FINANCIAL RISKS AND MARKET VALUE OF LISTED DEPOSIT MONEY BANKS IN NIGERIA: PANEL EVIDENCE

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DOI: https://doi.org/10.57233/ijamer.v2i2.34

Article History: Received: 23 May 2026 | **Revised:** 31 May 2026 | **Accepted:** 15 June 2026 | **Published:** 25 June 2026

How to Cite This Article
Onobruke, G. S., & Onyeke, A. A. (2026). Financial risks and market value of listed deposit money banks in Nigeria: Panel evidence. *International Journal of Accounting, Management and Economic Review, 2*(2). https://doi.org/10.57233/ijamer.v2i2.34

Abstract
Market value is stakeholders' a critical measure of financial performance and going of firm in the business world but it has been threatened by risks. The study examined effect of financial risks on the market value of listed deposit money banks (DMBs) in Nigeria using thirteen out of Fourteen listed DMBs on NGX selected through purposive sampling technique for the study period of 2011 to 2024. Ex-facto research design was adopted and secondary data were analysed with Panel regression model with total of 182 observations. The result revealed liquidity risk had positive insignificant effect on market value while both capital adequacy and credit risks had negative significant effect on market value of quoted banks. The study concluded that generally excessive risks impede on market value of banks and credit risk is more sensitive to market value reduction of banks. Risks are linked as capital adequacy and credit risks are influenced by bank marketability problem. It is recommended that CBN and FRCN should peg Matrix risk percentage level for liquidity, capital adequacy and credit risks at 10%, 8% and 2.5% and 6.7% overall risk ratio metric for banks with mandatory disclosure in the financial statements. Thus regular regulatory policy check and enforcement would control banks distress due to negative effect of risks on bank value.

Key Words: Financial risks, market value, risk management theory, quoted deposit money banks

1.0 Introduction

Market value remains a critical concern for stakeholders in the business world, particularly in the face of increasing economic uncertainty and competition. To maintain competitive and attract investments, firms must consistently enhance their operational performance to increase market value of firms. Strong performance through in crease in market value not only boosts the going concern of the firm value but also attracts investors by showcasing the company's potential for sustainable growth and profitability (Prasad et al., 2022). Thus, market value serves as an

indicator of managerial success concerning investment decisions made by investors. The decision to invest in a company often hinges on its perceived value.

The concept of firm value is a fundamental aspect of corporate finance and strategic management. It refers to the market value of a company, which is determined by the present value of its expected future cash flows. Market value is a critical measure that reflects the company's ability to generate economic profits and create wealth for its shareholders. Market value is often considered a proxy for a company's overall performance and success (Velte, 2022). It represents the market's perception of the firm's ability to generate future cash flows and the associated risks. The higher the firm value, the more valuable the company is perceived to be by investors and the market. Firm value is influenced by various factors, including the company's profitability, growth prospects, risk profile, and corporate governance practices (Handayani & Ibrani, 2023).

In this way, the value of a firm in investors' and creditors' view is very important that they are mostly used in selecting investments and providing credit for the firms. The increase in firm value which is the wealth maximization and rational objective of a firm is being threatened by macro and micro economic risks which is ever inherent in a business environment. The heightened negative risks effect on market value that has led to collapse of many firms with possible high market value especially in the risky banking industry. Increase I risk in the business environment is due to a volatile economic environment, fast growing economic landscape and economic meltdown; as such organisational risks effect analysis and management has become the most focused area of all businesses regardless of their size, nature and location (Saeidi, et al. 2020; Ben-Selma et al, 2013).

The banking sector is primarily faced by financial risks as it involve chance of financial losses arising from bank assets and it majorly comprises linked risks of liquidity, credit and capital adequacy risks. It is significance to banks safety and performance as Roy and Bandopadhyay (2021) stated that financial risks are influenced and affected directly by capital structure, credit arrangements and indirectly by other risks which include operating risks and liquidity risks. Risks is believed to determine the investment decisions and future prospects of an organization and a manager is constantly devising means to reduce risks of financial loss and business winding up (Holton, 2014; Ayeni & Emeka, 2021).

Credit risk is the major risk faced by banks because they channel their funds in the form of loans to the public as a stock on trade to make profit and enhance bank value. There are various reasons that make debtors not fulfill their obligations to the bank. Increase in loans and advance is a sign of better trade but loans assets management is very important for bank whose operations provide loan, because the bigger the receivables the greater the risk. If a bank is in high NPL conditions, it would increase other costs and liquidity risk, thus potentially causing bank losses.Babangida and Khan (2021) stated that higher the credit risk ratio is caused by NPL ratio due to poor credit policy, collateral, poor asset risk assessment as well compromise and it worsen the quality of loan, which causes the number of non-performing loans to increase, which can increase the likelihood of a bank being in trouble consequently lowering profit and market value

of the banks. Credit risk causes occurrence of losses of income resulting from financial market that reduces firm value by reducing firm assets and investment collapse (WahlStron, 2009).

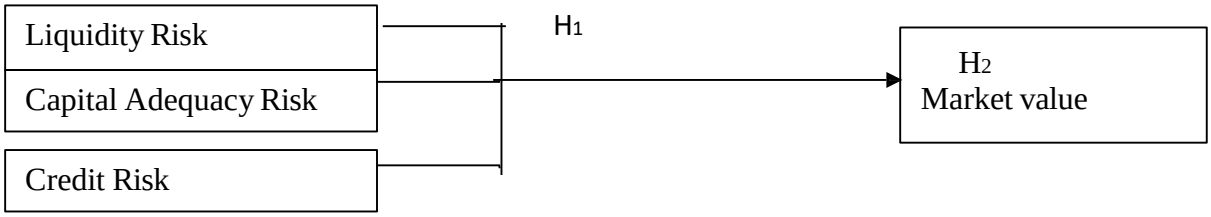
Bank risks are closely linked as increase in capital adequacy would reduce liquidity risk as there would more money to fund more loans and advance for profit mixamisation vice versa but higher credit risk and capital adequacy risk would reduce cashflow/earnings and increase liquidity risk with negative effect on bank market value. Ikpefan (2013) stated that not only almost every aspect of banking is either directly or indirectly influenced by the availability of capital also adequate capital base serves as a safety net for a variety of risks to which an institution is exposed in the course of its business and it enhance investors' confidence consequently increase bank value. Adequate capital absorbs possible losses and thus provides a basis for maintaining depositor confidence consequently reduces liquidity risk and increase market value of bank (Jasim, 2024; Anetor, et al. 2023).The motivation for the study is drawn from the fact that despite the risks and the recapitalision policies formulated in the banking sector in 2004 and 2010 the market value of quoted banks is still remains relatively low compare to previous years. This necessitated the study to examined effect of financial risks on market value in the post-organisation of 2011 to 2024 period of quoted deposit money banks in Nigeria.

Though they are existence of previous works in the area but this study different from the previous studies. Due to high inflation rate in the Nigeria economy and to avoid understating value of banks fixed assets the study further modified measurement of Tobin's-Q of market value formula by grossing up value of fixed assets with each year annual rate of inflation to reflect the precept of the proponent of the formula, Tobins James, 1969. The Tobin-Q formula had been necessarily adjusted to fit environmental use and exigency of time (Chung & Pruitt, 1994; Tahir & Razali, 2011).

Besides, prior Nigerian studies mainly focused on profitability and few studies on long-post capitalisation as measure of performance and with used of indiscriminate study period rather than market-based valuation of bank financial performance using significant banks post consolidation study period of 2011 to 2024. The study also measured all its variables in ratios and same metric.Thus, the study contributed to sharpening market valuation of banks performance with new method of measuring market value in an inflationary country with the use of Tobin-q. The study also focused on the primary banks risks and their effect on bank value.

Conceptual Framework

The research framework which show the pictorial association between the dependent and independent variables of the study is presented as follows:



The H_1 explained the direct relationship between the Effect risk (factors) and market value.

Market Value

Akpanuko and Etim, (2024) defined market value, as a benchmark of shareholders' wealth. They explained shareholders' wealth is the value that shareholders have in the company and it can also be referred to as shareholders' equity. This definition reflect the importance of investor's value place on company operation and demands for their shares as this what increase market value and shareholders wealth. Onobruke, et al. (2025) defined market defined as the market price of company assets. This is in line with Tobin-Q formula 1969 meaning and implications that; firm asset should earn minimum return of one unit on its asset that is the value of firm asset should be greater than its liability in future present value to be in good going concern. Evans and Evans (2007) viewed market value as the price that would be paid by a motivated buyer to a motivated seller after a property's exposure to a market place of equal access information. .This definition highlighted significant factor of market value increase of a firm which is the unarbitrary determination of firm share prices unlike other commodities price sky-rocked in inflationary period indiscriminately. It can also be looked at market value of a stock or bond as the current price at which that security is trading. Share price and market value are determined by forces of demand and supply of rational investors and firms management.

Indriawati et al., (2021) defined market value as an investor's evaluation of a firm's ability to manage its resources successfully. The firm's value is crucial because the greater the firm's worth, the more prosperous the shareholder would be. It is an economic metric that reflects a company's market value. Investors' assessments of a firm's management's capacity to foresee and adapt to potential changes in the company's economic environment impact the firm's market value.Summarily, market value is the rational monetary value of firm at a particular willing time. This value is a function of relevant information available before the buyer or a willing investors. Therefore, this value is influenced by the asymmetric of information and the efficient of the market

Financial Risks

The banking industry that trade on risk which is credit, risk does not necessarily connote all bad as it poses gains and chance of loss. Onobruke, et al. (2025) defined financial risk as possible chance of losses; and it is family of risk that include leverage risk, liquidity risk, capital adequacy risk, credit risk and capital structure losses Furthermore, Adebayo (2021) opined risk is related to opportunity; it is a part of business activity and cannot be avoided. This definition is

more business friendly compare to that of Adeyemo and Adebayo (2021). Risk does not all connotes bad situation because it is inside risks investors find gain, that is higher the risk, higher gain. It is now left for investors to determine their level of risk acceptance, risk adverse, Risk neutral or risk takers. As it is impossible to avoid all kinds of business risks because risks are embedded in opportunities as Nigeria business environment is full of general risks and risk factors. It is uncalculated and mismanaged uncertainty situation that is a risk.

Roy and Bandopadhyay (2021) stated that financial risks are influenced and affected directly by capital structure, credit arrangements and indirectly by other risks which include operating risks, corporate governance risk and systematic/macroeconomic risks. In the same direction Hopkin (2014) defined risk to be anything that can impact the fulfillment of the objectives. Thus, government policies, host community unrest, national economy instability and insecurity amount to risk to organisation. This is why risks are both systematic and unsystematic in nature. One of the corporate objectives is to maximize shareholders' wealth by increase in firm value and it is threaten by macro and micro-economic risks in Nigeria. Adeusi et al (2014) defined the concept of risk as something key to happening that may have an impact on the achievement of objectives and it includes risk as an opportunity as well as threat. This emphasized that risks are not to be feared as the fear of risk can manifest negative aspect of the risk but risk should be managed for success. The nature of banking business contents connotes and contain an environment of high risk and so risky in the sense that it is the only business in which the proportion of borrowed or deposited fund is far higher than the owners' equity. The banking business in comparison to other types of human endeavor is entirely exposed to risk.

Primary banking risks are linked and causal in nature as liquidity risk of poor cash level would create fear of bank failure and reduce customer's patronage thereby reducing bank value. So also, increase in credit risk would reduce financial inflow thereby creating liquidity risk and eroding of capital adequacy with overall causal effect of declining market value due to low trade, bad debts and depletion of bank assets. Capital adequacy risk exposes the banks to poor trading ability and shareholders to high chances of loosing their investments. The combined effect would influence shareholders to reduce their investment, trust and patronage consequently reducing bank value.Conclusively, risks are Micro and Macro-economic peril factors that threaten the achievement of business objectives. They are inherent business factors that determine the extent of trade-off between level of gains and loss.

Review of Previous Empirical Studies

Liquidity Risk and Market Value

Ayeni and Emeka (2021) investigated the effect of financial risks on the performance and firm value of manufacturing companies listed in Nigeria stock exchange in the study period of 2010. The ex-post factor research design, panel regression technique on the variable of liquidity risk, leverage and return on asset as the only dependent variable. The result of the study revealed that leverage risks, liquidity risk among other variables were having negative significant effect on performance. This finding implied that liquidity risk had adverse and significant effect on firm value; as liquidity increase, performance of company decreases. The study finding implies a disproportional increase revenue increase from risks taken to liquidity risk increase would reduce

market value of banks. Though, the study looked at sensitive area/industry in the economy but the lack statement of number of company for population and sample as well sampling method for the study could hinder comparison, verification and replication of the study. As a result, the findings cannot be inferred objectively.

In supporting work of Akpanuko and Etim (2024) examined the relationship between risk and value of listed banks in Nigeria where all 15 listed commercial banks in Nigeria between 2017 and 2022 were selected using census sampling technique. The secondary panel data of the banks were analysed with panel regression model methods to determine credit risk was proxy with ratios of non-performing loans to total loans and liquidity risk was proxy with total loans and advances divided by total customers' deposits to firm value. The result of the study found liquidity risk management to have significant positive relationship with market value of listed commercial banks in Nigeria. The study, the result is inferred that a commercial bank with a longer percentage of liquidity risk is more likely to experience greater financial performance and by extension higher market value. This also implies in this content of this study that higher risk would enhance value of firm of it is efficiently managed. Notwithstanding the key bank risks variable studied, the study used popular measurement of variables including Tobin-q market value measurement without consideration inflation effect on fixed assets. Thus, this modified Tobin-q to factor in inflationary peculiarity of Nigeria economy

In a different finding Mottoh and Sustrisno (2020) examined effect risk management on firm value; which include leverage, liquidity risk, profitability in Indonesia using 268 out 345 listed companies were selected for the study using purposeful sampling technique. The result showed a negative significance t-value at 0.776 meaning that it was insignificant. This means that liquidity did not influence on firm value. This mixed result of this study call for further inferences of the result and its formula as current asset over current liability can be interpreted to reflect many scenarios as follow; high ratios value could mean much unsold stocks and receivables as well means idle cash especially in the banking industry with special balance sheet features.

Thus, by implication may influence firm value and it could reduce sales, revenue and consequently impact firm value and financial performance negatively. Industry factors could also be inferred for result of this nature. Though the study focused on liquidity risk but did not pay attention to Nigerian factors and peculiarity which necessitated this study.Summarily, there are mixed effect of positive and negative findings of liquidity risks on market value that is due to operational, trading and environmental gap which necessitated further study of this nature.

Capital Adequacy Risk and Market Value

Jasim (2024) examined banks' capital adequacy impact on profitability and market value of listed using ten listed commercial banks in Iraq stock exchange between 2011 and 2018. The market value was proxied with stock prices, returns on assets and returns on equity for profitability in multiple panel regression models. The result revealed that capital adequacy had significance negative influence on market value and profit on different model equations. This indicates that increase in capital adequacy ratio reduces profit and market value of banks. The

implication of this finding is that increase in capital adequacy ratio is the reduction in capital adequacy and credit risk. It is a situation where much capital is being tie down. In a well-managed credit policy situation increase in capital adequacy risk would lead to increase in profit and market value of banks vice versa. Therefore, increase in capital adequacy risk would lead to increase in profit and market value. Though the study observed capital adequacy problem in banking operation but no solution policy was given thus the importance of this study.

The above study finding is line with Adeyemo and Adebayo (2021) definition of risk; that it is inside risk investors find profit. The study used more than five years study period as a follow up this used thirteen economic significant events years to enhance statistical results and economic relevance.

Contrarily, Anetor et al. (2021) investigated the effect of capital adequacy risk and liquidity risk on firm value of thirteen purposive selected listed deposit banks in Nigeria stock exchange within the period of 2010 and 2019. Ex-post facto research design and Partial Least Squares Structural Equation Modeling was used to test the postulated hypotheses effect of risks on market value of Tobin-Q formula. The findings revealed that capital adequacy risk and liquidity risk had a positive significant and non-significant positive effect on market value of deposit money banks in Nigeria to both dependent variables. The finding implication is that decrease in capital adequacy risk which invariably means increase in capital adequacy ratio influence market value positively. As it shows the safety level of the bank financing and deposit money. Though the study asserted the significant influence of capital adequacy and liquidity risks on market value but did not give operational reason for different effect on market value which is caused by trading and management differences as stated in this study.

Opekilede and Afolabi (2023) investigated the impact of capital adequacy risk on the financial performance of microfinance banks in Nigeria using seven purposive selected microfinance banks operating at the Central Bank of Nigeria's national category were selected and their annual financial reports in period of 2012 to 2022. The panel regression model res results revealed that both capital adequacy ratio and cost-to-asset ratio have a direct significance and significant relationship and credit risk ratio has an inverse and significant relationship with return on asset respectively. This credit risk is link to capital adequacy risk with further inverse effect on market value. The study did not give reason for the inverse relationship effect of risk which necessitated this that opined that the finding implies that different banks risks intend to have inverse effect on market value which is due to trading volume of assets to risk level.

Innocent, et al. (2019) examined the effect of capital adequacy and credit risk on the performance of fourteen commercial banks in Nigeria selected through census sampling technique between the study period of 2008 2017. The study descriptive research design analytical results showed that capital adequacy risk have significant positive effect on the bank's financial performance contrarily credit risk, and operating efficiency have negative and statistically significant effect on the financial performance of the banks in Nigeria. This finding indicate that decrease in capital adequacy risk symbolize more capital available as more loans and advance would be given out with intending more corresponding income which would

consequently increase market value of banks but credit risk is more sensitive in reducing bank value due fragile of Nigeria economy. Though the study is sensitive to banking risks but more recent study covering the post reorganization of the banking industry of this nature is necessary. There is mixed evidence from previous studies that capital adequacy risk has both positive and negative influence on market value which is inferred to be methodological and optimum operational gap which necessitated this study.

Credit Risk and Market Value

Situorang and Augustine (2019) analysed the influence of credit risk on firm value with performance as a mediating variable between 2013 and 2019. 28 listed banking firms from Indonesia Stock Exchange were selected through purposive sampling technique out of 35 banks December, 2018. Operational risk (CER) and credit risk (NPL) that were the regressed against Tobin's-q formula under panel regression and causal research design Equation Modelling. The result of the study revealed that credit risk has significant negative influence on firm value as mediating variable. In the same vein credit risk measured in the ratio of non-performing loans to total assets loan of the banks (NPL) had significant negative effect on firm value of commercial banks in Indonesia. This implied that credit risk decrease both performance and firm value. This was so because uncollected loan assets would reduce both fixed assets and current cash assets of the banks that would consequently reduce investment as well as revenue of the listed banks, everything be equal.Though the used multiple to examine effect of banks risks on market value but it lack Nigerian environmental factor; thus a similar study of this nature is necessitated.

In a supportive finding from work of Kayode, et al. (2015) examined the impact of credit risk on banks' performance in Nigeria. Panel estimation was carried out on the six selected banks using the random effect model framework. Findings from the study showed that credit risk is negatively and significantly related to bank performance, measured by return on assets (ROA) which means that an increased exposure to credit risk would reduce bank profitability.

Contrarily to the above study, Nwanna and Oguezue (2017) examined the nexus between credit management and profitability (ROA) of Deposit Money Banks (DMBs) in Nigeria context for the period of 2006 to 2015. Secondary data used were sourced from Central Bank of Nigeria Statistical Bulletins and the Annual Reports of all the existing DMBs studied. Multiple regression technique was used in analyzing the data. The study found that loans and advances and loan loss provision had positive and insignificant effect on profitability.Empirically, increase in credit risk generally reduce market value of banks as it is asserted to measure bank loss of assets and revenue inflow. This necessitated this study to examine the credit safety policies effect of banking reorganisation period covered by the study. Thus,finding evidence remains inconclusive, particularly for Nigeria's post-2011 reforms.

Theoretical Framework:

The Risk Management Theory

The risk management theory was propounded by several Scholars in evolutionary manner; they include Herber Simon (1947); Rober, H. and Bob, H. (1963); David, M. and Smith, W.S (1980). It was further developed by David, H. Pyle (1997). The thrust of the theory is that managers may

manipulate the bank financial asset position because they are likely to be concerned with overall risk and less concerned with specific risk pose by Portfolio components. Thus, the theory prioritise overall risks of the firm towards its safety and going concern than specific risk adverse or control. The crux of this theory is emphasis on the overall risk reduction of organisation not specific risk priority in organisation (Akpanuko and Etim, 2024; Bagh et al, 2022).

Thus, a particular high risk level can be accepted in organisation to avoid or transfer other risks with aim of reducing the overall risks of the organisation to enhance overall market value and going concern of the organisation. This explain that risk management is trade-off between different risks as well profitability with overall of higher wealth maximisation. Furthermore, the theory emphasize process of risks identifying, measuring, evaluating, selecting, minimizing and monitoring risks to increase firm value.

The study is supported by the stakeholder as propounded by Edward R. Freeman (1984). The theory stated that every organization, group or individual can influence or be influenced by the achievements of the organization's goals/risks as such organization itself should be considered as a grouping of stakeholders and the purpose of organization should be to manage their interests, needs and view-points of the society. Thus, managing and taking care all stakeholders interest is risk management and reduction that could influence firm value positively. An organization is child of the society so it must take care of component of the society for it to survive (ICAN 2019;Ishaku et al. 2021)).The study hypothesis were that various bank risks have no effect on market value of banks are justified and linked to both theories; that risks would not reduce bank value due to proper overall risk management and shareholders management organizational approach.

3.0 Methodology

The study employed Ex-Post Facto research design. This was for the fact that the research work is quantitative in nature; because the variables were secondary data and the events of study had already taken place. The population of this study is all the fourteen (14) quoted Deposit Money Banks (DMBs) in Nigerian Exchange Group (NGX) as at 31st December, 2024 but through purposive sampling technique thirteen (13) quoted DMBs that operated for fourteen years study from 2011 to 2024. The secondary data were extracted from the financial statement and Annual accounts of the banks and the share price were collected from both Annual of the banks and Nigeria Exchange Group website. The data of the variable were further proxied into ratios of same metric as indicated in the table below.

Variables Measurement: This study used the approximation of Tobin-Q-Ratio formula as a proxy of market value. Thus, the study adapted the formula as used in the works of Tyokoso et al. (2017); Alsmady et al. (2023) and modified it as follow to reflect the tenet of the Proponent idea:

MFV/Tobin's-Q = MVE + Total liabilities ÷ Book Value of Fixed Assets (1+R) + Current Assets.

Where: 1 is unit of one and R is Nigerian annual rate of inflation.

Justification of Tobin-q Formula Modification: The sanctity of market value in Tobin-q performance valuation is the measurement of current performance of a firm designated in yearly share price as the valuation of firm assets but due to the high inflation in Nigeria economy; book value of assets would not march current monetary valuation of firm designated in market value of share (MVE) as in the Tobin-q formula. Thus, to draw parity of mathematical variables and for the book value of assets to march market value of equity/assets; the book value of assets is grossed up with yearly annual inflation rate. The is to avoid over value of Tobin-q premium that is inherent I rhe standard Tobin-q and to factor Nigerian environmental inflationary effect on bank operation for statistical efficiency (Chung & Pruitt, 1994; Onobruke, el. ta. 2025).

Table 1:
Variable Measurement

Variable Name	Proxy	Measurement	Sources
Market Value	FVQ	Modified Tobins-Q formula of market value of shares over gross up value of fixed assets plus current assets	Tahir & Razali (2011) Chung & Pruitt (1994)
Liquidity Risk	LIR	Bank value of liquid assets to short term deposits of the bank	Akpanuko & Etim (2024); Zubairu (2014)
Capital Adequacy Risk	CARP	Shareholders capital to banks risk weighted assets/loans and advances	Jasim (2024); Opekilede & Afolabi (2023)
Credit Risk	CRR	Total value of non-performing loans to total loans	Jonathan & Michael (2018)

Source: Authors compilation, 2026.

It is worthy to note that all the variables / presume factors are in ratio measurement of 100% value to put all the variables measurement on the same level.

Model Specification

In order to empirically examine the effect of risks on market value of quoted Nigerian banks and the study adapted multiple linear regression models of Akpanuko and Etim (2024) as they are formulated as follows:

$$FVQ_{it} = B_0 + B_1, LIR_{it} + B_2CAR_{it} + B_3CRR_{it} + e_i$$

Where:

MFV/FVQ= Tobins-q modified market value of firm

$B_{0=}$ the constant or intercept

$B_{1=}$ is the regression coefficient or slope of the independent variables.

B_{1-} B_3 = Regression coefficient

it; is panel data effect function; i- unit of bank time and $e_{it=}$ the error term.

The time series cross-sectional data were analysed using Ordinary Least Multiple Regression (OLS) in a Panel regression model with the aid of E-View. This for fact panel data were used and OLS is an efficient estimator with the BLUE character for efficient result. Thus, Panel

regression model /OLS was used to examine the linear effect of independent variables on dependent variable. The study carried out pre and post diagnosis tests to determine efficiency of data and results as explained herein and the Huasman test indicated that Random effect had more significance general variability effect of the banks factors, therefore the study adopted Random effect model.

Panel Regression Result Analysis and Discussions

Based on the result of the Hausman test, this study accepts null hypotheses which states that Random effect is appropriate (see table 2 for the result of Hausman) test and Descriptive Statistics. This showed that the firms' general level effects is having more dominant risks influencing market value of quoted deposit money banks in Nigeria as measured in Modified Tobin-Q formula of 1969.

Descriptive Statistics as attached in table 3

H_0: Random effect is appropriate

H_1: Fixed effect is appropriate

TABLE 1- HAUSMAN TEST: Correlation Random Effects- Hausman Test

Table 2:

Hausman (1978) specification test

	Coefficient
Chi-square test value	5.994687
P-value	0.1119

Source: Authors compilation, 2026.

The Hausman table reveals P-vale coefficient of 0.1119, which is higher than 0.05 implying that Random effect is more appropriate

Table 3:

Descriptive Statistics

	MVQ	LIR	CAR	CRR
Mean	0.960147	0.210971	0.220309	0.121556
Median	0.945672	0.198101	0.262727	0.052568
Maximum	2.536072	0.51102	0.980999	6.7
Minimum	0.092107	0.019174	-5.045333	0.001495
Std.Dev.	0.238704	0.100115	0.569329	0.534707
Skewness	3.008913	0.807396	-6.366938	10.99255
Kurtosis	22.01388	3.894068	52.25227	130.585
Jarque-Bera.	3016.208	25.83574	19517.36	127106.4
Prob.	0	0.000002	0	0

Sum	174.7468	38.3967	39.87596	22.12313
Sum Sq	10.31328	1.814178	58.34447	51.74998
Observation	182	182	181	182

Source: Authors compilation, 2026.

The table two above revealed mean value of 0.96014, 0.210971, 0.220309 and 0.121556 respectively for MVQ, LIR, CAR and CRR with their corresponding standard deviation value of 0.23870, 0.100115, 0.569329 and 0.534707 respectively. The figures of the standards deviations are not higher than mean of each variable or not widely dispersed from the position of the mean, meaning the data are normally distributed even considering minimum and maximum values. This also reflect that the maximum and minimum values are normally distributed

. **Table 4**

Matrix correlations

	MVQ.	**LIR**	**CAR**	**CRR**
MVQ	1	-0.151187	-0.786284	-0.177244
LIR	-0.151187	1	-0.177244	-0.011497
CAR	-0.786284	0.339611	1	0.01765
CRR	-0.177244	-0.011497	0.01765	1

Source: Authors compilation, 2026.

The table presents the correlations matrix of the independent variables. It could observed that correlations among variables is between 0.786284 and 0.01765 which is not up to 1, that is no presence of correlation coefficient more than .78 as a result there is no problem of multicollinearity.

Table 5:

Variance Inflation Factor (VIF)

	Const	**LIR**	**CAR**	**CRR**	**Total**	**Mean**
VIF	NA	1.130763	1.130966	1.000658	3.2624	1.087
1/VIF	0.000621	0.012409	0.000385	0.000308		

Source: Authors compilation, 2026.

The Variance Inflation Factor (VIF) of (LIR, CAR & CRR) variables; showed VIF values ranged from 1.000 to 1.130, with mean VIF of 1.087 which is less than 10 the general benchmark for mutlticollearity. This indicated multicollinearity is absence or not significant in this model. Also, the 1/VIF which represents the tolerance level showed similar values pattern ranged from 0.000385 to 0.012409 which are less close to 1; mean variables are less correlated but far higher than 0 meaning no severe multicollinearity among variables.

Table 6:
Heteroskedasticity

Prob, (3)	0.2264

The Breush-Pagan-Godfrey test for Heteroskedasticity as shown in table above was performed on the residuals and the results showed prob. 0.2264 which are in excess of 5% or 0.05 which lead us to reject the presence of heteroskedasticity in the residual.

Table 7
Direct Random Effect Regression Results E-view Ouput 2013

Variable	Coef.	St. Err.	t-Statistics	Prob	Sig.
Constant	1.024583	0.032433	31.5909	0.0000	***
LIR	0.103027	0.128409	0.802339	0.4234	*
CAR	-0.352406	0.020454	-17.22942	0.0000	***
CRR	-0.072377	0.018274	-3.960732	0.0001	***

Root MSE	0.128048	R-squared	0.643867
Mean dependent var	0.491544	Adjust. R-sq	0.63783
S.D. dependent var	0.215077	S.E. of regression	0.129486
Sum squared resid	2.967711	F-statistic	106.6683
Durbin-Watson stat	2.443352	Prob(F-statistic)	0.0000
F-statistic	0.537769	Prob > chi2	0.6515

Source: Authors compilation, 2026.

Table 7 presents the results of Random Effects model. The result showed that the P-value of F-statistics is 0.0000 which is far less than 5%, this showed that the model is 100% fit and that the model is statistically significant as it implied that all the independent variables are statistically significant. The R-square value of 0.64 means that independent variables contributed 64% to the outcome of the dependent variables. It also indicated that 64 percent of the variation in market value of listed banks measured in adjusted Tobin-Q formula (FV) was caused by the direct risks effect of liquidity risk (LIR), capital adequacy risk (CAR) and credit risk. The adjusted R square of 0.62 /62% implied that any variations that could have occurred as a result of the introduction of additional independent variable are taken care of and could only influence the R square to the down point of .62%.

H_{01}: the null hypothesis are accepted that liquidity risk has no direct significant effect on market value of listed banks.

$H_{,2,\&3}$: the alternative hypotheses are accepted that capital adequacy risk and credit risk have direct significant effect on market value of listed banks.

Liquidity Risk and Market Value

The regression line shows that market value (MVQ) = 1.024583+ 0.103027LIR-0.352406CAR-0.072377CRR. It shows that for every unit increase in liquidity risk, market value (MVQ) increases by 0.10 unit. The p - value of 0.4234 is higher than t - value of 0.05; that is, it is insignificant at forty percent. This simply means that null hypothesis is accepted that liquidity risk of deposit money banks have no significant positive influence on the market value of quoted deposit money banks in the country.

Capital Adequacy Risk and Market Value-(MVQ) = 1.024583+ 0.103027LIR-0.352406CAR-0.072377CRR::The result regression line reveals that for every 1 unit increase in capital adequacy risk (CAR) market value of DMBs decrease by 0.35 unit. It also implies that the p-value of 0.0000 is far lower than t-value of 0.05; that means that capital adequacy risk has significance effect on market value at zero t-value as such the alternative hypothesis is accepted that capital adequacy risk influence market value of quoted negatively in Nigeria.

Credit Risk and Market Value: The regression line shows that market value (MVQ) = 1.024583+ 0.103027LIR-0.352406CAR-0.072377CRR. This portray that for every unit increase in credit risk, market value (MVQ) of DMBs decreases by 0.07 unit. The p - value of 0.0001 is lower than t - value of 0.05; that is, it is significant at zero percent. This simply means that the alternative hypothesis is accepted that credit risk of deposit money banks have no significant positive influence on the market value of quoted deposit money banks in Nigeria.

Discussion of Findings

Liquidity Risk and Market Value

Liquidity risk (LIR) measured in ratio of liquid assets over short term deposit had positive insignificant effect on market value therefore, the work aligned itself with the work of Motto and Sustrisno (2022) as against the work of Ayeni and Emeka (2021). By the content and context of risks or liquidity risk, increase in liquidity means decrease in liquidity risk as it is the inadequacy of fund to finance daily obligations of banks that constitute liquidity risk and this study result show positive significant value of liquidity risk measured in liquidity ratio to market value of quoted banks. Thus, the study result implied that decrease in liquidity risk has positive influence on the market value of bank but it does not have significance influence. The insignificance influence of this result it could be due to low rate of turn over of liquid asset, tied down cash level, unprofitable risk acceptance level and unadventurous of management leading to non corresponding inflow to enhance and significantly influence market value of banks.Therefore, liquidity risk occasioned by low risk level and idle cash would not influence market value of quoted banks in Nigeria. This finding is in line with concept of risk by Adeyemo and Adebayo (2021) that it is inside risk investors find profit.

Capital Adequacy Risk and Market Value

Capital adequacy risk (CAR) measured in the ratio of shareholders fund over weighted risky assets was found to have negative significant value on market value of quoted banks in Nigeria thus the study follow the work of Jasim (2024) as against the study of Innocent et al. (2019). By the variable affinity of measurement of capital adequacy risk, increase in capital adequacy ratio implies decrease in capital adequacy risk as it is reflect inadequacy of trade loans and advances necessary for operational demand of banks compare to the shareholders fund available.

Thus, capital adequacy risk is of two folds; inadequacy of shareholders fund to fund demand for loans and advances as well to absorbs losses; constitute a risk in one. And the inability of the banks to secure enough loans and advance to optimally utilize the shareholders fund resources available constitute a risk in another hand. Thus, the result of the study implies that decrease in capital adequacy risk reduces market value of bank as banks make profit from risk through trade in loans and advances. This is line with Risk Management Theory of (1997) posit that various risk factors should be traded off or managed for overall risk benefit and risk level of the firm.

It could also be professed that uninvested shareholders fund poses a risk that reduces bank value likewise the low ability of banks to lend and to recover loans and interests pose risks that reduce market value of bank. Thus, capital adequacy risk is linked to other risks of credit and liquidity. Therefore, capital adequacy risk influence market value of banks according its optimum risk level and operational efficiency of banks.

Credit Risk and Market Value

The study result reveal credit risk having negative significance effect on market value of quoted banks in Nigeria therefore the study align its finding with the study of Situorang and Augustine (2019) and against the study of Nwana and Oguezue (2017). The study show that increase in credit risk would lead to higher proportionate decrease in the market value of banks. It can be inferred from this finding that credit risk is more sensitive risk to bank survival and need less level of its risk tolerance as it causes liquidity and capital adequacy risk which induces causes bank failure than other risks. The negative effect of credit risk on market value is inferred that credit risk is marketability problem and risk signal, as it portray inability to realize principal and interest assets of the bank for trade continuity and going of the firm. Thus, credit risk is leakage of resources level of the bank. Therefore, excessive credit risk reduces market value of quoted banks and causes bank failures.

5.0 Conclusion and Recommendations

Generally excessive risk stifle market value of banks. Liquidity, capital adequacy and credit risks are casually linked, thus capital adequacy and credit risks are mostly influenced by bank marketability problem. Credit risk is most sensitive to banks failure and high credit risk arises from inability of banks to utilize available shareholders fund, collect loan principal and interest on banks assets. Contrarily, low liquidity risk reduces bank profit opportunity. Therefore, lack of optimum risk and effective risks management would lead to financial distress of banks.

Recommendations

The Federal Government through the CBN and FRCN should make regulations to peg Matrix risk level of percentage for principal risk of liquidity, capital adequacy and credit risks in the

Nigeria banks at 10%, 8% and 2.5% respectively and the overall risks matrix at 6.7%. The regulatory body/CBN should ensure regular monitoring of level of non-performing loans and enforce capital adequacy thresholds. The CBN should make a policy for addition of a risk reporting section and enforce complete risks disclosure in the financial statements of listed banks.

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