

# Effect of Board Attributes on Earnings Management of Listed Deposit Money Banks in Nigeria

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## Abstract

The main objective of this study was to investigate the effect of board attributes on earnings management of listed deposit money banks in Nigeria between 2016 and 2021. Board size, board diversity and board composition, were used as proxies for board attributes of listed deposit money banks in Nigeria, while discretionary accrual was used as proxy for earnings management in this study. The data was obtained from published annual audited accounts and financial reports of listed DMBs. A panel data of the twelve (12) quoted banks covering a period of five (5) years was employed. The study used various methods such as descriptive statistics, correlation, Hausman test and panel regression. The result found that board size and board composition was negatively significant on earnings management. while, board diversity was negatively insignificant on earnings management. The study recommends that shareholders of commercial banks in Nigeria should put in place ideal boards with adequate members so as to provide an oversight role that would minimize on earnings management. Also, the study recommends that deposit money banks in Nigeria should ensure that the composition of the board could properly constitute to have audit committees and independent directors who will bring in outside experience and expertise that would minimize earnings management. Finally, due to the insignificant effect of board diversity on earnings management, banks management should increase the awareness about the benefit of gender diversify Board members and give women the opportunity to participate in decision making process and share their knowledge.

**Keywords:** Board Attributes, Board Size, Board Diversity, Board Composition, Earnings Management, DMBs

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## 1. Introduction

The board attributes are the key internal control mechanism that serves as an interface between owners of capital (shareholders) and those who (managers) utilize that capital and create value (maximize shareholders' wealth). Additionally, the boards of directors monitor the firm's accounting system by ensuring the managers observe the relevant accounting principles and standards in preparing financial reports, thus guaranteeing the credibility of accounting information. The board's supervisory role in financial reports is vital because opportunistic managerial behaviors associated with earnings manipulation may mislead shareholders. Githaiga et al. (2022) argued that the board of directors is at the heart of corporate governance and that board attributes determines its effectiveness in monitoring the managers. Therefore, board attributes (board size, independence, gender diversity, and financial expertise) are important attributes that improve its effectiveness in mitigating earnings manipulation.

Board size has to do with the number of directors on the board. Proponents of small board size opined that it contributes more to the organization's success by prompt and precise decision making. Also, women are generally perceived to be associated with less fraudulent practices. The inclusion of women on corporate boards may likely reduce the opportunistic tendency of appointed managers and enhance accounting quality. In corporate management, women are found to be more risk averse as they are less likely to take risks and act unethically in a bid to gain private benefits (Ekpulu & Iyoha (2021).

Subsequently, earnings management practice produces less reliable accounting earnings that do not reflect a firm's financial performance. Earnings management is likely to reduce the quality of reported earnings and its usefulness for investor's decisions, thus reducing investors' confidence in the financial reports (Nasution & Nengzih, (2020).

The internal mechanisms of corporate governance, such as the board of directors is vital in protecting the shareholders' interest. The board of directors' responsibility is to monitor and control the management team to ensure compliance with laws and regulations and achieve financial information reliability. Despite the global adoption of various reporting standards, such as International Financial Reporting Standard (IFRS) and International Accounting Standards (IAS), yet unethical activities in the financial reporting are becoming order of the day and managers' discretion in financial reporting has continually threatened shareholders' interest. The persistent divergence of interest between managers and shareholders has been a recurring issue, and this has continually elicited empirical investigation in research (Moses, 2019).

The motivation for this research arises as the issue of financial mismanagement has eaten up corporate

organizations worldwide especially commercial banks and this is due to lack of good board of directors within the organizations. The scope of this research work covers the effect of board attributes on earnings management of listed deposit money banks in Nigeria spanning from 2016-2021. This is a period that was affected by various regulatory policy changes; one of such was the Treasury Single Account (TSA) that made a lot of banks to carry out strategic corporate financial policies so as to remain in business.

Board size, board diversity and board composition were used as proxies for board attributes of listed deposit money banks in Nigeria, while discretionary accrual was used as proxy for earnings management in this study. It is based on this background that the study examines effect of board attributes on earnings management of listed deposit money banks in Nigeria.

The Study tested the following Hypothesis:

**H<sub>01</sub>:** Board size has no significant effect on earnings management of listed deposit money banks in Nigeria.

**H<sub>02</sub>:** Board diversity has no significant effect on earnings management of listed deposit money banks in Nigeria.

**H<sub>03</sub>:** Board composition has no significant effect on earnings management of listed deposit money banks in Nigeria.

## 2. Literature Review

### 2.1 Concept of Board Attributes

Board attributes refer to features of corporate boards that are tasked with overall management of the firms. Mwendwa (2020) refer to board attributes as the concept of corporate governance. The success or collapse of firms is thus associated with the role acted by the management and firm governance as a process. While Nasution and Nengzih (2020); Fan, Lau and Young (2007) consider a broad variety of matters in corporate management, some process such as exposes, rights of voting, rules among others, this study gives attention on the several features of the board including board size, number of women in the board and non-executive directors

However, board attribute is all about running an organization in a way that guarantees that its owners as stakeholders are receiving a fair return on their investment because the interests of shareholders are usually conflicting with that of managers. The main challenges are reflected in the management and coordination related problems due to the variation in interests of firm's stakeholders. In view of the above, there is no single definition of corporate governance. The concept is defined and understood differently in different parts of the world, depending on the relative power of owners, managers and providers of capital (Keil & Nicholson, 2003). In his definition, Abri et al. (2019) asserted that board attributes is the determination of the broad uses to which organizational resources will be deployed and the resolution of conflicts among the myriad participants in the organization. In a similar effort, corporate governance as the way management of a firm is influenced by many stakeholders, including owners, creditors and other stakeholders.

#### Concepts of Board Size

Board size indicates the total number of directors on the board of each sample firm which is inclusive of the CEO and Chairman assigned for each accounting year. The number of directors' sits on the board will use a proxy for this variable. Board size refers to the total number of directors on the board of each sample firm which is inclusive of the CEO and Chairman for each accounting year. This includes outside directors, executive directors and non-executive directors (Shakir, 2008). One of the board attributes that have been a subject of much interest is the size of the board of directors. As considering the board size, there is a trade-off between additional value-added expertise or monitoring benefits and disadvantages stemming from the coordination problem (Ekpulu & Iyoha, 2021). Although larger board size can facilitate board functions and provide more quality decision-making processes, they can ultimately have problems of coordination and communication leading to decline in board effectiveness and consequently firm performance.

#### Concepts of Board Diversity

Board diversity is the proportion of the number of females to total board size is used as a measure of board gender. The presence of a female on the board leads to gender diversity. It is generally accepted that female board members are more independent (Adigwe & Ogoun, 2018). One key principle of corporate governance is that women candidates should also be sought as part of the board of directors. There are reasons to believe gender diversity may be most important in this setting. If adding female directors to corporate boards leads to more effective boards via increased cognitive conflict and ultimately greater independence or via increased director effort or knowledge, then the benefits should be most readily visible when it comes to the quality of financial reporting because high quality financial reporting requires extensive financial expertise, continuous monitoring efforts and a high level of cognitive independence to produce the best outcome (Ekpulu & Iyoha, 2021). Gender diversity is the proportion of the number of females to total board size is used as a measure of

board gender. The presence of a female on the board leads to gender diversity. It is generally accepted that female board members are more independent (Carter et al., 2003).

#### Concepts of Board Composition

Board Composition comprises of non-executive director which are basically board of director of the company or the firm, but does not have any stake holding in the company nor is he an employee of the company; he is annually paid by the company. Corporate governance standards in some of the public companies require the non-executive director so they have an unbiased opinion about the company's strategies and the company's decision making. He also has the ability to judge the performance of the organization independently and also have the knowledge about the organizational activities.

#### Concepts of Earnings Management

According to Githaiga et al. (2022), earnings management can be described as using judgments and provisions by the management in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying performance of the company or to motivate or influence stakeholders based on outcomes that depend on reported accounting numbers.

Earnings management entails the use of discretion available to managers in deciding the accounting treatment of various transactions and events for the sake of their expected incomes (Mwendwa, 2020). Kajola et al. (2020) stated that managers practice earnings management when they use the opportunity to make accounting choices to misreport the financial reports for purposes of lying to some stakeholders about the firm's economic conditions or take advantage of a certain benefit that is depended on the amount of earnings reported. Kajola et al. (2020) suggested that managers engage in earnings management when they alter the financial statements so as to correspond to the set targets. The shareholders being the legal owners require to get correct and timely information on the affairs of their companies. Proper measures should be taken both by the government and the regulatory agencies to ensure that shareholders get reliable information from the managers.

**Discretionary Accruals** As evident from the studies of previous researchers, there are two types of accruals (discretionary and non-discretionary accruals), However, managers involved in earnings management by playing with discretionary accruals. In this regard, the researchers had applied various models for calculation of discretionary accruals e.g. DeAngelo Model in 1986, Healy Model in 1985, Jones Model in 1991 and Modified Jones model in 1995. However, the latest and widely used model is Modified Cross-Sectional Jones Model, which has been used in this study also, wherein discretionary accruals have been derived by subtracting nondiscretionary accruals from total accruals, whereby non-discretionary accruals are derived (Agyeman, 2020).

## 2.2 Empirical Review

### Board Size and Earnings Management

Githaiga et al. (2022) examined the effect of board size on earnings management (EM) from a developing region perspective. The study further adds literature by examining whether firm size moderates the relationship between board characteristics and EM. This study employs data drawn from 88 listed firms in the East African Community (EAC) for the period between 2011 and 2020. The study used the system generalized method of moments (SGMM) estimation model to take care of potential endogeneity and reverse causality. The findings revealed a positive and significant relationship between board size and EM. The findings further indicated that board independence, board gender diversity, and board financial expertise had a negative and significant effect on EM. In addition, the findings confirmed that firm size moderated the relationship between board size, board independence, board gender diversity, and EM. Thus, this study contributes to the existing literature by empirically examining the topic in the EAC. Further, the study did not fill the existing gap in literature by examining whether firm size moderates the relationship between board characteristics and EM.

Ekpulu and Iyoha (2021) examined the effect of board size and the earnings management of financial statement among non-financial firms listed in the Nigerian Stock Exchange. The study adopted a longitudinal research design; using a population size of ninety-three (93) firms; with sample size of fifty-six (56) firms using filtering criterion of firms that do not have all the annual reports during the period 2006 to 2018. The study used the binary estimation technique to obtain a functional relationship between a transformed qualitative variable (logit) and the predictor variable. The study found that board size has an inverse relationship with the likelihood financial statement while board independence and board meetings exhibit positive relationship with the likelihood of financial statement fraud. Based on the result, the study concludes that board attributes are not aversive mechanisms in curtailing managers' excesses on the likelihood to engage in financial statement fraud.

Adewumi, et al. (2020) examined the effect of board size on earnings quality in government-linked and non-linked firms quoted on the Nigerian Stock Exchange. Discretionary Accruals (DACC), Earnings Predictability (EPRED) and Earnings Persistence (EPSIS) are used as measures for earnings quality. The study employed a sample size of 30 companies consisting of 15 firms listed on the NSE and then firms without

government linkage. Longitudinal research design was employed for the study with data covering the period 2009-2018. Secondary data was employed for the analysis and panel regression technique was employed for model estimation. The findings of the study reveal that the effect of board size on earnings quality shows differences amongst linked and non-linked firms. For government non-linked firms, board size effect is only significant in DACC, but neutral in relation to EPRED and EPSIS, while for government-linked firms, lower board size is found to enhance EPRED, but neutral in the case of DACC and EPSIS. Based on the findings, the study recommends that for both government-linked and non-linked firms, there is a need to ensure optimal board size. Though there is currently no consensus on what an adequate board size should be, the study recommends that companies must ensure that the board represents all the stakeholders' interest as this can help to improve effectiveness.

#### Board Diversity and Earnings Management

Cho and Chunyoung (2022) analyzed the relationship between Vietnamese firms' earnings management, board characteristics, and ownership structures. They used board size and the proportion of outside directors to reflect board characteristics, and the ownership percentages of the board of directors, outside directors, and the chief executive officer (CEO) to reflect the ownership structures. They also used discretionary accruals, measured by the modified Jones model, to proxy for earnings management. From analyzing firms listed on the Ho Chi Minh and Hanoi Stock Exchanges from 2012 to 2017, it was found that board size and the ownership percentages of outside directors and CEOs are negatively related to earnings management, whereas the board of directors' ownership percentage is positively related. The proportion of outside directors is not significantly associated with earnings management.

Kafidipe et al. (2021) examined corporate governance and earnings management in deposit money banks and how operational problems within commercial banks and information on them in Nigeria has been hoarded to a great extent. Twelve banks are included in the panel data spanning the period 2013–2018 using Descriptive-statistics. To investigate the presence of existing relationship amongst variables, the Pearson-correlation analysis is utilized. However, panel data estimation strategies such as pooled regression, fixed effect as well as random effect regression were also used to identify the presence of collinearity among the variables. In contrast, the Hausman test was used to select the appropriate estimator. The result showed a negative but a significant impact on bank's financial risk. However, a corporate governance system that is sound increases the profitability of loans as well as the stability of banks. Furthermore, the study finds that board size, board independence, directors' shareholdings and board meetings are negative while the coefficient number of board committee is positive on risk management. Therefore, shareholders, board meetings & members of the board does have negative relationship to fraud management.

Permatasari (2020) examined the relationship between corporate governance and earnings management of Indonesian banks. The sample utilized in this study are all of Indonesian banks during the period of 2010–2016, which has derivative transactions. Data sources were obtained from annual report and bank financial statements. The study results showed that good corporate governance implementation in Indonesia was able to influence bank risk. There were differences in credit risk, liquidity risk and operational risk in banks with different governance ratings, but not at market risk. The effectiveness of risk management and good corporate governance implementation is needed to enable banks to identify problems early, to follow up on rapid improvements and to be more resilient to crises. The study did not measure the extent to which board composition can promote earnings management in commercial banks in Nigeria.

Nasution and Nengzih (2020) examined the effect of the effect of Good Corporate Governance, Earning Per Share, and Company Characteristics on Earnings Management. Good Corporate Governance is measured using indicators of Institutional Ownership, Managerial Ownership, Independent Board of Commissioners, Audit Committee, Earning Per Share, Company Size on Profit Management. The banking companies that have gone public are listed on the Indonesia Stock Exchange (IDX) in 2015-2018. The method used is a quantitative method. The population in this study were all banking companies listed on the Indonesia Stock Exchange for four years, namely 2015 - 2018. Data collection techniques in this study were carried out in several ways, namely by documentation and literature study. The data obtained were then analyzed using the multiple linear regression analysis model using SPSS version 24. However, before multiple regression analysis was performed first, a descriptive statistical regression analysis and a classic assumption test were performed.

#### Board Composition and Earnings Management

Ali, et al. (2021) examined the effect of corporate governance and the insolvency of financial institutions. However, they investigated whether shareholder-friendliness of corporate governance mechanisms is related to the insolvency risk of financial institutions. The study used sample of 556 publicly traded U.S. financial institutions over the 2005–2010 period. Insolvency risk data was collected from the Credit Research Initiative (CRI) database managed by the Risk Management Institute (RMI) at the National University of Singapore. The

study found that corporate governance is positively related to the insolvency risk of financial institutions as proxied by Merton's distance to default measure and credit default swap (CDS) spread. The study also found that "stronger" corporate governance increases insolvency risk relatively more for larger financial institutions and during the period of the financial crisis. Lastly, the results suggested that shareholder-friendliness of corporate governance mechanisms is viewed unfavorably in the bond market.

Shanwan and Almubaydeen (2020) examined the impact of board composition and dividend policy on real earnings management in the listed Jordanian industries. 8 years data (2010 to 2018) was extracted from the audited financial reports of the selected firms. Data was analyzed using Structural Model via AMOS version 26 and SPSS version 21. The findings revealed a positive and significant effect between board size, board composition and real earning management at  $p\text{-value} < 0.05$  and  $0.001$  (two-tailed) respectively. While negative of dividend policy on REM was recorded at  $p\text{-value} > 0.05$  (two-tailed). This study has immensely contributed towards bridging the gap in the existing knowledge as it documented a new finding. The benefits of these findings cross over the managers, shareholders, board of directors, investors, the Jordanian government and all other relevant institute for the buildup of the healthiest industrial sector and better economy.

Bufarwa, et al. (2020) examine relationships between corporate governance mechanism, integrated financial reporting, and investment risk on the stock exchange in Thailand. This study has investigated determinants and consequences of integrated financial reporting by analyzing Form 56-1 for year-end 2015 of the 240 Thai listed firms. To examine the relationship, an integrated financial reporting checklist was developed to identify the level of integrated reporting of listed firms on the Stock Exchange of Thailand. Investment risk data was collected from SETSMART database. The analysis was conducted using structural equation modeling (SEM). The statistical results from factor analysis found that all seven dimensions are appropriate measurements of integrated financial reporting. The empirical result is that positive relationships were found for stakeholder-oriented corporate governance mechanism, shareholder-oriented corporate governance mechanism and integrated financial reporting; integrated financial reporting and investment risk. The model identified mediating relationship of integrated financial reporting between shareholder-oriented corporate governance mechanism and investment risk.

### 2.3 Theoretical Framework

#### Agency Theory

The principal and agent theory emerged in the 1970s from the combined disciplines of economics and institutional theory. There is some contention as to who originated the theory, with theorists Stephen Ross and Barry Mitnick claiming its authorship. Ross is said to have originally described the dilemma in terms of a person choosing a flavor of ice-cream for someone whose tastes he does not know. The most cited reference to the theory, however, comes from Michael Jensen and William Meckling. The theory has come to extend well beyond economics or institutional studies to all contexts of information asymmetry, uncertainty and risk.

The agency theory has its roots in economic theory and it dominates the corporate governance literature. Daily, Dalton and Canella (2003), point to two factors that influence the prominence of agency theory. Firstly, the theory is a conceptually simple one that reduces the corporation to two participants, managers and shareholders. Secondly, the notion of human beings as self-interested is a generally accepted idea. In its simplest form, agency theory explains the agency problems arising from the separation of ownership and control. It "provides a useful way of explaining relationships where the parties' interests are at odds and can be brought more into alignment through proper monitoring and a well-planned compensation system" (Davis, Schoorman & Donaldson, 1997).

The agency theory will be adopted as it helps in understanding why managers engage in earnings management. Thus, on the basis of this theory, a positive relationship is predicted between corporate governance and earnings management. This is because of existence of conflicting interests between the management and the shareholders would essentially promote and encourage earnings management by the management team.

### 3. Methodology

The study was Ex-post facto research design. The population of this study was made up of 14 listed commercial banks on the floor of the Nigerian Stock Exchange from year 2016 to 2021. However, twelve (12) out of the thirteen (13) listed commercial banks was used based on convenience. Access Bank Plc, Fidelity Bank Plc, First Bank of Nigeria Plc, First City Monument Bank Plc, Guaranty Trust Bank Plc, Stanbic IBTC Bank, Sterling Bank Plc, UBA Plc, Unity Bank Plc, Union Bank, Wema Bank Plc, and Zenith Bank Plc. Ecobank was listed as Eco Transnational incorporated and the data was quoted in dollars and Jaiz bank was listed in 2018, hence was exempted from the sampled banks for the period of this study due to unbalanced data sets. The data on board attributes and earnings management information was used for this study and it will be secondary in nature. The study used various methods such as descriptive statistics, correlation, Hausman test and panel regression.

$$DEC_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BC_{it} + \beta_3 BD_{it} + e_{it} \text{-----} 3$$

Where

DEC = Discretionary Accrual (Log)

BS= Board Size (Log)

BC= Board Composition (Log)

BD= Board Diversity (Log)

e = Stochastic error term

$\beta_1, \beta_2, \beta_3$  are regression parameters, also, the slope of each variable.

#### 4. Results and Discussions

Table 1 Descriptive Statistics

	DAC	BS	BC	BD
MEAN	-2.292639	13.79167	62.84597	19.42514
MEDIAN	-2.420000	14.00000	57.73500	20.00000
MAXIMUM	9.060000	21.00000	93.75000	45.45000
MINIMUM	-3.470000	7.000000	43.75000	0.000000
STD. DEV.	1.438621	3.188613	12.84741	10.36751
SKEWNESS	6.951386	0.188483	0.946749	0.181994
KURTOSIS	55.44025	2.386982	2.718263	2.523332
JARQUE-BERA	8829.802	1.553685	10.99414	1.079099
PROBABILITY	0.000000	0.459856	0.004099	0.583011
SUM	-165.0700	993.0000	4524.910	1398.610
SUM SQ. DEV.	146.9438	721.8750	11718.97	7631.459
OBSERVATIONS	72	72	72	72

Source: E-Views 10, 2023

The table 1 revealed the data used in the study with discretionary accruals (DAC) having a mean value of -2.292639 which means that DAC on an average is -2.292639 for quoted deposit money banks in Nigeria. The deviation from the mean (standard deviation) was 1.438621; this means that DAC was not normally distributed because the standard deviation value was lower than the mean value. In like manner, it has a median of -2.420000 with skewness and kurtosis of 6.951386 and 55.44025 respectively. The maximum DAC of quoted deposit money banks in Nigeria as at the period of study was 9.060000 which means that the highest DAC of quoted deposit money banks in Nigeria was more than 9.06, while the minimum of DAC of quoted deposit money banks for the period under study was -3.470000. The Jacque-Bera value of 8829.8 confirms the normality of the data.

Also, board size (BS) has mean value of 13.79167 while deviation from the mean (standard deviation) was 3.188613. The mean of BS was normally distributed because the standard deviation value was lower than the mean value. In like manner, it had median of 14.00000 with skewness and kurtosis of 0.188483 and 2.386982 respectively. The maximum of BS of quoted deposit money banks in Nigeria as at the period of study was 21.00000 which means that the highest BS from the quoted deposit money banks in Nigeria was not more than 21, while the minimum BS from the quoted deposit money banks for the period under study was approximately 7.00. The Jacque-Bera value of 1.5536 confirms the normality of the data.

Furthermore, board composition (BC) has mean value of 62.8459 while deviation from the mean (standard deviation) was 12.84741. This means that BC was normally distributed because the standard deviation value was higher than the mean value. In like manner, it had median of 57.73500 with skewness and kurtosis of 0.946749 and 2.718263 respectively. The maximum BC of quoted deposit money banks in Nigeria as at the period of study was 93.75000 which means that the highest BC from the quoted deposit money banks in Nigeria was not more than 93.75, while the minimum BC from the quoted deposit money banks for the period under study was approximately 43.75. The Jacque-Bera value of 10.994 confirms the normality of the data.

Finally, board diversity (BD) has mean value of 19.42514 while deviation from the mean (standard deviation) was 10.36751. This means that BD was normally distributed because the standard deviation value was higher than the mean value. In like manner, it had the median of 20.0 with skewness and kurtosis of 0.181994 and 2.523332 respectively. The maximum of BD of quoted deposit money banks in Nigeria as at the period of study was 45.45000 which means that the highest BD from the quoted deposit money banks in Nigeria was not more than 45.4, while the minimum BD from the quoted deposit money banks for the period under study was approximately 0.000. The Jacque-Bera value of 1.079099 confirms the normality of the data.

Table 2: Correlation Matrix

	DAC	BS	BC	BD
DAC	1	-0.1532	-0.1613	-0.1741
BS	-0.1532	1	-0.5178	0.0044
BC	-0.1613	-0.5178	1	0.0483
BD	-0.1741	0.0044	0.0483	1

Source: E-Views 10, 2023

Table 2 explained the correlation of board attributes measures and earnings management of listed deposit money banks in Nigeria where the DAC was correlated with BS to the value of -0.15 which signifies there is no correlation since the value is negative, While the DAC were correlated with BC to the value of -0.16 which signifies there is no correlation since the value is negative. Also, DAC was not correlated with BD to the value of -0.17 which signifies there is no correlation since the value is negative. Similarly, BS was correlated with DAC to the value of -0.15 which signifies there is no correlation since the value is negative, While the BS was correlated with BC to the extent of -0.51 which signifies there is negative correlation since the value is negative. Also, BS was correlated with BD to the value of 0.00 which signifies there is positive correlation since the value is positive. Comparably, BC was correlated with DAC to the value of -0.16 which signifies there is lower correlation since the value is negative, While the BC was correlated with BS to the extent of -0.51 which signifies there is negative correlation since the value is negative. Also, BC was correlated with BD to the value of 0.04 which signifies there is higher correlation since the value is positive. In addition, BD was correlated with DAC to the value of -0.17 which signifies there is no correlation since the value negative, While the BD was correlated with BS to the extent of 0.004 which signifies there is positive correlation since the value is positive. Also, BD was correlated with BC to the value of 0.048 which signifies there is positive correlation since the value is positive.

Table 3: Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	3.124874	3	0.3728

Source: E-Views 10, 2023

In view of the fact that both fixed and random effect tests was conducted, Hausman test was used to decide the best out of the result. The test enabled this research to choose the most appropriate between the fixed and random effect models. With the probability of 0.372, the random effect was estimator was used to run the regression.

Table 4: Panel Regression  
 Dependent Variable: DAC

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.343137	1.564624	1.497572	0.1389
BS	-0.143117	0.060148	-2.379403	0.0202
BC	-0.035607	0.014946	-2.382415	0.0200
BD	-0.021838	0.015844	-1.378335	0.1726
R-squared	0.433959	Mean dependent var		-2.292639
Adjusted R-squared	0.352319	S.D. dependent var		1.438621
S.E. of regression	1.373249	Sum squared resid		128.2354
F-statistic	3.306873	Durbin-Watson stat		2.449410
Prob(F-statistic)	0.025241			
R-squared	0.127317	Mean dependent var		-2.292639
Sum squared resid	128.2354	Durbin-Watson stat		2.449410

Source: E-Views 10, 2023

Board size had negative significant effect on earnings management because the p-value was 0.0202 which was less than the 0.05 significant level, indicating that increase in board size will automatically decrease on discretionary accruals in the firm. Also, board composition had a negative significant effect on earnings management because the p-value was 0.0200 which was less than the 5% significant level, indicating that increase in board composition will automatically decrease discretionary accruals.

While, board diversity had an insignificant effect on earnings management because the p-value was 0.1726 which was greater than the 5% significant level, indicating that increase in board diversity will not have a noticeable increase the earnings management.

The coefficient of determination ( $R^2$ ) is 43.3% which means that board attributes variables used in the study explained variation on earnings management to the extent of 43%, while the remaining variation of 57% was explained by other variables not captured in the model. The model is fit with Probability of F-statistics of 0.02.

#### 4.2 Discussion of Findings

Based on the findings, board size had a significant effect on earnings management at 5% significant level, indicating that increase in board size will automatically decrease on earnings management of listed deposit money banks in Nigeria. However, the implication of this finding indicates that board size should neither be too large nor too small but should be appropriate in size to enable active and effective member participation and so that the members should be capable of effectively carrying out their duties to tame discretionary accruals. Research works such as; Ali et al (2020), Agbaje and Oloruntoba (2018), all support the findings of this study.

Also, board composition had a significant effect on earnings management which signifies that increase in board composition will automatically decrease earnings fraud of listed deposit money banks in Nigeria. However, the implication of this finding indicates that the independence of a board of directors is related to its composition and the board is expected to be more independent as external directors increase in proportion to non-independent directors. Also, board comprising reasonable proportion non-executive directors is more likely to be independent of management than one dominated by inside directors, and therefore more likely to protect the interests of other stakeholders. This work is in support with the findings of Shahwan and Almubaydeen (2020),

Furthermore, board diversity had no significant effect on earnings management which signifies that increase in board diversity will not have any noticeable increase on earnings management of listed deposit money banks in Nigeria. However, the implication of this finding indicates that Board Diversity is heterogeneity or difference among members of a particular board, and has many aspects for categorization ranging from task skills to relational skills, age to nationality, functional background to religious background, and from political preference to gender preference. However, this may not affect earnings management as seen in the result. This work is in support with the findings of Shakir (2008) and Nasution and Nengzih (2020).

#### 5. Conclusion and Recommendations

This research examined effect of board attributes on earnings management of listed deposit money banks in Nigeria for a period of 5 years (2016 – 2021). The findings reached that board size has a negative significant effect on earnings management of listed deposit money banks in Nigeria. This shows that board size significantly contributes to the earnings management of listed deposit money banks. Therefore, an increase in board size will automatically decrease earnings management of listed deposit money banks in Nigeria.

Furthermore, the study also found out that board composition had a negative significant effect on earnings management of listed deposit money banks in Nigeria. Meaning that an increase in board composition will automatically decrease earnings management of listed deposit money banks in Nigeria. In addition, the study found that board diversity has no significant effect on earnings management of listed deposit money banks in Nigeria. This reveals that increase in board diversity will not have any noticeable increase on earnings management of listed deposit money banks in Nigeria

Based on the findings and conclusions from this study, the following recommendations are as follows;

- i. The study recommends that shareholders of commercial banks in Nigeria should put in place ideal boards with adequate members so as to provide an oversight role that would minimize on earnings management.
- ii. The study recommends that deposit money banks in Nigeria should ensure that the composition of the board could properly constitute to have audit committees and independent directors who will bring in outside experience and expertise that would minimize earnings management.
- iii. Finally, due to the insignificant effect of board diversity on earnings management, Banks management should increase the awareness about the benefit of gender diversify Board members and give women the opportunity to participate in decision making process and share their knowledge.



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