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BOARD ATTRIBUTES AND CORPORATE SOCIAL RESPONSIBILITY SPENDING ON FIRM VALUE OF LISTED DMBs IN NIGERIA: THE MODERATING ROLE OF PROFITABILITY

This study examines the effect of board attributes and corporate social responsibility spending on firm value of listed DMBs in Nigeria: the moderating role of profitability. The research adopted an ex-post facto research design, and the secondary data was collected from 2012 to 2023. The sample consisted of eleven listed Deposit Money Banks (DMBs) and multiple regression was used to establish the moderating effect of profitability on these ethical relations. The ethical variables analyzed show that firm value is inversely sensitive to board size, with an indication that an increased board size is a disadvantage to the firm's valuation and vice versa. Also, profitability moderates the effect of these ethical factors on firm value as evidenced in this study. Therefore, this study concludes that ethical considerations such as board size and csr spending are relevant determinants of the firm value of listed DMBs in Nigeria. This study strongly recommends that a deep focus on profitability and ethics together as profitability is an important moderator in enhancing the impact of board attributes and CSR spending on firm value.

Keywords: Deposit Money Banks; Board Attributes; Corporate Social Responsibility; Firm Value; Profitability.

INTRODUCTION

Beyond the role of effective capital allocation and deployment of production factors to achieve a specific economic objective, the company is also expected to meet the needs of the company's stakeholders whose expectations and values, according to Pellegrini et al. (2022), typically reflect the level of civilization of a specific geopolitical area in a continually evolving historical time. This pursuit of stakeholders' expectations has generated a wide circularity that requires management awareness of metrics that play a determining role in affecting firm value. Moreover, the complex turbulent and uncertain conditions of the internal and external environment of enterprises complicate the process of managing the value of a firm requiring the selection of appropriate management strategies. And so, management and policy makers seek appropriate research on how firms create and maintain value. The financial sector of a nation is key and can broadly be classified into two main systems: bank-based and market-based. In economies where the banking sector predominates, financial resource mobilization primarily occurs through banks.

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Given that many developing economies feature bank-dominated financial systems, there exists a sustained demand for theoretical and empirical examinations focused on bank performance (Ubasinachi et al. 2024). Around the world, corporations, either public or private are main vectors of innovation, economic development, and social ascension. Within most societies, corporations are at the center of citizens' lives as employers, suppliers as well as customers of goods and services, and investment opportunities (Porter & Kramer, 2011). Moreover, the societies within which firms operate typically have expectations which may be in the form of value or interest of the stakeholders, which are embedded in the corporate mode of operation. Literature suggests that when these expectations are not met or are perceived inadequate or inappropriate, it could result in loss of confidence in the organization and that may threaten the existence and survival of the organization (Aguilera et al. 2007). Responsively, organizations have attempted to gain legitimacy by strategically positioning their operational activities to meet the norms, values, expectations and demands of society via corporate governance and corporate social responsibility (Dare et al. 2021). However, the complexities in the expectations of various stakeholders of the firm have accentuated the unending discourse on the interaction between these measures of corporate responsibilities and dimensions of firm assessment with a predilection to firm's profitability regarding deposit money banks in Nigeria.

According to Ogunyemi & Akinyele (2021) the issue of balancing profitability with company CSR obligations in a country like Nigeria with pressing social issues like poverty and inadequate infrastructure, companies sometimes struggle to invest in meaningful CSR initiatives. Regardless, it is expected that these strategies and initiatives exert a significant effect on the firm's performance and perception of shareholders subsequently influencing firm value especially in deposit money banks across the nation. Although, it is important to note that there are several key issues in the implementation of key strategies regarding corporate governance and corporate social responsibility especially in a developing nation like Nigeria. Such as the lack of true independence in many corporate boards due to the fact that a significant number of directors have close ties to the company's management or major shareholders (Akinbuli & Akinbuli, 2020), leading to a significant lack of accountability and transparency.

The growing awareness and demand for business behavior with the concept of sustainability gradually transforming from a macro-environment issue into a mainstream business practice. Firms are now being pressurized by policy makers, investors, shareholders and stakeholders to adopt sustainable practices typically reported along three main subcategories namely Environmental Principles, Social Principles and Corporate Governance Principles (Lehenchuk et al. 2023).

Williams (2018) stressed that corporate governance and corporate social responsibility are interlinked and fundamental to the continuing operation and growth of any corporation. Accordingly, this study examines the effect of board attributes and corporate social responsibility spending on firm value of listed DMBs in Nigeria: the moderating role of profitability.

The next section presents the related literature, followed by the methodology of the research, while the results and discussions are presented in the subsequent section. Finally, the conclusion and recommendations conclude the paper in the last section.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

Board Attributes

OECD principle of Corporate Governance (2004) defines corporate governance as a set of relationships between a company's management, its board, its shareholders and other stakeholders and the structure through which objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined, the stakeholders may be the shareholders, managers, customers, suppliers, financial institutions, government and the community. There are several definitions around this concept which encompass measures of management, degree of control and the relationship between the great and small shareholders. Like the definition provided by Jensen & Meckling (1976), this study defines corporate governance as a set of established rules, that guide company management to maximize profitability and stakeholder value, aligning with agency theory's focus on shareholder interests.

The board composition and processes, according to Kleinschmidt (2007), is expected to ensure the strategic guidance of the company, the effective monitoring of management and the board's accountability to the company and the shareholders. The requirements for its processes range from the frequency of meetings, agenda setting and obtaining the requisite information to determining which issues the board should address. With regards to its composition, the board must be constituted to ensure a sufficiently independent and qualified board. Independence is achieved by having members on the board that are not managers of the company and that have no relationships with them or other stakeholders. There are three (3) aspects to the composition of boards as identified by Gutterman (2023), which are considered particularly important and they are: independence, qualification and size. Due to these qualifications, the importance of measuring corporate governance by proxying board size cannot be underestimated, as it is considered one of the key components for validity of board composition and thus making it relevant for the purpose of this study.

Corporate Social Responsibility Spending

Corporate social responsibility is a broad concept that describes a business's obligation to interact with society. It is a commitment that the corporation has for both its internal and external stakeholders, who are entities that affect and in return get affected by the corporation's business decisions, environment and society by integrating both social and environmental values within its core business operations (Hafez, 2015). CSR has evolved into a critical component of company strategies and is viewed as a value-creation potential (Alatawi et al., 2023). CSR, in addition to meeting shareholders' information needs and enhancing corporate value, helps to reduce risk (Wirawan et al., 2020).

According to Carroll (1979), it could be classified into four categories: economical, legal, ethical, and philanthropic. The economic responsibility is to provide returns to stakeholders, emphasizing stakeholders and employees, and provide products and services to the market with that of a fair price. The legal responsibility is to comply with the rules and regulations of the higher authority governing the

region to which they reside. The ethical responsibility is to do what is right regardless of the laws and obligations. The philanthropic responsibility is to do beyond its ethical responsibilities. The first three categories are all required and are expected from corporations to incorporate in their codes of conduct and business. However, philanthropic responsibility is not required from corporations as it should be a voluntary responsibility that an entity would want to take (Hafez, 2015).

Firm Value

According to Massie et al. (2018), firm value can be defined as the price that potential investors are willing to pay if a company is to be sold. The authors further stated that it can reflect the value of company assets such as securities. To Bottazzi et al. (2023), firm value is the present value of future cash flows with due consideration of the uncertainties associated with the future cash flows. Firm's value is also sometimes interpreted as the value per share; however, this can only be applied to publicly listed companies. It is a financial metric that represents the total economic value of a business, considering both its equity and debt components (Reschiwati et al., 2020). More aptly for this study, Sukesti, et al., (2018) defined firm value as the value attributable to the company based on investors' perceptions of the level of success of a company. This clarifies firm value as a measure of the wealth of shareholders and is a reflection of investment decisions on funding and asset management.

Increasing firm value is very important for company management because the increase implies an effort to maximize company value ultimately achieving shareholders wealth maximization (Maya, 2016). Consequently, every company strives to engage in the dynamics of market demands, opportunities and challenges that could potentially affect the value of the company. Firm value provides a comprehensive measure of a company's total worth and is often used by investors, analysts, and financial professionals to assess a company's overall value, regardless of its capital structure. Firm value typically considers not only the equity value, but also the total debt owed by the company and the company's cash and cash equivalents on hand.

Previous research measured firm value using enterprise value, Market capitalization, Price to Book value and Tobin q (Sukesti, et al., 2018). Similar to the study conducted by Sampurna and Romawati (2019), this study utilizes Tobin's Q as a proxy for measuring firm value. Tobin's Q is a financial metric that measures the market value of a company relative to its book value or total asset replacement cost.

Tobin's Q = Market Value of Firm's Assets/ Replacement cost of Firm's assets

2.2 Theoretical Review

The Stakeholder Theory

This theory was first proposed by R. Edward Freeman in 1984, argues that businesses should not solely focus on maximizing profits for shareholders, but also consider the interests and welfare of all stakeholders that affect or are affected by the business's activities. The basic premise of this theory is that business organizations have responsibility to various groups in society (the internal and external stakeholders) and not just the owners i.e. shareholders (Adeoye, 2018). The responsibility includes responsibility for the natural environment; thus, decisions should be taken in the wider interest and not just the narrow shareholder interest. According to Wright and Ferris (2017), stakeholder theory is based

upon the assertion that maximizing wealth for shareholders fails to maximize the wealth of society and all its members and that it is only concerned with managing all stakeholder interests solely.

The key principles of this theory may include the following:

- **Identification and Understanding of Stakeholders:** A business must identify its stakeholders, understand their needs and concerns, and consider how the firm's actions affect them.
- **Stakeholder Engagement:** Firms should engage with stakeholders, be transparent in communication, and involve them in decision-making processes where possible.
- **Long-Term Value Creation:** The theory emphasizes creating value for all stakeholders, not just shareholders, through responsible decision-making that benefits society, the environment, and the economy.
- **Interdependence:** Stakeholders are seen as interdependent, meaning that the success of the firm often relies on maintaining positive relationships with various stakeholder groups. A firm's actions can create value for stakeholders, which in turn can lead to greater long-term success for the firm.

This theory is the underpinning theory for this study as it focuses on how businesses should consider the interests of various groups beyond just shareholders, like employees, customers, suppliers, communities, and even the environment. In this case, applying stakeholder theory to CSR and corporate governance would help explain why and how companies engage in activities that benefit a broader range of stakeholders, and how these activities can potentially enhance firm value.

2.3 Empirical Review

Shoaibi and Khalil (2022) examined the effect of CSR activities on the performance of Pakistani firms using panel data from companies listed on the PSX between 2008 and 2019. Their results indicated that CSR had a significant negative impact on ROA, suggesting that in developing countries, CSR may be perceived more as a financial burden than as a value-creating activity. The authors attributed this negative effect to firm opacity and the weak communication of CSR initiatives to stakeholders. Without adequate disclosure or marketing, CSR expenditures may fail to generate reputational benefits that translate into financial returns. Moreover, their study highlighted that firm-level variables such as size, profitability ratios (ROE, NPM), dividend payout, liquidity, leverage, and GDP growth also shape financial performance. This provides important insight that CSR does not operate in isolation but interacts with broader financial and contextual factors. However, the study did not explicitly consider profitability as a contingent factor.

Supporting the stakeholder view of CSR, Muhammad et al. (2024) studied 119 PSX-listed firms (2010–2021) and found that CSR was positively related to firm value. Their model was more comprehensive, as it incorporated enterprise risk management (ERM) as a mediator and corporate governance quality as a moderator, measured through a governance index with 29 provisions. By showing that CSR's effect on firm value depends on internal governance and risk management structures, their study underscores the fact that CSR–value relationships are not universal but conditional. This insight is particularly relevant for the present study, which extends the conversation by examining profitability as another

conditioning variable. In banking, profitability could either magnify the CSR–value relationship or weaken it, if investors interpret CSR as a wasteful diversion of resources when profitability is low.

Similarly, Chen et al. (2024) outlined that in the past few decades, companies have begun to pay attention to the issue of whether companies that are engaged in CSR activities enhance firm value remains a subject of debate. From the perspective of agency theory, high-CSR companies can encounter poor financial performance and a reduction in firm value because of managers' bad project selection. According to stakeholder theory, high-CSR companies face a positive relationship with financial performance because of considerations for the benefits of stakeholders. This study collects CSR data from Commonwealth Magazine and examines how Taiwanese companies engaged in CSR activities affect corporate financial performance. The empirical finding shows that CSR is significantly positive for corporate financial performance. This result suggests that companies actively engaged in CSR activities bring a positive effect on firm value. Therefore, our evidence supports the stakeholder theory that high CSR companies benefit their stakeholders.

3. RESEARCH METHODOLOGY

3.1 Research Design

This study adopted the ex-post facto research design using balanced panel data collected for the period 2012 to 2023. The moderating role of profitability on the interaction between board attributes, corporate social responsibility spending and firm value of listed DMB's in Nigeria was examined.

3.2 Method of Data Collection

This study was conducted based on secondary data and thus, the secondary balanced panel data employed was sourced from “the Macheme ratio”, an authorized data management domain with credible international reputation. The financial reports and accounts consists of the following listed Deposit Money Banks in Nigeria: Access Bank PLC, Fidelity Bank PLC, First Bank of Nigeria PLC, First City Monument Bank PLC, Guaranty Trust Bank PLC, Stanbic-IBTC Bank PLC, Sterling Bank PLC, Union Bank PLC, United Bank of Africa PLC, Unity Bank PLC, Zenith Bank PLC and the period covered is a period of 12 years (2012-2023).

3.3 Model Specification

The model specifications for direct effect are as follows:

Direct Effect:

$$Fv_{it} = \alpha + \beta_1 CG_{it} + \beta_2 CSR_{it} + \beta_3 FS_{it} + \mu_{it} \dots \dots \dots 1$$

Where,

Fv denotes Firm value

CG is a measurement of Board Attributes (Board Size)

CSR is a measurement of Corporate Social Responsibility Spending (CSR Spending)

ROA is a measurement of Profitability

FS is the control variable (Bank Size)

μ is the error term

it denotes institution/bank (i) in the year (t)

β_1 --- β_6 are the coefficients to be estimated

Moderating Effect of Firms' Profitability

Indirect Effect:

$$Fv_{it} = \alpha + \beta_1 CG_{it} + \beta_2 CG * ROA_{it} + \beta_3 CSR_{it} + \beta_4 CSR * ROA + \beta_5 ROA_{it} + \beta_6 FS + \mu_{it} \dots \dots \dots 2$$

Fv denotes Firm value

CG*ROA - is a measurement of the interacting effect of Board Attributes (Board Size) and Profitability (ROA)

CSR *ROA - is a measurement of the interacting effect of Corporate Social Responsibility Spending (CSR Spending) and Profitability (ROA)

ROA is a measurement of Profitability

FS is the control variable (Bank Size)

μ is the error term

it denotes institution/bank (i) in the year (t)

β_1 --- β_6 are the coefficients to be estimated

3.4 Method of Data Analysis

In the case of measuring the moderating role of profitability using STATA 18, the system Generalized Least Square (GLS) method is employed for analysis. The GLS is a method used to estimate the unknown parameters in a linear regression model. It is used when there is a non-zero amount of correlation between the residuals in the regression model. It is employed to improve statistical efficiency and reduce the risk of drawing erroneous inferences and assumptions especially when using panel data. The GLS system also controls unobserved heterogeneity and the persistence of the dependent variable.

4. RESEARCH ANALYSIS AND FINDINGS

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Fv	132	.1	.103	.012	.601
Cg	132	13.595	3.375	6	21
Csr	132	.373	.397	0	1.795
Prof	132	1.738	1.717	-9.532	0.5617
Fsize	132	15.884	.841	13.147	17.322

Source: STATA 18

Table 1 presents the overview of the descriptive statistics for the independent, dependent, control and moderating variables examined for the purpose of this study. The firm value results exhibit a data line ranging from .012 (minimum) to .601 (maximum) with a standard deviation of .103 and an average (mean) value of 0.1. The standard deviation (Std. Dev.) is a measure of the extent to which there exists variation in firm value ranging from the highest to the lowest value on the dataset. The higher the standard deviation reflects a higher difference from the average and vice versa. The standard deviation of firm value (.103) shows that the return for FV has low volatility as it goes between the high of .601 (max) and the low of 0.12 (min). These minor differences may be due to internal and external reasons including the efficiency of operations, profitability, market conditions, competitive landscape, and our independent variables.

The variable “cg” is the average of the board attributes, thus having a mean of 13.595 and a standard deviation of 3.375. This means that the board attributes readings from within the dataset are not constant and are in fact highly elevated, standing from as low as 6 to as high as 21. These results show a high degree of variability reflecting that board attributes practices within the firms in the dataset vary greatly which suggest diverse governance structures. Based on the results obtained, the second independent variable which is ‘csr’ shows an average value of .373 and a relatively large deviation between maximum and minimum values being from 0 to 1.795 showing a lack of restrictions in the movements of these values. This indicates that there is an important deviation of data from the average due to the high standard deviation. The profitability index ‘prof’ shows only a slight difference in the mean and standard deviation reflecting values of 1.738 and 1.717 respectively on 121 observations. Although there seems to be a significant difference between the maximum value of 0.5617 and the minimum value of -9.532, this could also reflect high market volatility and profitability variability in the industry.

4.2 Correlation Analysis

This section presents the correlation matrix of each of the models to assess the association between each of the model dependent variable and independent variables within themselves. Correlation analysis is used to explain the strength and direction of a linear relationship between two variables (Pallant, 2011). Pearsons's correlation was adopted to evaluate the interrelationship between study variables.

Table 2: Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)
(1) fv	1.000				
(2) cg	-0.172	1.000			
(3) csr	-0.059	0.076	1.000		
(4) prof	0.577*	0.028	0.116	1.000	
(5) fsize	0.083	0.206*	0.401*	0.441*	1.000

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Source: STATA 18

Table 2 indicates that the dependent variable, firm value 'fv' exhibits weak association with the independent variables, none of which are statistically significant: board attributes 'cg' (-0.172), and corporate social responsibility 'csr' (-0.059). The independent variables themselves show significant but weak correlations, just as between board attributes and corporate social responsibility (0.076) indicating absence of strong association among independent variables.

4.3 Diagnostic Tests

4.3.1 Multicollinearity Test

Table 3: Variance Inflation Factor

	VIF	1/VIF
Fsize	1.532	.653
Prof	1.254	.798
Csr	1.198	.834
Cg	1.051	.952
Mean VIF	1.259	.

Source: Stata 18

The VIF mean of 1.259, as revealed on Table 4.3, indicates the absence of any issue of multicollinearity. This provides justification for panel ordinary least square analysis.

4.3.2 Hausman Test

Table 4: Hausman Fixed Random Test

Table 11. Hausman Fixed Random Test				
Variable	(b) Fixed	(B) random	(b-B) Difference	Sqrt (diag(V_b- V_B)) Std. err
Cg	-0.00488	0.002734	-0.00761	
Csr	-0.01663	-0.02932	0.01269	
Prof	0.039449	0.014682	0.024768	
Fsize	-0.01807	-0.04527	0.027208	
b = Consistent under H0 and Ha; obtained from xtreg			chi2(4) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 84.43	
B = Inconsistent under Ha, efficient under H0; obtained from xtreg			Prob > chi2 = 0.0000	
Test of H0: Difference in coefficients not systematic				

Source: STATA 18

The p-value is less than 0.05 as indicated by the Hausman result, the null hypothesis is therefore rejected and the fixed effect regression model is more appropriate for the study.

4.4 Regression Results

This sub-section presents model summary regression results for the model used in this study to confirm the effect of independent variables on the dependent variable. As a result of that, firm value was utilized to inspect the relationship between board attributes and corporate social responsibility of deposit money banks in Nigeria. As presented in Table 5, the relationship between the variables shows a cumulative mean dependent variable and an SD dependent cumulative variable of >0.100 suggesting that the overall model is fit in explaining the level of variance between all the variables used for this study. The p-value in regression analysis tests the null hypothesis that the corresponding coefficient is equal to zero (i.e., the variable has no effect). The higher the P-value, the weaker the evidence against the null hypothesis. With this consideration, the result of our analysis prescribes that board attributes 'cg' with a P-value < 0.05 indicates strong evidence that CG significantly impacts the dependent variable which is Firm value 'fv'. While corporate social governance 'csr' and firm size (control variable) with P-values larger than 0.05 (i.e., 0.411 or 0.093 respectively) indicate weaker evidence, suggesting that the variable may not significantly influence the outcome. While profitability 'prof' has a P-value of 0 which reflects a null hypothesis. The method that is most appropriate for panel data (which is both cross sectional and time series) is suggested to be Cross-sectional time series FGLS regression.

Table 5: Cross-sectional time-series FGLS regression

Fv	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Cg	-.005	.002	-2.18	.029	-.009	0	**
Csr	-.017	.02	-0.82	.411	-.056	.023	
Prof	.039	.005	8.26	0	.03	.049	***
Fsize	-.018	.011	-1.68	.093	-.039	.003	*
Constant	.39	.161	2.42	.015	.074	.706	**
Mean dependent var	0.100		SD dependent var	0.104			
Number of obs	120		Chi-square	79.125			
Prob > chi2	0.996		Akaike crit. (AIC)	-255.321			

*** $p < .01$, ** $p < .05$, * $p < .1$

Source: STATA 18

After several pre-tests, including ordinary least square (OLS), random and fixed effect tests amongst others and the results presented by using the Fixed Generalized Least Square (FGLS) provide for a better understanding of the variables used in the study. Table 5 above shows the FGLS regression results describing the relationship between the various independent variables and firm value (fv) using correlated coefficients standard error. Nevertheless, the chi-squared value of 79.125 means that the general variations in fv are properly explained by the chosen model or independent, moderator, and control variables. The overall model is also statistically significant and thus indicates that all the predictors in the model have a significant relation to fv. Some variables prove the effect on fv. According to the analysis of several variables, the following has been established: CG exhibits a negative sign of (-0.005) with t-value and p-values of -2.18 and .029 respectively, and thus its coefficient is statistically significant at the 5% level. This implies that board attributes, one of the key ethical factors, has a significant negative effect on firm value. On the other hand, the second independent variable corporate social responsibility is statistically negatively insignificant with respect to firm value with t-values of -0.82 and a p-value of .411, implying that in this study model, changes in csr spending does not have a wayward impact on the Tobin's Q of these firms therefore having an insignificant to null effect on firm value. Table 6 below shows the results of our indirect effect with the moderating effect of profitability using the new model as stated in the previous chapter of this work. For this analysis, the new model required several adjustments which the FGLS regression was unable to account for. Therefore, there was a necessary alteration in the method used as Table 4.4 shows results of analysis using the 'Cross-sectional time-series FGLS regression (Drisc/Kraay) for Moderating Effect of Profitability' which is a simple modification from the FGLS regression previously used for analysis. The foremost reasons to use this method is to address the existence of heteroscedasticity (variance of errors differing across observations) and autocorrelation (error terms that are correlated across time periods). The Driscoll/Kraay robust standard errors also provided a way to correct for both of these problems, ensuring that the estimates of the standard errors of your coefficients are consistent even when there are these issues. This was propagated by Driscoll and Kraay in 1998 and has since become a widely used method in econometrics.

Table 6: Cross-sectional time-series FGLS regression for Moderating Effect of Profitability (Drisc/Kraay)

fv	Coef.	Std.Err.	t	P>t	[95%Conf.	Interval]
CGPROF	0.003	0.000	9.830	0.000	0.002	0.004
CSRPROF	0.005	0.005	1.010	0.336	-0.006	0.017
fsize	-0.025	0.004	-6.110	0.000	-0.034	-0.016
_cons	0.419	0.062	6.790	0.000	0.281	0.556

Regression with Driscoll-Kraay standard errors	Number of obs	=	132
Method: Pooled OLS	Number of groups	=	11
Group variable (i): id	F(3, 10)	=	38.23
maximum lag: 2	Prob > F	=	0.0000
	R-squared	=	0.3068
	Root MSE	=	0.0874

Source: STATA 18

Table 6 also gives the result from Model 2. The model predicts the percentage of variation of firm value (fv), depending on the influence of independent, interaction, and control variables, which is 30.68% (R-squared = 0.3068). The remaining 69.32% of the variance is not explained by the independent and moderating variables but can be explained by other factors outside the model like extraneous variables that are captured by the error term in the model 2. Where CGPROF has a coefficient of 0.003 reflecting a positive and significant effect of board attributes on firm value using the moderating effect of profitability, also stating a standard error of 0.000. Where CSRPROF has a coefficient of 0.005 reflecting a positive and significant effect of corporate social responsibility on firm value using the moderating effect of profitability as stipulated by Model 2, also stating a standard error of 0.005. The standard errors which are <.005 (0 and 0.005) indicates that the coefficient estimate is precise meaning the estimated coefficient is close to the true population coefficient, and the variability in estimation is low.

The results of this study implies that:

- board attributes has a significant negative effect on firm value, this means that there exists an inverse relationship between board attributes and firm value
- there is a null and insignificant effect of corporate social responsibility (csr spending) on firm value (Tobins Q)
- board attributes through the moderating effect of profitability has a significant positive effect on firm value
- corporate social responsibility through the moderating effect of profitability has a significant positive effect on firm value

The study investigated the impact of board attributes and corporate social responsibility (CSR) on the firm value of Deposit Money Banks (DMBs) in Nigeria, incorporating profitability as a moderating variable. Empirical results indicate that board attributes exert a significant negative effect on firm value, suggesting that an increase in board size may adversely influence firm performance as measured by Tobin's Q. Conversely, CSR expenditures exhibit an insignificant relationship with firm value, implying that CSR engagement alone does not directly enhance firm performance. However, when profitability is introduced as a moderating factor, the relationships between both board attributes and CSR with firm value become positively significant. This finding underscores the pivotal role of profitability in strengthening the influence of governance and social responsibility initiatives on firm value within the Nigerian banking sector.

4. SUMMARY, RECOMMENDATIONS AND CONCLUSIONS

This study seeks to extend the literature by examining the effect of different types of ethical factors on the firm values of DMBs in Nigeria with profitability as a moderator. The primary question of the research is therefore to assess the effect of board attributes and corporate social responsibility on the firm value of deposit money banks in explaining the moderating role of profitability. By so doing, the study employs quantitative research methodology through the analysis of secondary research data sourced from the annual reports and accounts of selected listed DMBs for 12 years covering between the years 2012 and 2023. The study framework resolves to panel data to analyze the cross-sectional temporal variation of the firms, and the stratified and convenient sampling technique is deployed for a target of 11 DMBs. According to the findings of this research, ethical factors and profitability have a deterministic, positive effect on the performance of DMBs in Nigeria. Contrary to the hypotheses specifying no effect, with the only exception to this finding being the second hypothesis that states that corporate social responsibility has no significant effect on firm value of DMBs in Nigeria due to the findings that state a null relationship between the pair as assumed by the hypothesis. Further, profitability shifts the effects of ethical factors like board attributes and corporate social responsibility, which explains the underlying nature of firm value changes. The results suggest that ethical considerations like board attributes and corporate social responsibility as it is measured by board size and csr spending respectively when considered with the moderating role of profitability are important to the continued increase in the firm value of DMBs in Nigeria.

Based on the conclusion of this study, the following recommendations were made:

- i. The study already highlights that board size plays an important role and deposit money banks should focus on optimizing the composition and size of their boards to ensure effective decision-making. Having a mix of independent directors with diverse expertise can promote better oversight and help mitigate risks related to governance. This will build trust with stakeholders and investors, which in turn can enhance firm value. Through providing consistent training for board members on global best practices can also improve their ability to make decisions that foster long-term sustainable growth.
- ii. A deep focus on profitability and ethics together as profitability is an important moderator in enhancing the impact of board attributes and CSR on firm value. Deposit money banks should ensure that profitability is not pursued at the cost of ethical practices. Instead, the focus should be on creating a balanced approach where profit generations go together with responsible

governance and CSR activities. While sustainable financial models should be adopted that do not prioritize short-term profits over long-term stability and ethical standards. They should focus on profit-driven ethical decision-making, where each decision taken by the bank considers its financial returns along with its social impact.

- iii. This study will also recommend that regular reporting on board attributes and corporate social responsibility be considered for DMBs, and they should provide regular and detailed reports on their governance structures and CSR activities, demonstrating the impact of these actions on the firm's value. Transparency in these areas not only increases stakeholder trust but also reflects a commitment to ethical practices which has proven to improve in the perception of the firm in the public eye and thus improving firm value due to investment and patronization. Implementing regular auditing of board attributes and CSR practices to ensure they meet the highest standards can also be done through independent audits or self-assessments to identify areas for improvement and to supplement the already published reports.

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