

Corporate Governance and Firm Value of Nigerian Listed Deposit Money Banks

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Abstract

This study investigated how the corporate governance factors influenced the firm value of 12 listed Nigerian Banks on NGX within a range of 2011 and 2019 with 108 observations. Data were generated from a Certified Annual Financial Statement of sampled study. The study used descriptive, Hausman test, multiple regression analysis of random effect, and diagnostic tests such Heteroskedasticity and Autocorrelation to validate the data. The overall result indicated that there was a significant influence of corporate governance on the firm value. Findings further revealed that there was a negative significant relationship between board size, board composition, firm size, and firm value of sampled banks in Nigeria as the P-values <0.05 level of significance whereas the frequency of board meeting had a negative insignificant influence on firm value and leverage had a positive and significant influence on firm value. Whereas the women on board had a positive but non-significant influence on the firm value of the selected Nigerian banks as P-value > 0.05. Conclusively, the firm value of Nigerian banks was influenced by the practice of good corporate governance. The study suggested that the board of directors' size should be kept with adequate size for the operation of a banking system to be effectively and efficiently managed.

Keywords: Corporate Governance, Firm Value, Nigerian Banks, The Board Size, Gender Diversity

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1. Introduction

Banks play a vital role in assisting the economic operations of a nation by moving funds from saving units to spending units. If a banking system is efficient, there will be improvements in its profitability, thereby increasing the availability of funds flowing from savers to borrowers, and provision of better and quality services for the consumers. Firm value is the worth of a bank based on the total value of its outstanding shares in the market. It is the wish of investors to the success of a bank that reflects the share price (Reschiwati, Syahdina, and Handayani, 2020). Thus, corporate governance serves as vital ingredients that furnished information on how to expand the shareowner's wealth. It also plays an active position in rising the market value (Tahir, Rehman, and Rehman, 2014; Ahmad and Sallau 2018). Okoye *et al.* (2020) viewed that effective corporate governance underpins the existence of general tenets of business and is a vital ingredient for business sustainability. Okoye *et al.* (2020) assert that improper use of corporate governance creates a conflict of interest which is the role of corporate governance in which management acts as the agent, who is the custodian of resources of an enterprise to develop own interests against the principals. Therefore, the collapse of several companies in recent times can be linked to a lack of effective corporate governance; though the Nigeria Code of Corporate Governance 2018 recommends that corporate governing bodies of organizations should accommodate an adequate balance of knowledge, diversity, and independence for performing their responsibilities with fairness and without bias.

The corporate boards still lack adequate guidance to accomplish their firm value yet many of the problems experienced by the banks put under statutory management are largely attributed to financing. The failure of corporate governance has become a continuing threat worldwide and this can be traced to historic Mesopotamia, the United States of America security market crash in 1991, United Kingdom secondary crises, USA saving and loan debacle in 1980, financial crises in Latin America and East-Asia in 1990 (Ruparelia and Njuguna, 2016). Other countries in the world have also witnessed corporate failure in companies such as Enron in 2001, WorldCom in 2002, and Qwest Communication in 2011 in the US; Palmer and Harvey in 2017, and Carillion in 2018 in Europe; Skye bank and Diamond Banks in 2018 in Nigeria

Sanusi (2010) shared that the banking crisis in Nigeria has been associated with governance incompetency with the merging of banks which become a serious issue in the banking sector. He further stressed that corporate governance in banks failed due to the un-care attitude of boards to practice good corporate governance in turn misled by executive management participating in the sourced for unsecured loans at the expense of the depositors that unqualified to obtain a loan which can have a negative effect on firm value. The boards of directors were further blamed for the decline in shareowners' wealth and corporate failure

(Adigwe *et al.*, 2016). Moreover, the non-executive directors may be compromised, since they are being paid by the banks they are expected to oversee (Adigwe *et al.*, 2016).

Sanusi (2010 cited in Okoye *et al.*, 2020) also view the inadequacy and illiquidity of banks associated with failure of governance which prompted the take-over of eight banks by the (CBN) and subsequent injection of billions of naira bailout fund into six banks to avoid distressed such as Skye and Diamond Banks in 2018. Out of eight banks, Keystone Bank and Union Bank survived, due to a lack of prudent management of resources invariably affecting their market value. Consequently, emphasis has been laid on the appropriate transformation of several corporate governances, particularly made to the board composition, size, and structure (Adigwe *et al.* 2016). Furthermore, failure of corporate governance practices could hinder the earnings and firm value of banks due to loans disbursement with inadequate security, some directors disbursed funds for their personal use (Akpan and Riman, 2012).

A kind of research on corporate governance has been done on a bank's performance or profitability. They include (Akpan and Riman, 2012; Oyerinde, 2014; Adigwe *et al.*, 2016; Udeh, Abiahu, and Tambou, 2017; Agbaeze and Ogosi, 2018; Prusty and Ah-ah dal, 2018; Ogunmakin *et al.*, 2020; Okonkwo and Azolibe, 2020; Inyang, Inah and Eyo, 2020; Okoye *et al.*, 2020; Ozili, 2021). Some of the studies focused on corporate governance and investment decisions of banks such as (Marughu and Nwaobia, 2020; Okere and Ibidunni, 2019; Ahmad and Sallau, 2018; Mohammed and Elewa, 2016). However, other studies focused on corporate governance and firm value without adequately appreciating gender diversity and they failed to consider Nigerian banks that they did not change their nomenclature since 2011 as a result of good corporate governance practice.

Therefore, the gaps which the study intended to fill include; gap in the number of banks that have not changed their nomenclature since 2011. Based on this backdrop, the study aims at filling this existing gap by assessing how corporate governance practices have influenced a firm value of listed Nigerian Deposit Money Banks within a range of (9 years) 2011-2019. The firm value as a Tobin Q is measured by the market value of equity plus the market value of debt divided by the replacement cost of all assets.

The main objective of this paper is to assess the relationship between corporate governance and firm value of Banks in Nigeria while specific objectives are to; examine the influence of board size on firm value; investigate the relationship between the board composition and firm value; to ascertain the influence of gender diversity on the firm value, and to evaluate the impact of frequency of board meeting on the firm value of Nigerian banks.

This study, therefore, seeks to answer the following research questions. What is the influence of board size on firm value? What is the influence of board composition on the firm

value? To what extent has gender diversity influenced the firm value? What is the impact of frequency of board meetings on firm value?

Based on the above, the study is currently trying to add value to the existing work (Agbaeze and Ogosi, 2018; Prusty and Ah-ah dal, 2018; Ogunmakin *et al.*, 2020; Gulamhussen and Santa, 2015; Adams and Ferreira, 2009; Gill and Abradovich, 2012; Baxter, 2014) by considering only Nigerian Deposit Money Banks that have not to changed their nomenclature since 2011. This study also contributes by extending the timeline to 9 nine years (2011-2019), thus avoiding circumstances that are contingent on a particular period in the market values of banks or the composition of its board. At the same time, this study makes an empirical contribution to the debate on issues related to the integration of some corporate governance variables in corporate decision-making

This paper consists of five sections. Section one presents the introductory part of the study. Section two focuses on the literature review. Section three contains the research methodology. Section four discusses the findings while section five concludes the study.

2. Literature Review

The rules by which institutions are regulated and governed are known as corporate governance. It advanced with aim of promoting transparency with effective service delivery of a banking sector and motivates the professionals to achieve its objectives (Udeh *et al.*, 2017). Corporate governance refers to a procedure that governs the operations of banks with aim of ensuring that banks are managed in line with the expectation of shareowners and other interested parties. Pitambar (2017), views corporate governance as a way of regulating and operating by which activities of banks promote objectivity, transparency, and accountability. Okafor (2011) and Ogunmakin *et al.*, (2020) affirmed that corporate governance encompasses the rule that guide management to perform his or her responsibility within the organizational circle. This supports that corporate governance encompasses the policies, procedures, and framework applied by banks to achieve the targeted objectives. Okonkwo and Azolibe (2020) described corporate governance of banks as means by which activities and business operations of the banks are conducted and governed by the management team and boards.

Firm value is the worth of a company based on the total value of its outstanding shares in the market and is a reflection of a market share price of a bank. The rises in market share price will invariably allow the investors to have trust and confidence in the banks. They are ready to increase their finance with aim of getting higher returns from their investment. The firm value is the capital employed that connotes the market value of shares and liabilities of the bank (Ifada *et al.*, 2019). The elevation of stock price furnishes a good indicator to encourage investors to identify investment opportunity options.

Board size is regarded as the number of persons who are on a board of a bank. It was stated in the code of corporate governance that the board size should be moderated relative to the operational scale of a bank and should be able to accommodate a diversity of experience with no compromising integrity, independence, comparability, and frequency and presence of members in attending meetings (Ahmad and Sallau, 2018). Code of Corporate Governance for Banks and Discount Houses in Nigeria (2014) pronounced by CBN recommends that the non-executive directors in the board should be greater than that of executive directors subject to a maximum number of 20 directors. Fama and Jensen (1983 in Bandsal and Sharma, 2016) argue that as the number of a member on board increases invariably leads to a bureaucratic system of operation in the banking sector. Hence, causing the board to face challenges, in turn, leading to a fall in market value.

A board composition comprises members within and outside the banks. Members within a bank are appointed among executive officers whereas outside directors are members whose links with the bank is their directorship that holds no special interest with banks. It contained in the code issued by CBN (2014) that board members should have non-executive directors of which at least (2) should be independent non-executive who holds no special interest with the bank and are considered for selection by the bank without bias. Therefore, board composition is the ratio of executive directors on the board compared to the number of non-executives. Ahmad and Sallau (2018) show that board composition is positively and significantly with the value of Nigerian banks.

Gender diversity means the participation of females on the board of directors. This could be an honest means to empower board diversity. Literature asserted that the presence of females within the board of banks is limited and this might be connected to the failure of performance (Romano, Ferretti and Quirici, 2012). Gender diversity refers to the presence of female members in the board committee and it is a fair presentation of men and women in the board and committee. Women have features that make them prudent in financial issues. They are risk avoidant in nature and neutral in judgment and behavior.

The frequency of board meetings refers to the number of times board members meet in a year. The code of corporate governance issued by CBN (2014) in Nigeria recommends that the board meets no less than three times a year. The mechanism for promoting the practice of good corporate governance is for the member to always have the frequency of board meetings. Ibrahim, Adesina, Olufowobi, and Ayinde (2018) found that board management meetings had a negative influence on Return on assets.

Firm size is regarded as a controlled variable which several researchers have used among are; Gill and Abradovich (2012) who discovered that firm size has no negative influence on the value of American firms. Herbert and Agwor (2021) also disclosed that a bank size has a

positive moderating effect on corporate governance disclosure about the financial performance of banks. This is supported by the work of (Nguyen *et al.*, 2017; Ibrahim *et al.*, 2018) bank size had an important influence on the performance of banks.

Leverage is also regarded as a controlled variable which is described as borrowed money to invest. This is commonly used in various circumstances as a means of altering the cash flow and financial position of a company. Since the objective of the firm is to increase the wealth of the shareholders, the best leverage policy is the one that increases the shareholder's wealth by the greatest amount (Akintola, 2019). Therefore, leverage will positively and significantly relate to the value of the firm.

Gill and Obradovich (2012) examined how corporate governance and financial leverage influence the firm value of American firms using a sample size of 333 firms listed on the New York Stock Exchange (NYSE) for the period of 3 years from 2009-2011. The study used a correlational design. The aggregate results revealed that larger board size negatively influences the value of American firms, and CEO duality, audit committee, financial leverage, firm size, return on assets, and insider holdings positively influence the value of American firms. The impact of corporate governance and financial leverage differs between manufacturing firms. However, a small period of 3 years of coverage may hamper valid holistic generalizations of the outcome.

Baxter (2014) investigated the relationship between the corporate governance ratings of Australian publicly listed companies and their financial performance from 2006 to 2008. He used the Horwath Corporate Governance Report (HCGR) to measure the variable for corporate governance, which is the most known rating in Australia. The result of the study shows that both stars and rankings are positively associated with Tobin's Q, ROA, and ROE. Bozec and Dia (2014) studied the governance-performance relationship for Canadian companies from 2002-2005. They found a positive relationship between governance indices and Tobin's Q.

Adesanmi *et al.* (2018) compared the financial performance with corporate governance of Nigerian banks and manufacturing firms from 2005 to 2014 using pooled OLS regression and paired t-test to test hypotheses. They discovered the links exist among board size, board independence and ROA of the studied manufacturing firms and banking sectors was positively significant. However, the study can be subjective due to CCG in the banking sector differing from manufacturing firms, and the study is based on comparative analysis. Olayiwola (2018) conducted a study on how corporate governance influenced the financial performance of listed companies in Nigeria from 2010 to 2016 using panel data regression to test hypotheses. His results revealed that board size, board composition, and audit committee size had a significant joint effect on net profit margin respectively. However, the study sampled (10) listed companies not DMBs, and its direction varied with this study.

Agbaeze and Ogosi (2018) investigated how corporate governance influenced the profitability of Nigerian banks within a range from 2005 to 2015 using correlation and regression test hypothesis. The outcome of a tested hypothesis discovered the existence association among profitability, board and employees size in Nigerian banks. The result was limited to 5 banks and a sample was too small to arrive at a very good conclusion to be generalized. Ozili (2020) carried out a literature review on the recent corporate governance research in Nigeria. He disclosed that the board of directors is the most explored corporate governance determinant in the Nigerian in the position of literature. The study identifies the recent advances and challenges in the literature and suggests some directions for future research. However, there was no empirical evidence to support the study.

Okonkwo and Azolibe (2020) relate corporate governance with bank performance in Nigeria within the range 2006-2018 using multiple regression techniques to analyze data. The findings indicated that board size, board composition, and audit quality jointly had a significant and positive effect on the volume of shares traded. However, the study sampled 14 banks without justification for base year and selection of 14 banks and proxied Profitability as EPS instead of ROA which was not a good indicator to arrive at a very good conclusion.

Ogunmakin *et al.* (2020) carried out a study on how corporate governance was associated with the financial performance of selected banks in Nigeria from 2009 to 2018 using descriptive and panel estimation techniques to test hypotheses. The study disclosed that board size and gender diversity exerts no positive and significant effect on the performance of Banks in Nigeria. However, the study covered 10 banks and there was a discussion on firm value such as Tobin's Q.

Okoye *et al.* (2020) relate corporate governance with the financial performance of commercial banks in Nigeria from 2003 to 2016 using the Generalized Method of Moments to analyzed the data. They found that there were strong existing links among board size, directors' equity, firm size, and financial performance. However, the research focused on 8 banks and captured just only two variables as corporate governance while gender diversity and Tobin's Q were not provided in their study. Herbert and Agwor (2021) examined how corporate governance disclosure (CGD) has been influenced the financial performance of commercial banks in Nigeria for a period of 2011 -2016 using content analysis, OLS- regression, and diagnostic tests to analyze the data. The results disclosed that there was an association between CGD and the banks' financial performance, as the result further disclosed the positive effect of CGD link to board of directors and whistleblowing policy. However, the result was limited to 13 banks and covered 2011 -2016. The period of 6 years was too small to arrive at a very good conclusion. Variables such as gender diversity and Tobin's Q were not considered

This paper is supported by agency theory that was propounded by Jensen and Meckling (1976) because; it focuses on a mechanism that dominates the corporate governance literature and depends among parties associated in conflicts, agency problems which grouped into four such as managerial, debt, social and political agency. Jensen and Meckling (1976) uphold that shareowners are the residual claimants after other parties had claimed their rights. Hence, corporate governance is ensuring safeguards the interests of shareowners.

Furthermore, agency theory suggests a positive correlation between good corporate governance and firm value. The basis of this hypothesis is the agency costs (monitoring costs, bonding costs, and residual loss). As regards the firm value, if managers misuse the firm's resources, thereby adversely affecting firm value and low profits means that shareowners will earn little or no earnings, which may harm the bank manager's tenure and banks at large (Ozili, 2020).

Based on the above empirical review, this study formulates four null hypotheses:

H₀₁ Board size does not influence firm value.

H₀₂ There is no influence of board composition on the firm value.

H₀₃ Gender diversity does not influence firm value.

H₀₄ Frequency of board meetings does not influence the firm value.

3. Methodology

This study used a correlation research design while the study population comprises twenty-two (22) listed Nigerian Deposit Money Banks. The judgmental sampling method was used to select the twelve (12) listed Nigerian Deposit Money Banks out of 22 Banks. Judgmental sampling technique is employed to select twelve (12) listed Nigerian Deposit Money Banks with population criteria (1) Banks that have not changed their nomenclature as of January 2011 is exempted (2) Banks with incomplete data for all variables for the purposes is eliminated to maintain homogeneity in the sample. Twelve (12) banks were selected based on their survivability after the issuance of the Code of Corporate Governance of 2006 and revised NCCG 2011 by SEC. The following banks were chosen because of their consistency in the publication of the Annual Report without changing their nomenclature since 2011. The banks are; Access Bank Plc, Unity Bank Plc, Fidelity Bank Plc, First Bank of Nigeria Limited, First City Monument Bank Plc, Guaranty Trust Bank Plc, Union Bank of Nigeria Plc, United Bank for Africa, Stanbic-IBTC Bank Plc, Sterling Bank Plc, Wema Bank Plc, and Zenith Bank Plc.

Data were calculated and derived from the certified audited annual financial reports of the Twelve (12) selected listed Nigerian Deposit Money Banks from 2011-2019. The study used

descriptive and panel regression techniques to analyze data. The following diagnostic tests such as Heteroskedasticity and Autocorrelation were conducted to validate the data.

Table 1: Summary of Measurement of Variables

Variables	Variable Labels	Measurement	Sources	Expected Sign
Dependent				
Tobin's Q	TQ	<u>The market value of equity + book value of debt</u> Total assets	Calculated from Annual Financial Reports of selected Banks	
Independent				
Board Directors Size	BDS	This measure as the total number of board of directors	Annual Financial Reports of selected Banks	±
Board Composition Size	BCS	Percentage of non-executive directors sitting on the board to a total number of directors.	Calculated from Annual Financial Reports of selected Banks	±
Board Management Meeting	BMM	This is measured as the number of times board members meet in a year.	Annual Financial Reports of selected Banks	±
Gender diversity	GED	Measured as number of female directors on board of directors	Annual Financial Reports of selected Banks	±
Control Variables				
Firm size	Fis	The logarithm of total assets	Annual Financial Reports of selected Banks	+
Leverage	Lev	<u>Total liabilities</u> Total assets	Calculated from Annual Financial Reports of selected Banks	+

Source: Author's Compilation (2021)

3.1 Model Specification

To empirically ascertain the impact of corporate governance practice on the firm value of the listed banks in Nigeria, a model adapted from the study of (Ahmad and Sallau 2018), was used as specified in both functional and stochastic form as follows:

$$\text{Tobin's Q} = f(\text{BDS}, \text{BCS}, \text{BMM}, \text{GED}, \text{FIS}, \text{LEV}), \quad (1)$$

$$\text{Tobin's } Q_{it} = \lambda_0 + \lambda_1 \text{BDS}_{it} + \lambda_2 \text{BCS}_{it} + \lambda_3 \text{BMM}_{it} + \lambda_4 \text{GED}_{it} + \lambda_5 \text{FIS}_{it} + \lambda_6 \text{LEV}_{it} + \mu_{it}, \quad (2)$$

where:

Tobin's Q = TQ, BDS = Board Directors Size, BCS = Board Composition Size, BMM= Board Management Meeting, GED= Gender diversity, FIS= Firm size, LEV= Leverage. λ_0 = Constant parameter,

$\lambda_1, -\lambda_6$ = Coefficient of parameter/explanatory variables,

μ_{it} = Error terms,

Note the subscription index “it”,

i = company,

t = time.

4. Results and Discussion

Table 2 reveals the mean of Tobin’s Q, board directors size, board composition size, board management meeting, gender diversity, firm size, and leverage of 0.855588, 13.77778, 0.622656, 2.796296, 6.240741, 20.32863, and 0.839129 respectively. Table 2 also that, Tobin Q had a maximum value of 2.550800 and a minimum value of 0.632200 while gender diversity had a minimum value of 0.000 and a maximum value of 6.000000 respectively. The implication of this is that both women board members contributed minimally to the increase of firm value during the sample period because some banks were not appreciated the gender diversity while the bank size with a value of 22.68641 contributed maximally to the firm value more than other parameters. From Table 2 the standard deviation for Tobin’s q, BOS, BCS, GED, BMM, FIS and LEV are 0.254109, 2.933319, 0.147806, 1.464593, 2.233435, 2.205873 and 0.263414 respectively. The result implies that BOS with a standard deviation of 2.933319 is riskier than other parameters in the study. The probability of Jarque-Bera of all variables was less than the 0.05 significance level except for the variables of BCS and GED respectively.

Table 2: Summary of Descriptive Statistics

	TQ	BOS	BCS	GED	BMM	FIS	LEV
Mean	0.855588	13.77778	0.622656	2.796296	6.203704	20.32863	0.839129
Median	0.799800	14.00000	0.588235	3.000000	6.000000	20.89288	0.860839
Maximum	2.550800	25.00000	1.000000	6.000000	13.00000	22.68641	2.032676
Minimum	0.632200	7.000000	0.181818	0.000000	2.000000	13.22533	0.001222
Std. Dev.	0.254109	2.933319	0.147806	1.464593	2.169281	2.205873	0.263414
Skewness	4.539733	0.454214	0.390931	-0.038333	1.105019	-2.045717	-0.052303
Kurtosis	26.53523	3.855850	3.551064	2.653361	4.182967	6.678482	12.91058
Jarque-Bera	2863.548	7.009744	4.117412	0.567162	28.27654	136.2198	442.0376
Probability	0.000000	0.030051	0.127619	0.753082	0.000001	0.000000	0.000000
Sum	92.40350	1488.000	67.24688	302.0000	670.0000	2195.493	90.62596
Sum Sq. Dev.	6.909114	920.6667	2.337591	229.5185	503.5185	520.6488	7.424396
Observations	108	108	108	108	108	108	108

Note: Variable definitions: Tobin’s Q= TQ, BDS =Board Directors Size, BCS= Board Composition Size
BMM= Board Management Meeting, GED= Gender diversity, FIS= Firm size, LEV= Leverage

Table 3: indicates that negative associations were found among the variables except for gender diversity. The findings show a positive association exists between gender diversity and firm value whereas board size, board composition, management meeting, and firm size were negatively and significantly associated with firm value at the significance of 0.05 and 0.1 levels. At the same time, leverage is positively and significantly associated with firm value

Table 3: Correlation Matrix

	TQ	BOS	BCS	GED	BMM	FIS	LEV
TQ	1.000000						
BOS	-0.289435**	1.000000					
BCS	-0.190766*	-0.510927**	1.000000				
GED	0.072163	0.298272**	-0.229697*	1.000000	0.110255		
BMM	-0.182280	0.218677	-0.115231	0.110255	1.000000		
FIS	-0.212929*	0.469932	-0.561317**	0.098329	0.268669**	1.000000	
LEV	0.569636**	0.051022	-0.443722**	0.344259**	0.065564	0.084123	1.000000

Note: The values in asterisks are denoted by ** 5% and *10% at two-tailed significance levels Variable definitions are the same as in table 2

From Table 4, the P-value of the Hausman test showed 0.06, since the value is greater than the 0.05 significance level; therefore, the random effect is preferred. Table 4 revealed that the overall result of predictors variables had a significant influence on the firm value as P-values of F-stat < 0.05. This implies that there was a relationship between corporate governance variables and the firm value of the selected Nigerian banks. The study shows that the R² value of approximately 0.51 suggests that 51 % of the variation of the criterion variable is contributed by the predictor variables. The rest 49% is changed by variables that are outside the model, which has been taken into account by the disturbance error. However, despite there being a negative association of board size, board composition, and firm size with firm value but they still significantly influenced the firm value of sampled banks in Nigeria as the P-values <0.05 level of significance. This implies that as the number of a member on board increases invariably leads to a bureaucratic system of operation in the banking sector. Thus, causing the board to face challenges, in turn, leading to a fall in market value. Women on board had a positive but not significant influence on the firm value of selected Nigerian banks as P-value > 0.05. This implies that many selected banks did not consider account of women as board members whereas the frequency of board meetings had a negative insignificant influence on firm value but leverage had a positive and significant influence on the firm value as the confirmed coefficient of 0.584953 and p-value is 0.0000. This implies that moderate leverage is susceptible to contributing to market value. This can increase investor confidence that banks can pay dividends. The result of the Durbin-Watson stat showed 1.635147, this implies there was an absence of auto serial correlation in the study.

Table 4: Summary Result of the Regression Analysis

Variables	Fixed effect (1)			Random effect (2)		
	Coefficient	t-statistics	P value	Coefficient	t-statistics	P value
Constant	4.235931	5.701294	0.0000	2.280258	5.252843	0.0000
BOS	-0.021331	-2.706130	0.0081	-0.022328	-2.939474	0.0041
BCS	-0.414133	-2.376942	0.0196	-0.505001	-3.006491	0.0033
GED	0.021609	1.546793	0.1254	0.003694	0.291023	0.7716
BMM	-0.009155	-0.917387	0.3614	-0.014691	-1.574653	0.1185
FIS	-0.168314	-4.427915	0.0000	-0.059652	-3.098004	0.0025
LEV	0.702361	7.711741	0.0000	0.584953	7.055048	0.0000
R-squared			0.722308			0.506651
Adjusted R-squared			0.669855			0.477343
F-statistic			13.77059			17.28717
Prob(F-statistic)			0.000000			0.000000
Durbin-Watson stat			1.950645			1.635147

Hausman Test **Chi-Sq. Statistic** **12.034111, P value 0.0612**

Notes: Variable definitions are the same as table 2

The outcome from Table 5 shows the Branch-Pagan-Godfrey test on Heteroskedasticity since the F-stat and Obs R² have the relationship of p-values of 0.0002 and 0.0003 respectively which < 0.05 level of significance, it is saved to conclude that there was an absence of Heteroskedasticity. Table 4.4 also shows the F-statistics and Obs R² values of 12.98781 and 22.26912 with P-v of 0.000 and 0.000 respectively, this indicates the no presence of auto-correlation in the model since P < 0.05 level of significance.

Table5. Post Estimation Diagnostic Test for Model

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	5.524975	Prob. F(5,102)	0.0002
Obs*R-squared	23.01631	Prob. Chi-Square(5)	0.0003
Scaled explained SS	140.5705	Prob. Chi-Square(5)	0.0000
Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	12.98781	Prob. F(2,100)	0.0000
Obs*R-squared	22.26912	Prob. Chi-Square(2)	0.0000

4.1 Discussion

This study tests how corporate governance has influenced the firm value of Nigerian deposit money banks from 2011 to 2019. Corporate governance was measured as a board of directors' size, board composition, board management meeting, and gender diversity while firm value represented Tobin's Q, while firm size and leverage were used as control variables. The study discovered that aggregate predictor variables significantly influenced the firm value of sample banks in Nigeria. The study shows negative association exists among board size, board composition, and firm size with firm value, but they had a significant influence on the firm

value of the sampled banks in Nigeria; gender diversity had a positive and board management meeting had a negative while both had an insignificant influence on the firm value of sampled study and leverage had a positive and significant influence on firm value supported by the study of (Akintola, 2019). These results from the study, therefore, corroborated the study of Ahmad and Sallau (2018) who found out that significant relationship among board composition, firm size, and market value proxied as Tobin's Q of listed DMBs in Nigeria and in contrary to board size that had a positive insignificant influence on the market value. The study also concurs with Okonkwo and Azolibe (2020) who indicated that board size and board composition jointly had a significant effect on shares traded. The outcome also is consistent with Okoye *et al.* (2020) who hypothesized that board size and firm size have a strong influence on Nigerian banks' financial performance and at the same time, Ibrahim *et al.* (2018) found that board management meetings had a negative influence on the performance of Nigerian banks. This study is supported by Ogunmakin *et al.* (2020) revealed that board size and gender diversity exert a negative significant effect on the banks' performance in Nigeria. This is contrary to the finding of this study which disclosed that gender diversity had a positive and insignificant influence on the firm value. Gulamhussen and Santa (2015) supported the presence of and percentage of fema directors in boardrooms had a positive influence on performance. However, they also discover a negative relation between the presence of women in boardrooms and risk-taking while studying the role of women in boardrooms with a sample of 461 banks from OECD countries. Adams and Ferreira (2009) found that the average effect of gender diversity on firm performance was negative. This negative effect is driven by companies with fewer takeover defenses. They suggest that mandating gender quotas for directors can reduce firm value for well-governed firms. Ouni Mansou and Arfaoui (2020) empirically supported that there was a turnover effect of gender diversity on the financial performance of firms.

5. Conclusion

Conclusively, the firm value of Nigerian deposit money banks is influenced by the practice of good corporate governance. This was affirmed by the hypothesized results that aggregate predictor variables significantly influenced the firm value of sampled banks in Nigeria during the studied time. This finding implies that in the period of inefficiency and ineffectiveness to practice good corporate governance, managers may misuse the firm's resources, thereby adversely affecting firm value and low profits. This means that shareowners will earn little or no earnings, which may harm bank managers' tenure and banks at large.

6. Limitation and Direction for Further Studies

A critical limiting factor is that the study was unable to cover all listed banks in NGX due to some banks that changed their nomenclature. Further studies may be carried out to explore other corporate governance factors such as top management team attributes about a firm value in a non-financial sector.

The following recommendations were suggested that the board of directors' size should be kept with adequate size for the operation of a banking system to be effectively and efficiently managed. The Banks should embrace the inclusion of females as members of a board for the fair presentation as women have features that make them more prudent in financial issues and risk avoidant in nature.

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Appendix

Hausman Test and Regression Analysis

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.034111	6	0.0612

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BOS	-0.021331	-0.022328	0.000004	0.6359
BCS	-0.414133	-0.505001	0.002142	0.0496
GED	0.021609	0.003694	0.000034	0.0021
BMM	-0.009155	-0.014691	0.000013	0.1183
LEV	0.702361	0.584953	0.001420	0.0018
FIS	-0.168314	-0.059652	0.001074	0.0009

Dependent Variable: TQ

Method: Panel Least Squares

Date: 01/11/22 Time: 20:16

Sample: 2011 2019

Periods included: 9

Cross-sections included: 12

Total panel (balanced) observations: 108

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.235931	0.742977	5.701294	0.0000
BOS	-0.021331	0.007882	-2.706130	0.0081
BCS	-0.414133	0.174229	-2.376942	0.0196
GED	0.021609	0.013970	1.546793	0.1254
BMM	-0.009155	0.009980	-0.917387	0.3614
FIS	-0.168314	0.038012	-4.427915	0.0000
LEV	0.702361	0.091077	7.711741	0.0000

Effects Specification

Cross-section fixed (dummy variables)				
R-squared	0.722308	Mean dependent var		0.855588
Adjusted R-squared	0.669855	S.D. dependent var		0.254109
S.E. of regression	0.146006	Akaike info criterion		-0.859322
Sum squared resid	1.918606	Schwarz criterion		-0.412300
Log-likelihood	64.40340	Hannan-Quinn criteria.		-0.6178071
F-statistic	13.77059	Durbin-Watson stat		1.950645
Prob(F-statistic)	0.000000			

Dependent Variable: TQ

Method: Panel EGLS (Cross-section random effects)

Date: 01/11/22 Time: 20:14

Sample: 2011 2019

Periods included: 9

Cross-sections included: 12

Total panel (balanced) observations: 108

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.280258	0.434100	5.252843	0.0000
BOS	-0.022328	0.007596	-2.939474	0.0041
BCS	-0.505001	0.167970	-3.006491	0.0033
GED	0.003694	0.012694	0.291023	0.7716
BMM	-0.014691	0.009329	-1.574653	0.1185
FIS	-0.059652	0.019255	-3.098004	0.0025
LEV	0.584953	0.082913	7.055048	0.0000

Effects Specification

	S.D.	Rho
Cross-section random	0.150947	0.5166
Idiosyncratic random	0.146006	0.4834

Weighted Statistics

R-squared	0.506651	Mean dependent var	0.262552
Adjusted R-squared	0.477343	S.D. dependent var	0.207904
S.E. of regression	0.150305	Sum squared resid	2.281736
F-statistic	17.28717	Durbin-Watson stat	1.635147
Prob(F-statistic)	0.000000		