OWNERSHIP STRUCTURE AND DIVIDEND POLICY: THE MODERATING EFFECT OF PROFITABILITY OF LISTED DEPOSIT MONEY BANKS (DMBs) IN NIGERIA

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Abstract
The study explores the relationship between the ownership structure and dividend policy of listed deposit money banks in Nigeria with a focus on the moderating effect of profitability for the period 2014-2020. Thirteen (13) Deposit Money Banks (DMBs) were selected out of 14 (DMBs), with data analyzed from the annual financial statements of the DMBs. Ordinary Least Square (OLS) regression was used to analyze the data from the listed DMBs in this study. The findings shows that managerial ownership shows a positive and insignificant effect on dividend payout ratios; foreign ownership has a positive and insignificant influence on the dividend payout ratio of listed DMBs in Nigeria. Conversely, institutional ownership shows a negative and significant influence on the dividend payout ratio of DMBs. Moreover, ownership concentration shows a negative and significant influence/effect on the dividend payout ratio of the DMBs. Furthermore, the study shows that profitability plays a moderating role in the relationship between managerial ownership and dividend payout ratio leading to a positive effect. The research highlights the intricate interplay between ownership structure, profitability, and dividend policy within Nigerian deposit money banks. Based on the findings and conclusion drawn, the following recommendations are proffered: Encourage managerial ownership alignment for improved governance, focusing on long-term value. Although not statistically insignificant for dividends, alignment enhances transparency and strategic vision, and attracts foreign investment to diversify ownership for fresh perspectives. Despite the not-significant dividend impact, diversification enriches strategic direction and global insights, and Leverage profitability has an impact on managerial ownership for dividends. Align managerial incentives with profitability gains for sustainable value creation.

Key Words: Ownership Structure, Dividend Policy, Listed Deposit Money Banks in Nigeria, Institutional Ownership, Foreign Ownership.

Introduction

A dividend policy is extremely important because of its announcement effect on share price, this is in line with the signaling theory of dividends hence a stable dividend policy is expected to influence share prices because of the greater confidence of investors about future prospects of the firm which is in supports of the bird-in-hand theory of Gordon (1963). The need for high interest in dividends cannot be underestimated in consideration of the recent economic and financial crisis; many investors have started to desire high current dividends to meet their socioeconomic needs. Hence, the role of the financial manager is to strike a balance between dividend payout which is the return on investment to the shareholders who have a stake in the bank, and the share of profits to retain for future expansion and profitable investment opportunities to be financed internally.

Ownership structure looks at who owns the bank. An organization's ownership structure identifies every person or entity that has a stake in its stock or an ownership interest in it. Ownership structure, according to Jensen & Meckling (1976) is the division of equity based on the ownership of capital, votes among shareholders, and equity owners' identities. Ownership structure significantly impacts corporate strategic decisions, particularly dividend payment policies, due to its influence on internal funding for future profitable investments. Existing literature, including studies by Dahiyat & Nsour (2021) and Farouk, et al. (2022), acknowledges the link between a bank's ownership structure and dividend policy. Higher ownership concentration or more block holders enhance investor monitoring power, as these stakeholders have strong incentives to protect their investments. Additionally, institutional ownership acts as an alternative monitoring mechanism because institutional investors' substantial stakes and voting power provide them with the motivation and means to influence managerial behavior, as demonstrated by research by Shleifer & Vishny (1986)

On the other hand, profitability is necessary for the survival of the business, it is also used to measure management efficiencies and effectiveness, in addition, potential investors are interested in profitability because it influences dividend decisions and stock market price. It is therefore worthy to note that dividend can only be declared out of profit made hence a bank that consistently operates a loss may not declare and pay dividend and this may be detrimental to its going-concern.

Statement of Problem

The COVID-19 pandemic and the oil price war have had adverse effects on the economic growth and cash positions of many companies globally. Particularly, businesses in severely impacted sectors like tourism, hospitality, aviation, and retail have had to cut or suspend dividend payments to preserve cash resources and ensure their survival. For example, major UK banks like Barclays, Royal Bank of Scotland, HSBC, Lloyds, Santander, and Standard Chartered suspended dividend payments and share buybacks from 2019 through 2020. In Croatia, the Croatian National Bank imposed a ban on dividend distribution until December 31, 2020, with individual decisions made for each bank. Despite this, some companies may have the financial capacity to continue paying dividends due to accumulated retained earnings.

Despite the implementation of e-dividends in Nigeria, there are some other problems like as unclaimed dividends; almost all the DMBs in Nigeria that pay a dividend have such problems. "The activities of some capital market operators (CMOs) which frustrate the e-dividend mandate process, leading to a rise in unclaimed dividends in the capital market. The unclaimed dividends in the capital market were estimated to have risen to over N200 billion (Yuguda 2021)". "Regardless of several engagements, as of April 8, there were still 4,012,311 accounts with incomplete documentation (know your customer (KYC)) information. This exercise is critical to deepening the participation of retail investors and directs all CMOs to account from it the highest level of priority" (News Agency of Nigeria, 2021).

However, previous studies that examined the relationship between ownership structure and dividend policy include Alshubiri (2014) using industrial firms in Jourdan; Manuel & Reyna (2017) in Mexico; Peerbhai, *et al.* (2021) in South Africa; Bataineh (2021) industrial and service firms in Jourdan; Tigero, et al. (2023) in Latin America. On one hand, studies by Afolayan (2015), Miko & Kamardin (2015), Aliyu, et al. (2016), Akani & Sweneme (2016), and Omilabu, et al. (2018) found a positive result. This suggests that there is a positive association between ownership structure and dividend policy in Nigeria.

On the other hand, studies by Adamu, et al. (2018), Adamu, et al. (2020), and Osidero & Ademola (2017) found a relationship between ownership structure and dividend policy, but the statement does not specify whether this relationship is positive or negative. Therefore, these findings are not directly comparable to the positive result mentioned in the first group of studies. In summary, the findings regarding the relationship between ownership structure and the dividend policy in Nigeria are mixed, with some studies showing a positive association and others indicating a relationship without specifying its nature (positive or negative).

The studies that examined the relationship between profitability and dividend policy and revealed a positive and significant relationship include the study of Chakraborty, et al. (2004), Thafani & abdullah (2014), Ghudurati & Hashemi (2014), Khan, et al. (2015), Mawutor & Kemebradikemor (2015), Kawshala & Panditharathna (2017), Astakoni, et al. (2019), Gul, et al. (2020). Hence profitability can moderate the relationship between ownership structure and dividend policy in consideration that dividends can only be declared when profit is made.

Furthermore, studies also exist on ownership structure, profitability measures, and dividend policy, for example, the study of Chen, et al. (2005) using listed firms in Hong Kong; Al-Sa'eed (2018) using manufacturing companies in Jordan; Dahiyat & Al-Nsour (2021) using banks in Jordan; Mustafa, et al. (2023) using listed firms in Turkey; the studies determine the effect of ownership structure and dividend policy on profitability measures. Although these studies consider both developed and developing economies but did not determine the moderating effect of profitability on the relationship between ownership structure and dividend policy and their findings may not be applicable in the Nigerian DMBs. However, the study of Farouk, et al. (2022) used DMBs in Nigeria but the study determined the moderating effect of financial performance on the relationship between ownership structure and dividend policy covering a period of 2009-2017. However, the current study considers profitability (net profit margin ratio) as a moderating variable because profitability has a significant influence on dividend payments, in addition, this study will also consider post COVID 19 period so that the findings can accommodate the effect of COVID 19 on the ability of DMBs in Nigeria to pay dividend which can only be declared and paid when profit is made. Based on the above issues raised the following research objectives were raised:

a. Determine the impact of ownership structure on the dividend policy of listed deposit money banks in Nigeria.
b. Determine the moderating effect of profitability on the relationship between ownership structure and dividend policy of listed deposit money banks in Nigeria.

A summary of the hypotheses is provided to test the link between the dividend policy and ownership structure and the moderating effect of profitability. Sequel to the above, the following null hypotheses were proposed:

H_0^1 Ownership structure has no significant impact on the dividend policy of listed deposit money banks in Nigeria.

H_0^2 Profitability does not significantly moderate the relationship between ownership structure and dividend policy of listed deposit money banks in Nigeria.

This study seeks to investigate how profitability moderates the relationship between ownership structure and dividend policy of listed Deposit Money Banks in Nigeria from 2014 to 2020. The study uses dividend payout ratio, concentrated ownership, institutional ownership, managerial ownership, foreign ownership, and net profit margin as the variables. The seven years period was chosen because of the 2014 CBN circular that affected the capital build-up of banks. The study will examine how profitability affects the link between ownership structure and dividend policies in Nigeria. The study will be useful for various stakeholders such as researchers, experts, practitioners, regulators, managers, directors, shareholders, and investors of the listed deposit money banks in Nigeria. The study will help them to analyze the situation, make accurate decisions, review and upgrade policies, and understand the impact of ownership structure on dividend payment. The remaining parts of the paper are organized as follows: section 2: literature review; section 3: methodology; section 4: discussion of results and, section 5: conclusions and recommendations.

Literature Review

This section of the study addresses two key aspects: conceptual issues related to the study's variables and a review of existing literature in the same field. The primary goal of this chapter is to create a conceptual framework and establish relationships among the study's variables based on prior research. Additionally, it aims to identify and address any gaps in the existing literature that may be uncovered during the review process.

Concept of Ownership Structure

Ownership structure looks at who owns the bank. An organization's ownership structure identifies every person or entity that has a stake in its stock or an ownership interest in it. Ownership structure, according to Jensen & Meckling (1976), is the division of equity based on the ownership of capital, votes among shareholders, and equity owners' identities.

Concentrated Ownership refers to the structure where big shareholders own a huge amount of a company's stock. This concentrated ownership or block-holders are the investors who hold at least 5 % of the company's stock. Ownership concentration was measured as the Ratio of shares held by those with 5% shares or more to the total amount of ordinary shares in issue (Farouk, et al., (2022).

Institutional Ownership is measured as the Ratio of shares held by institutions to the total amount of ordinary shares in issues Farouk, et al., (2022). Institutional investors are large investors such as insurance firms, banks, pension funds, financial institutions, investment firms, and other nominee firms associated with the mentioned categories of institutions (Koh, 2003).

Managerial Ownership could be defined as a percentage of shares owned by independent non-executive directors, executive directors, and non – independent non-executive directors Hashim (2008). Che (2003) claimed that managerial ownership may be divided into two; i) insider ownership and ii) outsider ownership. Insider ownership is defined as a percentage of shares held by the insider board members including executive directors and non-independent, non-executive directors while outside board ownership is defined as a percentage of shares held only by independent non-executive directors.

Foreign Ownership is a situation where the shareholders of a company have foreign holders. Foreign ownership means there is a foreign shareholder in a company. Foreign Ownership was measured as the Ratio of shares held by foreign directors to the total amount of ordinary shares in issue (Farouk, et al., 2022). If another shareholder is residing in the company's operated country, in this case, the concept of a foreign shareholder may be mentioned (Sakinc & Gungor, 2015).

Concept of Dividend Policy

The term dividend is derived from the Latin word "dividendum" which means "thing to be the divided". Dividends are simply defined as the money that a company pays out to its shareholders from the profits it has made (Doughty, 2000). Davies and Pain (2002) also defined dividend as the amount payable to shareholders from profits.

Concept of Profitability

Profit is the ultimate objective of any company, representing the difference between income and expenses over a specific period. The ability to generate profit is essential for the sustainability of a new company. Profitability ratios serve as metrics to assess a company's overall performance and effectiveness. These ratios are of interest not only to the company's management but also to trade payables and business owners. Key types of profitability ratios include gross profit margin, net profit margin, operating expenses ratios, return on capital employed (ROCE), assets turnover ratio, return on asset (ROA), and return on equity. According to Anani & Sweneme (2016), profit means the difference between the revenue generated from the sale of output and the full opportunity cost of the factor used in the production of that output. Included within costs is the premium charged for risk-taking and the costs of using the owner's capital. According to Astakon, et al. (2019), profitability is the company's ability to earn profits through its business operations using asset funds owned by the company.

Empirical Review

The review is to check the impact of the moderating effect of profitability on the relationship between ownership structure and dividend policy.

Ownership Structure and Dividend Policy

This study empirically reviews some literature on the ownership structure and dividend policy of some companies that are listed on the stock exchange of various countries including Nigeria. For example, the study of Gul, et al., (2012) analyzing the impact of dividend policy on shareholders' wealth within a six-year period from 2005 to 2010 for 75 companies listed on the Karachi Stock Exchange, several key findings emerged. It was revealed that dividend-paying companies significantly differed from non-paying companies in terms of their average market value (AMV) relative to book value of equity (BVE), indicating the positive influence of dividend payments on shareholder wealth. Conversely, retained earnings were found to have an insignificant impact on the market value of equity, and the price-earnings ratio (P/E ratio) did not significantly affect shareholders' wealth. Additionally, the study noted that the lagged market value of equity had a significant influence on the market price per share, highlighting the historical market value's impact on the current share price. Also, Adamu, et al. (2020) examined the association between ownership structures and the decision to pay dividends. The sample firms of this study consist of non-financial firms listed on the Nigerian Stock Exchange for the period 2011 to 2015 with 270 firm observations and logit regression models used to examine the relationship. The study uses managerial ownership and institutional ownership as proxy of ownership structure and dividend payout and the dividend yield was used as a proxy of dividend policy and agency cost as a theory of the study firm size, retained earnings, and leverage was used as a control variable. The study revealed strong evidence that institutional investors were positively related to the decision to pay dividends. However, managerial shareholding was found to have an inverse effect on firms' probability of paying dividends.

In addition, Bataineh's (2021) study analyzed how different types of ownership structures affect the dividend policy of Jordanian industrial and service firms listed on the Amman Stock Exchange from 2014 to 2017. The statement mentions that the study used Tobit Panel Regression and focused on family ownership, institutional ownership, foreign ownership, and state ownership as the variables, and dividend yield as the outcome. The findings show that institutional ownership had a positive effect, foreign ownership had a negative effect, and family ownership and state ownership had no effect on dividend yield, and that the study revealed that Jordanian firms have highly concentrated and family-dominated ownership structures. Moreover, Tigero, et al. (2023) evaluate the ownership concentration affects dividend smoothing of firms in six Latin American countries with low investor protection and high ownership concentration. The study used panel data and compared firms with and without a mandatory minimum dividend rule. The findings show that firms with higher ownership concentration, more growth opportunities, and greater financial constraints tend to smooth dividends more, and that this was consistent with the reputation-building hypothesis.

Profitability and Dividend Policy

The study empirically reviews some literature on profitability and dividend policy. For example, Omilabu, et al., (2018) examined the effect of dividend policy on the profitability of selected banks in Nigeria from 2011 through 2015. Profit after tax was used as a dependent variable in the study while dividend per share and dividend payout ratio served as an independent variable and total asset as a control variable. Secondary data was used and multiple regression analysis was employed in the research, bird-in-hand, and signaling theory was adopted as theories in the study. The result showed that dividend policy and total assets have a significant effect on profitability and dividend per share has no significant effect on profitability. Equally, Astakoni, et al., (2019) analyzed the effect of the company's dividend policy and profitability of cosmetics and household needs manufacturing companies listed on the Indonesian Stock Exchange for the period of 7 years (2010-2016). Profitability is the dependent variable proxy by NPM, ROA, and ROE while dividend policy was used as the independent variable proxy by DPO and DY. Secondary data was used in the study and partial least square (PLS) was employed. The result showed that there is a significant and positive effect between dividend policy and profitability.

At the same time, Gul, et al. (2020) examined the factors that affect the dividend policy of pharmaceutical companies registered on the Pakistan Stock Exchange (PSX) from 2013 to 2017. Population-based on all sectors of the Pakistan Stock Exchange (PSX) in which pharmaceutical companies have been taken as a sample by using census sampling technique because all companies of the pharmaceutical sector were considered. Panel VAR model, fixed effect model (FAM), and regression were used to determine the influence of IV on DV. The results revealed a significant effect of managerial ownership, debt policy, ROA, firm size, and free cash flow on dividend policy.

Moderating Effect of Profitability on the Relationship between Ownership Structure and Dividend Policy

This segment reviewed some literature related to ownership structure, profitability, and dividend policy. For example, the study of Dahiyat & Al-Nsour (2021) The paper that explored how ownership concentration affects the profitability and dividend policy of banks listed on the Amman Exchange from 2010 to 2019. The paper used ownership concentration, return on equity, and pay-out ratio as the variables, and simple regression as the analytical method. The findings show that ownership concentration had a positive effect on profitability and a negative effect on dividend policy. And that this was explained by the power and influence of large shareholders. On top of that, Farouk, et al., (2022) said, it is becoming clear that the existing ownership structure in commercial banks in Nigeria is inefficient because it fails to protect the owners' interest as a result of dwindling financial performance leading to little or no payment of dividend. The population is fourteen listed commercial banks in Nigeria as of 31st December, 2017. The study investigated how ownership structure and financial performance affected the dividend payout ratio of listed commercial banks in Nigeria from 2009 to 2017. The study used secondary data from annual reports and generalized least square regression as the data source and analytical method. The findings indicate that managerial ownership and foreign ownership had a negative effect, concentrated ownership had a negligible effect, and institutional ownership had a positive effect on the dividend payout ratio, and that financial performance moderated these effects.

Furthermore, Mustafa, et al. (2023) examined a sample of non-financial firms listed on the Borsa Istanbul (BIST) from 2016 to 2020. The study examined how board structure and control wedge ownership affect the dividend policy of firms. The statement mentions that the study used board size, board independence, female board membership, board knowledge/skill, return on equity, and firm age as the variables, and dividend per share as the outcome. The statement summarizes the findings that board size, female board membership, and knowledge/skill had a strong positive effect, board independence had a non-significant positive effect, and control wedge ownership moderated three of the four relationships.

Theoretical Framework

Dividend Signaling and Information Asymmetric Theory

In 1961, Miller and Modigliani (M&M) identified that dividend payments play a significant role as a signaling mechanism to inform the market. Jacklin & Bhattacharya (1988) further expanded on this concept, explaining that increases in dividends often convey positive signals to the market, leading to an increase in share prices, while decreases in dividends send out negative signals, causing share values to decline. Zameer, et al. (2013) reinforced this idea, asserting that businesses use dividends strategically as a signaling tool. They discussed how managers possess insights into a company's future earnings, creating an information asymmetry where insiders, including managers, are well-informed, while outsiders are not. To address this imbalance, managers may announce dividends to establish information symmetry between insiders and outsiders. This signaling theory suggests that a company's dividend policy can serve as a means to inform investors about its prospects for the future. Cash dividend announcements help to reduce information asymmetry by providing shareholders with valuable insights into management's outlook for the company's future profitability, information that outsiders lack. As a result, investors may utilize this information in determining a company's share price.

Dividend Signaling and Information Asymmetry Theory was adopted due to its relevance in concerned with how a firm's dividend policy communicates information to investors and how it can influence the firm's stock price. In the context of ownership structure and dividend policy, examining how dividend decisions are used to signal information about the firm's financial health and performance becomes particularly pertinent. The moderating effect of profitability can further influence how dividend decisions and information signaling are applied within the context of ownership structure.

Research Methodology

Research Design

The study uses an explanatory research design to test how profitability moderates the link between the ownership structure and dividend policy of Nigerian banks. The research design is chosen because the study wants to measure the effects of one variable on another and also the moderating variable to see if there is a causal relationship among the variables. The study covered 14 deposit money banks that are quoted on the floor of the Nigerian stock exchange as of 2022, February. The study uses 14 deposit money banks (DMB) from the NSE as the samples size. The study selects the DMBs based on two criteria: they must be listed throughout the study period and they must have the required data for the study. The study applies these criteria to ensure complete observation, minimum requirements and avoid redundant samples. The study used the annual report and financial statements of all the banks that are quoted on the Nigerian Stock Exchange (NSE) for the period under review (2014-2020).

Measurement of Variables

The dividend payout ratio was used as a dependent variable as DPR = Dividend per share divided by Earnings per share as stated in Gugler (2003), Bushra and Mirza (2015), Afolayan (2015), Khan, et al (2015), Cyril. et al. (2020). Ownership structure was the independent variables proxy by Ownership concentration be measured as the Ratio of shares held by those with 5% shares or more to the total amount of ordinary shares in issue, as stated in Sale, et al., 2018; Adamu, et al., (2018), Sulong & Nor (2018), Farouk, et al., (2022). Institutional ownership is measured as a ratio of shares held by institutions to the total amount of ordinary shares issued as stated in Al-shubiri, et al., (2012), Dandago et al (2015), Farouk, et al., (2022). Managerial ownership is measured as the Ratio of shares held by directors to the total amount of ordinary shares in issue as stated in Miko & Kamardin 2012; Wahla, et al., 2012; Saleh, et al. 2018; Adamu, et al., 2018; Sulong & Nor 2018), Farouk, et al., (2022). Foreign ownership was measured as the Ratio of shares held by foreign directors to the total amount of ordinary shares in the issue. Dandag,o et al (2015); and nor (2018), Farouk, et al., (2022). Profitability was the moderator in the study which is measured as Net profit Margin, as stated by Ajanthan (2013), Astakoni, et al., (2019), and Al-Sa'eed (2018). Firm size and Age were used as control variables and measured as the Natural Log of total assets and age of the firm respectively (Aguenaou, et al., 2013, Afolayan, 2015, Khan, et al, 2015, Igbinovia & Iyoha 2020).

Technique of Data Analysis

Descriptive, correlation, and multiple regressions were used in the study. Descriptive statistics was used to compute the summary statistics that describe the central tendency, as well as, how the data spread out around the mean value. This tool was used to describe the dependent, independent, and moderating variables of the study by computing the Mean, Median, Maximum, Minimum, and Standard Deviation of the variables. This was in line with the study of Chakraborty, et al., (2004); Silvia & Toni, (2020).

The correlation technique was used to construct the nature of the relationship between ownership structure and dividend policy and the moderator. This shows the strength of the relationship between the independent variables among themselves with the dependent variable and the moderator. This is in line with the study of Mawutor & Kemebradikemor, (2015); Kawshala & Panditharathna, (2017) Gul, et al., (2020).

The study uses multiple regressions with panel data methodology to measure the effect of independent variables on the dependent variable (dividend payout ratio). The study uses different regression models such as OLS, FE, and RE and tests such as Hausman and LM to select the best model for the study. The study also conducts robustness tests to ensure the validity and fitness of the results.

Models Specification

The models of the study are mathematically expressed as follows;

$DPR_{it} = \alpha + \beta_1 OWC_{it} + \beta_2 INOS_{it} + \beta_3 MGOS_{it} + \beta_4 FOWS_{it} + \beta_5 FSIZE_{it} + \beta_6 Age_{it}\ £_{it}\ldots\ldots_i$

$DPR_{it} = \alpha + \beta_1 OWC*NPM_{it} + \beta_2 INOS*NPM_{it} + \beta_3 MGOS*NPM_{it} + \beta_4 FOW*NPM_{it} + \beta_5 NPMit + \beta_6 FSIZE_{it} + \beta_6 Age_{it}\ £_{it}\ldots\ldots_i$

£ = the intercept β_1-β_7 = The beta- factor of the various slope coefficients DPRit = Dividend payout ratio of the DMBs i in year t OWC_{it} =Ownership Concentration of the DMBs i in year t $INOS_{it}$ = Institutional Ownership of DMBs i in year t $MGOS_{it}$ = Managerial Ownership of DMBs i in year t FOWSit = Foreign Ownership of DMBs i in year t NPM =Net Profit Margin of the DMBs i in year t $FSIZE_{it}$ = Size of DMBs i in year t Age = Age of the DMBs i in year t $£_{it}$ = error term

Normality Test of Independent and Dependent Variables

A multicollinearity test was carried out to check whether there is a correlation between independent variables which may mislead the result of the study. Where the results show a variance inflation factor (VIF) less than 10 it indicates an absence of multicollinearity (Gujarati, 2003).

Results and Discussion

This presents analyses and interprets the data generated for the study and the data relating to each of the statistical hypotheses of the study were presented and analyzed. The data for ownership structure (management ownership, foreign ownership, institutional share ownership, and ownership concentration) moderating variable profitability and dividend policy (dividend payout ratio) are extracted from the annual reports and accounts of the sampled DMBs listed on the Nigerian Stock Exchange. In addition, the hypotheses of the study were also tested, and inferences there were.

Descriptive Statistics

Table 1 provides a summary of statistics for the variables of the study. The summary statistics include measures of central tendency, such as mean, measures of dispersion (the spread of the distribution) such as the standard deviation, minimum and maximum of the dependent variable, moderating variable, and explanatory variables. The table shows the summary statistics of the dependent and independent variables to effectively appreciate the nature of the results. Descriptive statistics provides a basic insight into the nature of the data upon which analysis is done.

Table 1: Descriptive Statistics of the Variables

Variables	Obs.	Mean	Std. Dev.	Min	Max
DPR	91	0.2365	0.2388	0	0.7607
MOWS	91	0.0189	0.0338	0.0007	0.2386
FOWS	91	0.0156	0.0267	0.00011	0.1659
INSOWS	91	0.0226	0.0349	0.0004	0.1651
CONCOWS	91	0.0713	0.08108	0.0029	0.3406
NETPROFIT	91	0.11078	0.1202	0.00025	0.4898
BSIZE	91	9.5425	0.7975	8.19453	11.4780
AGE	91	22.6154	14.2234	8	51

Source: Generated from Annual Report Data of the Companies using STATA

Table 1 shows the mean of 0.2365 for DPR meaning that the average dividend payout ratio of listed DMBs in Nigeria is approximately 23 kobo with minimum 0 and 76 kobo, the standard deviation of 0.2388 shows that the DPR of the banks under study deviate significantly. The mean of the management share ownership is 0.0189 meaning that on average managers of listed DMBs in Nigeria owned 2% of the total share ownership with minimum and maximum of 0.07% and 23.9% respectively.

However, the standard deviation of 0.0426 shows a significant variation in the management share ownership of listed DMBs within the period under review. The mean of the foreign share ownership is 0.0156 meaning that on average foreign shareholders hold approximately 2% of the total shares of listed DMBs in Nigeria with minimum and maximum of 0.01% and 16.6% respectively. However, the standard deviation of 0.0293 shows the significant variation in the management share ownership of listed DMBs within the period under review. Institutional share ownership shows a mean of 0.023 with a minimum and maximum of 0.0349 and 0.16506. However, the standard deviation of 0.0349 shows no significant variation in institutional share ownership of the companies under study.

The mean of the ownership concentration is 0.0713 meaning that on average ownership concentration holds approximately 7% of the total shares of listed DMBs in Nigeria with minimum and maximum of 0.03% and 34% respectively. However, the standard deviation of 0.08108 shows the significant variation in the management share ownership of listed DMBs within the period under review. Bank size, measured by the logarithm of total assets has a mean of 9.5425, minimum and maximum of 8.19453 and 11.4780 but the standard deviation of 0.7975 suggests a no considerable level of dispersion in size of the DMBs during the period under review.

Similarly, Bank age measured as the total number of years from the date of listing has an approximate mean value of 22 years, a minimum and maximum of 8 and 51 with a standard deviation of 14.2234 signifies not much variation in the ages of the companies under study.

Correlation Matrix

This section presents and discusses a correlation matrix that explains the level of association between the independent and dependent variables of the study and between the independent variables themselves.

Table 2: Correlation Matrix

Variables	DPR	MOWS	FOWS	INSOWS	CONCOWS	NETPRO	BSIZE	AGE	VIF
DPR	1.0000								
MOWS	0.0486	1.0000							1.54
FOWS	-0.0391	0.3495	1.0000						2.37
INSOWS	-0.1286	0.3765	0.6759	1.0000					2.00
CONCOWS	-0.2822	0.1588	0.0984	-0.0051	1.0000				1.26
NETPROFIT	0.2736	-0.1885	0.0724	-0.0849	0.0723	1.0000			1.33
BSIZE	0.1466	-0.0782	-0.2204	-0.1344	-0.2479	0.2618	1.0000		1.25
AGE	-0.0998	-0.2837	0.1977	0.0851	-0.3209	-0.1726	-0.0763	1.0000	1.51

Source: Regression Results Computed by the Authors Using STATA

Table 2 shows the correlation coefficients on the relationship between the dependent variable dividend policy (DPR), independent variables (management ownership, foreign ownership, institutional share ownership and ownership concentration, bank size, and age), and the moderating variable profitability (net profit margin). The values of the correlation coefficient range from -1 to 1. The sign of the correlation coefficient indicates the direction of the relationship (positive or negative), and the absolute values of the correlation coefficient indicate the strength, with larger values indicating stronger relationships. The correlation coefficients on the main diagonal are 1.0, because each variable has a perfect positive linear relationship with itself.

The correlation results presented in Table 4.2 also indicate that three of the explanatory variables foreign ownership, institutional share ownership, ownership concentration, and age are negatively correlated with the dividend payout ratio while management share ownership, net profit margin, and bank size are positively correlated with the dividend payout ratio.

Robustness Test for Dependent and Independent Variables

This section of the study presents and discusses the entire robustness test conducted to improve the validity and reliability of the statistical inferences derivable from the regression model. This test includes; the multicollinearity test and the Cook-Weisbergb test of heteroskedasticity.

Table 3: Diagnostic Test

Model	Variance Inflation Factor (VIF)	Heteroskedasticity	Hausman Test	Lagrange Multiplier (LM)
One	1.61	0.1549	0. 2785	0.0910
Two	1.07	0.2984	0.3183	0.2100
Three	2.04	0.1346	0.9736	0.000

Source: Regression Results Computed by the Authors Using STATA

Multicollinearity Test: A Variance Inflation Factor (VIF) test was carried out, the results of which provide evidence of the absence of collinearity. This is because the results of the VIF test range from a minimum of 1.33 to a maximum of 2.37 VIF of 5.00 can still be proof of the absence of collinearity Hence, the predictive ability of the independent variables is not adversely affected by the relationship.

Heteroskedasticity Test: The test is conducted to check whether the variability of error terms is constant or not. The presence of heteroskedasticity signifies that the variation of the residuals or term errors is not constant which would affect inferences with respect to the beta coefficient, coefficient of determination (R^2), t-statistics, and F-statistics of the study. Test of heteroskedasticity ensures that the regression fits all the values of the independent variables and this is possible only if the residuals do not vary with the independent variable and therefore are random. The result of the heteroskedasticity test reveals an absence of heteroskedasticity in the first, second, and third models because the probability of the chi-square is 0.1549 in the first model, 0.2984 in the second model and 0.1346 in the third model.

Lagrange Multiplier (LM): A Lagrange Multiplier (LM) test is also conducted to help in deciding between a random effects regression and a simple OLS regression since the hausman test suggest random in model two and three. The LM test revealed a p-value of 0.0910 in model one and 0.2100 in model two evidence of no significant difference across the companies, this means we accept the null and conclude that OLS is appropriate. However, the p-value is 0.000 in model three evidence of significant difference across the companies, this means we reject the null and conclude that random effects are appropriate.

Presentation, Analysis, and Discussion of Regression Results

This section presents the regression result of the dependent variable (Dividend Payout Ratio), the moderating variable, and all the independent and control variables of the study.

Table 4: Regression Results

Variables	Coefficients	Std. Err.	T	P>|t|
MOWS	2.9063	1.3118	2.22	0.027
FOWS	0.0975	2.1822	0.04	0.964
INSOWS	-1.3771	1.1754	-1.17	0.241
CONCOWS	-0.2910	0.4284	-0.68	0.497
MOWNET	-47.1992	17.602	-2.68	0.007
FOWNET	6.0814	12.496	0.49	0.626
INSOWNET	5.7226	8.4756	0.68	0.500
CONCNET	4.6194	2.5076	1.84	0.006
BSIZE	0.0951	0.0432	2.20	0.028
AGE	-0.0031	0.0044	-0.71	0.476
_cons	-0.6054	0.4187	-1.45	0.148
R-sq: within	= 0.2156			
Between	= 0.0898			
Overall	= 0.1353			
Number of obs	= 91			
F(4,50)	= 20.43			
Prob > F	= 0.0255			
Hettest	= 0.1346			
Hausman test	= 0.0973			

Source: Regression Results Computed by the Authors Using STATA

From Table 4 Model three was found to be significant (F-value 20.43 and P-value 0.0255) with R^2 of 21.56%. In the model, the interaction terms between profitability and ownership structure were examined to test the moderating effect in this study. This model is found to be significant considering the p-value of 0.0255. The results further indicate that profitability has changed the effect of management ownership on dividend policy from a positive but not significant to a positive significant influence on the dividend payout ratio of listed DMBs in Nigeria. This implies that profitability has changed the management decision on the dividend policy. However, the combined effect of management ownership and profitability revealed a negative and significant effect on dividend payout ratio of listed DMBs in Nigeria. This is consistent with the findings of Foomani & sarlak, (2018) explored how information asymmetry and government ownership affect the dividend policy of firms listed on the Tehran Stock Exchange. The study used signaling theory, annual reports, financial statements, linear regression, and correlation as the theoretical framework, data sources, and analytical methods. The findings show that structural reform to increase information transparency had a positive moderating effect on the relationship between information asymmetry and dividend policy.

Saleh, et al. (2018) investigated the role of different corporate ownership identities on the dividend policy of Malaysian firms. The study investigated how growth opportunities and different types of ownership structures affect the dividend policy of firms. The study used agency theory, annual reports, financial statements, and pool OLS regression as the theoretical framework, data sources, and analytical method. The findings show that managerial ownership had a negative effect, government and foreign ownership had a positive effect, and growth opportunity moderated the effect of managerial ownership on dividend policy.

The combined effect of foreign ownership and profitability revealed a positive and not significant effect on the dividend payout ratio of listed DMBs in Nigeria. This is consistent with the findings of Saleh, et al. (2018) whose findings show that government and foreign shareholders contribute to increasing the firms' dividend payout with weak evidence on the moderating effect of growth opportunity. In addition, the combined effect of institutional ownership and profitability revealed a positive and not significant effect on the dividend payout ratio of listed DMBs in Nigeria. This is contrary to the prior expectation since institutional shareholders are concerned with capital gain rather than dividends hence all profit will be reinvested in value-creation activities. It was also contrary to the findings of findings of Fitriyani & Khafid (2019) analyzed the influence of institutional ownership, dividend policy, and free cash flow on debt policy with profitability as moderating. The study used 148 manufacturing companies that were listed on the Indonesia Stock Exchange from 2014-2016. The statement describes a study that used moderation regression analysis to examine the effect of institutional ownership, dividend policy, and free cash flow on debt policy, moderated by profitability. The statement reports that the study used 41 companies with 123 observations as the sample, and SPSS 21 as the software. The statement summarizes the findings that only free cash flow had a significant positive effect on debt policy, while the other variables had no effect, and profitability did not moderate the relationship. However, these show that the results of a study that measured the effect of ownership concentration, profitability, bank size, and bank age on the dividend payout ratio of listed DMBs in Nigeria. It also indicates that ownership concentration and profitability together had a positive and significant effect, bank size had a positive and significant effect, and bank age had a negative and insignificant effect on the dividend payout ratio.

Conclusion

This study examines the moderating effect of profitability on the relationship between ownership structure and dividend policy of listed DMBs in Nigeria. Therefore, from the findings of the study, the following conclusions were made; Managerial ownership has a positive but not significant influence on the dividend payout ratio of listed DMBs in Nigeria. Foreign ownership has a positive but not significant influence on the dividend payout ratio of listed DMBs in Nigeria. Also, institutional share ownership has a negative and significant influence on the dividend payout ratio of listed DMBs in Nigeria. Ownership concentration has a negative and significant influence on dividend payout ratio of listed DMBs in Nigeria. Profitability has significantly moderated the relationship between Managerial ownership has a positive but not significant influence and the dividend payout ratio of listed DMBs in Nigeria.

Recommendations

Based on the findings and conclusion drawn, the following recommendations are proffered: Encourage managerial ownership alignment for improved governance, focusing on long-term value. Although not statistically significant for dividends, alignment enhances transparency and strategic vision. Attract foreign investment to diversify ownership for fresh perspectives. Despite non-significant dividend impact, diversification enriches strategic direction and global insights. However, engage with institutional shareholders to address negative dividend influence. Open dialogue and tailored policies align dividends with stakeholder expectations. And also, Balance ownership concentration concerns to optimize dividends. Tailor strategies to satisfy both concentrated shareholders and diverse stakeholders. Leverage profitability's impact on managerial ownership for dividends. Align managerial incentives with profitability gains for sustainable value creation.

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