



EFFECT OF CAPITAL STRUCTURE AND CEO GENDER ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA*Bako Gideon David¹, Dr. Nasirudeen Abubakar², Prof. Benjamin Kumai Gugong³*^{1,2,3}*Kaduna State University, Kaduna, Kaduna State, Nigeria**Corresponding authors' email and mobile: gideondavidbako@yahoo.com/08023799951¹,
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Abstract

This study examined the effect of capital structure and CEO gender on financial performance of listed deposit money banks (DMB) in Nigeria for the period of ten years from 2012-2021. The study adopted the correlation and ex-post facto research design and a sample size of 13 out of a population of 14 DMBs listed on the floor of the Nigerian Exchange Group as at 31st December, 2021. Secondary data from the sampled banks annual audited financial reports was extracted. The data was analyzed using the multiple regression technique. The findings of the study revealed that the equity financing and debt to equity financing are significant with financial performance of listed DMBs in Nigeria. However, CEO gender was found to be insignificantly related to financial performance of listed DMBs in Nigeria. The study concludes that there is significant relationship between capital structure and CEO's specific characteristics on financial performance of listed deposit money banks in Nigeria. Therefore, the study recommended that banks should desists from high external borrowing in order not to risk being highly geared towards external ownership. DMBs in Nigeria should encourage the appointment of female employees as CEO in the banks as this proves to be significantly improving the financial performance of the listed DMBs in Nigeria.

Keywords: board size, capital structure, CEO gender, financial performance

1. Introduction

The survival and wellbeing of every organization can be ascertained through the financial performance of the organization. However, due to the dwindling financial performance of listed Deposit Money Banks (DMBs) in Nigeria over the years, there were several banking reforms and policies which led to various consolidations of banks in 2004. In an effort to avert a potential systemic crisis and establish a stable banking system that would ultimately lead to exceptional financial performance in the banking industry as well as fostering investor confidence and depositor confidence. Accordingly, Chief Executive Officers (CEOs) through the financial managers deemed it necessary to come up with effective financial policies to ensure sustainable optimum capital structure in their various organizations in order to improve their performance (Ezenwakwelu, 2018).

The responsibility to plan and execute all necessary activities that is geared towards maximizing the value and wealth of the shareholders like any other organization is vested on the bank's CEOs. Aburime (2013) stated that the banks CEOs should plan for effective output by minimizing cost, considering all banks regulatory demand to improve customer's confidence. The Nigerian Code of Corporate Governance stated that CEO is directly responsible for the day-to-day business of the bank. Additionally, the appointment of CEO has confirmed by Code is the exclusive responsibilities of the boards, subject to legal requirement. This is applicable to the DMBs in Nigeria as ratified by the shareholders and approved by the Central Bank of Nigeria. The bank CEOs tenure is determined by



EFFECT OF CAPITAL STRUCTURE AND CEO GENDER ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

their engagement term of five (5) years with the bank, subject to a maximum of 10 years (Code of Corporate Governance, 2018).

As part of the variables of capital structure, Chechet and Olayiwola (2014) and Akeem et al (2014) sees equity financial ratio as an element of capital structure which signifies external source of financing that influences the financial performance of firm in an ordinary business operation. In the same vein, Iyoha (2011) expressed that the relationship between the equity financial ratio and financial performance could be linked to the effect of equity owner's contribution in relation to an organization's financial performance. Furthermore, Dahiru (2016) sees debt and equity in relation to financial performance as representation of debt holders and equity holders' contribution in the financial performance of an organization. While, Ojo (2012) emphasized that total debt to total equity financing as a measure of business solvency have the tendency to influence financial performance of a firm. Ahmad et al (2019) used Al-taani (2013) discovered that this type of financing is measured by the percentage of shareholders' funds and creditors. According to Ophelia et al (2021) effect of debt financing on a firm's capital structure will increase the performance through tax deductions payment.

Some scholars determined the relationship between the CEOs gender and firm's performance. For example, Barber and Odean (2001) asserts that in ordinary business operation male CEO are considered more efficient, confident and viable in managing organizations than female CEO, irrespective of their educational background and their investment opportunity. Also, men are more likely to pay out dividend than women. According to Baloyi and Ngwakwe (2017) CEO gender does not necessarily matter to affect financial performance, be it a male or female CEO. They operate within the company with same resources to operate, which also means wouldn't be gender discrimination on the CEO position. He et al (2021) believed that female CEOs have administrative and managerial skills for advertisement, marketing and motivation and these skills are deemed superior to men.

Deposit Money Banks in Nigeria play an important service between the surplus and deficit sector of the economy. This ensures that DMBs provide adequate flow of money to service deficit sector of the economy and facilitate the movement of funds amongst economic units. However, the unstable financial statement which made many Nigerian banks have financial crises for many years which necessitated series of mergers and acquisition to strengthen and improve the capital structure towards ensuring sound and effective banking systems with financial performance. For instance, Skye bank of Nigeria Plc was acquired by Polaris as well as Diamond Bank of Nigeria Plc. merged with Access bank of Nigeria Plc (Olasupo, 2018). This has led to serious suspicion and criticism about mismanagement of resources by the top management of the banks arising from poor internal control mechanism (Popoola &Suleiman, 2020). Most recently, Titan Trust bank acquired 89.39% of Union Bank of Nigeria shares. This has also raised tension in the minds of customers as to why a two years old Titan Trust Bank will take over the asset and liabilities of 104 years old Union Bank (Adamolekun, 2021&Akinseinde, 2021). These trends of event prompted this study and however form the practical gap this study intends to investigate.

Empirical review of related literatures on capital structure showed gaps which the study intends to fill. For example, studies by Ibrahimy and Aidi, 2021 and Rohaizan et al., 2021 conducted in Malaysia; Li et al., 2021 conducted in China; Jepchumba and Kalui, 2021, and Kum et al, 2021 conducted in Kenya; Luu (2021) and Nguyen et al, (2021) conducted in Vietnam; Ali and Anwar, (2021) conducted in Iraq; Ulum (2021) conducted in Indonesia; Tretiakova et al, (2021) conducted in United Kingdom, were not conducted in Nigeria. This implies that the results may be differ in Nigeria since the social economic environmental of Nigeria and other countries differ.



In the same vein, review of previous literatures on CEOs showed a gap which the study intends to fill. For example, studies by Ghardallou et al (2020) conducted in Saudi Arabia; Wood and Vilkinas, (2007) conducted in Austral; Gupta and Mahakud (2020) and Kaur and Singh, (2019) conducted in India; Ting and Yu, (2015) conducted in China; Liu and Jiang, (2020) conducted in China; Ernestine and Setyaningrum, (2019) conducted in Taiwan and (Alhmood et al, (2020) conducted in Jordan, were not conducted in Nigeria. This implies that the findings may differ in Nigeria since the social economic environmental of Nigeria and other countries differ. In view of the gap highlighted, the researcher seeks to provide empirical evidence on the effect of capital structure and CEO gender of listed DMBs in Nigeria. The findings of the study ultimately play an important role in filling gap in the related research literatures. Also, the study serves as basis for financial decision to the policy makers of the listed DMB's in Nigeria.

2. Literature Review

Conceptualization

This focuses on the concept of financial performance, capital structure proxies of equity financing, debt to equity financing, and CEO gender.

Concept of Financial Performance

Gwamna et al. (2022) defines financial performance as a process of measuring the results of a company's overall assets, liabilities, equity, expenses, revenue and overall profitability in monetary terms, which are capable of generating revenues for the business, to ascertain its overall financial health over a given period of time and to be used in comparing similar firms across in the same industry or other sectors in aggregation. Yeasin (2022) defined financial performance as an estimated or measured of money and profit from the continuing operation which means a company's ability to generate more resources, from continuing operations it made over a specific time. However, Santika et al. (2022) see financial performance as the determination of operational, organizational and employee effectiveness based on predetermined targets, standards and periodic criteria.

This study defines financial performance as the output of the firm operations at a particular period of time. The output is the revenue generated by the asset against the expenses represented by liabilities in monetary value in other to ascertain the general financial well-being of the firm across same industry. This definition is similar to Suleiman (2013) while other studies differ because they looked at activities that generates the output. In line with the above, also, the study will use return on asset as a proxy for financial performance since the study is peculiar to banking sector in Nigeria. Return on Asset determines how the banks use the scarce resources to generate profits. It is computed by dividing profit before interest and tax by total asset.

Concept of Equity Finance

Equity finance primarily involves obtaining funds from outside sources by selling the company's shares to individuals and organizations, as well as through income retention. Thus, Emenuga (2019) posited that shareholders' funds were the definition of equity finance. Also, Gisele et al (2020) defined equity financing as raising of funds by sale of shares in a company total equity in form of cash. Equity financing can be in form of issue of shares to the public, cash from family and friends. Abdullahi et al (2023) sees equity financing as a major source capital structure without the use of debt. Equity financing need not be repaid for within a stipulated time frame like debts. Owolabi et al (2021) defined equity finance to manufacturing firms to consist of retained earnings, ordinary and preference shares. Equity is the change in company's total assets and total liabilities. Therefore, this study defines



equity financing as a form of startup raising funds through sales of an entity shares which deposit banks in Nigeria used in raising their capital. This fund constitutes investments from individuals and cooperates bodies for dividend consideration. This definition is similar to Osoro and Muturi (2013) and Gisele et al (2020) while, Osoro and Muturi (2013) saw equity financing as funds generated from relations and friends. Equity financing is computed by dividing total equity by total assets.

Concept of Debt-to-Equity Financing

According to Wilson et al (2022) debt to equity ratio is defined as the ability for firms to manage borrowed funds. Harelimana (2017) debt to equity ratio is the ratio of two different types of financing funds available which funds sourced are total liabilities while funds from within represents shareholders equity. Weak financial structure signifies high debt to equity ratio. Arumona et al (2021) defined debt to equity financing as the part of capital that was funded by debt as against equity. Therefore, when leverage is high it reflects that there is debt in the capital structure of the firm is high. Wikartika and Asmara (2021) and Ibrahim and Isiaka (2021) debt to equity ratio is the ratio that measures the firm's ability to meet the firm's obligations in the long run if the company is liquidated. This study defines debt to equity financing as the ratio of borrowed funds with interest element to funds injected into the firm by owners of the business. Debt to equity financing is seen as the gearing ratio which measures the degree of vulnerability of earnings accessible to ordinary shareholders of the company. This can be calculated by dividing total debt by total equity.

Concept of CEOs Gender

Gender can be referred as the different roles, qualities, attitudes or actions, that grow and develop in community or are considered generally suitable for men and women (Rokhmad & Susilo, 2017; Arvanitis et al., 2011). Supriyanto & Kho, (2022) saw the term CEO gender represent male and female. Jalbert et al (2013) saw CEO gender as name to differentiate between male and female. According to Noviera and Adhariani (2018) CEO gender is defined from a developing economy like Indonesia to be more male CEO than female counterpart. Na and Hong (2017) saw CEO gender as different discipline as well as behavioral impact in relation to risk and output. From all the definitions above, gender is a function of roles in an organization which could reflect a male or female. This study defined CEO gender as the proportion of male and female CEOs on management, board of directors of a company because there is no specific number of men and women to always be on managerial roles in company. CEO gender is measured by dummy variable 1 if female and 0 if male.

Empirical Review

Prekazi et al (2023) evaluated capital structure and financial performance of 42 commercial firms in Kosovo from 2014 to 2019. Panel data was used to analysis the data using multiple regression technique. The findings reveal that total debt to total equity and return on asset have a positive relationship. The study carried out in another economic and limited to firms. The present study will look at listed banks in Nigeria. Sudarsono and Shidiqie (2022) examined how debt financing and equity financing on Indonesia Islamic banks affect financial performance from 2014 to 2020. Auto-regression distribution lag was used to analysis the data. The findings reveal that return on asset and efficiency have a positive impact on debt financing while non-performing financing has a positive effect on equity financing. The studies constitute an environment gap since it was conducted under a different economic location.



Additionally, Abughniem et al (2022) examined capital structure, firm growth and performance of thirty-five industrial firms quoted in Amman Stock Exchange for a period of 2001 to 2015. Multiple regression was adopted to analysis the secondary data. The results show that debt ratio, debt to equity and firm growth impacts on return on asset. Owolabi et al (2021) examined the options available to equity financing and performance sixty quoted manufacturing firms in Nigeria for a period of 2008 to 2017. Both descriptive and inferential analysis were used to analysis the data. The findings show that equity financing option structure significantly impact financial performance.

Yenta and Kristianti (2022) examined top management and earnings management of forty-two Indonesia quoted manufacturing firms within the period of 2016 to 2018. Panel regression with cross-sectional and time-series analysis of the secondary data. The findings reveal that female CEO has no significant impact on earnings management. Also, female CEO in most emerging countries do not have significant different in decisions making than their male CEO. Also, Darmayanti et al (2022) investigated age, ethnicity and financial expertise of female directors on how it affects quality of earnings in 146 Indonesia financial firms for a period of 2015 to 2018. Multiple regression technique with SPSS version 16.0 was adopted for the analysis. The results show that female directors with age diversity have does not affect earnings quality.

Ahmed (2021) investigated CEO characteristics and performance of the quoted Nigerian insurance firms within the period of 2016 to 2020. Ordinary least square was employed to analysis the secondary data. The results reveal that CEO gender has a positive significant effect on the performance as they recommended hiring of male CEO. The concluded by recommending that importance should be given to males when hiring CEOs in insurance firms in Nigeria and also encouraged to acquire more shares in the firms they are managing. The study adopted ordinary least square technique to analyze the data. The current study will adopt multiple regression technique to analysis the secondary data. Considering the fact that most of the studies were conducted outside the country, the present study seeks to consider listed DMBs in Nigeria for a period 2012 to 2021.

Also, Fatoki et al (2021) investigated capital structure and effect on financial performance of seven quoted firms in Kenya for a period of 2010 to 2016. Panel vector auto regression using EVIEWS 10 was adopted with wald granger causality test. The findings show that return on asset has a significant impact on the debt ratio. Also, that a bi-directional association exists between debt-to-equity ratio and return on asset. Gweyi and Karanja (2014) examined leverage and financial performance of forty Kenya Savings and Credit Co-operative Societies for a period of 2010 to 2012. Secondary data of the financial statements were analysis by multiple regression techniques. The findings reveal perfect positive relationship between debt-to-equity ratio with return on equity and a weak positive connection between debt equity ratios with return on assets. Kartika et al (2023) evaluated capital structure and firms' performance of all manufacturing companies quoted in Indonesia Stock Exchange from 2018 to 2020. Secondary data was sourced from audited financial statement of the firms. The data were analyzed using multiple regression technique through E-views. The findings reveal that debt to equity and return on asset has no significant relationship. The study was carried out in a different country and environment with different economic system and conditions whereas this study will look at debt to equity financing as it applies to Nigeria.

Olamide and Paul (2021) investigated capital structure and performance of ten Nigerian listed manufacturing firms for a period of 2013 to 2019. Multiple regression technique was used to analysis the secondary data. The findings show that debt to equity ratio has negative insignificant impact on return on equity. Also, debt to equity ratio has no significant impact on return on asset. Also, in a similar study by Ayange et al (2021) investigated capital structure and performance of fifteen Nigerian listed



manufacturing firms for a period of 1999 to 2018. Multiple regression using three model was adopted to analysis the secondary data. The findings reveal that return on assets has a negative impact on debt-to-equity ratio (leverage). Oladele et al (2017) examined capital structure and financial performance of fifty-eight quoted manufacturing firms in Nigeria within the period of 2004 to 2013. Multiple regression was used to analysis the secondary data. The result shows that debt to equity ratio has no significant effect on return of assets and contrary to return on equity.

Ullah et al (2021) examined how female CEOs impact investment efficiency in China. Multiple regression was used to analysis the data. The findings reveal that CEO gender has a significant relationship with investment decisions. They also found out that female CEOs in an attempt to avoid overinvestment than under investment pay more attention to details. Also, He et al (2021) examined how CEO characteristics affects brand equity and firm's investment of 8830 observations from Chinese quoted firms for a period of 2012 to 2018. Probit regression using STATA 15 was used for analysis. The results show that CEO gender has no significant impact on a firm's performance to invest in brand equity.

Also, Shikumo (2021) examined impact of share capital and financial growth of forty-five non-financial firms in Kenya for a period of ten years 2008 to 2017. Descriptive statistics and panel data analysis was conducted on the secondary data. They recommended that non-financial firms are to utilize equity financing as a method of raising capital for business expansions, growth or acquisitions of assets. They found out that, 32.73% and 11.62% of share capital explain the variations in financial growth as showed in earnings per share and growth in market capitalization, which makes equity financing important to a firm.

Additionally, Abina and Akinola (2020) investigated capital structure and performance of fifteen Nigerian banks for a period of 1981 to 2019. Secondary data was subjected to augmented dickey-fuller test. The findings show that debt ratio has an insignificant negative association with return on asset. Ihemeje et al (2020) examined how equity financing scheme effect on productivity of three hundred and eighty-seven sample size out of 4,212 is registered Nigerian agro-allied small businesses. Both primary and secondary data were collected and analysis using ordinary least square regression technique. The findings reveal that equity financing scheme has a positive and significant impact on the sustainable productivity agro-allied small businesses. Even though the period of the study is adequate but these studies period stopped in 2020 while this present study will extend to 2021.

Akintoye and Abdulraheem (2020) examined equity financing on financial performance of ten selected Nigerian pharmaceutical firm for a period of 2000 to 2019. Stata software was used to analysis the secondary data with multiple regression analysis. The results revealed that equity financing has a positive significant impact on return on asset. Ihemeje et al. (2020) examined how equity financing scheme effect on productivity of three hundred and eighty-seven sample size out of 4,212 is registered Nigerian agro-allied small businesses. Both primary and secondary data were collected and analysis using ordinary least square regression technique. The findings reveal that equity financing scheme has a positive and significant impact on the sustainable productivity agro-allied small businesses. Even though the period of the study is adequate but these studies period stopped in 2020 while this present study will extend to 2021.



Theoretical Framework

The theories underpinning this study are pecking order theory and upper echelon theory. Pecking order theory under pinned capital structure and upper echelon theory under pinned CEO gender. The pecking order theory which is also referred to pecking order model and one of the acceptable capital structure theories of Myers and Majluf. The theory state that the companies should finance the business (the activities of the business) by internal financing through retained earnings, where retained earnings is unavailable, the company can finance it by debt. The pecking order theory asserts that internal debt financing should be considered first as the need arise for every organization to increase its capital structure and followed by external debt financing and lastly the equity financing, because, the internal debt financing serves as a means of increasing managers ownership in the organization which by implication increase the managers efficiency in running the affairs of the organization and that will equally lead to an increase in the financial performance of the organization.

On the other hand, the equity financing sent bad signal to potential shareholders as they may fill that the shares were overpriced. Hence, they will not patronize the share and the organization may ultimately reduce the price of the shares which also reduces the market share value and financial performance of the organization. In this regard, the pecking order theory stands to anchored the independent variables of capital structure which include the equity financing ratio to represent the issue of shares financing option based on the theory and debt to equity financing ratio represents the debt financing option as suggested by the theory. However, Hambrick and Mason, 1984 argued that a new direction on the research on corporate decision making by proposing that managers' personal characteristics are reflected in the decisions taken by the organizations. They are of the opinion that upper echelon theory is anyone who is in top management level of an organization, without their inputs and support, the organization would not function well or cease to exit. The theory proposed the use of several demographic characteristics namely age, socioeconomic background, formal education, tenure, gender, citizenship and so on. They viewed them as proxy for the psychological drivers of decision making. Moreover, the theory explains the present study in the sense that the independent variable CEO's gender used in the study is demographic characteristics would directly or inversely influence the performance of listed DMBs in Nigeria.

3. Methodology

A correlational research design was considered suitable for this study. The correlation enables the researcher examine the association among two or more variables are related to one another, what they share in common, while at the same time predicting a particular outcome based on certain information provided. The study population consists of all the fourteen (14) DMBs in Nigeria as at 31st December, 2021 as contained in table 1. Filtering criteria was carried out to arrive at the sample size. Jaiz bank was not selected as it does not have data required to measure the study variables. The study used secondary data from the audited financial statement of listed DMBs for the period of ten years (2012-2021). This study employed multiple regression technique for data analysis. Also, diagnostic test was conducted such as normality test, heteroskedasticity test and multicollinearity. The analysis was done using STATA 13 data analysis software.



EFFECT OF CAPITAL STRUCTURE AND CEO GENDER ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

Table 1

Population and Sample Size

SN	Bank Name	Year of Listing	Year Incorporated	Sample Size
1	Access Bank	1998	1989	Selected
2	Eco Bank	2006	1986	Selected
3	Fidelity Bank	2005	1987	Selected
4	First Bank of Nig. Plc.	1971	1894	Selected
5	First City Monument Bank Plc.	2004	1982	Selected
6	GT Bank Plc.	1996	1990	Selected
7	JAIZ Bank Plc.	2017	2011	Not Selected
8	Stanbic IBTC	2005	1989	Selected
9	Sterling Bank Plc.	1993	1960	Selected
10	Union Bank Plc.	1972	1969	Selected
11	UBA Plc.	1970	1961	Selected
12	Unity Bank Plc.	2005	1987	Selected
13	Wema Bank Plc.	1990	1945	Selected
14	Zenith Bank Plc.	2004	1990	Selected

Source: Nigerian Exchange Group and Websites (2021)

Variable Measurement

The study considered only 13 listed DMBs in Nigeria as sampled above for the period 2012 to 2021. The study measured the variables of the study as presented in the Table 2 below:

Table 2

Variable Measurement

Variables/Acronyms	Variable Measurements	Sources
Dependent Variable		
Return on Assets (ROA)	Profit before interest and tax/ Total Assets.	Menacer (2014), Yahaya & Lamidi (2015), Anarfo (2015), Iyinomen et al (2019)
Independent Variable		
Equity Financing Ratio (EFR)	Total equity / Total assets.	Ng'ang'a (2013), Esiemogie, et al (2014) Sultan & Adam (2015)
Debt to Equity Financing Ratio (DER)	Total debts/ Total equity.	Ng'ang'a (2013), Rafiu & John (2014) and Foyeke et al (2016)
CEO Gender (CGEN)	This is measured by a dummy variable, '1' if female CEO sits on the board, otherwise '0'	Schubert, Brown, Gysler, and Brachinger, (1999); Cooper, (2017)

Source: Author's Compilation, 2024.

Model Specification

This study modified Baron and Kenny (1986) model encapsulates the relationship between capital structure represented by equity financing (EFR) and debt to equity financing (DER) and CEO gender as the independent variables with dependent variable financial performance proxy by return on asset (ROA).

The study specified the model as thus:

$$ROA_{it} = \beta_0 + \beta_1 EFR_{it} + \beta_2 DER_{it} + \beta_3 CGEN_{it} + \varepsilon_{it}$$

Where: ROA = Return on Assets, EFR = Equity Financing Ratio, DER = Debt to Equity Financing,



CGEN = CEO's Gender, β_0 = Intercept, $\beta_1 - \beta_3$ = Coefficient of the Explanatory Variable, i = DMBs t = Period.

4. Result and Discussion

Descriptive Statistics

Table 3

<i>Descriptive Result</i> Variables	Min	Max	Mean	Std. Dev.	Kurtosis	Skewness
ROA	-0.1055	0.2467	0.0283	0.0474	11.3076	2.4378
EFR	-2.0074	0.9992	0.2292	0.4298	9.3388	-0.8369
DER	-0.6675	458.6672	57.8723	92.3636	5.2372	1.5839
CGEN	0	1	0.4461	0.4990	1.0469	0.2167

Source: STATA output 2024

The mean value of return on assets is 0.0283 for the entire 13 listed deposit money banks in Nigeria for the period, indicating 2.83% return on all the sampled banks. The skewness coefficient value of 2.4378 indicates that the distribution was positively skewed to the right. The maximum value of the sampled banks financial performance was about N24.67 billion while the minimum was less than N10.55. There appeared to be quite a lot of variation in the financial performance of the sampled banks as indicated by the standard deviation value of 0.0474 which is moderately high compare to the mean value of 0.0283, this suggest that there is a moderate variability of observations from the listed DMBs.

The average value of equity financing is N22.92 billion of the listed DMBs within reviewed periods. The standard deviation of 0.4298 indicates a moderately high spread of the data from the mean of 0.2292. The highest equity funding by the listed DMBs in Nigeria per annum is N99.92 billion within the period under review. For debt-to-equity financing, Table 3 shows the smallest proportion of the banks' capital mix is less than N66.75 billion and the largest proportion is N458.67 billion. Again, the average coefficient value of 57.8723 and standard deviation of 92.3636 indicates that the data is widely dispersed from the mean. Table 3 also reveals that the mean CEO gender is 0.4462 average value with standard deviation being 0.4990; which means that the number of female CEO sitting on the banks board is about 44.64% of the total board members during the period of the study. The minimum and maximum CEO gender is 0 and 1 respectively. The kurtosis coefficient value of 1.0469 and the skewness coefficient value of 0.2167 infer that a normal distribution exists between the variable.

Correlation Matrix

Table 4 below presents the correlation matrix result of the study where the degree of association between the dependent variable and the independent variables is determine.

Table 4

Correlation Result

Variable	ROA	EFR	DER	CGEN
ROA	1.0000			
EFR	0.5688	1.0000		
	0.0000			
DER	-0.0940	-0.0349	1.0000	
	0.2872	0.6935		
CGEN	0.0101	0.1476	-0.2577	1.0000
	0.9090	0.0938	0.0031	

Source: STA TA output 2024



EFFECT OF CAPITAL STRUCTURE AND CEO GENDER ON THE FINANCIAL PERFORMANCE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA

It can be observed from Table 4 that a strong positive association exists between return on assets and equity financing of the listed DMBs in Nigeria evident by the coefficient value of 0.5688. This signifies that equity financing is significantly correlated with financial performance of the banks for the period under review. However, a weak negative and in insignificant correlation exists between debt-to-equity ratio and financial performance of the listed banks in Nigeria. The coefficient value and the p-value of debt-to-equity ratio is - 0.0940 and 0.2872 respectively. More so, the analysis revealed a very weak but positive insignificant correlation between CEO gender and financial performance. The Table revealed a coefficient value of 0.0101 and a p-value of 0.9090 for CEO gender in the banks.

Diagnostic Test

This section presents and discusses the diagnostic test conducted so as to determine by comparison, the best alternative model for reliability and validity of the inferential statistics from the regression model. The test consists of multicollinearity test and Breusch-Pagan/CookWeisberg test for heteroskedasticity. Table 5 below shows the result.

Table 5

Diagnostic Analysis

Variable	VIF	Tolerance Value	P-Value
EFR	1.02	0.978201	-
DER	1.07	0.933585	-
CGEN	1.09	0.914357	-
Mean VIF	1.06	-	-
Hettest Chi ²	-	-	110.47
Hettest Sig.	-	-	0.0000
Hausman	-	-	0.0002

Source: STATA output 2024

Multicollinearity test is administered to determine whether or not there is correlation among the independent variables which can distort the findings of the study. The tolerance values and also the variance inflation factor (VIF) are competent measures of assessing the presence or not of multicollinearity. The test as indicated by the VIF mean of 1.06 in Table 5 shows that there is absence of extreme association as all the tolerance values are less than 1.0 and all the factors are below 10. The test for heteroskedasticity was also administered in order to assess whether or not the variability of error terms is constant. The findings as indicated in Table 5 above revealed an existence of heteroskedasticity revealing a-5% significant probabilities of 0.0000. This implies that the original ordinary least square (OLS) is not suitable for the study. The Hausman test supported the choice of the fixed effect model (0.0002) as the appropriate model over the fixed effect model. A further test of the Panel Corrected Standard Errors (PCSEs) model was done to correct for the presence heteroskedasticity in the data and thus is the appropriate for the study.



Regression Result

The result of the regression is presented and discussed. It also draws conclusions. In Table 6 below, it is reported that the estimates from the regression analysis reveals that R-square (R^2) of the model is 0.3384 implying that about 33.84% of the independent variables jointly explained the variations in return on assets of the listed DMBs in Nigeria while, the remaining 66.16% are explain by other variables not captured in the model. However, the Wald-Chi2 shows a coefficient value of 59.86 and a p-value of 0.0000 which suggests that the model is again statistically significant and fitted.

Table 6
Panel corrected standard errors (PCSEs) Result

Variables	Coeff.	Z	P-Value
Constant	0.0209	3.51	0.000
EFR	0.0639	7.64	0.000
DER	-0.0001	-2.12	0.034
CGEN	-0.0096	-1.07	0.286
R-Square			0.3384
Wald Chi²			59.86
Prob. Chi²			0.0000

Source: STATA output 2024

Discussions

The equity financing indicates a positive and statistically significant with financial performance of listed deposit money banks in Nigeria by a coefficient of 0.0639 and a p-value of 0.000 which is significant at 1% level of significance. This means that a unit increase in EFR causes financial performance to increase by N6.39 billion. This signifies that equity financing contributes towards the financial performance of listed DMBs in Nigeria. The finding of the study is in line with the studies of Njagi et al. (2017); Achieng et al. (2018); Mwende et al. (2020); and Sudarsono et al. (2022). While Akeem et al. (2014) and Noor et al. (2020) shared a contrary finding with the current study.

Table 6 above shows a negative coefficient value of -0.0001 and significant p-value of 0.034 between debt-to-equity financing and financial performance. This implies that debt to equity financing is negative and statistically significant with financial performance of listed DMBs in Nigeria. This signifies that for every N1 increase in the amount of debt-to-equity financing, financial performance of the banks will decrease by 0.0001. The finding is in line with the studies of Abdullah et al. (2019); Yinusa et al. (2019); Abughniem et al. (2022) and Prekazi et al. (2023). But disagree with the findings of Githaiga et al. (2015); Udobi-Owoloja et al. (2020); Abina et al. (2020); Olamide et al. (2021) and Kartika et al. (2023). However, the relationship between CEO gender and financial performance of the listed DMBs in Nigeria shows a negative and statistically insignificant association as indicated by a beta coefficient value of -0.0096 and p-value of 0.286. This implies that CEO gender is negatively and significant impacting on the financial performance of the banks in Nigeria. This signifies that when CEO gender increase by 1 number, banks' financial performance will decrease. The findings contradict the studies of Jalbert et al. (2013); Na et al. (2017); Ullah et al. (2021) and Ahmed (2021). However, the finding is in line with Shao et al. (2014); Baloyi et al. (2017) and Carrilero-Cashillo et al. (2021); Waitherero et al. (2021); Huong et al. (2021) and Hidayat et al. (2021).



5. Conclusion and Recommendations

In line with the findings of the study, it was concluded that equity financing is an important variable in explaining the financial performance of banks as observed by a significant positive relationship between equity financing and financial performance of the listed DMBs in Nigeria. The research also concludes that debt to equity financing ratio is significantly influencing the financial performance. However, it was also concluded that a negative insignificant impact exists between CEO gender and financial performance. The study therefore recommends that, bank managers should adopt policy that ensures that equity financing is encouraged as it proves to be significantly impacting the financial performance of the listed DMBs in Nigeria. Additionally, banks should desist from high external borrowing in order not to risk being highly geared towards external ownership. The DMBs in Nigeria should encourage the appointment of female employees as CEO in the banks as this proves to be insignificantly related to financial performance of the listed DMBs in Nigeria for the period.

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