Corporate Dividend Policy and Firm Value: Evidence from Selected Deposit Money Banks (DMBs) in Nigeria

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Abstract

Research Purpose: This study aims to analyse and assess how Dividend Payout (DPA), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), and Long-Term Debt Ratio (LTDR) impact the value of banks in Nigeria over the period from 2013 to 2022. The study constructs and tests two hypotheses to achieve this goal.

Methodology: The study adopts a panel regression model that includes pooled Ordinary Least Squares (OLS), fixed effects, random effects, and the Hausman test for decision analysis. The Hausman test results indicated no sufficient evidence to reject the null hypothesis, suggesting that the differences between fixed and random effect estimation coefficients are not significant. Consequently, the random effect estimation was used as it provides the most consistent and efficient estimation.

Findings: The random effect estimation reveals the following impacts on Return on Assets (ROA):

- The coefficients of Dividend Payout (LNDPS), Net Interest Margin (LNNIM), and Long-Term Debt Ratio (LNLTDR) show a positive impact on ROA.
- The Capital Adequacy Ratio (LNCAR) shows a negative impact on ROA.
- Among these, LNDPS and LNCAR have a significant impact on ROA, as their p-values are less than 5%.

Conclusion: The study concludes that dividend policy and capital adequacy significantly affect the return on assets for banks in Nigeria. The findings emphasise the importance of aligning dividend policies with long-term growth and profitability goals.

Recommendations: It is recommended that Deposit Money Banks (DMBs) should synchronise their dividend policies with their long-term growth and profitability objectives to enhance their value.

Key words: Capital Adequacy ratio, Deposit Money Banks (DMBs), Dividend Policy, Firm Value.

1.0 INTRODUCTION

Dividend policies have been a hot button issue in the financial community ever since the advent of joint stock companies. A "dividend policy," as described by Adegbie and Akenronye (2022), directs managerial choices about the amount and timing of cash payouts to shareholders. The ultimate goal of management is to maximise shareholder value, which is determined by the ordinary stock price of the business. Management academics and economists have taken an interest in the issue of theoretical modelling and empirical inquiry of the dividend policy of firms. Therefore, dividend policy is a complex topic of finance (Njoku 2022). The optimal dividend policy is one that results in the highest possible stock price, thereby maximising the overall value of the organisation.

Finding the appropriate dividend policy that increases business value should be the focus of the finance management (Baker, 2015). Nippel (2008) contends that decreases in dividend distributions have a negative effect on share values. When dividend hikes are announced, the stock market typically reacts negatively. The signalling effect of dividends causes share prices to fall. The signalling effect states that managers set a dividend level to indicate their better knowledge of the company's future prospects through the use of confidential information. The dividend payout ratio might remain consistent if this occurs. Lease et al. (2000) state that certain business leaders and an even larger percentage of academics doubt that a well-considered dividend programme adds value. However, there are many who argue that dividend policy is irrelevant and that any policy will suffice, and that dividends should be given only in extreme circumstances. A well-managed dividend policy, according to proponents of this view, may boost a company's worth. The question this poses is how much of an impact dividend policy has on the value of a company. This study will analyse the effect of dividend policy on the worth of Nigerian government-owned corporations.

1.1 OBJECTIVE OF THE STUDIES

The primary objective of this research is to investigate dividend policy and the impact it has on the value of a company through an empirical study using Zenith bank, UBA, First bank, Access bank, and GTB as a case study. This investigation's specific objectives are:

i.   Investigate the impact of dividend policy on the value of DMBs in Nigeria.

ii.   Determine the impact of capital adequacy ratio as a control factor on the value of DMBs in Nigeria

1.2 RESEARCH HYPOTHESIS

The following hypothesis is set to be evaluated:

H_{O1}: There is no significant relationship between dividend policy and the value of DMBs in Nigeria

H_{O2}: There is no significant relationship between capital adequacy ratio as a control variable and the value of DMBs in Nigeria

The primary focus of this study will be to examine the impact of dividend policy on the valuation of banks. During this undertaking, an analysis will be conducted on public corporations in Nigeria, such as Zenith bank, UBA, First bank, Access bank, and GTB.

2.0 THEORETICAL FRAMEWORK

The following theories support this study:

Signalling Theory

The concept was first introduced by Fama and French in 1969. In order to convey to the financial market that the company is profitable and growing, management often distributes dividends (Ngoboka and Singirankabo, 2021). High dividends, as proposed by this theory (Karimov, 2020), are necessary for a corporation to get favourable attention from investors and advance its business goals. Investors should take heart from this. Managers have a strong interest in the signal provided by the time series of revenue (Magazzino et al., 2021). Thus, dividends may be an indicator of a company's financial health (Kanakriyah, 2020), a signal that can influence investor mood (Huynh et al., 2021), and an influence on the firm's returns and the stock price (Dahmene, 2021). According to the Signalling theory, the elimination or reduction of dividend payments would be seen as very unfavourable by the financial markets (Ngoboka, 2021). According to the signalling theory, shareholders and market watchers can tell if a company's management is trying to mislead the market in order to increase profits quickly.

Bird-in-Hands theory

As a reaction to the Dividend Irrelevance hypothesis proposed by Miller and Modigliani (1961), Lintner (1956) developed this idea, which has since received support from other academics like Gordon (1959). Whether dividends or capital gains boost profits from stock holding is mostly irrelevant to investors, according to the Modigliani-Miller hypothesis of irrelevance. Some of the underlying premises of the bird in the hand hypothesis include that the corporation is being equity-financialized rather than debt-financialized, that retained earnings represent the exclusive means of finance, that the cost of capital for the company is unchanged, and that there is no corporate tax. According to this hypothesis, a company's worth may be affected by its dividend payouts. Saini et al. (2018) claim that dividends are significant because of the educational value they might provide to potential new shareholders. Investors' expectations for future profits may be affected by the dividends' announcement. The dividends are maximising the firm's worth. Dividends were favoured above capital appreciation in this scenario. Since capital gains in the future are riskier, investors would rather receive dividend payments in the present when a firm is experiencing strong profitability. However, investors are solely interested in returns, hence the idea has been criticised for failing to reduce the cost of capital.

2.1 REVIEW OF LITERATURE

Dividend Policy

The decisions that companies make about their dividend policies are the most important part of company strategy (Kanojia et al., 2022). Dividends, as outlined by Ejem (2019), represent a compromise between retaining profits and dispersing them through cash distributions and the issuance of stock. To put it another way, one could say that a company's dividend policy causes a division of its profits between internal use and distribution to shareholders. However, according to Adelabu (2021), a dividend is the fraction of a company's profits that the board of directors recommends be allocated to shareholders. It is often expressed as a per-share sum as a percentage of the company's notional value of its ordinary share capital. The dividend is usually distributed from the current year's earnings, however it may also come from the company's general reserves. The term "cash dividend" refers to the common form of dividend distribution. When a dividend is paid out in the form of cash, it has a negative influence on the firm's liquidity position and reserves, while distributing earnings in the form of stock dividend (bonus issue) is neutral or even beneficial to these metrics. Since a stock dividend represents a capitalization of owner equity, it fails to reduce the overall value of the company in the same way that a cash dividend would. Dividends may be affected by the following factors: availability of capital, firm size, investment opportunities, investor clout, and management of regimes and thoroughness. Dividend policies vary not just over time and across borders, but also among individual companies. Companies, whether public or private, have trouble deciding how much to pay in dividends to shareholders and whether to do it in cash or stock (Alhileen, 2020).

The influence of dividend policy on a company's value was investigated by Anton (2016). Between 2001 and 2011, he conducted a survey of 63 non-financial corporations that are publicly listed on the Bucharest Stock Exchange. After adjusting for firm-specific variables, the results of the fixed-effects model showed that dividend payments increased business value. It was also shown that both financial leverage and organisation size contributed positively to a company's value.

The dividend policies of businesses listed on the Dar Es Salaam Security market (DSE) were investigated by Evelyne (2016) using a correlation analysis to determine the elements that have an impact on these policies. Lumapow & Tumiwa (2017) examined how factors including company size, dividend policy and productivity affected the value of businesses. The employment of the panel data regression with random effect model in numerical analysis is increasing. According to the findings, dividends have a significant and negative impact on a company's value. A company's worth is heavily influenced by its size and production.

The impact of dividend policy on the financial performance of banks in Ghana was studied by Agyei and Marfo-Yiadom (2011). Panel data were obtained from the financial statements of 16 separate commercial banks in Ghana covering the years 1999-2003 for this study. According to the court's decision, "financial leverage," "bank size," and "bank growth" all

helped banks do well. Research has shown that dividend policy may have an effect on a company's value, and these results are generally consistent with that conclusion.

Ismawati (2018) looked at how capital structure and dividend policy affected the worth of Indonesian firms that were traded on public exchanges. The panel regression method was implemented. The findings demonstrated that capital structure affects a company's value. The dividend policy of the corporation had no effect on the stock price. These findings are in keeping with the theory of "signalling," which says that rapidly growing businesses are more appealing to investors. The stock price has not responded favourably to the distributions. Therefore, a change in dividend policy is indicative of a change in the value of the company. Financial managers have a dual responsibility to maximise the wealth of their organisation and its stockholders (Priya & Mohanasundari, 2016). According to Barman (2008), a company's ability to increase shareholder wealth is best measured by its stock price, and dividends are the most dependable indication of share price. If a business is successful, it will use some of its dividend money to expand its existing portfolio, and the remainder will be distributed to its stockholders.

3.0 RESEARCH DESIGN

The present study employed a panel research design, which involves the examination of data subsequent to the occurrence of the phenomenon under investigation. This particular methodology exhibits efficacy in conducting surveys that are either descriptive or explanatory in nature. The methodology in question will be employed due to its relevance to the present study. The ex post facto study strategy is distinguished by the researcher's inability to manipulate pre-existing variables. Researchers frequently utilise the ex-post facto approach to research, also referred to as the causal comparative study design, to establish a connection of causation between a dependent and an independent variable.

3.1 POPULATION OF THE STUDY

The DMBs were chosen with the aim of offering a comprehensive sample of one main market segment that is listed on the Nigerian stock exchange. The Population centres on Five (5) DMBs out of all the DMBs in Nigeria. These DMBs are Zenith bank, UBA, First bank, Access bank, and GTB. The ex-post facto design approach will be utilised in this study to analyse secondary data due to the absence of controlled variables and the need to evaluate a predetermined outcome. Consequently, the study examines the impact of dividends on corporate valuations in previous instances.

The study will be based on data obtained from secondary sources.

3.2 STUDY SAMPLE AND SAMPLING TECHNIQUE

The audited financial statements of companies listed on the NSE will be disclosed for a period of 10 years (2013-2022). The selected publicly traded corporations' yearly financial

statements will undergo data extraction. Moreover, the NSE data repository is the designated source for obtaining the investment decision of the chosen firms.

3.3 SOURCES OF DATA

This study will make use of secondary sources. The published annual reports of chosen businesses for the applicable years sampled for study will serve as the data infrastructure utilised for secondary data. These sources will include published audited financial statements of sampled firms on the NSE over a period of 10 years (2013- 2022).

3.4 RELIABILITY

The source in which the data is drawn from data confirms the reliability of the data. The data is primarily drawn from the annual report published on the website of NSE which is available to various analysts.

3.5 VALIDITY OF THE DATA

To guarantee the research instrument's content validity, the researcher compared the nature of the data from the selected 5 major Deposit Money Banks in Nigeria's annual reports to the research objectives (quantitative data analysis). The study's research topics were well-suited to secondary data analysis. The validity of the study was determined by comparing the methodology of this study to those of other studies to ensure that it is consistent with previous studies. To this end, the data is reliable for this research study.

3.6 MODEL DESCRIPTION AND JUSTIFICATION

The following sections define and explain the factors utilised as explanatory variables in calculating dividend payout ratios and the value of businesses.

i.   The computation of the dividend per share (DPS) involves the division of the total dividends by the earnings per share (EPS). A cash dividend refers to the segment of a corporation's earnings that is disbursed to its shareholders.

ii. Return on Asset is the return on average asset to an organisation.

Model specification

ROA = (DPS, CAR, NIM, LTDR) --- 1

$ROA_t = ao_t + \beta_1 DPS_t + \beta_2 CAR_t + \beta_3 NIM + \beta_4 LTDR + \varepsilon r_t$ -- 2

Where;

ROA_t: Return on Asset (measure of firm value)

DPS_t: Dividend per share **i** in year **t**.

CAR = Capital Adequacy Ratio (control variable)

NIM = Net Interest margin (control variable)

LTDR = Loan to Deposit Ratio (control variable)

$\beta 0, \beta 1, \beta 2, \beta 3, \beta 4$ = coefficients

εi = error terms.

It is expected that the model will exhibit positive values for $\beta 1 > 0$, $\beta 2$, $\beta 3$, $\beta 4 > 0$.

3.7 DATA ANALYSIS TECHNIQUES

To analyse the cross-sectional data collected from 2013 to 2022, the researcher used a fully modified panel regression model approach. An overview of the methodology used to empirically validate the study's hypotheses is presented. It is necessary to ensure the stationarity of a data series, as non-stationary series might lead to spurious or erroneous conclusions. The Levin–Lin–Chu panel unit root estimates are adopted for this study. Three different estimators are employed in order to obtain reliable estimates. They are the pooled OLS estimator, the Fixed Effects Model and the Random Effects Model. The justification for the use of panel model is due to the nature of this study which is a panel data series, that is, data across sections (banks) and over time (2013-2022) in Nigeria. Hence, only a panel regression model can be applied to this type of data series.

4.0 DATA PRESENTATION AND DESCRIPTION

4.1 DATA ANALYSIS

The data for this study is sourced from the various published accounts of the banks on NSE website. The data covers from year 2013 – 2022. The data covers Return on Assets (ROA), Dividend Per Share (DPS), Capital Adequacy Ratio (CAR), Net Interest Margin (NIM) and Loan to Deposit Ratio (LTDR) and they are presented below:

Bank-Name	No	Date	ROA	DPS	CAR	NIM	LTDR
ZENITH	1	2013	3.3	1.6	26	8.7	54.1
ZENITH	1	2014	2.9	1.75	20	8.4	69.7
ZENITH	1	2015	2.6	1.75	21	8.1	77.7
ZENITH	1	2016	3.5	1.55	23	7.4	76.73
ZENITH	1	2017	3.2	1.77	27	8.94	54.5
ZENITH	1	2018	3.35	2.8	25	8.9	44.2
ZENITH	1	2019	3.4	2.8	22	8.2	57.8
ZENITH	1	2020	3.01	3	23	7.9	49.78
ZENITH	1	2021	20.4	3.1	21	6.7	62.6
ZENITH	1	2022	16.8	3.2	1.93	7.3	56.5

UBA	2	2013	1.7	0.49	22.6	5.9	43.4
UBA	2	2014	1.7	0.49	16	6	50.2
UBA	2	2015	2.2	0.3	20	6.3	49
UBA	2	2016	2.1	0.6	20	6.7	60.8
UBA	2	2017	1.9	0.75	20	7	60.3
UBA	2	2018	1.6	0.85	24	6.3	50.1
UBA	2	2019	1.6	1	23.43	6	60.1
UBA	2	2020	1.7	0.52	22.4	5.4	45.01
UBA	2	2021	1.5	1	24.9	5.4	62.7
UBA	2	2022	1.6	1.1	28.3	5.61	59.1
GTB	3	2013	4.3	1.45	23.91	8.87	70.2
GTB	3	2014	4.2	1.5	21.4	8.1	78.8
GTB	3	2015	3.9	1.52	18.11	8.26	85.2
GTB	3	2016	4.7	1.75	19.79	9.01	80
GTB	3	2017	5.3	2.4	25.5	10.42	70.2
GTB	3	2018	5.61	2.7	23.4	9.23	55.4
GTB	3	2019	5.23	2.25	22.5	9.28	59.3
GTB	3	2020	4.07	2.8	25.9	9.26	47.38
GTB	3	2021	3.37	3	23.83	6.74	4.6
GTB	3	2022	2.85	3	24.56	6.68	40.9
FIRST BANK	4	2013	2	2.16	17.7	9	69.94
FIRST BANK	4	2014	2	2.35	15.78	7.6	71.42
FIRST BANK	4	2015	0.4	0.43	17.08	8.1	61.2
FIRST BANK	4	2016	0.3	0.39	28.7	8.8	67.1
FIRST BANK	4	2017	0.9	1.21	33	8.4	63.7
FIRST BANK	4	2018	1.1	0.25	24.3	7.5	47.9
FIRST BANK	4	2019	1.19	0.26	15.45	7.4	46.1
FIRST BANK	4	2020	1.2	0.38	17.01	6.1	45.3
FIRST BANK	4	2021	1.47	0.45	17	4.5	65

FIRST BANK	4	2022	1.36	0.35	17.4	5.1	58.5
ACCESS	5	2013	1.98	1.58	19.2	5.8	59.05
ACCESS	5	2014	2	1.89	18.4	6.8	76.35
ACCESS	5	2015	2.5	2.65	20.1	5.9	81.14
ACCESS	5	2016	1.98	0.25	21	6.2	86.6
ACCESS	5	2017	1.5	0.4	22.5	5.8	88.9
ACCESS	5	2018	1.9	0.65	18.5	5.3	77.7
ACCESS	5	2019	1.32	0.5	20	7	68.4
ACCESS	5	2020	1.22	0.65	20.6	5	57.6
ACCESS	5	2021	1.55	0.85	20.93	5.84	50.8
ACCESS	5	2022	1.17	0.9	17.85	3.83	67.4

Source: Annual reports of the respective banks (2013-2022)

4.1.   1 Estimation Tests

To ensure stationarity of the data series, a unit root test is carried out. Also, a cointegration test is carried out to ascertain the long run equilibrium relationship among the variables. In addition to pooled OLS, panel econometric methodologies are used, Fixed Effects Model and the Random Effects Model. Table 4.2 shows the unit root test of the variables, Table 4.3 shows the cointegration test, and Table 4.4 shows the econometric estimates for all three procedures, starting with the findings of ordinary least squares using pooled data. The 3 stars (***), 2 stars (**), and 1 star (*) respectively indicates that a regression coefficient is significantly different from zero at the 1%, 5%, and 10% levels respectively. The lack of stars indicates that, even at the 10% level, the coefficient is not meaningfully different from zero.

4.1.2   Panel Cointegration Test

Since the variables are integrated at order one, the cointegration relationship between them must be established. The findings of the cointegration analysis reported in Table 4.2 show that the variables have a cointegration link. The probability value of the ADF is less than 5% hence the null hypothesis of no cointegration is rejected. To this end, there exists a long-run equilibrium relation among the variables in the panel model.

Table 4.1: Kao Cointegration Test

Kao cointegration test		
	t-statistic	Prob
ADF	-1.686467	0.0459

Residual	0.162645	
HAC	0.084787	

Source: Author (2023)

The estimation tests were conducted using pooled OLS, Fixed Effects Model and the Random Effects Model. Table 4.2 shows the econometric estimates for all three procedures, starting with the findings of ordinary least squares using pooled data. The 3 stars (***), 2 stars (**), and 1 star (*) respectively indicates that a regression coefficient is significantly different from zero at the 1%, 5%, and 10% levels respectively. The lack of stars indicates that, even at the 10% level, the coefficient is not meaningfully different from zero.

4.1.3 Banks' Value Equation using Pooled OLS Estimator

Table 4.2: Banks' value equation using Pooled OLS Estimator

Dependent Variable: Return on Asset (ROA)

Dependent Variable: LNROA				
Method: Panel Least Squares				
Date: 06/15/23 Time: 07:02				
Sample: 2013 2022				
Periods included: 10				
Cross-sections included: 5				
Total panel (balanced) observations: 50				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.867475	1.097128	1.702150	0.0956
LNDPS	0.592269	0.104159	5.686220	0.0000***
LNNIM	0.227034	0.384564	0.590368	0.5579
LNCAR	-0.553885	0.195076	-2.839329	0.0068***
LNLTDR	0.030345	0.176586	0.171844	0.8643
R-squared	0.561349	Mean dependent var		0.809915
Adjusted R-squared	0.522358	S.D. dependent var		0.732466
S.E. of regression	0.506219	Akaike info criterion		1.570945
Sum squared resid	11.53160	Schwarz criterion		1.762147

Log likelihood	-34.27362	Hannan-Quinn criter.	1.643756
F-statistic	14.39682	Durbin-Watson stat	1.064813
Prob(F-statistic)	0.000000		

Source: Author (2023)

The equation explaining the financial performance of deposit money banks in Nigeria has a low good fit, with an R-squared of about 56%, implying that the explanatory variables in the equation explained about 44% of the systematic variations in return on asset (ROA) among deposit money banks in Nigeria. The p-value of the F-statistic (which assesses the overall significance or goodness of fit of the model) is 0.00000, indicating that the overall model is statistically significant at the 1% level. At the 1% level of significance, the hypothesis of a significant linear relationship between ROA and all of the regressors in the equation cannot be rejected.

In more detail, the empirical findings show that LNCAR has a negative impact on bank ROA. While the Dividend per share (DPS), Net Interest Margin (NIM), and Loan to Deposit Ratio (LTDR all have a positive relationship with ROA. For LNDPS, LNNIM, LNCAR and LNLTDR, the p-values of the t-statistics (measures the individual significance of the parameters in the model) are 0.0000, 0.5579, 0.0068, and 0.18643, respectively. Thus, LNDPS and LNCAR coefficients are statistically significant at the 1% level, whereas LTDR and LNNIM coefficients are statistically insignificant even at 10% level. The pooled OLS estimator's main flaw is that it ignores the panel structure of individual variability in the model. Three alternative estimators were utilised to estimate the growth equation in order to acquire richer results and establish the robustness of our findings. The Fixed Effects model, the Random Effects model, and the Hausman test.

4.1.4 Banks' value equation using the Fixed Effects Model

This method is also known as the "one-way fixed effects model." It is preferred because it clearly accounts for cross-sectional (cross-bank) heterogeneity, that is, it solely accounts for the unique or individual variability in a particular model for the intercept. It specifically allows for distinct intercept coefficients for each bank in our situation.

Table 4.3: Fixed-effects, using 50 observations

Variables	Coefficient	Std. Error	T-ratio	P-value	
Const.	2.813227	1.508383	1.865061	0.0714	
LNDPS	0.226725	0.118038	1.920790	0.0637*	
LNCAR	-0.739132	0.168480	-4.387051	0.0001***	

LNNIM	-0.523681	0.625723	-0.836923	0.4088	
LNLTDR	0.301596	0.160811	1.875463	0.0699*	
R-squared	0.818852		*Adjusted R-squared*	0.722617	
Durbin-Watson	1.886254				

Source: *Author (2023)*

Fixed effect cross-sectional specific estimation result presented in Table 4.3 above shows that when heterogeneity effect across deposit Money banks in Nigeria sampled in the study is incorporated into the model. From the result, LNDPS and LNLTDR have positive and significant effects on LNROA at 10% significance level whereas LNCAR has a negative coefficient with a significant effect on LNROA at 5%. Also, LNNIM has a negative and insignificant effect on LNROA. The estimates of the model did validate the a priori expectation of a positive association between ROA and DPS, ROA and LTDR. As a result, DPS and LTDR met the a priori expectation however, NIM CAR did not.

The R-square value is 0.818852 which depicts that about 82% of the total variations in ROA were captured by the model while the remaining 18% is due to chance. Also, the adjusted R-square value, which accounts for the degrees of freedom in the model, is 0.722617. It depicts that about 72% variations in ROA were accounted for taking into account the degrees of freedom in the model. Furthermore, the D-W statistic of 1.886254 is approximately 2, implying that serial correlation is not present in the fixed effect model.

4.1.5   Banks' performance equation using the Random Effects Model

For both the intercept and the slopes, the random effect model accounts for the unique or individual variability in a given model. The outcome is shown in Table 4.4.

Table 4.4: Random Effect Model using 50 observations

Variables	*Coefficient*	*Std. Error*	*T-ratio*	*P-value*	
Const.	1.867475	1.097128	1.702150	0.0956	
LNDPS	0.592269	0.104159	5.686220	0.0000***	
LNCAR	-0.553885	0.195076	-2.839329	0.0068***	
LNNIM	0.227034	0.384564	0.590368	0.5579	
LNLTDR	0.030345	0.176586	0.171844	0.8643	
R-squared	0.561349		*Adjusted R-squared*	0.522358	

Source: *Author (2023)*

The heterogeneity effect between deposit money banks and across time is incorporated into the model via the error term, as shown in Table 4.4 random effect estimation result. The coefficients of LNDPS, LNNIM, and LNLTDR have a positive impact on ROA. While LNCAR has a negative impact on LNROA. From the result, only LNDPS and LNCAR have a significant impact on LNROA as their p-values were less than 5%. In this random effect model, the a priori anticipation of a positive link between DPS, NIM, LTDR, and ROA were established while CAR and ROA positive link were not established. The adjusted R-square for random effect estimation shown in Table 4.4 depicts that about 52% of systematic fluctuations in ROA can be explained by changes in the explanatory variables when the degrees of freedom in the model are taken into consideration.

4.1.6 Hausman Test-Decision Analysis

Table 4.5: Hausman Test Using Random Effect Model

Null hypothesis	Chi-square stat	Probability
Difference in coefficient not systematic	.0000	1.000

Source: Author (2023)

Table 4.5 presents the Hausman test. The value for the chi-square statistic is 0.000, and the probability chi-square statistic is 1.000. The results show that there is no sufficient evidence to reject the null hypothesis that differences in fixed and random effect estimation coefficients are not significant. As a result, the random effect estimation, as shown in Table 4.4, provides the most consistent and efficient estimation. Hence, it becomes clear that the random effect estimation best describes dividend policy and the value of banks in Nigeria. A summary of the random effect estimation was that the coefficients of LNDPS, LNNIM, and LNLTDR have positive impact on ROA. While LNCAR has a negative impact on LNROA. From the result, only LNDPS and LNCAR have a significant impact on LNROA as their p-values were less than 5%. In this random effect model, the a priori anticipation of a positive link between DPS, NIM, LTDR, and ROA were established while CAR and ROA positive link were not established. The adjusted R-square for random effect estimation shown in Table 4.4 depicts that about 52% of systematic fluctuations in ROA can be explained by changes in the explanatory variables when the degrees of freedom in the model are taken into consideration.

4.1.7 Hypotheses testing

Hypothesis One

H_{O1}: There is no significant relationship between dividend policy and the value of banks in Nigeria

From the random effect model results above, dividend policy measure by DPS was found to be positively and statistically significant at 1% level. This is affirmed by the p-values which

were less than 1% (0.000) significance level. This indicates that the DPS as a measure of dividend policy does significantly affect the value of banks in Nigeria. Hence, we reject the null hypothesis one.

Hypothesis Two

H_{O2}: There is no significant relationship between capital adequacy ratio as a control variable and the value of banks in Nigeria

From the random effect regression results, CAR as a control variable was found to have a significant negative impact on ROA at 1% level. This indicates that CAR does have a significant relationship with return on asset among deposit money banks in Nigeria. This provided grounds for rejecting the null hypothesis two.

4.2.   DISCUSSION OF RESULTS AND POLICY IMPLICATION OF FINDINGS

The empirical findings of this study, DPS was found to be statistically significant at 1% level. This indicates that the DPS as a measure of dividend policy does significantly affect the value of deposit money banks in Nigeria. This depicts that an increase in DPS will bring about an increase in return on assets as a measure of bank value. This finding is in tandem with a priori expectation of a positive correlation. An increase in DPS will increase the capacity of the banks to expand their existing portfolio and the others will be distributed to the shareholders.

Also, the implication is that dividend policies do have a significant positive impact on the value of firms (banks) in Nigeria. Hence, the firms' values will increase if dividend policies are effective.

5.0 CONCLUSION

A dividend is a distribution of earnings made to shareholders. When profits are high, dividends are paid out at a higher rate, which boosts the share price. When profits are low, dividends are paid out at a lower rate, which lowers the share price. Due to the lack of a regulatory framework, corporations in Nigeria can determine for themselves whether or not to pay dividends. The study's primary aims are to analyse and assess the ways in which, DPA, CAR, NIM, and LTDR all impact on the value of banks in Nigeria between the periods 2013-2022. For this goal, 2 hypotheses are constructed and tested. The study adopted a panel regression model encompassing pooled OLS, fixed effect, random effect, and the Hausman test for decision analysis. The result of the Hausman test shows that there is no sufficient evidence to reject the null hypothesis that differences in fixed and random effect estimation coefficients are not significant. As a result, the random effect estimation provides the most consistent and efficient estimation. The random effect estimation was that the coefficients of LNDPS, LNNIM, and LNLTDR have positive impact on ROA. While LNCAR has a negative impact on LNROA. From the result, only LNDPS and LNCAR have a significant impact on LNROA as their p-values were less than 5%.

5.1 RECOMMENDATIONS

The following policy recommendations are made in light of the aforementioned research findings:

1. Sync dividend policy with long-term growth and profitability goals. A bank's dividend strategy should be in line with its long-term profitability and expansion goals. While shareholders may look forward to consistent dividend payments, it's critical for banks to hang onto revenues so they may reinvest them in lucrative prospects. This strategy can assist the bank's growth, technological advancements, and risk management skills, eventually improving its performance.

2. When choosing a dividend policy the capital adequacy ratio should be taken into account. The capital adequacy ratio is a crucial indicator of a bank's financial stability and capacity for loss absorption. Banks should think about keeping an appropriate capital buffer when calculating dividend distributions to make sure they can survive any financial crises. It's crucial to find a balance between returning earnings to shareholders in the form of dividends and holding back enough capital to cover continuing expenses and legal responsibilities.

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