

Diversification and Financial Survival of Selected Deposit Money Banks in Nigeria

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DOI: <https://doi.org/10.51244/IJRSI.2026.1303000198>

Received: 25 March 2026; Accepted: 30 March 2026; Published: 15 April 2026

ABSTRACT

A stable financial sector efficiently allocates resources, manage financial risks and supports productive sectors of the economy for growth and development. Despite the contribution of the financial sector to the growth of the economy, deposit money banks are faced with declining capital adequacy ratio, asset quality ratio, management capacity ratio, earnings ratio and liquidity ratio. Extant literature showed that full integration of diversification into the bank operation can ensure effective financial survival. Several studies had examined how diversification affect financial survival but a few focused on income, asset and fund as proxies of diversification. This study examined the effect of diversification on financial survival of selected deposit money banks in Nigeria.

The study adopted *ex-post facto* research design. The population of the study comprised all the 19 authorised deposit money banks by Central Bank of Nigeria as at December 2023. Purposive sampling technique was used to select a sample of 15 authorised deposit money banks with the relevant data extracted from audited annual reports and accounts of the sampled banks for a period of 16 years (2008-2023). Reliability of data was premised on the certification of regulatory authorities and auditors. Data were analysed using descriptive and inferential (multiple linear regression) statistics at 5% level of significance.

The result showed that diversification measures had joint significant effect on management capacity ($Adj. R^2 = 0.06$, $F(5, 234) = 28.71$, $p < 0.05$), bank earnings ($Adj. R^2 = 0.03$, $F(5, 234) = 4.17$, $p < 0.05$) of selected deposit money banks in Nigeria.

The study concluded that diversification supports the financial survival of deposit money banks in Nigeria. The study recommended that the management of deposit money banks should strengthen the implementation of income, asset and fund diversification to drive financial survival.

Keywords: Asset diversification, Asset quality, Earning ratio, Capital adequacy, Income diversification, Liquidity ratio, Management capacity **Word Count:** 290

INTRODUCTION

The objective of deposit money banks, which act as an economic middleman between surplus and deficit units, are to increase the market value of the bank while also optimizing financial stability, shareholder wealth, and profitability. The profitability, soundness and stability of deposit money

banks is critical to the well-being of a country's general economy at large due to their significant roles in capital accumulation, firms' growth and economic advancement. The financial survival of deposit money banks generally relies on a variety of benchmarks and the accumulation of years of practical planning, valuable input, efficient and effective utilization of resources, and consistently optimal corporate performance.

The stability of the financial system is crucial for the growth and development of any economy, particularly in emerging markets like Nigeria. An effective financial system promotes the efficient allocation of resources, fosters investment, and stimulates economic growth by providing the infrastructure for financial transactions (Adeniyi & Igbatayo, 2021). However, Nigeria's financial system has frequently been unstable, as evidenced by financial market shocks, regulatory failures, exchange rate volatility, and banking sector crises. These structural

issues continue to pose challenges to the country's economic growth trajectory, raising doubts about the effectiveness of the Nigerian financial system in fostering sustainable development.

Isik and Uygur (2021) argue that high rate of commercial bank financial instability and bank failure do not limit to developing economies but also developed and emerging economies which adversely affected commercial banks primary roles of financial intermediation. Deposit money banks cannot carry out financial intermediary functions and contribute to economic activities without sound financial stability indicators such as capital adequacy ratio, asset quality ratio, management capacity, bank earnings and bank liquidity. However, Ojiegbe et al., (2023) opine that globally, achieving financial stability mechanisms by commercial banks have become greater challenge to managers which hinder sound financial intermediation towards economic functions.

Furthermore, the 2007-2009 global financial crises exposed numerous inefficiencies in the systems for economic management in almost all jurisdictions worldwide. These vulnerabilities were particularly noticeable in the financial services sector, which acted as the main conduit for the rapid and widespread transmission of the crises to every corner of the world. Consequently, the problems originating from subprime mortgages in the housing/mortgage sector had a cascading effect on the insurance business, deposit money institutions, and capital markets (Aroghene & Ikeora, 2022; Didigu et al., 2022). This incident quickly highlighted the deficiencies and shortcomings of the regulatory institutions responsible for overseeing different sectors of the financial system (Igbiosa & Ogiemudia, 2022). This sparked a discussion among Nigerians regarding the implementation of an efficient CBN regulation to prevent future regulatory failures in Africa financial sector stability.

In Nigeria, numerous reforms have been implemented by the Central Bank of Nigeria to ensure the financial stability of deposit money banks or commercial banks. Over the past thirty years, the Nigerian financial sector has gone through significant reforms and events, including the consolidation of commercial banks from 89 to 25 in 2005, followed by a global financial crisis that impacted Nigeria from 2007 to 2009. These events had a significant impact on deposit money banks in Nigeria, resulting in a decrease in the number of banks operating in the country.

The consequence of these experiences led to a reduction in their numbers which has resulted in the concentration of banks, making it an oligopolistic market of service providers doing almost the same thing as a financial intermediary (Fakunmoju, 2023). After that, the reform in the financial industry initiated in 2005 in Nigeria brought about the anticipation that there would be enhancement in the banking system operations, which would lead to a reduction in intermediation spreads and hence improvement in financial service access. However, the reverse is now the case.

For Nigeria banks to achieve financial stability and accomplish the ultimate objectives of diversification in all ramifications, there must exist proper supervision of the diversification activities involved. On the other hand, for some Banks (DMBs) in Nigeria, instead of several banking reforms to engender an improved banks' financial stability, it often leads to crisis and they continue to struggle to remain solvent, liquid and strive for survival despite the fact that they render more services than their traditional roles.

Instead of reforms to diminish threat faced by DMBs in Nigeria, the challenges of financial instability keep increasing that several of these banks continue to go into mergers and acquisition over and again (Jegade et al., 2024). Could it be that the ventures diversified into are not properly managed or diversification has no substantial effect on Banks' financial stability in Nigeria? This study investigated the combine effect of diversification strategies on the financial survival of deposit money banks in Nigeria.

Hypothesis of the study were formulated as follow:

H₀₁: Diversification has no significant effect on management capacity of DMBs in Nigeria

H₀₂: Diversification has no significant effect on bank earnings of DMBs in Nigeria

REVIEW OF EXTANT LITERATURE

Conceptual Review

Management Capability

Management capability refers to the knowledge, skills, and experience possessed and employed by individuals holding managerial roles as well as achieve cost effectiveness (Weber, 2024). Management capability is according to Lei et al. (2022) pivotal in achieving sustainable competitive cost advantage. The strength of the bank's management team in terms of technical skills, exposure and experience gathered through the years is an added advantage that guarantees the bank's success in the marketplace. Thus, it is true to mention that the success or failure of any organization is highly depending on the managerial capability as far as smooth running of the business affairs is concerned. Thus, quality managerial efficiency results in business success and vice versa are also true (Gautam, 2020).

The capacity in this sense manifests in the management's ability to utilize the resources aggressively to boost the income, utilize the facilities in the bank productively and reduce costs. It can be measured through maximization of shareholders wealth, total expenditure to total income, operating expenses to total and so on (Sarker 2006).

Fakunmoju et al., (2021) define the concept of bank management capability as whether a bank that is operating at the beginning of some pre-determined time is still operating at the end of that time period. Banks are the key institutions to mediate the funds flow in economy and their survival is linked with the economic health and financial stability (Cebula, 2010; Mare, 2015). Abou-El-Sood, (2016) posited that banks are also quite sensitive to the distress – instability of the banking sector can easily generate large financial and social costs.

According to Chiorazzo et al. (2018) a bank is identified and have management capability if it is still operating at the end of some measured period, while a bank that exits the market during that same time period is a 'non-survivor.' The survivorship concept the researchers explained makes no distinctions among the various avenues that a bank might use to exit the market; any avenue of exit indicates that the bank either did not or could not survive on its own. A financial failure (i.e., a bank that disappears due to insolvency or illiquidity) is treated no differently than a strategic failure (i.e., a bank that disappears as the target in a merger, acquisition or holding company reorganization). The formula for management capability is ratio of cost to total assets.

Bank Earnings

Fakunmoju et al. (2024) defined bank earning as an increase in the net income of deposit money banks. Earnings by a bank indicate the extent to which management is putting its assets into productive use, although some nonproductive use is normal because while plant and equipment may not directly generate income, they are necessary to support the operations of the bank. What is critical here is that a bank must ensure cost efficiency of running plant and equipment.

The major role of a bank is to take in funds, primarily through deposits and equity and reinvest differential earnings. In addition, a bank provides fee-based financial services that generate earnings in form of commission among others. It requires sound management to ensure that the optimum degree of expenditure is made that reflects the efficiency and quality of earnings (Fakunmoju et al., 2024). Azim and Nahar (2021) view bank earnings as the ability of the bank's management to use its capital resources to generate returns, which has resulted in bank expansion.

According to Fakunmoju et al. (2022), view bank earnings as the amount earned that can sustain banks operations and shield banks from future disasters. The power of the banks to earn more returns is crucial as in so doing the banks can ably fulfil their financial obligations expected by the capital providers as well as the increase future value of the banks in the sight of the public (Gautam, 2020). Thus, banks that earn huge returns stand a better chance of making more profit than their counterparts. Earning is the traditional parameter for measuring financial performance. Good and consistent earning builds public confidence in the bank and reduces

the likelihood of bankruptcy by absorbing the loan losses. In this study, bank earning was measure in terms of percentage of bank net income to average total assets.

Bank earnings ratio = Net interest income/Total assets

Diversification is a concept that involves firm into new lines of activities either by the process of internal expansion or by acquisition, or firm having more than one product and business activities in more than one industry (Ndungu, & Muturi, 2019). It is a form of growth strategy for a bank which seeks to increase profitability and stability through greater sales and revenue volume obtained from services, new products and new markets. A diversification strategy stands apart from the other three strategies such as merger and acquisition, internal start up, joint venture and requires a company to acquire new skills, new techniques and new facilities. Therefore, diversification is meant to be the riskiest of other strategies to pursue (Owino, 2021).

Markowitz's theory states that "Don't put all your eggs in one basket" as a diversification strategy. This concept aims to minimize risk for companies that will make investments using investments made by companies that are not focused on one allocation to reduce the possibility of risk occurrence (Ndungu & Muturi, 2019; Baroroh, 2023). Diversification is one of the strategies used by companies to deal with fierce competition and rapid market growth (Halim, 2019; Fadli, 2019). Diversification can increase systematic risk, but companies can benefit from increasing the value of the companies they invest in (Sittichobtham, 2019; Duho et al., 2020; Muharam & Bellinda, 2020; Benjakik & Habba, 2021), Trinugroho et al., 2018)

The modern understanding of diversification dates back to the work of Harry Markowitz in the 1950s. Diversification is a corporate strategy to enter into a new market or industry in which the business does not currently operate, while also creating a new product for that new market. It is a risk management strategy that mixes a wide variety of investments within a portfolio. In finance, diversification is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk. It is a technique that reduces risk by allocating investments among various financial instruments, industries, and other categories. The rationale behind this technique is that a portfolio consisting of different kinds of assets will on the average, yield higher long-term returns and lower the risk of any individual holdings or security. A common path towards diversification is to reduce risk or volatility by investing in a variety of assets.

The banking industry is the backbone of any economy and a diverse, profitable and stable banking system is the pre-requisite for strong and prosperous economies (Nisar et al., 2018). However, despite the paramount importance of the banking industry in Nigeria, banking concentration and the level of domestic credit is very low owing to increase in non-performing loans whose resultant effect is unprecedentedly increasing defaults in repayment of loans, poor banking practices, non-compliance to banking regulations, unstable economic and political conditions. Hence, the need for deposit money banks to reposition their operational strategy into alternative revenue source and shift their revenue mix by diversifying into related line of businesses other than intermediating funds between the surplus and deficit units.

Income Diversification

This is based on the division of banks' net operating income into two components: net interest income and net non-interest income (Radojicic & Marinkovic, 2023). Net interest income is the difference between interest income and interest expense. Net interest income is the result of performing traditional lending deposit activities. Net non-interest income is the difference between operating income and net interest income. $Div\ Income = 1 - [(\text{interest income}/\text{operating income})^2 + (\text{non-interest income}/\text{operating income})^2]$.

Asset Diversification

Asset diversification is based on the structure of earning assets, which includes loans, investments of all types, interest earning deposits (Radojicic & Marinkovic 2023). The need to use the asset diversification arises due to the shortcomings of income-based measure (Laeven & Levine, 2007): (1) lending operations can also bring income from fees, so income-based measure can overestimate the extent to which banks engage in non-lending activities and (2) accurate measurement of diversification of activities based on income is difficult due to the

unavailability of gross data on non-interest income. The share of loans in earning assets reflects the degree of banks' reliance on traditional lending operations. The second component of DIVassets is the share of other earning assets in total earning assets. Other earning assets are the difference between the value of earning assets and the value of loans. DIVassets as a measure of earning asset diversification for bank is obtained as follows:

$$\text{Div Asset} = 1 - [(\text{loans/earning assets})^2 + (\text{other earning assets/earning assets})^2]$$

Fund Diversification

Fresno and Hangraeni (2020) assert that diversification of funding increases the non-core liabilities held by a bank, strengthens the interconnectivity between banks, and amplifies the effects of an aggregate shock. Banks with less diversified funding tend to have a higher deposit ratio and are less likely to be financed by securities issues, which implies that they are less connected to other financial institutions (Kleinow et al., 2017).

In this study, fund diversification means spreading bank investments across various asset classes like stocks, bonds, real estate, and commodities, in different industries and geographical locations, to reduce the overall risk of your portfolio by ensuring that if one investment performs poorly, others may offset the loss; essentially, it is about "not putting all your eggs in one basket"

THEORETICAL REVIEW

Two theories were considered most relevant to this research work:

Resource based theory

The resource-based theory was propounded by Wernerfelt in 1984. It is regarded as one of the theories of strategic management that is widely quoted because of its practical relevance to contemporary practices. The key assumption of the resource based view is the exploration of a firm's resources geared towards gaining sustainable competitive advantage over other competing firms in the industry, the philosophical ideology of the theory proposes that competitive advantage can only be attained by the effective and efficient engagement of all resources available to all a firm (Olokundun et al., 2014).

The resource based theory contends that the possession of strategic resources provides an organization with a golden opportunity to develop competitive advantage over its rivals (Freeman et al., 2010). RBT provides an assessment of the resources that firm required to possess and dispose of a bundle of distinctive capabilities and competencies to be competitive. RBT allows an organization to leverage upon its inward capabilities which are rare and inimitable to achieve competitive edge over other organizations. The theory states that all organizations have in their possession several untapped resources with potential that makes them superior over competitors and also enables increased performance when properly combined.

This theory supports the coordination of tangible and intangible resources for higher performance and competitive advantage. Its major weakness is that many firms have limited bundle of strategic asset and capabilities and are easily copied by competitors (Al-Ansari, 2014). The major strengths of RBT is that it is the driving force in strategic management literature and complements the stakeholder theory in that firm competitiveness requires effective management of both organizational resources and stakeholder theory relation (Freeman et al., 2010). Resource based rationales apply well to diversification in that diversification has been shown to influence performance. Anh (2022) opined that diversification index has positive influences on the bank's operating efficiency both before and after risk adjustment. Resources of an organization both tangible and intangible can be diversified to optimize organizational profitability and stability. Diversification in the banking industry can create value for shareholders (Ajao & Kokumo-Oyakhire, 2021).

Stakeholder theory

The word "stakeholder", the way we now use it, first appeared in an internal memorandum at the Stanford Research Institute (now SRI International, Inc.), in 1963. The term was meant to challenge the notion that stockholders are the only group to whom management need be responsive³. By the late 1970's and early 1980's

scholars and practitioners were working to develop management theories to help explain management problems that involved high levels of uncertainty and change. Much of the management vocabulary that had previously developed under the influence of Weberian bureaucratic theory assumed that organizations were in relatively stable environments. In addition, little attention, since Barnard (1938), had been paid to the ethical aspects of business or management, and management education was embedded in a search for theories that allowed more certainty, prediction and behavioral control. It was in this environment that Freeman (1984) suggested that managers apply a vocabulary based on the “stakeholder” concept.

The provision of resources for a corporation as the foremost objective of its board member is the thrust of the stakeholder theory. Therefore, the Board of Directors of a corporation has to be represented by all the parties that are crucial to the corporation’s success. The outcome of this is the corporation’s ability to arrive at a consensus among all crucial stakeholders, creating the cohesion needed to move the corporation forward and avoiding any inimical interest clash (Tricker, 2009 cited in Osho & Ogodor,2018). Hence, the Board has the directive to assure that there is effective corporate governance within the corporation by having representations from the various stakeholders groups: shareholders, the national community, staff members, suppliers and customers.

THEORETICAL FRAMEWORK

Empirical studies related to diversification have developed diverse academic literature including different theoretical perspective. These perspectives support the determinant of diversification. Among all these theories, the stakeholder theory and resource based theory are considered to be the most profound. However, the theory that is underpinning this study is stakeholder theory. Various stakeholders seeking for financial stability, especially the shareholders seeking for wealth maximization and enhanced firm value. According to Ho Li and Gong (2021), the theory is conceptualized as the nexus of a set of contractual relationship among different stakeholders whose common interest and enterprise must conscientiously represent. The main reason for this is that diversification is a multi-dimensional concept which deals with many proxies like fund, income, assets, product of deposit money bank activities for efficient and effective bank financial performance. This ideology is in line with the stakeholders theory that is equally multi-dimensional in the sense that it advocates that corporate entities should engage in an improved stakeholders’ relations for the achievement of financial performance(Folashade et al., 2016: Lee et al .,2009)

Empirical Review

Muchiri and Omwenga (2023) examined the impact of liquidity capacity and financial performance of commercial banks in Kenya. The subject matter was to test the relational impact of net stable funding, liquidity coverage, liquidity gap, non-performing loans, and moderating variable of bank competition on the performance deposit money. The theoretical framework adopted in this inquiry includes the anticipated income theory and the shift ability theory of liquidity. The study employed the explanatory research design which allowed the usage of panel regression analysis (random effect, fixed effect, Pooled effect, and Hausman test). The findings revealed that net stable funding and liquidity coverage have s significant positive impact on the return on equity and assets of selected banks in Kenya while for non-performing loans, the liquidity gap has a negative significant effect on the return on equity and assets in Kenya banks in Nigeria.

Omeni and George (2021) investigate portfolio diversification and performance of deposit money banks: Analyzing the Nigerian Banking Industry. The Augmented Dickey Fuller (ADF) test option was used and the study discovered that at short run, treasury bills, and ordinary shares are negatively related and not significantly related to return on equity while investments in subsidiaries and foreign balances outside Nigeria are positively related to return on equity of DMBs at most lag periods. Tran et al. (2023) examined income diversification, market structure and bank stability: A Cross-country Analysis. GMM estimator is used in this study and found that diversified banks are more stable in a more concentrated environment compared to those on a less concentrated market.

Manifita et al. (2024) examined the influence of income diversification and external risk on financial performance and stock prices of banks listed on the Indonesia stock exchange using ex-post facto research design

and with 23 banking companies listed on the Indonesia Stock Exchange. The study adopted structural equation model (SEM) and the findings are as follows; Income diversification has a direct negative effect on the financial performance of banking performance and income diversification has a direct positive effect on stock prices.

Hassan and Adegbe (2020) investigated the relationship between financial leverage and financial stability of quoted manufacturing companies in Nigeria. The study employed ex-post facto research design and purposively used 13 companies as the sample size out of the 99 research population. Financial stability was proxied by cash flow from operation, ROE, ROA and Liquidity ratio; while debt-equity ratio was used to represent financial leverage. The study revealed that financial leverage significantly affected financial stability of quoted manufacturing companies of Nigeria.

Wahyuningtias, and Kusumawardhani, (2024) studied the moderating effect of income Diversification on intellectual capital and company performance, a case study of banking in Indonesia. The researchers adopted expo facto research design, using 38 banks that are listed on the Indonesia stock exchange (BEI) out of 47 banks were chosen as samples for the study. Data analyses were done using multiple regression methods. The findings of the study revealed that intellectual capital has a positive effect on company performance and that income diversification has a moderate effect on intellectual capital and company performance

Chinoda and Kapingura (2023) examined the Impact of Digital Financial Inclusion and Bank Competition on Bank Stability in Sub-Saharan Africa. The study used the two-step System Generalised Method of Moments. This study builds on a new measure of digital financial inclusion to examine the impact of digital financial inclusion and bank competition on bank stability in Sub-Saharan Africa for the period 2014 to 2020. The study findings revealed that digital financial inclusion has a significant positive relationship with bank stability (z-score) and a negative relationship with non-performing loans. The study also found a significant negative effect of bank competition (HHI) on bank stability in line with the competition fragility view.

Radojičić and Marinković (2023) assessed the Impact of Income and Assets Diversification on Bank Performance in Serbia. The employed multiple regression on panel data set of 22 operating banks in Serbia in the time period spanning the last 15 reporting years. The study found a positive influence of the degree of diversification, measured both by income composition and earning assets composition indicators, on the levels and stability of the banks' return on equity. The study further tested whether the presence of COVID-19 crisis challenged the observed regularity and confirmed that it has had tendency to reverse the long-term relationship.

Abbas and Ali (2022) reported that asset diversification as well as funding diversification reduces the risks of banks. They also found that income diversification is positively related to the banks' risk-taking. Thus, income diversification contributes to the instability of banks whereas asset and funding diversification induce bank stability. This investigates the effect of conventional capital ratio, risk-based capital ratio, and capital buffer ratio on commercial bank risk-taking over the period from 2002 to 2019 using a two-step GMM method. The finding reveals that there is a positive relationship between traditional capital ratio and risk-taking for the full sample results, which is supported by the regulatory hypothesis. The results are same across various categories based on capitalization and liquidity. Whereas the relationship is negative when capital is measured through risk-based capital ratio and capital buffer, the results are in line with the moral hazard hypothesis.

Adem (2023) investigated Impact of income diversification on bank stability: a cross-country analysis. The study utilised longitudinal financial data. The finding also suggests that political institutions have substantial, direct implications that are positively related to bank fragility. Macroeconomic factors such as gross domestic product (GDP) growth and inflation also influenced bank stability.

Adegbe et al (2023) investigated the effect of Internationalization on Economic Value-Added in Deposit Money Banks in Selected African Countries. The study adopted an expo facto research design. The population consisted of seventy-one Deposit Money Banks (DMBs) in selected African countries of South Africa, Kenya, and Nigeria as of 31 December 2021. Seventeen DMBs were selected using a purposive sampling technique. Data were extracted from published financial statements of selected DMBs. The validity and reliability of the data were premised on the statutory audit of the financial statements. Descriptive and inferential (multiple regression) statistics were used to analyze the data. The study strongly established that internationalization had a significant

positive effect on economic value-added in DMBs in selected African countries.

Uniamikogbo et al., (2020) accessed the Income Diversification and Financial Performance of Selected Deposit Money Banks in Nigeria. The study used ex-post facto research design. The purposive sampling technique was used to select the 8 banks classified by Central Bank of Nigeria to be Domestic Systematically Important Banks in Nigeria. Data collected from the annual reports and the Nigerian Stock Exchange website for a period 2008-2018 was used. Findings showed that while commission income has a significant positive effect on Tobin’s Q ratio of DMBs, foreign exchange income and firm age each have a significant negative effect on Tobin’s Q ratio of DMBs in Nigeria.

METHODOLOGY

This study adopted an ex-post facto research design. The population of the study was 19 deposit money banks which comprised 5 international and 14 national categorization banks listed by Nigeria Exchange Limited to operate in Nigeria as at 31 December, 2023. 15 Deposit money Banks comprised of 7 international banks and 8 national categorization banks were purposively selected as the sample size for the study because of availability of data. Secondary data were extracted from the published financial statements of DMBs for the period of 16 years (2008-2023).

The audited financial statements of the selected listed deposit money banks formed the source from where the data were extracted and the researcher believed that the financial statements were prepared by the banks in line with the applicable reporting framework, and audited by the respective banks ‘statutory auditors as approved by the security exchange commission (SEC), and the Nigeria exchange group (NEG).

The effect of diversification on financial survival of selected deposit money banks in Nigeria was investigated using regression analysis conducted through the use of statistical software (Strata) at 5% level of significance.

The study carried out data analysis using descriptive and inferential statistics. Adjusted R² enhanced the study in measuring the effect of the independent variable (Diversification) on the proxies of dependent variables. The model used is as follows:

$$MC_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 AD_{it} + \beta_3 FD_{it} + \beta_4 BS_{it} + \beta_5 BAS_{it} + \partial_t + u_{it} \quad \text{Model 1}$$

$$BE_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 AD_{it} + \beta_3 FD_{it} + \beta_4 BS_{it} + \beta_5 BAS_{it} + \partial_t + u_{it} \quad \text{Model 2}$$

Where:

MC= Management Capacity

BL= Bank Earnings

ID= Income Diversification

FD =Fund Diversification

BS= Board size

BAS= Bank size

ANALYSIS, RESULT AND DISCUSSION

Descriptive Statistics

Variables	Obs	Mean	Std. Dev.	Min	Max
CAR	240	.4109167	.6568143	.01	3.91
AQ	240	.4402917	.8258123	0	3.47

MC	240	.7085	.6525895	.05	3.47
BE	240	.7855	1.695983	.01	23.16
LQR	240	.6012083	1.00637	0	5.26
CM	240	6.36125	4.201544	.51	33.29
ID	240	2.160823	2.227978	.006	13.57
AD	240	1.836667	2.841654	.01	21.11
FD	240	1.954208	3.275529	0	17.69
BS	240	13.55	2.775717	9	20
BAS	240	16.95303	1.814347	10.44372	19.85795

Table 1: Descriptive statistics

Source: Author’s Computation (2026)

The descriptive analysis outcome in table 1 provides a summary of the data for each of the variables in the dataset. The dataset consists of 240 observations for the period from 2009 to 2023. The variables in the dataset include, capital adequacy ratio (CAR), Asset quality (AQ), management capacity (MC), bank earning (BE), liquidity ratio (LQR), capital mix (CM), income diversification (ID), asset diversification (AD), fund diversification (FD), bank size (BS) and board size (BAS). Starting with the management capacity ratio (MC), the total loans into total deposit ratio has a mean value of 0.7085 with a standard deviation of 0.6525. The minimum value is 0.05, while the maximum is 3.47. These figures indicate that the management capacity recorded in the financial statements of the sampled banks’ exhibit moderate dispersion around the mean. Bank earnings (BE), has an average value of 0.7855 with a standard deviation of 1.695. The values range from 0.01 to 23.16, suggesting high means and relatively small dispersion moderate variability in bank earnings across deposit money banks.

Regression Analysis

The regression analysis result of the effect of diversification on financial survival of deposit money banks in Nigeria are as shown in the table below: Regression result of model 1

Model 1				
Variable	Coeff	Std. Err	T-Stat	Prob
ID	-.0555229	.0149194	-3.72	0.002
AD	-.031833	.0076483	-4.16	0.001
FD	-.0066662	.0088726	-0.75	0.464
BS	-.0231585	.0158524	-1.46	0.165
BAS	.0511093	.022391	2.28	0.037
Cons	.3473089	.4102162	0.85	0.410
F-Stat/Wald Stat (Prob)	28.71 (0.0000)			
Adjusted R-Squared	0.0660			
Hausman Test	chi ² ₍₆₎ = 1.92 (0.8603)			
Degree of Freedom	F(5, 234)			
Testparm Test/LM Test	F(15, 205) = 1098.45 (0.0000)			
Heteroskedasticity Test	chi ² ₍₁₎ = 6.13 (0.0133)			
Autocorrelation Test	F _(1, 14) = 18.999 (0.0007)			
Cross section independence test	-1.604 (0.474)			

Source: Author's Computation (2026)

Regression result of model 2

Model 2				
Variable	Coeff	Std. Err	T-Stat	Prob
ID	-.0897147	.0294541	-3.05	0.008
AD	-.0365962	.0238337	-1.54	0.145
FD	-.0140474	.0214346	-0.66	0.522
BS	-.0075079	.0213756	-0.35	0.730
BAS	-.0899406	.0570821	-1.58	0.136
Cons	2.700523	1.115333	2.42	0.029
F-Stat/Wald Stat (Prob)	4.17 (0.0142)			
Adjusted R-Squared	0.0332			
Hausman Test	chi ² ₍₆₎ = 2.689 (0.7477)			
Degree of Freedom	F(5, 234)			
Testparm Test/LM Test	chibar2(01) = 1098.45 (0.0000)			
Heteroskedasticity Test	chi ² ₍₁₎ = 140.60 (0.0000)			
Autocorrelation Test	F(1, 14) = 8.636 (0.0108)			
Cross section independence test	-1.534 (0.874)			

Source: Author's Computation (2026)

Model

$$MC_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 AD_{it} + \beta_3 FD_{it} + \beta_4 BS_{it} + \beta_5 BAS_{it} + \mu_{it} \dots \text{model 1}$$

$$BE_{it} = \beta_0 + \beta_1 ID_{it} + \beta_2 AD_{it} + \beta_3 FD_{it} + \beta_4 BS_{it} + \beta_5 BAS_{it} + \mu_{it} \dots \text{model 2}$$

interpretation

model 1

$$MC_{it} = \beta_0 - 0.056ID_{it} - 0.0318AD_{it} - 0.007FD_{it} - 0.023BS_{it} + 0.051BAS_{it} + \mu_{it} \dots \text{Model 1 restated}$$

Table 2 shows the regression analysis of how all proxies of diversification strategies affects management capacity (MC). The probability of the T-test was used in determining the statistical significance of the effect of each proxy of diversification strategies on management capacity (MC) of the selected deposit money bank (DMBs) at 5% significance level. The result shows that assets diversification (AD), income diversification (ID) and bank size (BS) have a probability value of less than the 5%, which is the chosen level of significance for this study. This implies that three proxy significantly affect the management capacity (MC) of the selected deposit money bank at the significance level of 5 percent.

The proportion and direction of the effect of each of the proxies were estimated using both the signs and estimates of the coefficient. The results indicate that four of the proxies of diversification strategies that is income diversification (ID), Assets diversification (AD) and funds diversification (FD) as well as the control variables board size (BS)) exert a negative effect on the management capacity (MC) of the selected DMBs, with coefficient value of -0.0555, -0.0318, -0.0066 and -0.02315 respectively, while the other control variable (Bank Size (BAS))

exert a positive effect (0.051) on management capacity (MC). The Adj R^2 is 0.066 which showed that the variation of diversification in financial stability is 6.66 % while the balance of 93.4% represent other factors not considered in this study. This means that diversification factors explains only a small portion of financial stability.

At the 5% level of significance adopted for this study and degree of freedom F (5, 234), the result of the F-statistics showed a probability value of 0.000 which is less than the 5%. This implies the rejection of the null hypothesis for model one, which states that “There is no significant effect of diversification strategies on management capacity ratio of DMBs in Nigeria”, thus the study concluded that diversification strategies significantly affect management capacity (MC) of DMBs in Nigeria.

Model 2

$BE_{it} = \beta_0 - 0.089ID_{it} - 0.036AD_{it} - 0.014FD_{it} - 0.075BS_{it} + 0.089BAS_{it} + \mu_{it}$...Model2 restated

Table 2, shows the regression analysis of how all proxies of diversification strategies affects bank earnings (BE). The probability of the T-test was used in determining the statistical significance of the effect of each proxy of diversification strategies on bank earnings (BE) of selected deposit money bank (DMBs) at 5% significance level. The result shows that only one proxy assets diversification (AD) has a probability value of less than the 5%, which is the chosen level of significance for this study. This implies that only this proxy significantly affects the bank earnings (BE) of the selected deposit money bank at the significance level of 5 percent.

Income Diversification (ID): The coefficient for ID is -0.0897, with a standard error of 0.0294 and a t-statistic of -1.66. The associated p-value of 0.008 suggests that ID has a statistically significant effect on bank earnings. This implies that increased in income diversification influences bank earnings of deposit money banks in Nigeria.

Asset Diversification (AD): The coefficient for asset diversification is -0.0365, with a p-value of 0.145. This suggests a significant negative relationship between asset diversification and banks earnings. The results suggest that variations in asset diversification does not significantly influence banks earnings among deposit money banks in Nigeria. This further means that increase in asset diversification lead to decrease in financial stability.

Fund Diversification (FD): The coefficient for fund diversification is -0.0014, with a p-value of 0.522. While the coefficient is negative, indicating that an increase in fund diversification may result to decrease in financial stability of deposit money banks in Nigeria.

Board Size (BS): The coefficient of board size is -0.0075 (p = 0.730), indicating a weak and statistically insignificant relationship with banks earnings. This finding suggests that variations in board size are not a major determinant of financial stability within the sampled deposit money bank.

Bank Size (BAS): The coefficient for bank size is -0.0899, with a p-value of 0.136. This suggests that bank size has a negative association with bank earnings, the effect is not statistically significant. The increase in bank size may lead to decrease in financial stability of deposit money Banks in Nigeria.

The Adj R^2 is 0.0332 which showed that the variation of diversification in financial stability is 3.32 % while the balance of 96.68% represent other factors not considered in this study. This means that diversification explains only a small portion of financial stability.

At the 5% level of significance adopted for this study and degree of freedom F (5, 234), the result of the F-statistics showed a probability value of 0.0142 which is less than the 5%. This implies the rejection of the null hypothesis for model two, which states that “There is no significant effect of diversification strategies on banks’ earnings of DMBs in Nigeria”, thus the study concludes that diversification strategies significantly affect banks earnings (BE) of DMBs in Nigeria

DISCUSSION OF FINDINGS

Model 1: The model investigated the effect of diversification on management capacity of selected deposit money banks in Nigeria. Consequent to analysis conducted, the result were mixed: while each of the explanatory variables income diversification (ID), asset diversification (AD), and fund diversification (FD), bank size exhibited negative effects. However only board size exhibited positive effect. Income diversification, Asset diversification and board size revealed significant effects while fund diversification and board size revealed insignificant effects. However, the joint statistics of the combined explanatory variables showed that diversification had a significant positive effect on management capacity of deposit money banks in Nigeria.

Model 2: The model investigated the effect of diversification on bank earnings of selected deposit money banks in Nigeria. On the analysis conducted, the study reported mixed results. Income diversification (ID), asset diversification (AD), fund diversification, bank size (BAS) and board size (BS) showed negative effect. Only income diversification was significant while asset diversification, fund diversification, bank size and board size revealed insignificant effects. However, the joint statistics of the combined explanatory variables revealed that diversification has significant positive effect on bank earnings and this results is consistent with some previous studies, Adesina (2021), Redojac and Marinlovic (2023), Liang et al (2020) and Akinroye et al (2023). On the contrary, some other studies had negative effect, Egbule et al (2023), Ajao and Kikelomo (2021), Maltonado et al (2022).

Implication of findings

Implication for Regulators

The findings in this study confirm that there is significant relationship between the main objective of the study which investigated the relationship between diversification financial stability of deposit money banks in Nigeria, therefore polices to enhance effective and efficient monitoring of financial stability of the deposit money banks in Nigeria.

Implication for Bank management

This study covers the banking sector in the economy of Nigeria, due to the importance of the sector to the economic development, this coverage is imperative for the entities who are after good governance and maximum performance, the study provides policy direction for the management of deposit money bank on the benefits associated with the implementation of the effective diversification in their companies. It is important and clear to all deposit money banks that diversification mechanism is an important toll to monitor and control stability associated with their operations.

Implication for Policy makers

The findings of this study would provide managers and practitioners with useful aspects of diversification strategies to improve financial stability. Diversification significantly affects capital adequacy ratio of deposit money banks in Nigeria. The findings would be useful for policy makers and regulators in promoting diversification strategies which would ultimately lead to financial stability in Nigeria.

CONCLUSION AND RECOMMENDATIONS

This study examined the effect of diversification on financial survival of selected deposit money banks in Nigeria, the effect of the independent variables (income diversification, asset diversification, fund diversification) and controlling variable (board size and bank size) on the dependent variable were established. Based on the results of the F-statistics in each of the models which showed positive significant effects, the study strongly established that diversification had a positive significant effect on financial survival of deposit money banks in Nigeria.

In consideration of the findings of the study, the study recommend that the management of deposit money banks in Nigeria should reshape their institution environment through legislative reform to enhance the conditions for economic development and growth. This should involve making sure that corporate entity in Nigeria include diversification strategies in the strategic business model of their organisation. Also, management should abide by the industry norms when developing their diversification policies so as to conform and enhance the already established norms rather than to go against it.

The management of deposit money banks in Nigeria should put in place qualified management team who can make positive change and improve the capacity of management teams. The study recommends that the management of deposit money banks in Nigeria should through regulatory authorities and Basel committee of bank supervision formulate and implement relevant diversification strategies that uphold the desired financial performance and avoid overreliance on interest on deposit.

The study recommends that management of deposit money banks as a matter of necessity should put in place more strategies to support the existing strategies in the area of diversification and implementation.

Contribution to Future Research

To Concept: This study has developed conceptual frame work which is peculiar to this study and being a new development to concepts of diversification and bank stability in deposit money banks. The study has developed a forecasting regression model that is unique to this study in establishing probability of future relationship between diversification and financial stability of deposit money banks.

To Empiric: The study came up with models that would be useful to researchers in the area of generating quantitative accounting figures from companies financial statements to proxy of diversification strategies. The findings of this study have added to the growing literature in Nigeria on the connection between diversification strategies and financial stability. Within the framework of stakeholder theory. The theory advocate multi-dimensional conceptualization of nexus of a set of conceptual relationships among different stakeholders whose common interest must represent.

To Theory: This study contributed to the body of knowledge in establishing a significant relationship between diversification strategies and financial stability of selected deposit money banks in Nigeria, within the framework of stakeholder theory. The theory advocate multi-dimensional conceptualization of nexus of a set of conceptual relationships among different stakeholders whose common interest must represent.

To Policy: The policy makers will find this work useful in formulation of new policy settings and for monitoring compliance with existing policies, especially in policies relating to diversification of deposit money banks in Nigeria.

To Accounting Practice: The accounting practice will find this work useful by adopting or adapting the models developed in this research work to predict future financial stability and major contribution to accounting practice as they will assist in accurate forecasting.

REFERENCES

1. Abbas, F., & Ali, S. (2022). Dynamics of diversification and banks' risk-taking and stability: Empirical analysis of commercial banks. *Managerial and Decision Economics*, 43(4), 1–21. <https://doi.org/10.1002/mde.3434>
2. Adegbe, F.F., Ajibade, A.T. & Ebe, C.O. (2023). Internationalization and economic value-added in deposit money banks in selected African countries. *The International Journal of Business & Management*. 11(4), 45-57.
3. Adem, M. (2022). Impact of diversification on bank stability: Evidence from emerging and developing countries. *Discrete Dynamics in Nature and Society*, 2022. <https://doi.org/10.1155/2022/7200725>
4. Adeniyi, F., & Igbatayo, S. (2021). Financial system reforms and economic growth in Nigeria: An empirical analysis. *Journal of Economic Studies*, 49(2), 345-367. <https://doi.org/10.1108/JES-10-2021-0432>

5. Ajao, M. G., & Kokumo-Oyakhire, G. A. (2021). Corporate diversification and financial performance of conglomerate firms in Nigeria. *Journal of Business Studies and Management Review*, 5(1), 91–101. <https://doi.org/10.22437/jbsmr.v5i1.16665>
6. Al-ansari, Y. D. Y. (2014). Innovation practices as a path to business growth performance: A study of small and medium sized firms in the emerging UAC market (Southern cross University).
7. Anh, T. T. L. (2022). Impacts of Diversification on Operational Efficiency of Vietnam Commercial Bank. *Proceedings of the International Conference on Research in Management & Technovation*, 28, 55–61. <https://doi.org/10.15439/2021km88>
8. Aroghene, K. G. (2022). effect of non-performing loans (NPLS), Capital Adequacy (CA) and Corporate Governance (CG) On Bank stability in Nigeria. 4(4), 180–192. <https://doi.org/10.51594/farj.v4i4.400.Business>, 10(1), 65-78.
9. Baroroh, H. (2023). Activity diversification, performance, and profitability in Islamic Banking. *Jurnal Ilmiah Ekonomi Islam*, 9(2), 1920. <https://doi.org/10.29040/jiei.v9i2.809>
10. Benjakik, S., & Habba, B. (2021). Income diversification and bank performance: Does bank size matter? Empirical evidence from African banking sector'. *Research Journal of Finance and Accounting* [Preprint]. Available at: <https://doi.org/10.7176/rjfa/12-16-03>.
11. Chinoda, T., & Kapingura, F. M. (2023). The impact of digital financial inclusion and bank competition on bank stability in Sub-Saharan Africa. *Economies*, 11(1). <https://doi.org/10.3390/economies11010015>
12. Didigu, C., Joshua, N., Okon, I. S., & Eze, A. (2022). Monetary policy and banking sector stability in Nigeria. *Journal of Applied Statistics* 13(1), 12-26.
13. Duho, K.C.T., Onumah, J.M., & Owodo, R.A. (2020). Bank diversification and performance in an emerging market. *International Journal of Managerial Finance*, 16(1), 120-138. Available at: <https://doi.org/10.1108/IJMF04-2019-0137>.
14. Fadli, J.A. (2019). Should banks diversify their income and credit? evidence from Indonesia banking industry. *Kinerja*, 23(1), 28-41. Available at: <https://doi.org/10.24002/kinerja.v23i1.2124>
15. Fakunmoju, S. K., Jinadu, B., & Akindele, A. A. (2022). Effect of interest rate spread and bank specific factors on survival of tier-one and tier-two deposit money banks in Nigeria. *Emerging Markets Journal*, 12(2), 19-25. <https://doi.org/10.5195/emaj.2022.264>
16. Freeman, R. E., Harrison, J. S., Wicks, A.C., Parmar, B.L., & Colle. S. D. (2010). *Stakeholder Theory: The State of the Art*. Cambridge University Press
17. Halim, A. (2019). The effect of diversification strategy on efficiency in manufacturing companies listed on the Indonesia Stock Exchange', *Indonesian Accounting and Finance Studies*, 2(2), 149-176. Available at: <https://doi.org/10.21632/saki.2.2.149-176>.
18. Igbinoso, S. O., & Ogiemudia, O. A. (n.d.). Financial regulation and bank failure in Nigeria and USA. 210.
19. Isik, I., & Uygur, O. (2021). Financial crises, bank efficiency and survival: theory, literature and emerging market evidence. *International Review of Economics and Finance*, 76, 952-987, doi: 10.1016/j.iref.2021.07.016.
20. Jegede, C. A., Fakunmoju, S. K., Ajuzie, O. (2024). Combined effects of capital structure and corporate governance on financial stability of deposit money banks. *Ekonomicko-manazerske spektrum*, 18(1), 28-40.
21. Manifita, A. Paminto, A., & Jamaluddin (2024). Influence of income diversification and external risk on financial performance and stock prices of banks listed on the Indonesia stock exchange. *International Journal of Business and Management Investigation*, 3 (11); 29-45
22. Muchiri, N. W., & Omwenga, J. Q. (2023). Liquidity capacity and financial performance of commercial banks in kenya. *Reviewed Journal International of Business Management*, 4 (1), 165 – 185.
23. Muharam, H., & Bellinda, B. (2020). Income diversification, bank performance, and the moderating role of ownership type. *Strategic Business Journal*, 29(1), 68-79. Available at: <https://doi.org/10.14710/jbs.29.1.68-79>
24. Ndungu, J. G., & Muturi, W. (2019). Effect of diversification on financial performance of commercial banks in Kenya. *International Journal of Current Aspects*, 3(V), 267-285. Available at: <https://doi.org/10.35942/ijcab.v3iv.67>.
25. Nisar, S., Peng, K., Wang, S., & Ashraf, B. N. (2018). The impact of revenue diversification on bank

- profitability and stability: Empirical evidence from South Asian countries. *International Journal of Financial Studies*, 6(40), 1–25. doi:10.3390/ijfs6020040
26. Ojiegbe, J. N., Otiwu, K. C., & Aderigha, A. G. (2023). Banks diversification and return on assets of deposit money banks in Nigeria. *International Journal of Advanced Academic Research*, 9(9), 86-104. <https://www.openjournals.ijaar.org/index.php/ijaar/article/view/186>
 27. Olokundun, M., Hezekiah, F., Stephen, I., & Fred, I. (2014). An assessment of the taught entrepreneurship program in Nigerian secondary schools. *Merit Research Journal*, 2(11), 257-275.
 28. Omeni, I. P., & George, A. A. (2021). Portfolio diversification and performance of deposit money banks: Analysing the Nigerian Banking Industry. *Asian Journal of Economics, Business and Accounting*, 21(15), 12–27. <https://doi.org/10.9734/ajeba/2021/v21i1530475>
 29. Owino, M. O. (2021). Diversification, firm size and competitiveness of commercial banks in Kenya. A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Doctor of Philosophy of Business Management, Rongo University
 30. Paltrinieri, A., Dreassi, A., Rossi, S., & Khan, A. (2021). Risk-adjusted profitability and stability of Islamic and conventional banks: Does revenue diversification matter? *Global Finance Journal*, 50, 22-43 doi: 10.1016/j.gfj.2020.100517
 31. Radojčić, J., & Marinković, S. (2023). Impact of income and assets diversification on bank performance in Serbia. *Economic Themes*, 61(2), 197–214. <https://doi.org/10.2478/ethemes-2023-0010>
 32. Sittichobtham, M. K. (2019). How does loan portfolio diversification affect bank profitability?, Chulalongkorn University [Preprint]
 33. Trinugroho, I., Risfandy, T. and Ariefianto, M.D. (2018) 'Competition, diversification, and bank margins: Evidence from Indonesian Islamic rural banks', *Borsa Istanbul Review*, 18(4), pp. 349-358. Available at: <https://doi.org/10.1016/j.bir.2018.07.006>.
 34. Uniamikogbo, E., Okoye, E. I., & Amos, A. O. (2020). Income Diversification and Financial Performance of Selected Deposit Money Banks in Nigeria. *International Journal of Applied Management Sciences and Engineering*, 8(1), 89–105. <https://doi.org/10.4018/ijamse.20210101.oa1>
 35. Wahyuningtias, E. and Kusumawardhani, R.(2024). The Moderating Effect of Income Diversification on Intellectual Capital and company Performance; case study of banking in Indonesia. *Journal of Siasat Bisnis*, 28 (1); 104-115.