
BOARD CHARACTERISTICS AND CASH VALUE ADDED OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

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Abstract

This study examined the relationship between board characteristics and cash value added of listed deposit money banks in Nigeria for a thirteen year period covering from 2010-2022. Board size, board gender diversity and board independence were used to proxy board characteristics, while cash value added served as the dependent variable. In line with the objectives of the study, three hypotheses were formulated. Ex-Post facto research design was employed. Thirteen (13) listed deposit money banks constituted the sample size of this study. Secondary data were extracted from the annual reports and accounts of the sampled firms and were analyzed using E-Views 10.0 statistical software. The study employed inferential statistics using Pearson correlation and Panel Least Square (PLS) regression analysis. Findings from the empirical analysis showed that there is a significant and positive relationship between board size and cash value added ($\beta_1=0.035453$; $p\text{-value} = 0.0000 < 0.05$); a significant and positive relationship between board gender diversity and cash value added ($\beta_2=0.070263$; $p\text{-value} = 0.0000 < 0.05$); a significant and positive relationship between board independence and cash value added ($\beta_3=0.025593$; $p\text{-value} = 0.0000 < 0.05$) of listed deposit money banks in Nigeria at 5% level of significance respectively. Conclusively, board characteristics significantly relate with and cash value added of listed deposit money banks in Nigeria. It was recommended inter alia that considering the positive relationship between board characteristics and cash value added, it is suggested that company boards should have an independent majority which is more likely to consider the best interests of shareowners first, also is likely to foster independent decision-making and to mitigate conflicts of interest that may arise.

Keywords: Board Size, Board Gender Diversity, Board Independence, Cash Value Added

Introduction

The board of directors is a 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. The Board of Directors (BOD) has the main task of representing shareholders to participate in the governance and management of the enterprise in accordance with the development orientation of the enterprise. The Board of Directors is the governing body in a joint-stock company with full authority to represent the company to decide and perform the obligations and interests of the company. In general, the board of directors has great influence on the operations of the company in particular and on the business results of the company in general through management decisions. Therefore, improving the performance of government and improving the way companies do business has been the focus of several recent studies.

The relationship between the board and management is critical to the long-term success of the organization. However, problems arise when the different interests of the board and management are undefined (Amahalu and Osonwa, 2023). Some of the more common problems are interference by board members in operational matters; managers hesitate to make decisions; managers delegate difficult decisions upwards, leading to a risk-taking or conservative culture; and boards spend too much time dealing with small issues and thus neglect the most important issues that can significantly affect the organization. Boards of directors have been largely criticized for the decline in shareholders' wealth and corporate failure. They have been in the spotlight for the fraud cases that had resulted in the failure of major corporations, such as Enron, WorldCom and Global Crossing. In Nigeria, a series of widely-publicized cases of accounting improprieties have been recorded (for example, Wema Bank, NAMPAK, Finbank and Spring Bank). Some of the reasons stated for these corporate failures are the lack of vigilant oversight functions by the board of directors, the board relinquishing control to corporate managers who pursue their own self-interests and the board being remiss in its accountability to stakeholders. As a result, various corporate governance reforms have specifically emphasized on appropriate changes to be made to the board of directors in terms of its composition, structure and ownership configuration (). Given that the corporate governance literature is replete with studies examining the relationship between board characteristics and financial performance, it is clear that the vast majority of these studies have focused on corporate governance issues in developed economies. Several studies have failed to demonstrate a clear relationship between board characteristics and economic performance. For example, Amahalu, Okoye, and Nnadi (2023) found a positive relationship between board characteristics and financial performance, while Nguyen and Thuan-Huynh (2023) reported a negative relationship between management and financial performance. Similarly, Al-Absy and Hasan (2023) showed an insignificant relationship between board characteristics and financial performance. The inconsistencies of findings from the reviewed literatures show that there is a gap in literature which this study tends to fill, thus, the need for this study.

Objectives of the Study

The main objective of this study is to examine the relationship between board characteristics and cash value added of listed deposit money banks in Nigeria. The specific objectives are to:

- i. Evaluate the relationship between board size and cash value added of listed deposit money banks in Nigeria
- ii. Determine the relationship between board gender diversity and cash value added of listed deposit money banks firms in Nigeria
- iii. Assess the relationship between board independence and cash value added of listed deposit money banks in Nigeria

Research Hypotheses

Ho₁: There is no significant relationship between board size and cash value added of listed deposit money banks in Nigeria

Ho₂: There is no significant relationship between board gender diversity and cash value added of listed deposit money banks in Nigeria

Ho₃: There is no significant relationship between board independence and cash value added of listed deposit money banks in Nigeria

Conceptual Review

Board Characteristics

The characteristics of the board mean managers and officials in a significantly more complex environment, increasingly responsible, influenced by multiple stakeholders, and under pressure from all parties to better report on the health and behavior of the company. An organization's ability to withstand financial challenges and succeed well is believed to depend on the unique characteristics of its board (Amahalu and Okudo, 2023). The board is the highest decision-making unit of the company, tasked with securing and maximizing the assets of shareholders, monitoring the operations of the company, and evaluating the efficiency of the management. A board is a group of people who together manage the activities of an organization, which can be a for-profit organization, a non-profit organization or a government agency. The powers, duties and responsibilities of such board are determined by the bylaws of the board (including the corporate law of the relevant jurisdiction) and the organization's own rules and regulations. These bodies can determine the number of board members, the election method and the frequency of meetings.

Board size

The size of the board is the number of members forming the board. The optimal board size should include both active and inactive management members. Board size refers to the total number of board members for each sample firm, including the CEO and chairman for each fiscal year. This includes outside directors, non-executive directors and non-executive directors (Gordon, 2021).

Board Gender diversity

Gender diversity in government is the fair and equal representation of people of different sexes, often referred to as the equal ratio of men to women. Gender diversity on corporate boards explores and promotes gender diversity in traditionally male-dominated fields. This helps companies attract and retain talented women, which is especially important as more women enter the workforce around the world. The gender gap of the board is the proportion of female

managers out of the total number of board members. Board gender diversity is an important part of corporate governance; it is defined as the presence of female directors on corporate boards (Amahalu, Okoye, Obi, & Iliemena, 2019). Gender diversity focuses on the proportion and number of women on the board. Gender diversity in management means equal or balanced representation of different genders in the workplace or in other contexts and/or organizations. The extent to which a person's gender identity, role or expression deviates from the cultural norms assigned to people of a certain gender (Kanakriyah, 2021).

Board Independence

Independent outside directors are members of the company's board who are not affiliated with the company itself. Unlike insiders, outside directors are likely to be more objective and bring a different perspective to the management of the company. Board independence is the proportion of independent non-executive members on corporate boards, calculated by dividing the number of independent members by the number of board members (Okocha, Okoye, Amahalu, & Obi, 2022). An independent manager or board member is a person who does not have a material or financial relationship with the company, either directly or through one of the company's shareholders, shareholders or members of the management, except for membership fees received from the company's membership fee (Sobhan, 2021). Board of Directors Independence occurs when the board member has not been and is not currently employed by the company or its auditor, and the board member's employer has no significant business activities with the company.

Cash Value Added

Cash value added is a measure of company performance that looks at how much money a company generates through its operations. Generally, a high cash value added figure is beneficial for both companies and investors, as it demonstrates a company's ability to generate cash from one financial period to another, creating solid liquid profits. An index of more than 1.0 will indicate profitability while an index below 1.0 will indicate value destruction. The cash value added metric is one way to measure the real profitability of a business, beyond what is required to pay the bills and satisfy the investors (Onyeka & Amahalu, 2022).

$CVA = \text{cash flow} - \text{depreciation} - \text{capital charge}$

Board Characteristics and Cash Value Added

Ethnic heterogeneity is beneficial to the company because it positively affects performance indicators, while gender and educational heterogeneity has been shown to be the opposite (Bøhren and Staubo, 2016). According to Udo, Oraka and Amahalu (2022), women on boards are associated with corporate social responsibility (CSR) and CSR financial performance. However, in the mediation test, CSR seems to fully mediate the relationship between women on boards and financial performance. An increase in gender diversity in boards has a positive effect on the company's financial results. This shows that greater representation of women in boards can promote better management, which can be achieved by increasing the experience and opinions of managers. Companies should consider increasing the proportion of women on board as long as their presence can have a positive impact on the company's results. In addition, greater diversity can increase productivity, creativity and innovation.

Theoretical Review

Agency Theory

Agency theory was developed by Jensen and Meckling (1976). Jensen and Meckling (1976) proposed a theory of how corporate management is based on conflicts of interest between the owners of the company (shareholders), managers and important providers of debt financing; shareholders want to increase their income and wealth. Their interests are the income provided by the company as dividends and also the value of their shares; managers are employed to manage the company on behalf of the shareholders. However, if managers do not own shares in the company, they have no direct interest in future shareholder returns or stock value. Managers have employment and earn a salary; the largest creditors are interested in the company's managers ensuring impeccable financial management so that the company can pay its debts in full and on time. Agency theory is an economic theory that says that a firm is a set of contracts between self-interested individuals. A principal relationship occurs when a person (principal) authorizes another person (agent) to act on his behalf.

Empirical Review

Bebeji, Mohammed and Tanko (2015) analyzed the effect of board size and composition on the performance of five Nigerian banks over a nine-year period from 2002 to 2010. Multiple regression analysis revealed that board size has a significant negative effect on the return of the assets of Nigerian banks.

Odudu, James and James (2016) investigated the relationship between board characteristics and financial performance of savings banks in Nigeria between 2010 and 2015. Combined OLS regression technique was used to test the research hypothesis. The study concluded that the CEO does not have a significant impact on the return on equity of listed banks in Nigeria. Dabor and Benjamin (2017) investigated the relationship between board characteristics and firm performance in 90 Nigerian listed companies between 2010 and 2012. The study found that board size and education are positively and significantly related to sales revenue using OLS regression analysis technique.

Onwuchekwa (2019) investigated the relationship between board characteristics and earnings management practices of listed companies in Nigeria. A longitudinal study covering a six-year period (2007-2012) was used. The statistical tool used was the panel least squares regression technique. The study revealed that the independence of the board and the independence of the audit committee have a negative relationship with the consideration periods.

Islam, Pervej and Lee (2022) investigated the effect of board characteristics on firm financial performance in Bangladesh. The study included 28 non-banking institutions, and secondary sources were used to collect data for a five-year period (2016-2020). To demonstrate the relationship between board characteristics and firm performance in relation to performance, a regression analysis was performed that accounted for board size, number of female board meetings, audit committee, female directors, board members, and number of independent directors were considered independent variables and Return on Assets (ROA) was taken as the dependent variable of the study. The analysis showed that apart from the number of members of the management, no other independent variable has a significant effect on the return on equity (ROA).

Methodology

Ex-post facto research design was employed in this study. The population of this study consisted of the fourteen (14) deposit money banks listed on the floor of the Nigerian Exchange (NGX) Group from 2010 to 31st December 2022: Access Bank Plc, Eco Bank Plc, FCMB Bank Plc, Fidelity Bank Plc, First Bank Plc, Guaranty Trust Bank Plc, Jaiz Bank Plc, Stanbic IBTC Plc, Sterling Bank Plc, Union Bank Plc, United Bank of Africa Plc, Wema Bank Plc, Zenith International Plc and Unity Bank Plc. Purposively sampling method was adopted to select thirteen (13) deposit money banks which served as the sample size of this study: Access Bank Plc, Eco Bank Plc, FCMB Bank Plc, Fidelity Bank Plc, First Bank Plc, Guaranty Trust Bank Plc, Stanbic IBTC Plc, Sterling Bank Plc, Union Bank Plc, United Bank of Africa Plc, Wema Bank Plc, Zenith International Plc and Unity Bank Plc. This study made use of secondary data. The data were sourced from publications of the Nigerian Exchange (NGX) Group, fact books and the annual report and accounts of the sampled banks.

Table 1 Variable Description

Variable	Proxies	Acronym	Measurement
Independent Variable (Board Characteristics)			
	Board Size	BS	Logarithm of the total number of Directors
	Board Gender Diversity	BGD	$\frac{\text{Number of Female Directors}}{\text{Number of the Board of Directors}}$
	Board Independence	BI	$\frac{\text{Number of Independent Directors}}{\text{Number of the Board of Directors}}$
Dependent Variable			
	Cash Value Added	CVA	Cash flow - depreciation - capital charge

This study adapted and modified the model of Modozie & Amahalu, (2022):

$$PAT = \beta_0 + \beta_1 BS + \beta_2 FORD + \beta_3 BGD + e$$

Where:

PAT = Profit after Tax

FORD_{it} = Foreign Directors

e_{it} = the error term

β = coefficient which represents the slope of variables

Thus, in line with the study objectives and following the adapted model, the following panel least square regression models was constructed:

$$CVA_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 BGD_{it} + \beta_3 BI_{it} + \mu_{it}$$

Where:

β₀ = Constant term (intercept)

β_{it} = Coefficients of Board Characteristics to be estimated for firm *i* in period *t*

μ_{it} = Error term/unexplained variable(s) of firm *i* in period *t*

CVA_{it} = Cash value added of firm *i* in period *t*

BS_{it} = Board Size of firm *i* in period *t*

BGD_{it} = Board Gender Diversity of firm *i* in period *t*

BI_{it} = Board Independence of firm *i* in period *t*

Data Presentation and Analysis

Table 2 Pearson Correlation Matrix

	CVA	BS	BGD	BI
CVA	1.0000			
BS	0.3251	1.0000		
BGD	0.3910	0.2022	1.0000	
BI	0.1269	-0.3371	0.1166	1.0000

Source: E-Views Correlation Output, 2023

The resultant output of the correlation in table 4.2 showed that there is a positive relationship between BS (0.3251), BGD (0.3910), BI (0.1269) and CVA.

Table 3: Panel Least Square Regression Analysis showing the nexus between Board Characteristics and Cash Value Added

Dependent Variable: CVA
 Method: Panel Least Squares
 Date: 09/13/23 Time: 14:16
 Sample: 2010 2022
 Periods included: 13
 Cross-sections included: 13
 Total panel (balanced) observations: 169

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.048826	0.003321	14.70036	0.0000
BS	0.035453	0.004802	7.382906	0.0000
BGD	0.070263	0.008873	7.919003	0.0000
BI	0.025593	0.004572	5.597805	0.0000
R-squared	0.367773	Mean dependent var		0.019011
Adjusted R-squared	0.356277	S.D. dependent var		0.009797
S.E. of regression	0.007860	Akaike info criterion		-6.830668
Sum squared resid	0.010194	Schwarz criterion		-6.756588
Log likelihood	581.1915	Hannan-Quinn criter.		-6.800605
F-statistic	31.99400	Durbin-Watson stat		1.781688
Prob(F-statistic)	0.000000			

Source: E-Views 10.0 Regression Output, 2023

Interpretation of Regression Result

The resultant regression output in table 3 proves that the functional relationship between the dependent and independent variables is:

$$CVA = 0.048826 + 0.035453BS + 0.070263BGD + 0.025593BI + \mu$$

The implication of the regression model is that a unit increase in BS, BGD and BI will cause CVA to increase by 3.55%, 7.03% and 2.56% respectively. Table 3 also showed that BS, BGD and BI are positively and significantly related with the CVA of listed deposit money banks in Nigeria respectively. The beta coefficient of the variables; β_1 is 0.035453; $\beta_2 = 0.070263$; $\beta_3 = 0.025593$. The slope coefficients indicate that $X_1 = 0.0000 < 0.05$; $X_2 = 0.0000 < 0.05$; $X_3 = 0.0000 < 0.05$. Thus, a significant and positive relationship exists between BS, BGD and BI and

CVA. As evident in table 3, the adjusted R^2 is 0.356277. This means that approximately 35.63% of the variations in the sampled deposit money banks' cash value added can be explained jointly by BS, BGD and BI.

Decision

The overall regression result with P-value = 0.000000 provides a basis for accepting the alternative hypothesis, which states that BS, BGD and BI have a significant and positive effect on cash value added of listed deposit money banks in Nigeria at 5% level of significance.

Findings

Based on the analysis of data, the following findings emerged:

- i. There is significant and positive relationship between board size and cash value added of listed deposit money banks in Nigeria at 5% level of significance ($\beta_1=0.035453$; p-value = 0.0000<0.05).
- ii. There is significant and positive relationship between board gender diversity and cash value added of listed deposit money banks in Nigeria at 5% level of significance ($\beta_2=0.070263$; p-value = 0.0000<0.05).
- iii. There is significant and positive relationship between board independence and cash value added of listed deposit money banks in Nigeria at 5% level of significance ($\beta_3=0.025593$; p-value = 0.0000<0.05).

Recommendations

Based on these research findings, the following recommendations were made:

- i) A large board of 11-18 members should be encouraged. Because large records have a positive impact on cash value and business performance through effective monitoring and control.
- ii) As board gender diversity affects the value added to finance and the quality of disclosure through better oversight, which is likely to increase trust and encourage uninformed investor engagement, more female directors are needed on boards.
- iii) Considering the positive effect of board independence on adding financial value, it is recommended that corporate boards have an independent majority vote, which is more likely to be based on the interests of shareholders, also promotes independent decision-making and mitigates conflicts between companies. Potential interest.

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