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Financial Structure Decision and Market Value of Listed Deposit Money Banks in Nigeria

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ABSTRACT

The difficulties in financial structure mix decision have contributed to the failure and decline of Nigerian deposit money banks. Therefore, this study appraised the influence of financial structure (long-term as well as short-term debts to equity ratios) on the market value (Tobin Q and share price) of listed banks. The objectives were to ascertain the extent of relationship between long-term debt to equity ratio as well as examine the impact of short-term debt to equity ratio on the market value of the banks. A research design employed was an ex post facto, and a purposive sampling technique was used to choose 12 banks that were listed and had intact data as at the period of investigation on the Nigerian Exchange Group. Secondary data of the variables were gotten from the annual reports as well as accounts of selected banks over a period of 12 years (2011 to 2022). Data sourced were analysed with descriptive together with inferential statistics. The outcomes revealed that long term-debt to equity ratio positively as well as significantly influence the market value. This implies that bank's market value can be optimised by including more long-term debt and less equity in the financial structure mix. The study concluded that financial structure decision influenced the market value of listed Nigerian deposit money banks. The recommendation was that financial manager should maintain more of long-term debt than equity in the mix of its financial structure as it is appropriate to individual bank.

Keywords: Financial Structure, Deposit Money Bank, Long-Term Debt, Short-Term Debt, Market Value

1. INTRODUCTION

The expansion and progress of a nation depend on the crucial role plays by deposit money bank which cannot be ignore in a nation's economy. The bank in the financial sector drives the economy and serves as an intermediary to the remaining sectors of the economy (Bagh et al., 2017; Oladejo, 2023). According to Dia et al. (2020), banks are key contributors to every country's economy; indicating that supervision and regulation of banks are necessary to protect investors and clients as well as to maintain stability in the banking industry. To control bank activities, the government deploys regulations in the banking sector. The banking regulations outline the limitations, prerequisites, and requirements that must be met by the banking sector that encourage transparency.

Determining the financial structure is essential to deposit money bank's expansion in Nigeria. Financial managers are allowed to choose the elements of their financial structure if they increase the value of the shares, while also achieving some of the main aims and objectives of the banks. Managers throughout the world try to find a financial structure combination with the right

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proportion or gearing ratio. According to Huber (2018), using debt financing excessively may result in using profits excessively to settle long-term debts, which lowers investors' interest. Once more, an excessive dependence on stock limits the amount of capital that a bank may amass for its growth. Financial manager should consider the impact on the market value as well as the trade-off between using debt and equity.

Saji (2019) expressed that market value has been the centre of attention for financial study for quite some time. There are numerous options for determining its market value; like examining share prices in the stock market. In addition to that, modern finance uses Tobin Q. The share price of a listed bank directly reflects market sentiment, investors' perception of the bank's performance, and future growth prospects. Also, the Tobin Q ratio, a measure of market value to replacement cost, provides insights into how efficiently banks utilise their assets to create value for shareholders. A higher Tobin Q indicates that the bank's market value exceeds the cost of its assets, reflecting an effective financial management strategy.

Financial managers are reliant on determining the optimal ratio of financial structure as the bank's funding source. They find it difficult to decide on this alone, especially in developing nations like Nigeria. The management of a bank must make financial structure decision to capitalise on returns to diverse stakeholders as well as improve the bank's capacity to operate in a competitive environment. But due to the overall situation of the industry, which necessitates urgent institutional restructuring; the Nigerian financial sector has undergone numerous reforms over the past 30 years. The 1990s saw a number of anomalies and indications of stagnation in the banking industry. Banks numbering 31 had their licenses revoked by the Central Bank of Nigeria (CBN) between 1994 and 1998 for a number of reasons such as debt overhang, unsuccessful investments, insider deals, and insufficient capitalisation. These events demonstrate that the performance of Nigerian deposit money bank trend over the past few decades has not been encouraging (Sev et al., 2014). Also, the global recession that seriously harmed banks and fuelled the financial crisis of 2007–2009, also had an impact on Nigerian banking sector. This has affected the stability of most banks. The overcrowding of high non-performing loan and illiquidity issues hindered banks to fulfil their everyday responsibility to clients. This led to the collapse of numerous institutions in 2018 including Skye Bank. Diamond Bank sorted merger with Access Bank in 2020 in order to avoid collapse based on unsustainable capitalisation. As a result of bank mergers and acquisitions, the numbers of deposit money banks have decreased over time (Onyekwelu et al., 2018; Wuave et al., 2020).

Existing researchers (Ajiboye et al., 2023; Andow & Wetsi, 2018) concentrated on the dependent variable - market value using either Tobin Q or share price separately, while this study utilised both Tobin Q as well as share price collectively to measure market value. Also, the research design, sample size and scope of this study differ from that of the existing literatures under observation. Thus, this study examined the association between financial structure decision and market value of Nigerian listed deposit money banks. To accomplish this target, this study raised these research questions: What effect does long-term debt ratio have on the market value; and to what extent is the relationship between short-term debt ratio on the market value of Nigerian listed deposit money banks? Therefore, the research objectives are:

- To assess the influence of long-term debt ratio on the market value of listed deposit money banks in Nigeria.
- To ascertain the extent of relationship between short-term debt ratio and the market value of listed deposit money banks in Nigeria.

2. LITERATURE REVIEW

2.1 Financial Structure

Arnold (2014) defines financial structure to be the process of managing a financial institute's financial structure**.** The combination of a bank's various sources of funding is referred to as its financial structure. Most businesses receive combination of equity as well as debt funding. The financial structure of a bank is the proportionate use of debt as well as equity in its financing. It is the proportion of short debt, long debt as well as equity used to finance a bank (Shubita & Alsawalhah, 2012).

2.2 Market Value

The degree by which goals as well as results can be attained is revealed by the array of non-financial and financial metrics. A bank's market value is influenced by investors' insight of management's ability to forecast as well as adjust to changes in the bank's economic environment in the future. Accounting practices and account manipulations have an impact on metrics that are accounting based like Return on Assets (ROA) as well as Return on Equity (ROE). Metrics that are market based were just as significant to investors as that of accounting based. Tobin Q, price to book value, and stock return are examples of market-based performance metrics that are widely used to assess firm success (Ersoy et al., 2022). The capability of a bank for future profits generation can be assessed by investors through Tobin Q which is a market-based performance. It shows market prediction for future profit, and this makes it to be an excellent substitute for value of bank (Campbell & Minguez-Vera, 2008). Again, the share price reflects the level at which prospective shareholders are ready to purchase shares in the bank which reflect its valuation. For example, when high value is attached to the bank by investors, the share price will be pressured because of the demand of the bank's share that is higher. This will at the right time leads to a higher share price as well as value of bank that is higher. Consequently, the value the prospective investors and shareholders attached to the bank is because of its share (Kusiyah & Arief, 2017).

2.3 Bank Size

Compared to small-sized banks, larger banks have more chances to finance debt capital (Titman & Wessels, 1988). Big banks use debt more than small ones do; debt reduced costs for big banks as well as moral hazard and monitoring expenses. Also, the likelihood of bankruptcy is lower for large banks (Chittenden et al., 1996). Past researchers (Chen et al., 2021; Fama & French, 2002; Jadah et al*.,* 2020; Jadah et al., 2016) professed that size of bank favourably correlates with the tested bank's debt ratio, whereas Johnson (1998) reported unfavourable connection. This indicates that big bank typically issues shares to cover its expenses when stock prices are high (Dittmar & Thakor, 2007).

2.4 Bank Age

A number of investigations have used the bank's age as an explanatory variable that could influence choices about financial management approaches. Debt finance is not necessary for larger banks that have been operating for an extended period in generally stable markets. On the other hand, smaller, recently founded banks need more debt to meet their funding requirements. According to Sharif et al. (2012), larger, more successful banks that have built up goodwill in the market are able to readily secure the short-term loan funding that is needed since financiers have faith in their capability to pay on schedule.

2.5 Bank Revenue Growth

The effect of the rate of growth of quoted banks on Nigerian Exchange Group (NGX) is something the investigators are particularly curious about. The growing rate may indicate a need for additional funding, which will influence the financial structure. Cheng (2022) stated that analysts and investors are especially on the lookout for indications that a bank's profits are increasing in

a sustainable rate. Most valued investors also look for dividends as well as various additional accounting metrics to show growth potential.

2.6 Financial Structure and Market Value

Eberechukwu and Egbunike (2024) considered the influence of financial structure on the financial performance of Nigerian listed deposit money banks. An ex post facto research design was used with population of 13 banks that were quoted on the Nigeria Exchange Group at the end of 2023. Using a census technique, the sample size was the total population. The study's data came from the 2018–2021 public financial reports of the banks that were quoted. Stata13 software was used to analyse the data using multiple regression and Pearson correlation. The study found that there exists positive and significant influence between the net profit margin of the banks and equity capital as well as debt capital. Also, it revealed that financial structure significantly as well as positively affects the financial performance of banks. The study recommended that management should use equity as well as debts to finance their activities. Also, in financial structure management, industry benchmarks and best practices of deposit money banks should be considered.

Ajiboye et al. (2023) assessed the impact of financial structure on listed Nigerian banks' market value. The study used longitudinal research design. The selected deposit money banks' (DMBs) annual reports for the period of nine years (2012 to 2020) was used as secondary sources to obtain information on market value and financial structure. As of December 31, 2020; out of the 14 listed DMBs that comprise the whole population, 11 DMBs were selected utilising a purposeful sampling technique. The results show the overall debt-to-equity ratio linearly affected market value negatively. Also, short-term debt possessed linear negative as well as insignificant influence on market value. The review found that ratio of long-term debt had a U-shaped connection with market value, indicating that long-term debt initially reduced market value although eventually increased the market value of the bank. According to the report, Nigerian DMBs should change their financial structure to gradually lower their debt ratios while increasing their equity components. Furthermore, when borrowing, the long-term debt should be prioritised more because it increases market value over time.

Idolor and Omehe (2022) looked at how financial structure influenced the financial performance of Nigerian quoted deposit money banks. A time series-cross-sectional secondary data set, spanning seven years (2015–2021) was extracted from the annual reports as well as accounts of the banks quoted on the Nigerian Exchange Group. Pearson moment correlation, descriptive statistics as well as multiple linear regressions were utilised. Financial structure and financial performance have a negative relationship according to the correlation results. The outcomes of panel regression disclosed a significant and negative influence of debt to equity on return on equity as well as return on assets ($\beta = -0.1266$, $\rho < .01$; $\beta = -5.3571$, $\rho > .01$). An influence of asset tangibility that was significant on return on asset but with negligible influence on return on shareholder's equity ($\beta = -0.0235$, $\rho > .05$; $\beta = -0.3527$, $\rho > .10$). Age had an influence that was significant on return on equity and a negligible influence on return on asset. It was concluded that financial structure had a negative influence on the Nigerian banks' financial performance. It also suggests that to raise the value of firms and maximise the wealth of shareholders, an appreciable percentage of capital should be channelled on investment opportunities that are profitable. Moreover, banks should take preventive steps to reduce the credit risk involved in lending and borrowing, even as finance managers keep an eye on stock market movements.

Shahriar et al. (2021) investigated how several factors influenced Bangladeshi deposit money banks' financial structure. The research made use of panel data that was organised from secondary sources and included samples of 22 of the 61 scheduled banks for the years 2011 through 2020. A regression model of Feasible Generalised Least Squared (FGLS) was used to analyse data. The review's outcomes indicate that a deposit money bank's financial structure or

leverage is influenced by earnings per share, return on assets, asset growth, investment structure, asset structure, loan loss together with cost per loan asset provisioning. Contrarily, the authors fail to discover any concrete evidence that the financial structure of Bangladesh's banking sector is significantly impacted by liquidity, bank size, non-performing loan ratio in addition to capital adequacy.

Eklund and Lundgren (2020) assessed how financial structure impacted bank valuations in the US, focusing on the largest publicly traded banks from 2000 to 2019. A quantitative approach was used to accomplish the goal, and a dataset has been studied using balanced panel data. The research reveals that banks' debt-to-equity ratios are different from those of non-financial businesses, and the regression model demonstrates that financial structure affects how much banks are valued on the stock market.

Andow and Wetsi (2018) investigated financial structure as well as price of share of Nigerian listed deposit money banks. Data on financial structure were collected over ten years (2006–2016). The study employed a panel regression technique to assess the influence of financial structure on share prices, using data from 15 listed banks in Nigeria. Fixed and random effects models were selected using the Hausman test, which is a standard approach for evaluating panel data. The findings revealed that the banks' financial structure had a negative and significant effect on share price.

Nwude and Anyalechi (2018) observed the effect that financial structure has on Nigerian commercial banks' performance. The review assessed the causal association among commercial bank's performance together with debt-equity ratio as well as the impact of financing mix. Granger causality analysis, fixed and random effects, pooled OLS regressions, correlation analysis, panel analysis-random effect, the Hausman test and the controlled F-test for heterogeneity which are post estimation test were used in data sourcing. The results demonstrate that though funding for debt had a big and adverse influence on return on assets; debt to equity ratio had a significant together with positive influence on return on equity. In Nigeria, an inverse relationship exists between commercial banks' financial structure as well as performance.

2.7 Trade-Off Theory

The Trade-Off Theory was established by Kraus and Litzenberger (1973) and subsequently improved by Myers and Majluf (1984) as well as Scott (1976). It was formed to refute Modigliani and Miller's (1958) who affirmed that employing debt often has no or negative benefits, assuming there are no corporate taxes (Dinh & Pham, 2020). The Trade-Off Theory asserts that the optimum financial structure should be a part of every company. The argument is supported by the contrast of the potential interest as well as drawbacks of debt finance (Kraus & Litzenberger, 1973; Myers, 1984; Scott, 1976). Since interest on pre-tax profits is deductible, as acknowledged by Modigliani and Miller (1963), businesses can profit from leverage. Despite the claims made by Cornett and Travlos (1989), as well as Myers (1984), that every business should aim for its own ideal financial structure, whether by increasing or reducing debt, corporations may benefit from tax deductions by raising their debt levels. Moreover, the Trade-Off Theory recognises the negative effects of leverage on business performance. Debt financing involves the promise of future cash outflow because of the need to build compulsory debt future interest payments.

2.8 Pecking Order Theory

The Pecking Order Theory of financial structure was put forth by Myers and Majluf (1984). According to the theory, when a bank is searching for ways to finance its long-term investments, it has a clear preference for the sources of funding it will use. However, a bank ought to choose its own capital, or keep earnings, before moving on to debt and external equity. Theorists contend

that as businesses become more prosperous, they will borrow less since they will have enough cash on hand to fund their investment projects. They also maintained that a bank should look for outside funding, ideally in the form of corporate bonds or loans, when its internal funding is insufficient. Additionally, issuing fresh equity capital is the last and least desired option for financing once company bonds, bank borrowing, and internal borrowing have been exhausted.

3. RESEARCH METHODOLOGY

The design of the review utilised was ex post facto. The study's population comprises the 14 listed deposit money banks of the Nigerian Exchange Group as of December 31, 2022. A purposive sampling method was employed to select 12 specific deposit money banks based on the availability of data from listed banks during the examination period. Information on market value (including share price and Tobin's Q) and financial structure (long-term and short-term debt-to-equity ratios) of banks was obtained from published annual reports and accounts from 2011 to 2022, as well as the 2022 Fact Book of the Nigerian Exchange Group. Both descriptive as well as inferential statistics were used to analyse the secondary source data. Descriptive statistics, including mean, total, maximum, minimum, kurtosis, skewness, standard deviation, and the Jarque-Bera test, along with inferential statistics, such as panel data regression and correlation analysis, were employed to assess the normality of the data distribution.

3.1 Model Specification

The model specification utilised in this study was adapted from Harrison and Muiru (2021) review on the impact of financial management techniques on the financial performance of listed commercial banks in Kenya. The linear regression model employed in their study was as follows:

$TQit$=β0+β1Xit+β2Xit+β3Xit+β4Xit+εit

Financial Performance = Y, Constant = β0, Liquidity Management = X1, Capital Structure Management = X2, Credit Risk Management = X3, Working Capital Management = X4. The adjustment introduces in Y or the regression coefficient by each independent variable are β1 -β4 and the accounting random error term is ε for additional variables that impact financial performance but not in the model.

In this study, the econometrics as well as functional forms were used for model representation below:

TQ = (FS, CV) i
SP = (FS, CV) ii
CC = (LDER, SDER) iii
CV = (BS, BA, BRG) iv

The equations iii and iv are re-stated below as:

$$TQ_{it} = \lambda_0 + \lambda_1 LDER_{it} + \lambda_2 SDER_{it} + \lambda_3 BS_{it} + \lambda_4 BA_{it} + \lambda_5 BRG_{it} + \varepsilon_{it}$$

$$SP_{it} = \rho_0 + \rho_1 LDER_{it} + \rho_2 SDER_{it} + \rho_3 BS_{it} + \rho_4 BA_{it} + \rho_5 BRG_{it} + \varepsilon_{it}$$

Where:
TQ = Tobin Q
SP = Share price
Long term debt to equity ratio = LTDE; Short term debt to equity ratio = STDE;
BRG = Bank revenue growth; BA = Bank age; BS = Bank size;
λ_1–λ_5 = Coefficients of parameter; ρ_1–ρ_5 = Coefficients of parameter;
Error term = ε; Bank = i; Time = t

Table1 Variables Definitions

Variables	Proxies	Variable Labels	Measurement	Sources	Expected Sign
Dependent					
Market Value	Tobin Q	Tobin Q	Equity Market Value + Total Debt / Total Asset	Khlif et al., 2015	
	Share Price	SP	The stock price at the end of a fiscal year.	Kusiyah & Arief, 2017	
Independent					
Financial Structure	Short term debt to equity ratio	SDER	Fraction of banks' short-term debt to their overall equity during a one-year period	Adeniyi et al. (2020)	+
	Long term debt to equity ratio	LDER	Long-term debt as a percentage of banks' total equity over a one-year period	Adeniyi et al. (2020)	+
Control					
	Bank size	BS	Natural log of total assets	Ozcan et al., (2017)	+
	Bank age	BA	Dissimilarity between years of establishment as well as observation.	Islam and Iqbal (2022)	+
	Bank growth	BG	Difference in profits over time	Ahmed et al. (2015)	+

4.0 RESULTS

As depicted in Table 2, the average value of Tobin Q revealed the value of 1.017. This implies that sampled banks have ₦1.017 which was not encouraging with maximum of 3.05 as well as minimum of 0.2322. Additionally, it specified that average value of share price of sampled banks shows ₦ 9.631. This implies that sampled banks have performed fairly with maximum of ₦49.15 as well as minimum of ₦ 0.520 respectively. The outcomes revealed that 0.110 average ratio of long-term debt to equity was in contrast to 0.799 shown by the short-term debt. This indicates that the banks' debt-term structure is short-term loan dominated.

Table 2 Descriptive Statistics of Variables

	TQ	SP	LTDR	STDR	BS	BA	BRG
Mean	1.017	9.631	0.110	0.799	25.397	26.167	649.629
Median	0.953	5.950	0.088	0.779	25.725	23.000	9.922
Maximum	3.053	49.150	0.626	2.410	28.000	51.000	89695.920
Minimum	0.232	0.520	0.000	0.590	21.927	5.000	-99.885
Std. Dev.	0.267	10.415	0.105	0.178	1.436	14.518	7475.197
Skewness	4.483	1.700	3.330	6.438	-0.430	0.316	11.861
Kurtosis	31.256	5.644	15.793	53.755	2.220	1.655	141.796
Jarque-Bera	5272.823	111.315	1248.002	16451.486	8.101	13.238	118962.378
Probability	0.000	0.000	0.000	0.000	0.017	0.001	0.000
Sum	146.507	1386.932	15.769	115.104	3657.230	3768.000	93546.598
Sum Sq. Dev.	10.171	15512.465	1.563	4.523	294.923	30140.000	7990634607.247
Observations	144.000	144.000	144.000	144.000	144.000	144.000	144.000

In considering the controlled variables, the results indicate that the sampled banks had an average age of 26.167 years, with a maximum of 51 years, a minimum of 5 years, and a standard deviation of 14.518 years. Additionally, the banks' average size was found to be 25.40, with a maximum of 28, a minimum of 21.93, and a standard deviation of 1.44. Again, the sampled banks' average revenue growth was found to be 649.63, with a corresponding standard deviation of 7475.197, a minimum of -99.89, and a maximum of 89,695.92 per cent.

Table 3 Approximated Matrix of Correlation

Correlation	TQ	SP	LDER	SDER	BS	BA	BRG
TQ	1.000						
SP	0.076	1.000					
LDER	0.191	-0.195*	1.000				
SDER	0.278**	-0.127	0.251**	1.000			
BS	-0.112	0.151	-0.460**	-0.218**	1.000		
BA	0.170**	-0.252**	0.202*	0.285**	-0.023	1.000	
BRG	-0.040	-0.066	-0.011	-0.022	-0.049	-0.102	1.000

****** Level at which correlation is significant is 0.01
* Level at which correlation is significant is 0.05

The estimated correlation coefficients of the variables are outlined in Table 3. The outcomes established a weak correlation coefficient of 0.076 among price of share as well as Tobin Q, suggesting a positive connection between share price as well as Tobin Q. The outcomes also reveal that that long-term debt ratio has a negative and significant association with share price, with a coefficient value of -0.195, whereas it is positively correlated with Tobin's Q, with a coefficient value of 0.191. Additionally, short-term debt exhibits a positive and significant correlation with Tobin's Q, with a coefficient value of 0.278, while it has an inverse association with share price, as indicated by a coefficient value of -0.127. In considering the control variables, the results indicate a negative connection between the size of the banks and Tobin's Q, with an estimated coefficient of -0.112. Conversely, a positive relationship exists between the size of the banks and share price, as demonstrated by a strong estimated coefficient of 0.751. The weak correlation coefficients of 0.170 and -0.252 specified the existence of positive relationship between age of the banks as well as Tobin Q, while they also suggest a negative connection between the age of the banks and share price.

Also, there is an existence of negative connection between the bank growths as well as with Tobin Q along with price of share as displayed in the approximated weak correlation coefficients of -0.040 as well as -0.066. In the subsequent tables, these relationships were further probed using panel regression technique.

Table 4 Variance Inflation Factor (VIF)

	VIF	1/VIF
LDER	1.752	.571
SDER	1.507	.664
BS	1.281	.78
BA	1.108	.902
BRG	1.014	.987
Mean VIF	1.332	.

The outcomes in Table 4, using the term financing of debt in terms of long-term and short-term debt revealed the highest VIF recorded by long term debt ratio was 1.75, which was below the threshold of 10 for multicollinearity. The implication of these VIF results is that the model obtained for the impact of long-term and short-term debt ratios is free from multicollinearity issues since none of the VIF value is close to the threshold of 10 for multicollinearity to exist.

Table 5 Serial Correlation and Heteroscedasticity

Model	Test	Test Type	Value	P value	Conclusion
	Autocorrelation	Wooldridge Test	1.32	0.275	No serial correlation
	Heteroskedastic	Breush-Pagan / Cook-Weisberg	47.74	0.000	Presence of heteroscedasticity

The diagnostic test outcome for serial correlation and heteroscedasticity as specified in Table 5 indicate that there was no evidence of serial correlation, whereas heteroscedasticity was present. Hence, the results were obtained using robust standard error to correct for the violation of the assumptions of classical linear regression.

Table 6 Estimated Linear Panel Regression Results (Dependent=TQ)

Variables	Coefficient	t-stat
LDER	1.590**	(4.808)
SDER	0.785**	(4.276)
BS	0.104**	(4.678)
BA	-0.0201**	(-3.621)
BRG	-3.45e-07**	(-3.465)
Constant	-1.906**	(-4.980)
Observations	144	
R-squared	0.751	
Number of fid	12	
Chow F	6.30	
Chow P val	0.000	
Hausman Chi	29.18	
Hausman P val	0.000	

Robust t-statistics in parentheses** p<0.05

The outcomes in Table 6 examined the effect of financial structure decision on market value, with Tobin Q was employed to measure market value. The influences of short-term and long-term debt ratios on the Tobin Q of the sampled banks were considered. The panel regression - fixed effect was used based on the Hausman test. It was revealed that ratio of long-term debt ratio exerts a significant and positive effect on the banks' Tobin Q ($t=4.808$; $p<0.05$). This suggests that a higher value of Tobin Q requires a higher value of long-term debt. Similarly, the results revealed that short term-debt ratio also has a positive and significant impact on Tobin Q at a level of 5% ($t= 4.276$; $p<0.05$). Consequently, banks with a higher level of short-term debt ratio tend to record higher Tobin Q and high value in turn. So, a proper mix of long-term debts and short-term debts with equity in the financial structure of deposit money banks can improve its market value, as disclosed by Tobin Q.

The established outcomes regarding the the control variables reveal a positive and significant influence between bank size and Tobin Q ($t=4.678$; $P<0.05$). This connotes that as listed deposit money banks grow in size, in term of their assets, their market value increases, as measured by Tobin Q. Conversely, bank age ($t=-3.621$; $p<0.05$) and bank revenue growth ($t=-3.465$; $p<0.05$) exhibit a negative and significant effect on the banks' Tobin Q at the 5% level. This implies that when deposit money banks experience advancement in age and increase in revenue, the market value of the banks will be enhanced when Tobin Q is utilised.

Table 7 Estimated Linear Panel Regression Results (Dependent=SP)

Variables	Coefficient	t-stat
LDER	14.06**	(2.891)
SDER	0.0710	(0.0331)

BS	5.888**	(3.440)
BA	-0.0907	(-1.048)
BRG	-1.43e-07	(-0.0223)
Constant	-139.1**	(-3.070)
Observations	144	
R-squared	0.75	
Number of fid	12	
Chow F	10.76	
Chow P val	0.000	
Hausman Chi	6.15	
Hausman P val	0.188	

Robust t-statistics in parentheses ** p<0.05

In the outcomes obtained from Table 7, the effect of financial structure decision on market value was examined, while price of share was used to measure market value. Considering the Hausman test, the outcomes for the influences of both short-term debts together with long-term debt ratios on share price were estimated using panel regression - random effect technique. The findings indicate that the long-term debt ratio exerts a significant positive influence on banks' share prices (t=2.891; p<0.05). It was deduced that a higher value of long-term debt leads to a higher market value of the banks, as reflected in share price. However, the outcome demonstrates that the impact of the short-term debt ratio on share price is positive but insignificant at the 5% level (t= 0.033; p>0.05). This reveals that short-term debt ratio has a negligible influence on the share price of sampled banks. The positive correlation between share price and long-term debt ratio, and short-term debt ratio suggests that a bank's market value, as indicated by share price, can be boosted by appropriately allocating long-term and short-term debts to equity in the market value of the bank. In the light of the level of significance, a higher proportion of long-term debt is recommended, as it is significant, whereas a lower proportion of short-term debt is advisable, given its insignificance. The established outcomes regarding the control variables show a positively significant influence between bank size and share price (t=3.440; p<0.05). This specifies that as deposit money banks grow in size, in term of their assets, their market value increases**,** as reflected in share price**.** However, bank age (t=-1.048; p>0.05) and bank revenue growth (t=-0.022; p>0.05) exhibit a negative but insignificant impact on the share price of Nigerian banks.

5. DISCUSSIONS

The results of the panel regression analysis indicate that the long-term debt-to-equity ratio has a positive and significant influence on both Tobin Q as well as share prices of quoted banks. Similarly, the short-term debt-to-equity ratio was found to have a positive and significant impact on Tobin's Q, though its effect on share prices was positive but insignificant. These findings suggest that the financial structure plays a critical role in determining the value of sampled banks. The outcomes found here aligns with the existing empirical studies (Ananda et al., 2023; Eberechukwu & Egbunike, 2024; Eklund & Lundgren, 2020; Murniati et al., 2019; Nwude & Anyalechi, 2018), which also conclude that a higher long-term debt-to-equity ratio enhances the market value of deposit money banks. Ajiboye et al. (2023) outcome disclosed that long debt ratio had a U-shaped (positive together with negative) connection with market value, indicating that long-term debt initially reduces market value but eventually increased the market value of the bank.

However, the results of this study contradict previous empirical literature that reported a negative impact of financial structure on firms' market value. Studies such as Andow and Wetsi (2018), Idolor and Omehe (2022), and Islam and Iqbal (2022) found that total debt, long-term debt, and short-term debt ratios had a negative and significant influence on the market value of

traded banks. Similarly, Ajiboye et al. (2023) reported that short-term debt had a linear negative but insignificant effect on market value.

Despite these perspectives, the outcome of this study align with the Trade-Off Theory, which posits that each bank should determine its optimal financial structure—whether by increasing or reducing debt—to achieve maximum efficiency. The results also support the Pecking Order Theory, which suggests that banks should prioritise internal financing first, followed by debt, and finally equity. From an economic standpoint, a high debt-to-equity ratio contributes to increased capitalisation, allowing banks to meet their debt commitments while leveraging debt to enhance equity returns and strategic growth. This financial positioning can attract more investors to invest in the bank, as they are primarily concerned with their return on investment.

6. CONCLUSIONS AND RECOMMENDATIONS

This study emphasised on how financial structure decision play a role that is essential to the improvement of the market value of Nigerian listed banks. The present study employed panel regression analyses to investigate two principal research objectives, all of which were designed to comprehend the influence of financial structure decision on the market value of deposit money banks that are listed in Nigeria. It was revealed that short-term debt and long-term debt-to-equity ratios had a positive and significant influence on Tobin Q. Additionally, it was revealed that long-term debt-to-equity ratio had a positive and significant effect on share price, while short-term debt-to-equity ratio exhibited a positive but insignificant influence on share price of the selected banks. Based on these findings, the study concludes that financial structure decisions play a crucial role in determining the market value of Nigerian listed deposit money banks.

To sustain bank stability, the study recommends that decisions on financial structure made by managers must be balanced, accurate, and optimally structured between debt and equity, as appropriate for each individual bank. Managers should also prioritise a higher proportion of long-term debt while maintaining a lower level of equity in the bank's financial structure.

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