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Determinants of Firm Value: Using Selected Accounting Ratios in Nigerian Banks

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Abstract

Extant studies alluded to the fact that performance of any organization is measured through its value. The metrics for determining the firm value differ across sectors and it is firm-specific in nature. There are conflicting results in relation to determinants of firm value. This study examined the determinants of firm value in Nigerian deposit money banks. The study used twelve listed Nigerian deposit money banks covering the period from 2011 – 2020. A panel regression was adopted to test the various hypotheses. The analysis found that total asset turnover positively and marginally significantly affects a firm's value. A positive and significant relationship exists between dividends to total assets and the firm's value. Findings also reveal that free cash flow has an insignificant effect on firm value in Nigerian DMBs due to the nature of funding available to the banks. Other results indicate a negative and significant relationship between operating expenses to sales and firm value in Nigerian banks. The control variables, firm size, and financial leverage exhibited a significant relationship with firm value while firm size showed a positive effect, financial leverage had a negative relationship. Based on the findings, the study recommends that deposit money banks in Nigeria efficiently utilize their assets to generate high asset turnover and minimize operating costs to enhance firm value. The recommendation's actualization will depend on the management's ability to effectively set out and implement policies eliminating redundant assets and continuous maintenance of productive assets in their operations and reducing operational costs, thus enhancing firm value.

Key terms: *Deposit Money Banks, Dividend Pay-out, Firm Size, Firm Value; Asset Turnover Ratio, Log of Market Capitalization, Financial Leverage, Fixed Effect*

Introduction

In today's corporate environment, the performance of organizations plays a significant role in maximizing share prices. However, the main goal of each firm is to maximize the corporate firm's value and increase shareholders' wealth (Brigham & Houston, 2016). Thus, maximizing shareholders' wealth in the long term is the main goal of financial management. The firm's value varies according to the activities of the business

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and the economy as a whole. Conversely, firm value can be affected by internal as well as external factors. This study emphasizes the firm-specific factors since the firm cannot control the external factors.

A firm's corporate value is an economic metric that reflects its market value, and the share price movements in the secondary market influence its value. When the share price rises, its corporate value rises. When the share price falls, its corporate value falls; all other factors are kept constant. According to Purwanto and Agustin (2017), firm value is a typical metric for evaluating the firm's performance and how investors perceive it. Corporate value maximisation is crucial since it is the firm's primary objective. Thus, to enhance the firm's value, the critical question is to identify the factors that determine the firm's market price. This current study identifies some selected ratios used in determining the firm's value. The financial ratio indicates company performance in the future and shows the level of corporate health and improved efficiency of the business (Wijaya & Yustina, 2019)..

The choice of banks for this study is pivotal because banks, as financial intermediaries, mobilize funds from the savings or surplus sector to the borrowing or deficit sector. According to Marshal and Solomon (2015), this efficient flow of money within financial institutions is a stimulant for economic growth. A practical and stable financial system mobilizes resources and distributes them to various productive purposes, acting as a robust economic development engine. Banks guarantee reliable payment systems that help share risks and make long-term capital accessible through maturity transformation (Manasseh et al., 2014). A healthy financial sector contributes both directly and indirectly to the reduction of poverty by providing capital for entrepreneurial activity and by having an effect on economic efficiency and growth. Sarkın and Gülleroğlu (2019) and Angelina and Nugraha (2020) posited that the roles of banks encompass collecting and channelling funds within the ecosystem, thus creating productivity within the economy.

Research Problem

The concept of "firm value" has drawn the attention of several researchers around the world, as it is an economic concept that reflects the assets owned by a firm (Aggarwal & Padhan, 2017; Endri & Fathony, 2020). Sampurna and Romawati (2020) and Shah and Khalidi (2020) contend that an organization's firm value can reveal a great deal about its effectiveness and long-term growth.

A firm's value may be affected directly or indirectly by factors relating to the firm's specific characteristics. Notwithstanding its importance, the majority of studies and research on firm value have been conducted in developed nations, and very little is known about it in developing economies such as Nigeria (Nguyen *et al*., 2021; Faradita & Mubarak, 2022). The current study focuses on how total asset turnover, operating expenses, free cash flow, dividend payout, firm size, and financial leverage determine firm value.

Studies such as Enekwe (2015), Tiwari and Kumar (2015), Endri and Fathony (2020), and Amalia and Nugraha (2021) on the determinants of firm value used common factors such as dividend yield, total assets, earnings per share, interest coverage, the debt-equity ratio, capital structure, and book value per share as their accounting variables. Findings revealed conflicting results based on different firm-specific indicators. The inconsistencies and knowledge gaps observed in previous studies have necessitated the need for the current study.

Research Objective

The main objective of this study is to determine the effect of Total Asset Turnover, Operating Expense, Free Cash Flow, Dividend Payout, Firm Size and Firm Financial Leverage on the Value of listed Nigerian Deposit Money Banks (DMBs) while the specific objectives of the study are to:

(a) Determine the effect of total asset turnover on the value of listed Nigerian deposit money banks (DMBs).

(b) Examine the effect of operating expense value of listed Nigerian Deposit money Banks (DMBs).

(c) Examine the effect of free cash flow on value of listed Nigerian Deposit money Banks (DMBs).

(d) Evaluate the effect of dividend payout on value of listed Nigerian Deposit money Banks (DMBs).

(e) Determine the effect of firm size on value of listed Nigerian Deposit money Banks (DMBs).

(f) Establish the effect of firm financial leverage on Value of listed Nigerian Deposit money Banks (DMBs).

Hypothesis

The hypotheses mentioned below are put to the test to determine the degree of relationship between the accounting ratios and the firm value of listed Nigerian Deposit Money Banks (DMBs).

H_1: Total asset turnover has no significant effect on the firm value of listed Nigerian deposit money banks

H_2: Operating expense has no significant effect on the firm value of listed Nigerian deposit money banks

H_3: Free cash flow has no significant effect on the firm value of listed Nigerian deposit money banks

H_4: Dividend payout has no significant effect on the firm value of listed Nigerian deposit money banks

H_5: Firm size has no significant effect on the firm value of listed Nigerian deposit money banks

H_6: Firm financial leverage has no significant effect on the firm value of listed Nigerian deposit money banks

Theoretical Background

This study is anchored on Signalling Theory. According to the theory, managers of firms who are more knowledgeable about their businesses will be more likely to share this information with possible investors (Ongore & Kusa, 2013). This proposition demonstrates the information asymmetry between the firm's management and those interested in the information. In addition, this theory examines what will occur if the signal hinted at is not entirely persuasive or measures how much uncertainty can be tolerated before the signal loses all significance (Obamuyi, 2013). Informational signals are sent from one party to another in an effort to influence the outcome that the party wants. After acquiring secret information, managers of businesses decide whether or not to divulge it to outsiders, whether it is positive or negative. Managers of firms (insiders) often try to convey positive messages to outsiders and avoid purposefully sending negative information (Connelly et al., 2011). However, if executives issue equity when they think the share price is excessive, negative signals may be accidentally sent out throughout the process. For instance, the issuance of new shares sends negative signals to outsiders (Myers & Majluf, 1984; Taj, 2016). Understanding how these additional (usually negative) signals that are added to the primary (generally positive) signals confuse receivers and interfere with signalling is key.

Empirical Review

Malhotra and Tandon (2013), using listed 100 companies with a sample of 95, examined the variables that affect stock prices on the National Stock Exchange (NSE) from 2007 to 2012. The study used linear regression for the data estimation. The findings showed that dividend yield has a significant inverse relationship with the market price of all the tested company's stocks. In contrast, a significant positive relationship exists between book value, earnings per share, price-earnings ratio, and the firm's stock price.

Enekwe (2015) examined how Nigeria's oil and gas firms' corporate profitability was affected by the influence of financial ratios from 2008 to 2012. The study's dependent variable is Return on Assets (ROA),

proxy corporate profitability. In contrast, the total assets turnover ratio (TATR), debt-equity ratio (DER), receivables' turnover ratio (DTR), interest coverage (IC), and payables' turnover ratio (CTR) are the independent variables. The data analysis was estimated using descriptive statistics, Pearson correlation, and regressions. The findings showed that TATR, DTR, and IC positively and statistically significantly influence corporate profitability, whereas DER and CTR have a negative and insignificant relationship with corporate profitability.

Rauf (2015) studied how accounting ratios influence the share prices of the listed banks on the Colombo Stock Exchange. The study spans a period from 2005 to 2014. The dependent variable is share price, while the independent variables are dividend per share, earnings per share, book value per share, dividend payment, price-earnings ratio, and size. For the data estimation, panel regression and correlation analysis were employed, and findings indicate all the study's independent variables positively and significantly influence their share price.

Challa and Chalam (2015) studied the effects of book value, dividend per share, earnings per share, size of the firm, dividend payout ratio, dividend yield, return on net worth, the price-earnings ratio on the equity price of listed companies in BSE. The study used multiple regression analysis for the data estimation. The finding showed that the book value and return on net worth are the only variables that significantly and positively affect the market share price.

In Jordan, (Ramadan, 2016) studied the main determinants of the industrial firms' value using 77 industrial firms listed on the Amman Stock Exchange (ASE) from 2000 to 2014. The firm-specific variables of the study are size, age, sales revenue, operating cost, net margin, capital expenditure, book value, earnings per share, dividend per share, and pay-out ratio. The study used a panel data estimation technique. The finding showed that all the firm-specific variables used in the study statistically and significantly influenced the value of all firms listed at the Amman Stock Exchange (ASE).

Pradhan and Paudel (2017) studied the fundamental factors influencing Nepalese commercial banks' stock prices using 104 observations from 13 commercial banks in Nepal between 2007 and 2014. The study's dependent variables are market price per share and change in market price per share. In contrast, return on assets (ROA), return on equity (ROE), net profit margin (NP), earning per share (EPS), and dividend per

share (DPS) are the independent variables. The study used secondary data mined from the Banking and Financial Statistics and Bank Supervision Report produced by Nepal Rastra Bank and annual reports of the 13 selected commercial banks. The findings showed that DPS, ROA, and EPS positively influence the market price per share and the change in market price per share. The beta coefficients for DPS and EPS also positively and significantly affect the market price per share, whereas the net profit margin negatively affects stock price.

Endri and Fathony (2020) studied the effect of dividend policy, profitability, firm size, leverage, and growth on the firm value of the listed financial firms on the Indonesia Stock Exchange from 2013 to 2017. The study adopted a quantitative method using 21 companies as research samples, measured by purposive sampling techniques. The data analysis was estimated using the panel data regression technique. The findings showed that firm size, leverage, and growth, do not affect a firm's value. In contrast, dividend policy and profitability significantly and positively affect firm value. Additionally, simultaneous findings reveal that firm size, leverage, growth, profitability, dividend policy, and size influence firm value.

Amalia and Nugraha (2021) using the listed Indonesian banks from 2015-2019, examine how the credit risk (financing) and liquidity risk are proxied by FDR (Financing Debt Ratio). Other variables of study include asset quality is stated by NPF (Non-Performing Financing), and company size, measured by total assets, while CAR (capital adequacy ratio) affects firm performance proxy return on asset (ROA). The study used panel data regression for the data estimation, and the results showed that FDR, CAR, and NPF have a positive relationship with ROA.

Methodology

The study employed the ex-post facto research design because the data required for the analysis already exists. As a result, the research design utilises both cross-sectional and time series properties, resulting in a panel study. The Ratios and the annual reports and accounts of the twelve (12) listed Nigerian Deposit Money Banks for 2011 to 2020 were used as secondary sources for the research's data. The research period coincides with enacting several banking reforms to strengthen and improve the already-existing ones, ensuring the soundness and well-being of Nigerian banks and increasing their competitiveness domestically and internationally.

Sources of data and scope of the Study

The data collected covers a period of ten (10) years, from 2011 to 2020, and is on all listed deposit money banks in Nigeria. The study variables exclude the firms that do not have complete data for the period; hence the data availability conditioned the sample size to twelve (12) listed Nigerian deposit money banks for the study period with a purposive sampling approach. In the study, we used secondary data as annual reports from the twelve (12) deposit money banks listed on the Nigeria Exchange Limited (NGX) as of December 31, 2020. Agency cost variables: leverage, dividend payouts, and free cash flow were the three main types of data extracted from the annual reports for the study. Additionally, the data from the firms' annual reports used for this study were subjected to external audits by reputable local and international firms, thus making them reliable and trustworthy data sources.

The dependent variable used firm value proxy log of market capitalization while the independent variables are total asset turnover, operating expense, free cashflow, dividend payout and the control variables are firm size and firm financial leverage.

Model

To examine the determinants of a firm's value: using selected accounting ratios of listed Nigerian deposit money banks (DMBs), the study adapted the models of Challa and Chalam (2015) and Ramadan (2016). The modifications made in this study ranges from measurement of dependent and independent variables to suit the objectives of the current study, as shown in Eqn. 3.1 below:

$$FV_{it} = \alpha_0 + \alpha_1 TAT_{it} + \alpha_2 OES_{it} + \alpha_3 DITA_{it} + \alpha_4 FCF_{it} + \alpha_5 FSIZE_{it} + \alpha_6 FINLEV_{it} + \mu_{it} \quad \ldots \ 3.1$$

where: FV represents Firm Value (proxy Market Capitalization) (Dependent Variable), TAT represents total asset turnover, OES represents operating expenses, FCF represents free cash flow (proxies for agency cost) (Independent Variables), DITA represents Dividend to Total Asset (proxy for dividend payout) (Independent Variable), Fsize and FinLev represents Firm Size and Financial Leverage (Control Variables); μ represents the error term; i denotes the firm; and t represents the time period. $\alpha_1 - \alpha_4$ = the parameters estimate/coefficient of the independent variables while $\alpha_5 - \alpha_6$ are the coefficients of the control variables.

Table 1: Apriori Expectation

Name of Variable	Symbol	Apriori Expectation
Firm Value	MKTCAP.	±
Total Asset Turnover	TAT	±
Operating Expense	ACOPEX	±
Free Cash Flow	FCFA	±
Dividend Payout	DITA	±
Firm Size	FSIZE	±
Financial Leverage	FINLEV	±

Statistical Procedure

Panel data analysis was adopted to test the study hypothesis because of its ability to control for observed heteroskedasticity in the data. The panel data analysis consists of the OLS, RE, and FE (Random and Fixed Effect). According to Wooldridge (2010), they are econometric techniques that combine cross-section and time dimensions to generate precise results. The Hausman test determines whether FE (Fixed Effect) or RE (Random Effect) is more accurate for detailed panel data. If the Hausman test result is significant, FE is selected; otherwise, the RE (Saleh et al., 2008). Further tests, such as the VIF test, correlation analysis, and descriptive statistics, were also performed.

Findings and Discussions

Descriptive Statistics

Table 2 shows the descriptive statistics for the variables. Market capitalization (MKTCAP), the dependent variable, ranges from a minimum of N6.792 million to a maximum of N9.059 million in value. The data is noticeably distributed from the mean value, as indicated by the mean and standard deviation of N8.050 million and N0.574 million, respectively. Operating expense (ACOPEX) has a mean value of N0.019 million and a standard deviation of N0.006   million, indicating a significant clustering, with the maximum and minimum values being N0.047 million and N0.007 million, respectively. The total asset turnover (TAT) has a mean value of N0.092 million and a standard deviation of N0.048 million, indicating that sample data demonstrates significant clustering around the mean value, with maximum and minimum values of N0.554 million and N0.043 million, respectively. The standard deviation of the dividend payout is N0.625 million, and the mean value of N0.557 million demonstrates significant dispersion of the majority of the observations from the mean, with the maximum and minimum values being N2.417 million and N0.00, respectively. The standard deviation of free cash flow to total assets (FCFA) is N41.952 million, and the mean value of N1.132

million demonstrates significant dispersion of the majority of the observations from the mean, with the maximum and minimum values being N106.479 million and (N98.821 million), respectively.

The financial leverage as a control variable has a standard deviation N22.084million, and the mean value of N90.327 million demonstrates significant clustering of the majority of the observations from the mean, with the maximum and minimum values being N254.750million and N76.247, respectively.

The mean value of firm size measured as the natural log of total assets was N9.180m, while the maximum was N9.939m and the minimum was N8.195m, respectively. The gaps between the maximum and minimum clearly show that the sampled banks are homogenous. Firm size is not a variable of interest, but its inclusion in the regression model may improve the outcome of the study.

Table 2: Descriptive statistics

VARIABLES	MEAN	MEDIAN	MAX.	MIN.	STD. DEV.	OBS. (N)
MKTCAP. (N'm)	8.050	8.122	9.059	6.792	0.574	120
ACOPEX	0.019	0.017	0.047	0.007	0.006	120
ATAR	0.092	0.085	0.554	0.043	0.048	120
DITA (N'm)	0.557	0.348	2.417	0	0.625	120
FCFA	1.132	1.168	106.479	-98.821	41.952	120
FSIZE (N'm)	9.180	9.186	9.939	8.195	0.403	120
FINLEV (N'm)	90.327	86.660	254.750	76.247	22.084	120

Correlation Analysis

Pearson's coefficient of correlation was used to examine the existence of correlation among the study variables, as shown in Table 3 below. The result of the correlation matrix showed that Mktcap., the dependent variable, has a negative relationship with ACOPEX = -0.141, ATAR = -0.392 and LEV = -0.403 but a positive relationship with other explanatory variables (FCFA = 0032, DITA = 0.697, FSIZ = 0.793); ACOPEX, ATAR and LEV demonstrated a weak relationship with MARKETCAP. FCFA showed a very weak relationship with MKTCAP, while DITA and FSIZ demonstrated a highly correlated relationship with the dependent variable. A cursory analysis shows that the independent variables are not significantly connected, which means that multicollinearity is minimal (Bland & Altman, 2011; Schober et al., 2018)**.**

Table 3 – Correlation Matrix

	MKTCAP.	ATAR	ACOPEX	DITA	FCFA	FSIZ	FINLEV
MKTCAP.	1						
ATAR	-0.392	1					
ACOPEX	-0.141	0.312	1				
DITA	0.697	-0.146	0.014	1			
FCFA	0.032	0.147	-0.010	0.073	1		
FSIZ	0.793	-0.454	-0.028	0.379	-0.082	1	
FINLEV	-0.403	-0.659	0.171	-0.209	-0.013	-0.352	1
N	120	120	120	120	120	120	120

Multicollinearity

Another post-estimation to check for multicollinearity: is the Variance Inflation Factor (VIF), as shown in Table 4 below.

Table 4: Multicollinearity Result

VARIABLE	VIF	1/VIF
ATAR	2.25	0.444453
LEV	1.85	0.541367
FSIZ	1.47	0.681891
DITA	1.20	0.833144
OPEX	1.13	0.881074
FCFA	1.06	0.944423
MEAN VIF	**1.49**	

Table 4 above shows the degree of relationship between the explanatory variables. The variance inflation factor (VIF) value is also estimated to test the multicollinearity. As shown in Table 4, the results indicate that none of the variables exceeded benchmark 10, with the highest VIF at 2.25 and the lowest at 1.06. The mean VIF is 1.49, which is also less than the benchmark. These values indicate that the model is free from the problem of multicollinearity (Wang, 2010; Wooldridge, 2015; (Ahmad et al., 2021).

Heteroskedasticity Test

The Breusch-Pagan-Godfrey-Heteroskedasticity was used to analyze the variance inequality of the residuals between observations in the sampled data. If the spread and scattered residual patterns do not form a specific pattern, heteroscedasticity issues may exist in the data. The signs of heteroscedasticity are absent in a good regression model. However, this study's result showing an F-statistic of 2.72 and a p-value

of 0.0991 in the OLS (pooled) indicates that the banks in our sample are homogenous and do not have a heteroskedasticity problem.

Hausman Test

According to the Hausman Test, reject the null hypothesis if the p-value is small (less than 0.05). This means that the alternative hypothesis that fixed effect is desirable is accepted, and the null hypothesis that random effect is desirable is rejected. The results reveal that Prob > chi2 is greater than 0.05 (Prob > chi2 = 0.7694). The results of the Hausman test have also confirmed that the random effect (RE) is more efficient than the fixed effect (FE).

Table 5 Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-random section	3.31	6	0.7694

Regression Results

In this study, we employed REM and FEM to examine the determinants of firm value using the agency cost indicators. According to Hsiao (2003), if there is unobserved heterogeneity across firms, it has been acknowledged in other related studies that pooled OLS regression estimates may be inconsistent and biased. This is because pooled OLS regressions may result in estimator bias with spurious results. Therefore, given the panel nature of the data, this study used FEM and REM regressions to control for possible unobserved firm-level heterogeneities. The FEM and REM models consider heterogeneity across firms by allowing variable intercepts. The Hausman test, a statistical analysis, is used to select which of these two models to use. It compares the FEM model to the REM model (Cameron & Trivedi, 2009). The alternative hypothesis favours FEM and is tested against the null hypothesis, favouring the REM model. If the p-value is insignificant, it is safe to use the REM model; otherwise, use the FEM model. The Hausman test result showed chi2(6) = 3.31 and a p-value of 0.7694, thus selecting the REM model in contrast to the FEM model. In explaining the variation in the dependent variable, the model as a whole is significant. The R^2 is 0.9061, which explains that approximately 91% variation in the firm value, the dependent variable, is influenced by the changes in financial ratios that are independent variables.

The operating expense variable has a coefficient value of -7.0405, a t-statistic of -2.2600, and a p-value of 0.0240, which is significant at 2%. This shows that operating expense negatively and significantly affects a firm's value. The results are consistent with the findings of Athanasoglou et al. (2008), Kosmidou and Zopounidis (2008), Alkhatib and Harasheh (2012), Dissanayake (2012), Weersainghe and Perera (2013), Abebe (2014) and Oyerogba et al. (2014)who postulated that operating expense ratio are statistically significant predictors variable in determining return on assets ratio. In contrast, while Adesina et al. (2015) found operating expense to have no significant effect on profitability, Udiin and Hossain (2020) found operating expenses to have an inverse effect on a firm's profitability.

The total asset turnover variable has a coefficient value of 1.0148, a t-statistic of 1.9200, and a p-value of 0.0580, which is marginally significant at 6%. This shows that total asset turnover has a positive and marginally significant effect on a firm's value. When a firm can utilize its cash resources efficiently, its management is successful yearly, increasing the turnover ratio and affecting its value. The findings of this study are consistent with previous empirical results, which suggest that the total asset turnover has a positive and significant effect on a firm's value (Syamsuddin, 2011; Alivia & Chabachib, 2013; Aprilia et al., 2018; Widayati et al., 2019; Ichsani et al., 2021). However, the study by Utami and Prasetiono (2016) showed that total asset turnover has a positive and insignificant effect on firm value.

The dividend payout variable has a coefficient value of 0.2110, a t-statistic of 3.1400, and a p-value of 0.0020, which is statistically significant at 2%, implying that dividend payout positively and significantly affects the firm's value. The number of times dividends are paid to shareholders is a positive signal about the firm's ability to increase shareholder wealth. This finding is consistent with previous empirical findings, which suggest that the dividend-to-total asset ratio, as a measure of dividend policy, is a significant driver of firm value (Ozuomba et al., 2013; Udobi & Iyiegbuniwe, 2018; Osakwe et al., 2019; Chinnaiah, 2020). In contrast, studies by Odesa and Ekezie (2015), Anike (2017), Husain and Sunardi (2020) asserted that dividends to the total asset have no significant effect on the firm value.

The free cash flow variable has a coefficient value of 0.0004, a t-statistic of 0.9400, and a p-value of 0.3500, which is insignificant. This result shows that free cash flow has an insignificant effect on firm value in Nigerian DMBs due to the nature of funding available to the banks. The result is consistent with previous

empirical findings, which suggest that the free cash flow positively affect firm value (Ghodrati & Hashemi, 2014; Al-Zararee & Al-Azzawi, 2014; Suartawan & Yasa, 2016).

The two control variables, **FSIZE** has a coefficient and p-value of 0.8238 (0.000) while **LEV** has a coefficient and p-values of -0.0031 (0.0040), respectively. They are not variables of interest to the study's objectives. Still, their inclusion in the model could influence the outcome as it improves a study's internal validity (assurance that no external factors influence the experiment of interest) by reducing the effects of confounding and other irrelevant variables. Thus, experimental manipulation is responsible only for the study findings (Nielsen & Raswant, 2018). The size of a large company indicates that the company is experiencing growth (Shubita, 2021). Firm value is influenced by the firm's size as indicated by its number of assets (Al-Eitan et al., 2022). Firm size positively correlates with firm value (Pratama & Wiksuana, 2016; Pan & Xu, 2020). On the other hand, Kipesha and Moshi (2014) and Nguyen and Nguyen (2020) found that financial leverage negatively affects the return on assets. In contrast, financial leverage positively affects Islamic banking performance proxied by return on assets (Rahim et al., 2021).

Table 6 Regression Results

Variable	Coefficient	t-Statistic	Prob.
C	0.6284	0.7800	0.4380
ACOPEX	-7.0405	-2.2600	0.0240
ATAR	1.1115	2.1100	0.0350
DITA	0.3052	5.7500	0.0000
FCFA	0.0004	1.0800	0.2790
FSIZ	0.8238	9.5800	0.0000
LEV	-0.0031	-2.8800	0.0040
R^2	0.9061		
F-statistic	142.33		
Prob (F-statistic)	0.0000		
Heteroscedasticity Test	2.72		
p-value	0.0991		

Conclusions and Recommendations

This study examined the effects of accounting ratios; asset turnover ratio, operating expense, free cash flow to total assets, dividend to total assets, firm size, and financial leverage on firm value, proxied by the log of market capitalization. The study was based on the twelve listed Nigerian Deposit Money Banks from 2011 to 2020. Given the significance of these financial ratios to the firm's various stakeholders, including

investors, creditors, owners, and managers, the study aims to determine whether they send any signals to the market that affect the firm's value. The study found asset turnover ratio, dividend to total assets ratio, and firm size to positively and significantly affect the firm value, while financial leverage and operating expense negatively and significantly affect firm value. In contrast, free cash flow, although positive but insignificantly affects firm value. The overall results showed that accounting ratios enhance and improve the firm's value.

It is therefore recommended, among other things, that deposit money banks in Nigeria efficiently utilize their assets to generate high asset turnover and minimize operating costs to enhance firm value. The investors are also encouraged to monitor all the study variables to guide their investment decisions. The present study confirms that financial ratios benefit investors interested in the listed Nigerian Deposit Money banks (DMBs). These financial ratios possess reliable explanatory power and can be used to make accurate future forecasts of the value of Nigerian Deposit Money Banks (DMBs). Therefore, investors should exhibit care in studying and understanding the accounting variables of firms before investing in such firms.

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