings reported by Omoye and Eriki (2014) who applied probit, logit and extreme regression to a sample of 132 Nigerian firms and found a significant negative effect of board gender on earnings management. In France, Lakhali, Aguir, Lakhali and Malek, (2015) used multiple regression with 170 firms and found a negative relation between the proportion of women on board and earnings management of firms. Susanto (2016) using a sample of 69 firms from Indonesia showed that gender has influence on earnings management of their manufacturing firms. Also, Hussaini and Gugong (2015) in Nigeria used ordinary least square regression and found that female director had a significant positive influence on earnings management. Ioualalen, Khemakhem and Fontaine (2015) using multiple regression technique found that gender diversity have no significant influence on earnings management of firms for both Iranian and Canadian firms.

#### **2.5 Board Ownership and Earnings Management**

A study conducted by Kantudu and Samaila (2015), reported that managerial shareholding was significant in influencing financial reporting quality of quoted oil marketing firms in Nigeria. Ramadan (2015) revealed that management ownership was inversely associated with the practices of earnings management. Ogbonnaya, Ekwe and Ihendinihu (2016) reported that managerial ownership had positive significant effect on earning management of brewery industry in Nigeria. Fei (2015) used 323 sample firms and found that managerial ownership had positive and significant impact on earnings reliability implying that managerial ownership reduced the level of earnings management. In Nigeria, Kurawa and Saheed (2014) used multiple regression technique and found that insider ownership and management equity holding had significant positive influence on earnings management within the study period.

#### **2.6 Foreign Director and Earnings Management**

In a study from Malaysia by Abdul Rauf, Johari, Buniamin and Abd Rahman (2012) using data from 214 companies revealed that board race did not influence the practice of earnings management. A study from Netherland by Hooghiemstra, Hermes, Oxelheim and Randoy (2015) found that foreign director participation tended to exhibit a significant positive relation with earnings management of firms. On the other hand, Zhang and Uchida (2011) and Lei (2003) found that foreign board membership and,

independent foreign institutional investors had significant impact on earnings management of firms.

### **2.7 Board Size and Earnings Management**

Board size does not influence the practice of earnings management according to the study of Abdul Rauf, Johari, Buniamin and Abd Rahman (2012). Using a sample of Turkish firms and multivariate analysis, Mustafa, Mehmet and Suleyman (2014) reported that board size had negative and significant effect on the earnings management. In a related study by Oba (2014), he documented negative but insignificant effect of board size on earnings management of firms in Nigeria. Fodio, Ibikunle and Oba (2013) used multiple regression technique and found that board size was negatively and significantly associated with earnings management. Holtz and Neto (2013) revealed that earnings information was negatively affected by board size (more than nine members) in listed Brazilian Firms. Salihi and Jibril (2015), studying a sample of 29 consumer good firms suggested that larger board was not efficient to minimize the tendency of managing earnings. Also, a study conducted by Patrick, Paulinus and Nympha (2015) using a simple regression showed that board size had significant influence on earnings management practices among Nigerian quoted companies.

### **2.8 Board Composition and Earnings Management.**

A study by Zhang and Li (2007) in Chinese firms showed that the extent of earnings management was negatively related to the proportion of the independent directors. Similarly, Dimitropoulos (2011) adopted ordinary least squares regression and found that clubs with increased board independence were associated with high quality financial reporting through the deterioration of earnings management behaviour. In another study by Fodio, Ibikunle and Oba (2013), reported that board composition was negatively and significantly associated with earnings management. Arabborzoo, Rashidpuran and Arabi (2015), found that outside board members did not significantly affect earnings quality of firms listed in Tehran Stock Exchange. In Sri Lanka, Kankanamage (2015) adopted ordinary least squares regression and revealed that there was a significant relationship between board composition and earnings management of the firms. A study by Yohan (2016) in Korea found that outside directors tended to have a positive effect on firm value but not on earnings quality.

Based on the above arguments, the study therefore, hypothesized that:

Ho<sub>1</sub>: Board diversity has no significant effect on earnings management of listed Deposit Money Banks in Nigeria.

### **2.9 Audit Committee and Earnings Management**

A study by Chandrasegaram, Rahimansa, Rahman, Abdullah and Nik Mat (2013) found that audit committee played a significant role in mitigating earnings management of firms. Also, Yasser and Al Mamun (2016) found audit committee size was positively associated with financial reporting quality. The results indicated that the audit committee was a less significant factor in corporate governance than suggested by many previous researchers and policy makers. Ayemere and Elijah (2015) found that, audit committee characteristics had a constraining effect on earnings management. Another study by Xi'an and Xi'an (2012) found that participation of women in audit committees had a negative and significant influence on earnings management of firms.

On the other hand, Ioualalen, Khemakhem and Fontaine (2015) found that audit committee diversity did not have any significant impact on earnings management of selected Canadian firms. Following the positions established in previous researches, the study therefore, hypothesized as follows.

Ho<sub>2</sub>: Audit committee has no significant moderating effect on the relationship between women director, board ownership and earnings management of listed Deposit Money Banks in Nigeria.

### 2.10 Theoretical Framework

This section relates each of the theory adopted with the variables used in the study. Corporate monitoring by diverse board in terms of women director and foreign director is expected to constrain managers' behavior because corporate monitoring by diverse board may force managers to focus more on corporate performance and less on opportunistic or self-serving behaviour. If corporate board diversity enhances monitoring, it is expected to be associated with lower use of discretionary loan loss provision in the banks. Thus, organizations with more diverse senior managers are expected to reduce the level of earnings management.

The Agency theory view board of directors as the agent of the shareholders and as such there is need for it (board of directors) to act in the best interest of the shareholders. In this situation, sometimes the agent may not act in the best interest of the shareholders which often results in an agency loss situation. Advocates of the agency approach view the manager (directors) as an economic institution that will mitigate problems and serve as guardian to shareholders (Hermalin & Weisbach 2003). Based on the relevance and usefulness of agency theory in resolving conflict between principal (owners) and agent (managers) of organization. The study therefore adopted agency theory to underpin the study.

## 3. Methodology

The study adopts the ex-post facto research design because it conducted based on positivism paradigm and quantitative approach. The data were sourced from the annual reports and accounts of Fifteen (15) Deposit Money Banks listed on the NSE at 31<sup>st</sup> December, 2008 and remained listed up till 2015. Multiple regression technique was adopted and the analysis was carried out using Stata 13 as the tool of data analysis. The first regression residual was used to determine the Earnings Management (here after refer to as EM) of the banks and in the sample. In the second regression the effects of board diversity and audit committee on earnings management of the banks was measured.

The residual of the following model is used to estimate EM of the banks. The model adopted was Chang, Shen and Fang (2008) which was specifically built for financial sector and it was through this model that the residual were arrived at for the second model.

$$DLLP_{it}/TA_{t-1} = LLP_{it}/TA_{t-1} - \{a_0 1/TA_{t-1} + a_1 LCO_{it}/TA_{t-1} + a_2 BBAL_{it}/TA_{t-1}\} \dots \dots \dots (i)$$

DLLP represents Discretionary loan loss provision; LLP = Loan loss provision; LCO = Loan Charge-off; BBAL = Beginning Balance of loan loss;  $TA_{t-1}$  = Lagged Total Assets;  $\alpha_0$  = Constant. The second model is presented in the following equation which is used to estimate the measure the predictive ability of board diversity and audit committee on EM.

$$EM_{it} = \beta_0t + \beta_1Wdir_{it} + \beta_2Bown_{it} + \beta_3Fdir_{it} + \beta_4Bsize_{it} + \beta_5Bodc_{it} + \beta_6Acc_{it} + \mu_{it} .. (ii)$$

$$EM_{it} = \beta_0t + \beta_1Wdir_{it} + \beta_2Bown_{it} + \beta_3Fdir_{it} + \beta_4Bsize_{it} + \beta_5Bodc_{it} + \beta_6Wdir_{it}*Acc_{it} + \beta_7Bown_{it}*Acc_{it} + \mu_{it} ..... (iii)$$

$Wdir_{it}$  is Women director measured as number of women on board over the total number of board members. (Bathula, 2008);  $Bown_{it}$  is Board Ownership measured as the percentage of share held by the board of directors (Farouk, 2014);  $Fdir_{it}$  is Foreign Director represented the number of foreign director divided by total number of board members (Abdul Rauf, Johari, Buniamin, & Abd Rahman, 2012);  $Bsize_{it}$  is Board Size measured as the number of Board members in a particular year. (Daghsnii, Zouhayer & Mbarek, 2016);  $Bodc_{it}$  is Board Composition measured as the ratio of Non-executive director to total number of directors. (Araborzoo, Rashidpuran & Arabi, 2015); and  $Acc_{it}$  is a composite index representing Audit Committee which is made of: (i) Audit committee size, the number of committee members, (ii) Audit committee composition, the number of shareholders over the total number of committee members, (iii) Audit committee meeting, the number of times the committee held meetings in a year.  $\beta_1 - \beta_7$  = Coefficient of explanatory variables,  $\beta_0$  = Constant or Intercept and  $\mu$  = Error Term. Robustness tests such as multicollinearity, heteroscedasticity, normality test of the standard error and langrage multiplier tests were conducted to validate the results.

#### 4. Results and Discussion

This section first established the usefulness and the strength of Chang, Shen and Fang (2008) model in Nigerian Banking Sector. It further present, interprets, analyzes and discusses the regression results. Based on the F-ratio and the probability value, the first hypothesis of the study was tested, while the R square of the two regression (Unmoderated and Moderated) were compared and use as a basis of testing the seconf hypothesis of the study.

##### 4.1: Summary of Descriptive Statistics I

The minimum value for discretionary loan loss provision in the banks stood at -7.44e-09 within the study period, while the maximum value stood at 3.45e-09. However, on average, the earnings management of banks was -1.40e09. This indicates a decreasing level of manipulation for discretionary loans. The ratio of loan loss provision has their minimum and maximum value stood at -6.94e-09 and 2.50e-09 respectively. The mean of loan loss provision was -1.20e-10 implying that the ratio of loan loss provision to total assets is decreasingly managed. The inverse of total assets value for both minimum and maximum, stood at 2.30e-10 and 5.45e-09. The mean of the inverse of total assets for all the banks was 1.45e-09. The minimum value for loan charged-off for banks within the study period stood at -2.60e-10, while the maximum

value is 2.86e-09. The mean value reported for loan charged-off was 8.91e-11 for banks. The beginning balance of loan loss provision has a minimum value of -8.96e-09 and a maximum value of 1.49e-09. However, the mean value for beginning balance of loan loss provision was 1.41e-10. Below is the inferential statistics.

**Table 1: Regression Results of Chang, Shen and Fang (2008) Model**

Variables	Coeff	T-Stat	Prob.
Constant	9.80e-11	1.37	0.173
LLPTA	1.167	16.2	0.000
TA	-0.98	-23.6	0.000
LCOTA	2.337	15.7	0.000
BBALTA	1.041	17.8	0.000
R <sup>2</sup>			0.9178
Adjusted R <sup>2</sup>			0.9150
F-Statistics			321.07
F-Significance			0.0000

**Source: Result output from Stata 13**

From the cumulative result, the model records an R<sup>2</sup> of 0.9178 which showed the extent to which the discretionary loan loss provision was explained by loan loss provision scaled by total assets, inverse of total assets, loan charge off scaled by total assets and beginning balance of loan loss provision scaled by total assets. This showed the strength of the model as developed by Chang et al (2008) and its applicability as well as the usefulness of the model in ascertaining the extent of earnings management of listed Deposit Money Banks in Nigeria. Hence, this justified the adoption of the model in this study. Furthermore, the Fisher exact test (F-Statistics) value of 321.07 indicated that the model of the study was well fitted and as such the variables in the model were properly selected, combined and used.

All the independent variables (Loan loss provision scaled by total assets, Inverse of total assets, loan charge off to total assets, Beginning balance of loan loss provision to total assets) in the model were all found to have significant effect on discretionary loan loss provision. The signs accompanying each of the individual coefficient estimate was as specified in the model which further substantiates the appropriateness of the model.

#### 4.2: Summary of Descriptive Statistics II

The summary of statistics result indicates that the minimum value for earnings management in banks was 0.00003, while the maximum value was 0.14507. This indicates that the level of earnings manipulations of banks in Nigeria is minimal. To further substantiate this, the mean value of 0.007 indicates that the earnings manipulation level of banks was far below 1%. This could be associated with the adoption of both corporate governance and international financial reporting standard for best practices. Women director representation on board was zero percent some banks, while the highest representation stood at 60%, however, on average every banks have at least 14% of women on board. The minimum value for board ownership stood at 1.02%, while the maximum value is 55.19%. On average the total percentage

of shares held by banks stood at about 9%. For foreign directors' representation on board, the minimum was zero, while the maximum was 50%. On average, the banks have at least 10% foreign directors on board. The minimum and maximum number of board members stood at eight and twenty one for banks within the study period, while on average, each bank is deemed to have at least about 15 numbers of board members. The composition of the board in terms of non-executive directors to total number of directors is reported to have 21% on minimum and 88% as maximum for banks, while on the average, the non-executive directors occupies about 57% of the board members in banks. The inferential statistics is presented below.

**Table 2: Summary of Random Effect Model**

Variables	Unmoderated			Moderated		
	Coeffi	Z-Stat	Prob	Coeffi	Z-Stat	Prob
Constant	0.186	6.28	0.000	0.191	3.32	0.001
Wdir	-0.011	-1.71	0.086	-0.054	-1.43	0.154
Bown	0.019	4.12	0.000	0.018	0.92	0.357
Fdir	0.030	4.79	0.000	0.026	3.85	0.000
Bsize	-0.001	-1.63	0.104	-0.001	-1.43	0.154
Bodc	-0.044	-2.88	0.004	-0.037	-2.39	0.017
Acc	-0.015	-5.15	0.000	-0.016	-2.81	0.005
Wdirac				0.004	1.16	
0.245						
Bownac				-0.001	-0.05	
0.963						
R <sup>2</sup> Within	0.4593			0.4588		
R <sup>2</sup> Between	0.2882			0.3069		
R <sup>2</sup> Overall	0.3521			0.3701		
Wald Chi <sup>2</sup>	88.57			83.66		
Prob.	0.0000			0.0000		

**Source: Result output from STATA 13**

The results of the robustness tests include: heteroscedasticity test (p-value = 0.01) indicated the unfitness of the OLS and we proceeded with the GLS; the hausman specification tests for unmoderated and moderated model (p-value = 0.9385 and 0.9303) respectively, which indicated appropriateness of the random effect for the panel regression; Langrange Multiplier tests for unmoderated and moderated model (P-value = 0.01 and 0.01) respectively, which indicated presence of panel effect and hence the random effect used for this study. The regression results follow:

The significance influence of the audit committee variable on earnings management of Banks in the first model (unmoderated) showed that the variable can be used as a moderator, however, on comparison of the overall R<sup>2</sup> between the unmoderated (0.3521) and moderated (0.3701) models, it indicated that the interaction between women directors and audit committee, board ownership and audit committee accounted for significantly more variance than when they were used as single variables. This implied that, the moderated model explained the behavior of earnings management better in relation to the independent variables of the study when

compared with the unmoderated model. On the other hand, the test for significance difference which recorded a chi-square value of 34.20 and p-value of 0.0000 (see Appendix) indicated that there was a significant differences between the unmoderated and moderated models.

Under the unmoderated model, five of the variables (women directors, board ownership, foreign director, board composition, audit committee) were significant in influencing earnings management except for board size. Women director, board composition and audit committee were negatively related to earnings management under the unmoderated model which is also in line with the studies conducted by Lakhal, Aguir, Lakhal and Malek, (2015), Yohan (2016) and Xi'an and Xi'an (2012), but contrary to those of Hussaini and Gugong (2015), Arabborzoo, Rashidpuran and Arabi (2015) and Yasser and Al Mamun (2016). Also, board ownership and foreign director were positively related to earnings management of banks which also concur with the findings of Hooghiemstra, Hermes, Oxelheim and Randoy (2015) and Ogbonnaya, Ekwe and Ihendinihu (2016), but disagree with the findings of Ramadan (2015) and Abdul Rauf, Johari, Buniamin and Abd Rahman (2012).

For the moderated model, only three of the variables (foreign directors, board composition and audit committee) were having significant effect on earnings management of banks except for women directors, board ownership and board size. Among the significant variables, board composition and audit committee were found to have negative relationship with level of earnings management of banks while foreign director has positive relationship with the level of earnings management.

The two moderated variables were found to have insignificant effect on earnings management after the moderation, implying that the variables only affect earnings management individually than when they are moderated with audit committee. Another interesting findings this moderation is that the direction of the relationship changes. Women directors changed from negative to positive after being moderated with audit committee, while board ownership changed from positive to negative after being moderated with audit committee which may have resulted in its insignificant influence on earnings management.

Based on the forgoing analysis in respect of all the variables, the hypothesis one of the study which stated that board diversity has no significant effect on earnings management of listed Deposit Money Banks in Nigeria was tested. With respect to the findings showing that Wald  $\chi^2$  of 88.57 which was significant at the level of 1%. This implied that the independent variables significantly predicted the outcome of earnings management in listed deposit money banks in Nigeria. This therefore, provided enough evidence to reject null hypothesis I of the study.

Based on the findings and analysis in respect to moderated model of the study. The hypothesis which was formulated earlier in section one stating that audit committee had no significant moderating effect on the relationship between women directors, board ownership and earnings management of listed Deposit Money Banks in Nigeria was tested using the  $R^2$  statistics. Based on the  $R^2$  overall in respect of unmoderated and moderated models, they both record 0.3521 and 0.3701 respectively. This implied

that the high  $R^2$  recorded for moderated model as against the unmoderated model was an indication that the audit committee significantly moderated the relationship between women director, board ownership and earnings management. Therefore, this provided sufficient evidence of rejecting null hypothesis two of the study.

## 5. Conclusion and Recommendations

From the findings, the study concluded that board diversity and audit committee gender significantly affected the extent of earnings management in listed Deposit Money Banks in Nigeria. While audit committee can be concluded to have played a significant moderating role between the two moderated variables. Moderated board ownership is better than moderated women director because of the changes in direction of effect on earnings management. Overall, when diversity variables were improved upon, alongside increase in audit committee variables, the earnings quality of banks in Nigeria was guaranteed.

It is therefore recommended that management of the banks should increase the audit committee variables as they help checkmate the activities of the management and reduce the level of earnings management. Also, the management should consider members of the board who have shares when constituting the audit committee. In addition, women directors who partake in audit committee should be carefully selected by the management to ensure their full participation.

## References

- Abdul Rauf, F.H., Johari, N.H., Buniamin, S. and Abd Rahman, N.R. (2012). The Impact of Company and Board Characteristics on Earnings Management: Evidence from Malaysia. *Global Review of Accounting and Finance*, 3(2), 114-127
- Araborzoo, A. Rashidpuran, S. Arabi, A. (2015). The impact of corporate governance on earnings quality. *Journal of Scientific Research and Development*, 2(1), 127-132.
- Arun, T.G., Almahrog, Y.E. and Aribi, Z.A. (2015). Female Directors and Earnings Management: Evidence from UK Companies. *International Review of Financial Analysis*. 39(C), 137-146
- Ayemere, I.L. and Elijah, A. (2015). Audit Committee Attributes and Earnings Management: Evidence from Nigeria. *International Journal of Business and Social Research*, 5(4), 14-23
- Baccouche, S Hadriche, M and Omri, A. (2014). Multiple Directorships and Board Meeting frequency: Evidence from France. *Applied Financial Economics*, 24(14), 983-992.
- Barnea, A., Ronen, J. and Sadan, S. (1976). Classificatory smoothing of income with extraordinary items. *The Accounting Review*, 110-122.
- Bathula, H. (2008). Board Characteristics and Firm Performance: Evidence from New Zealand. An Unpublished thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Philosophy.

- Bello, A. (2005). Economics of Financial Reporting: A test on Nigerian Banks. An unpublished Seminar paper presented at the department of Accounting, Ahmadu Bello University, Zaria.
- Burton, C. & Ryall, C. (1995). Managing diversity. In *Enterprising nation: reviewing Pacific Century*, Research Report Australian Government Publishing Service, Canberra, 2,765-814.
- CBN, (2006). Code of Corporate Governance for Banks in Nigeria post consolidation.
- Chandrasegaram, R., Rahimansa, M.R., Rahman, S.K.A., Abdullah, S. and Nik Mat, N. (2013). Impact of Audit Committee Characteristics on Earnings Management in Malaysian Public Listed Companies. *International Journal of Finance and Accounting*, 2(2), 114-119.
- Chang, R. D., Shen, W.H.A. and Fang, C. J. (2008). Discretionary Loan Loss Provisions and Earnings Management for the Banking Industry. *International Business & Economics Research Journal*, 7(3), 9-20.
- Copeland, R. M. (1968). Income smoothing. *Journal of Accounting Research*, 6, 101-116.
- Daghsnii, O; Zouhayer, M. and Mbarek, K.B. (2016). Earnings Management and Board Characteristics: Evidence from French Listed Firms. *Account and Financial Management Journal*, 1(2), 92-110
- Dimitropoulos, P. (2011). Corporate Governance and Earnings Management in the European Football Industry. *Journal of European Sport Management Quarterly*, 11(5), 495-523
- Farouk M. A. (2014). Possession Formation and Earnings Management of Listed Chemical and Paints Firms in Nigeria. Being an M.Sc Thesis submitted to the school of Postgraduate Studies, Ahmadu Bello University, Zaria.
- Fei, C.C. (2015). The Impact of Managerial Opportunism on Earnings Reliability. *International Journal of Economics and Finance*, 7(10), 222-234
- Fodio, M. I; Ibikunle, J; and Oba, V.C. (2013). Corporate Governance Mechanisms and Reported Earnings Quality in Listed Nigerian Insurance Firms. *International Journal of Finance and Accounting*. 2(5), 279-286
- Gulzar, M. A. and Wang, Z. (2011). Corporate governance Characteristics and Earnings Management: Empirical Evidence from Chinese Listed Firms. *International Journal of Accounting and Financial Reporting*, 1(1), 133-151.
- Guo, J., Huang, P., Zhang, Y. and Zhou, N. (2014). Foreign Ownership and Real Earnings Management: Evidence from Japan. Being a Paper presented at the 2012 American Accounting Association (AAA) Annual Meeting and the 2012 AAA Mid-Atlantic Meeting.
- Hermalin, B. E. and Weisbach, M. S. (2003) Boards of directors as an endogenously determined institution: A survey of the economic evidence. *Economic Policy Review*, 9, 7-26.
- Hooghiemstra, R., Hermes, C., Oxelheim, L., & Randoy, T. (2015). The impact of board internationalization on earnings management. SOM Research Reports, 15010 (I&O), University of Groningen.
- Holtz, L. and Neto, A.S. (2013). Effects of Board of Directors' Characteristics on the Quality of Accounting Information in Brazil. Paper presented at the VII Anpcont Congress, Fortaleza, CE, Brazil, 25(66), 255-266

- Hussaini, B. and Gugong, B.K. (2015). Board Characteristics and Earnings Management of Listed Food and Beverages Firms in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 3(8), 25-41.
- Ibrahim, I. (2015). Board Characteristics and Earnings Management of Listed Foods and Beverages Firms in Nigeria. Being a M.Sc Dissertation Submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria
- Ishaq, M.T. (2017). Effect of Board Diversity on Earnings management of listed Conglomerates Firms in Nigeria. Being an M.Sc Thesis submitted to the School of Postgraduate Studies, Ahmadu Bello University, Zaria.
- Ioualalen, L., Khemakhem, H. and Fontaine, R. (2015). The Impact of Audit Committee Characteristics on Earnings Management: A Canadian Case Study. *Case Studies in Business and Management*, 2(1), 78-96.
- Kankanamage, C. A. (2015). The Relationship between Board Characteristics and Earnings Management: Evidence from Sri Lankan Listed Companies. *Kelaniya Journal of Management*, 4 (2), 36-43
- Kantudu, A.S and Samaila, I.A. (2015). Board Characteristics, Independence Audit Committee and Financial Reporting Quality of Oil Marketing Firms: Evidence from Nigeria. *Journal of Finance, Accounting and Management*, 6(2), 34-50.
- Kurawa, J. M. and Saheed, A. (2014). Corporate governance and earnings management: An Empirical Analysis of firms in petroleum and petroleum products distribution in Nigeria. *Research Journal of Accounting*, 2(2), 10-14
- Lakhal, F., Aguir, A., Lakhal, N., and Malek, A. (2015). Do Women On Boards And In Top Management Reduce Earnings Management? Evidence in France. *The Journal of Applied Business Research*, 31(3), 1107-1118.
- Lei, K. (2003). Earnings management and corporate governance in UK: the role of board of directors and audit committee. *Journal of Accounting and Finance*, 5(2), 23-39.
- Marimuthu, T. (2008). The role of Private Sector in Higher education in Malaysia. in D. Johnson & Maclean, R. (Eds.), Teaching: Professionalization, Development and Leadership, 271-282.
- Mazur, B. (2010). Cultural Diversity in Organisational Theory and Practice. *Journal of Intercultural Management*. 2(2), 5-15
- Mustafa; S; Mehmet, A; and Suleyman, I.C. (2014). The Impact of Corporate Ownership Structure and Board Size on Earnings Management for a Sample of Turkish Firms. *International Journal of Business & Management*, 9(12), 123-138.
- Oba, V.C., (2014). Board Dynamics and Financial Reporting Quality in Nigeria. *Review of International Comparative Management*, 15(2): 226-237.
- Ogbonnaya, A.K., Ekwe, M.C. and Ihendinihu, J.U. (2016). Effect of Corporate Governance and Ownership Structure on Earnings Management of Brewery Industry. *European Journal of Accounting, Auditing and Finance Research*, 4(7), 35-45
- Omoye, A.S and Eriki, P.O. (2014). Corporate Governance Determinants of Earnings Management: Evidence from Nigerian Quoted Companies. *Mediterranean Journal of Social Sciences*, 5(23), 553-564

- Patrick, E.A; Paulinus, E.C. and Nympha, A.N. (2015). The Influence of Corporate Governance on Earnings Management Practices: A Study of Some Selected Quoted Companies in Nigeria. *American Journal of Economics, Finance and Management*, 1(5), 482-493
- Qi, J. and Tian, S. (2012). Female Board Presence and the likelihood of Financial Restatement. *American Accounting Association*, 26(4), 607-629.
- Ramadan, I.Z. (2015). Does Ownership Structure Affect Jordanian Companies' Tendency to Practice Earnings Management? *Asian Journal of Finance & Accounting*, 7(2), 281-291.
- Razek, M. (2012). Board Characteristics and Earnings management in Manufacturing Companies in Nigeria. *Research Journal of Finance and Accounting*, 3(8), 15-31.
- Rose, C. (2007). Does female board representation influence firm performance? The Danish evidence. *Corporate Governance: An International Review*, 15 (2), 404-13.
- Saleh, M.N. and Haat, I.T. (2014). Earnings Management and Board Characteristics: Evidence from Malaysia. *Journal Pengurusan*, 24, 77-103
- Salihi, A.A. and Jibril, R.S. (2015). The Effect of Board the Size and Audit Committee the Size on Earnings Management in Nigerian Consumer Industries Companies. *International Journal for Innovative Research and Development*, 4(3), 84-91
- Shehu, U. H. (2012). Firm Characteristics and Financial Reporting Quality of Quoted Manufacturing Firms in Nigeria. An unpublished dissertation submitted to the school of postgraduate studies, Ahmadu Bello University, Zaria.
- Shehu, U. H., & Farouk, M. A. (2014). Board of Director's characteristics and Performance of listed Deposit Money Banks in Nigeria. *Journal of Finance and Bank Management*, 2(1), 89-105.
- Shehu U.H and Ibrahim, G. (2014). Governance Attributes and Real Activities Manipulation of Listed Manufacturing Firms in Nigeria. *International Journal of Accounting and Taxation*, 2(1), 37– 62
- Susanto, Y.K. (2016). The Effect of Audit Committees and Corporate Governance on Earnings Management: Evidence from Indonesia Manufacturing Industry. *International Journal of Business, Economics and Law*, 10(1), 32-37.
- Vafeas, N. and Theodorou, E. (1998). The relationship between board structure and firm performance in the UK. *British Accounting Review*, 30, 383-407.
- Xi'an, B.Q. and Xi'an, G.T. (2012). The Impact of Audit Committees Personal Characteristics on Earnings Management. *The Journal of Applied Business Research*, 28(6), 1331-1343
- Yasser, Q.R. and Al Mamun, A. (2016). Audit committee structure and earnings management in Asia Pacific. *Economics and Business Review*, 2(16), 66–84
- Yohan, A. (2016). Effect of Outside Director's Quality on Firm Value and Earnings Quality. *Research Journal of Business Management*, 11, 39-45
- Yu, M. (2013). State ownership and firm performance: Empirical evidence from Chinese listed companies. *China Journal of Accounting Research*, 6, 75–87

- Zhang, Y. and Li, Y. (2007). The Effect of the Directorate Characteristics on Earnings Management Based on Chinese Market Data. Available at <http://ieeexplore.ieee.org/document/>
- Zhang, Y. & Uchida, K., (2011). Corporate governance, investor protection, and earnings management: New international evidence, 6–19.