

**PRUDENTIAL GUIDELINES AND THE PERFORMANCE OF DEPOSIT
MONEY BANKS IN NIGERIA**

BY

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BENIN CITY

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**A PROJECT WRITTEN AND SUBMITTED TO THE DEPARTMENT OF
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BENIN, BENIN CITY.**

OCTOBER, 2023

DECLARATION

I, **AGBANOMA Juanita Emade**, of the Insurance Department, Faculty of Management Sciences University of Benin, Benin City, do hereby declare that this project is entirely my own work and composition, with all references to the works of other individuals having been properly recognized.

AGBANOMA Juanita Emade

Date

CERTIFICATION

We, certify that this research project was carried out by **AGBANOMA Juanita Emade** in the Department of Insurance, Faculty of Management Sciences, University of Benin, Benin City.

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(Head of Department)

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DEDICATION

This entire project is dedicated to the Almighty God, who provided all of the guidance, protection, and strength needed to overcome the obstacles encountered during the course of the research.

ACKNOWLEDGMENTS

I am appreciative of God Almighty for giving me life, good health, strength, knowledge, and direction as well as for His kindness, favor, protection, and the love He bestowed upon me during my academic endeavors.

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Abstract

This study investigates how the prudential guideline affects the performance of Nigeria's deposit money banks between the periods 2010 to 2022. In order to examine the panel data obtained from the financial reports of the different banks, the study used descriptive statistics, correlation analysis, and the Panel Least Square (PLS) approach. According to the findings, capital adequacy has a favorable and considerable impact on deposit money banks' performance while sensitivity to market risk have a significant and negative impact on deposit money bank performance. However, asset quality, earnings quality and liquidity ratio fail the significant test. The study comes to the conclusion that the performance of deposit money banks in Nigeria throughout the analyzed time is significantly influenced by capital adequacy and sensitivity to market risk. The study suggests that, in order to improve the performance of deposit money banks in Nigeria, the current capital adequacy ratio should retained since it improve the performance of deposit money banks in Nigeria. Also, since the performance of deposit money banks are impaired by increases in sensitivity to market risk. To enhance the performance of deposit money banks, sensitivity to market risk must be kept within an acceptable range.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The Nigerian banking sector has experienced significant growth, resulting in various changes in regulations and reforms. These changes encompass the number of banks, ownership structures, and the scope of their operations. The objective has been to reposition the industry effectively and profitably, allowing it to fulfill its role as a financial intermediary.

Several factors have contributed to the fragility of the financial system, often culminating in crises, including macroeconomic instability, corporate governance failures in banks, limited sophistication among investors and consumers, inadequate transparency regarding bank finances, and inconsistent supervision and enforcement (Sanusi, 2010).

To prevent the constant liquidation of Deposit Money Banks (DMBs), the Central Bank of Nigeria has shifted its focus towards assessing various financial performance indicators of banks. These indicators are designed to ensure stability, safety, and soundness within the banking system. They serve as guidelines to promote a prudent approach in managing high-quality loan assets and their associated earnings.

As part of this initiative, the CBN revised its Prudential guidelines in July 2010. The aim was to address various aspects of DMBs' operations, including Risk Management, Corporate Governance, Know Your Customer (KYC) and Anti-money Laundering

practices, project financing, object financing, real estate and commercial estate financing, Small and Medium Enterprises financing, Agriculture financing, Microfinance loans, retail financing, loan loss provisioning, and the specific characteristics of different types of loans and financing to different sectors. These guidelines involve various financial soundness indicators such as Liquidity, Capital Adequacy, Asset Management, earnings or profitability, exposure to foreign exchange risk, leverage, and debt service capacity, among others.

The CBN Prudential guidelines outline seven financial soundness indicators used to gauge the overall health of each financial institution. These indicators include Capital Adequacy Regulations, Asset Quality Regulation, Earnings or Profitability regulation, Liquidity Regulation, Exposure to FX Risk Regulation, Leverage Regulation, and Debt Service Capacity Regulation.

Thatcher (2002) emphasized that regulations can either enhance business operations or lead to their closure entirely. Therefore, key prudential regulations are intended to improve bank supervision and positively impact their performance. The prudential guidelines provide a general overview of the study's findings on how banks can limit risky activities and invest in profitable streams (Pasiouras, 2009).

This study aims to explore the impact of the Central Bank of Nigeria's prudential guidelines on the performance and profitability of deposit money banks in Nigeria.

1.2 Statement of research problem

Deposit money banks in Nigeria have encountered a range of challenges that seem all too human-like struggles. These include issues like not having enough financial backing, expanding their branches too slowly, grappling with weak management, insider fraud, and reckless lending. They've also faced a lack of technical expertise and banking know-how, which has left them in a tight spot when it comes to handling customer withdrawals. As a result, the government, shareholders, and other interested parties are quite worried about how well they're doing.

The financial health of these banks takes a hit because they often don't have enough capital on hand, struggle with cash flow issues, and deal with loans that aren't being paid back as expected. This makes it pretty tough for them to attract investors and lenders, which, in turn, affects their ability to acquire additional financial resources. When a bank can't readily access cash, it impacts its profits and ability to manage day-to-day operations, and in some extreme cases, it can lead to financial distress, a high number of bad loans, and a less-than-ideal investment portfolio.

Banks are supposed to maintain a healthy amount of capital to meet their financial responsibilities, turn a profit, and contribute to a stable financial system. The lack of adequate capital can often be traced back to a low initial investment, the impact of inflation, and a sizable pile of loans that aren't being repaid on time. This is why the

Central Bank of Nigeria introduced prudential guidelines, which include measures like suspending interest on overdue loans and setting aside funds to cover bad loans.

Despite a lot of people being interested in how these new guidelines affect deposit money banks, there hasn't been much research into the specific impact on their financial performance. It's a bit like everyone's watching, but nobody has really studied how these rules affect things like having enough capital, having access to cash, and managing the risk of loans going bad.

These prudential guidelines have also shone a light on how transparent banks are in their reports. With some banks struggling to manage their risky assets, their reports are going to be examined much more closely. The guidelines also emphasize the importance of responsible lending practices, ensuring that banks set aside enough funds to cover loans that might not get paid back.

In essence, these guidelines cover a wide range of aspects of how banks operate, from how they're managed to how they handle risk and protect their customers through practices like "Know Your Customer" and setting aside funds for potential loan losses. They're meant to safeguard the future of banks and the savings of their clients. However, nobody has really dug into how these guidelines affect the performance of commercial banks, so this study aims to fill that gap and explore how the Central Bank's prudential guidelines impact the performance of deposit money banks in Nigeria.

1.3 Research questions

In this research, we delved into some important questions about the challenges faced in the world of studying banking problems in Nigeria. These questions are like puzzle pieces we're trying to fit together:

1. How does having enough money in the bank relate to how well deposit money banks perform in Nigeria?
2. Does the quality of assets held by these banks have an impact on their performance in Nigeria?
3. What's the connection between the money banks earn and how they perform in Nigeria?
4. Is there a link between how much cash a bank has on hand and how well it does in Nigeria?
5. Lastly, does how banks react to changes in the market affect their performance in Nigeria?

1.4 Objective of the Study

In this study, we aim to understand how certain financial rules impact the way banks in Nigeria operate and perform. To achieve this, we've outlined specific goals to guide our research:

1. We want to find out how having enough capital affects how well deposit money banks in Nigeria do.
2. We're looking into how the quality of a bank's assets influences its performance

in Nigeria.

3. We're also interested in seeing how a bank's earnings affect how well it does in Nigeria.
4. Another aspect we're exploring is how a bank's liquidity levels impact its performance in Nigeria.
5. Lastly, we're investigating how a bank's response to market risks relates to its performance in Nigeria.

1.5 Statement of Research Hypotheses

We're going to put these hypotheses to the test in a more understandable way:

Hypothesis one: We want to see if having enough capital really makes a difference in how well deposit money banks perform in Nigeria. Is it possible that it doesn't matter much?

Hypothesis two: Does how well banks manage their assets actually have a big impact on how they perform in Nigeria? Or could it be that it doesn't make much of a difference?

Hypothesis three: Is there any connection between a bank's earnings and how well it does in Nigeria? Maybe earnings don't really affect performance.

Hypothesis four: Let's find out if a bank's liquidity (how much cash and assets it can quickly convert to cash) has any bearing on its performance in Nigeria. Or perhaps liquidity doesn't play a significant role.

Hypothesis five: Lastly, we're curious if a bank's sensitivity to market risk has any correlation with how well it does in Nigeria. Could it be that market risk sensitivity doesn't really matter in this context?

1.6 Significance of the Study

The study will be of relevance to the following group of people:

Central Bank of Nigeria: This study is useful to the Central bank of Nigeria, as it demonstrates the extent to which new prudential regulations influence the financial performance. This will enable the formulation of policies and strategies that will help in running the operations of deposit money banks. Variables contributing positively to financial performance should be strengthened while those influencing performance negatively should be reviewed.

Investors and Analysts: The investment advisors and analysts in the security markets will find the results useful as they can make use of performance indicators to advise their clients on the future prospects and sustainability of investments in commercial banks. Through the findings of this study, investors will understand changes in profitability in relation to regulation thus speculate on short term and long-term investments when new regulations are created for assets within their portfolios.

Academia: The study will also be important to scholars as it will provide the most updated literature on the influence of prudential regulations on financial performance of deposit money banks in Nigeria.

Bank directors: This study will be of great importance to bank directors as it will help them in benchmarking their performance with respect to the prudential guidelines in the banking sector.

Researchers: The result of this study will also serve as a data base for further researchers in this field of research.

1.7 Scope of the Study

This research investigates how the rules designed to ensure responsible banking practices impact how well banks in Nigeria perform. We looked at the banks that have official licenses to operate in Nigeria and focused on their financial records from 1990 to 2021. This time frame matches up with what many other studies have used when examining CAMELS financial indicators with panel data. It's also a good range for our research because it lets us thoroughly analyze more up-to-date data. We picked these years because it's convenient to find the necessary data for this study, and this information is accessible to investors.

1.8 Limitation of the study

The biggest challenge we faced in this study was that some banks were not very cooperative in sharing certain crucial numbers and information that would have helped us assess how well they followed the C.B.N. prudential guidelines. Additionally, we had limitations related to financial resources, a tight timeline, potential bias in responses, and

the need to balance this research with other academic commitments. Lastly, there weren't many sources available on the topic of managing non-performing assets, but we tried our best to mitigate this by relying heavily on data from the central bank of Nigeria's statistical bulletin, which is considered a reputable and trustworthy source both within Nigeria and internationally.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter, our goal is to dive into the theories and real-world studies that are important to our field. We're doing this to acknowledge and appreciate the hard work of fellow researchers in our area of expertise. Plus, we'll also be on the lookout for any missing pieces of information that we can explore in the future.

2.2 CONCEPTUAL REVIEW

2.2.1 Concept of Deposit Money Banks

Back in 2001, Nigerian Commercial and Merchant banks decided to embrace the concept of Deposit Money Banking. This essentially means that these banks took on some important responsibilities, acting as intermediaries in the world of finance. Their main goal was to do this efficiently in order to earn the trust of their customers and help keep the financial system running smoothly.

These banks offered a wide range of financial services, catering to both individual customers and larger businesses. This included things like setting up bank accounts, providing insurance, handling pensions, gathering savings and investments, offering loans for various purposes, and supporting economic activities, among other things. They also played a crucial role in making sure payments happened smoothly and helped put government monetary policies into action.

To ensure that these banks competed fairly and didn't pose a risk to the overall financial system, they needed to be regulated and closely supervised. This oversight was vital to protect the interests of shareholders, the government, and, of course, the customers who relied on these banks for their financial needs.

*******2.2.2 Financial Performance**

Financial performance refers to the degree to which financial objectives of a firm is being or has been accomplished (Verna, 2019). It is the financial actions business entities use to manage their current and non-current assets, financing, equity, revenues and expenses, and other resources to maximise shareholders wealth and profitability (Naz, Ijaz & Naqvi, 2016; Wapmuk, 2016).

In the context of academic research, it is the process of evaluating the financial outcomes of a firm's policies and operations over a certain period of time in order to determine its overall financial health and soundness for internal or external use, or for the purpose of comparing comparable businesses within the same sector or industries or regions in general (Kenton, 2019).

Financial measurements are tools that revealed the strength, weaknesses, opportunities and threats of banks. The examination and supervision of the performance of DMBs are essential for managerial and regulatory purposes. The CBN is concerned with the safety and soundness of banks and depositors' funds while shareholders are interested in the financial performance of their banks as per their liquidity and profitability levels.

Ongore and Kusa (2013) explained that the poor financial performance of DMBs can lead to failure and financial crunch which have undesirable impacts on economic growth while Mishkin (1992) as cited in Lisa and Sandy (2016) argued that the financial performance of banks can be measured in various ways including ROI, ROE, ROA as well as an estimation based on value addition.

According to Wapmuk (2016), several analyses and evaluations of the financial performance of banking institutions have focused on traditional financial metrics. Return on assets (ROA) and return on equity (ROE) are the most prominent and often used financial indicators.

The most significant and favored accounting metric of bank financial success according to this research is ROA. It is the banks' before-tax profit divided by their entire asset base. Because an examination of ROE ignores financial leverage and the risks attached to it, Flamini, McDonald, and Schumacher (2009) used ROA rather than ROE as a proxy for bank financial performance in this research. Even while off-balance-sheet operations have been accused of biasing ROA, it is still thought that these activities are insignificant in the majority of developing countries when compared to the risk associated with debt. This serves as the justification for it in this research.

2.2.3 Concept of Prudential Guidelines

Prudential guidelines (PG) are established laws, rules and regulations designed to minimize bank risk; ensure the safety and soundness of both individual institutions and

the banking system. According to Chuide Ojiakor's handout on Banking laws and regulations, prudential guidelines deal with the Management of Risk Assets, classification of credit facilities, interest, and provisions. The guideline establishes limits and constraints on the banking sector, and the element in preventing, limiting or stopping the damage caused by poor management.

The Guideline serves as part of the minimum rules that are set out by the CBN for the conduct of banking businesses whose need is to prevent banks from illiquidity, capital inadequacy, and poor asset quality. Specifics for Prudential guidelines is to avoid bank failure by launching policies, procedures, disciplines, and practices that would ensure the easy and reliable valuation of banks.

Sauda, et al. (2017) observed that Prudential guidelines are forms of government procedures that subject banks to certain requirements, boundaries and strategies that create transparency between the banks, their customers and the government, the absence of these regulations can affect the banking system, but good rules can impact the banking system drastically.

Kiplagat and Kalui (2020) asserted that prudential regulation forms a critical part of the operations of banks as it protects investors, consumers and ensures systemic stability they are required to maintain adequate capital, liquidity, asset quality, credit risk and management efficiency. The CBN require the DMB in their PG to exercise particular care in their operations so that specified outcomes are realized by removing some discretion

from bank management and replacing it with strategic rules in decision making. The current prudential guidelines was endorsed in July 2010 to deal with the management of risk assets, classification of credit facilities, agricultural financing, interest, and provisions among others which licensed banks are required by the guidelines to manage.

Licensed banks are required by the guideline to continuously manage their credit portfolio at least once per quarter in order to identify any deterioration in credit quality. The justification for the review of this guideline is to ensure a high degree of comparability of bank performance across national borders.

MANAGEMENT OF RISK ASSETS

The financial condition and performance of financial institutions must be assessed based on a reasonable assessment of assets and the appropriate recording of revenue and costs. Since loans and advances make up a large portion of a bank's assets, it is crucial to evaluate credit quality and how it affects solvency.

One of the biggest failings of banks in many developing economies is their inability to recognize problem assets, which leads to balance sheets that often do not accurately represent their real financial situation and income statements that overstate the profits that are used to pay dividends. A portfolio review system that enables the detection and monitoring of current or prospective issue loans, as well as the assessment of credit policies, is anticipated to be in place at the banks. The system should contribute to ensuring that prompt and sufficient measures are made to preserve the caliber of the loan

portfolio as well as the establishment and upkeep of a sufficient provision for losses.

The purpose of risk asset management is to build a reasonable foundation for:

- (i) Asset quality classification.
- (ii) Determination of an appropriate level of loan loss and valuation reserves.
- (iii) Accounting for accumulated but unpaid interest on non-performing loans.

CREDIT PORTFOLIO CLASSIFICATION

In simple terms, financial institutions have to categorize all the money they lend, whether it's through loans, credit lines, money owed to them, properties they've taken back because of unpaid loans, investments they've made, or other assets.

Now, when they decide whether a loan is doing well or not, it comes down to a few things. If the borrower is paying back both the main loan amount and the interest on time, just as they agreed when they took out the loan, then it's considered a "good" loan, or performing.

But if any of these things happen, then it's not doing so well, or non-performing:

The borrower hasn't paid interest or the main loan amount for 90 days or more.

The interest that's due has been added to the loan, or the due date has been pushed forward for at least 90 days.

So, in short, they're keeping an eye on whether people are paying their loans back as they should. If they are, it's good news; if not, it's a bit of a problem.

PROVISION FOR NON PERFORMING FACILITIES

To ensure that our banking system accurately reflects the financial stability of licensed

banks, it's important for these banks to set aside enough money to cover potential losses. There are two main ways to achieve this goal. First, banks should allocate funds based on the assessed risk of default for each individual credit arrangement. Second, they should also set aside a general reserve because every credit arrangement carries some level of risk, even if it's relatively small.

In simpler terms, the methods mentioned here require all authorized banks to keep some cash on hand to cover possible losses from loans that might not get repaid.

(a) For facilities that have been deemed inadequate, questionable, or lost.

I Interest should only be recorded on a cash basis when it is 90 days past due.

(ii) Principal repayments that are past due by more than 90 days should only be recorded on a cash basis and fully budgeted for.

(b) The following provision should be made for principal repayments on non-performing facilities that are still owing:

- Facilities that are sub standard: 10% of the unpaid balance.
- Credit lines with questionable standing: 50% of the outstanding sum.
- Lost credit facilities: the whole debt owing.

CREDIT PORTFOLIO AND INTEREST ACCRUAL DISCLOSURE REQUIREMENTS.

Every bank with a valid license is expected to break down its credit portfolio into two categories when preparing their audited financial statements: "performing" and "non-performing." These financial statements must also include information about the maturity

of deposit liabilities and credit facilities, based on the agreed repayment schedules. Additionally, they should specify the amount set aside for potential losses in credit quality (i.e., losses), dividing it between principal and interest. The responsibility falls on the bank's management to recognize revenue when it's legitimately earned or realized and to allocate funds for expected losses as soon as they can reasonably estimate them.

However, we've noticed a significant variation among licensed banks when it comes to recognizing income. While some banks stop accruing interest on non-performing credit facilities after three months, others do so after six months, a year, or even some don't seem to grasp the importance of suspending interest on non-performing credit facilities. To ensure the accuracy of reported operational results, we propose the following guidelines for how interest on non-performing loans should be handled, and we expect all licensed banks to adhere to these standards:

- (a) All types of non-performing credit facilities should be automatically placed on a "non-accrual" status, meaning that any interest payable on them should not be counted as revenue.
- (b) Unless the borrower pays the interest amount in cash, all accrued interest should be reversed and placed into a separate "interest on suspense accounts." These accounts are specifically designed for this purpose and will also accrue future interest costs until the facilities return to normal.
- (c) Any interest previously suspended and provisions made against the principal debt should only be recorded on a cash basis once the facilities are back to regular operation.

2.3 COMPONENTS OF FINANCIAL INDICATORS

2.3.1 Liquidity Regulation (LR)

Liquidity regulations are like rules in the financial world that make sure banks have enough money on hand to handle unexpected changes in the market. Think of it as a safety net for banks. These rules focus on the specific risks related to the assets banks hold, and they were put in place to prevent situations where banks run out of money, which can lead to big financial problems, like the ones we saw in past crises. These regulations are important because they help banks deal with times when they might run low on cash, and that can have big effects on the overall economy.

Banks make their money by taking in short-term deposits from people, usually paying them a small amount of interest, and then using that money to make more money by lending it out or investing it in things that will give them a bigger return over a longer time. But if a bank doesn't have enough cash on hand, it can lead to a panic where everyone rushes to take their money out of the bank. So, having the right amount of cash is super important for banks because if they don't, they can lose money.

On the flip side, if banks are seen as risky when it comes to cash, it can hurt their reputation. So, banks have to take steps to manage the risk of not having enough cash, while also making sure they have some of their money in things that make them more money, like high-return investments. It's a balancing act.

To check how well a bank is doing with all of this, we use different measurements, like ratios. One ratio, called Liquid Assets to Demand Deposits (LA/DD), tells us if a bank can meet the needs of its depositors in a year. Another one, Total Loans and Advances to Total Deposits (TLA/TD), tells us how much cash a bank has compared to all the money people have put in it. A third ratio, Liquid Assets to Total Assets (LA/TA), gives us an overall picture of a bank's cash situation. Total assets are everything a bank owns, and liquid assets are things like cash, money in other banks, and cash that can be easily accessed in a short amount of time.

TLA/TD is particularly important because it shows how well a bank can use its deposits and short-term cash to meet its customers' needs and short-term bills. So, in this study, we're focusing on that ratio because it tells us a lot about a bank's ability to handle its cash and keep its customers happy.

2.3.2 Capital Adequacy Regulation (CAR)

Capital Adequacy Regulation serves as a safety measure for banks, ensuring they possess sufficient funds to endure challenging periods and avoid financial collapse. This set of rules establishes a minimum capital threshold that banks are required to maintain in proportion to the risks they assume. The objective here is to prevent bank failures and financial crises.

To put it in more relatable terms, think of it as a bank's financial health check. It evaluates how much money a bank has in comparison to all its assets. This ratio provides

insights into the bank's financial robustness and stability. It's like asking the bank, "Hey, do you have enough money to handle the risks you're taking?"

This is crucial because it safeguards the interests of the individuals who entrust their money to the bank (depositors) and maintains overall stability within the financial system. It's akin to ensuring the bank is in good shape and fully prepared to handle any challenges that come its way.

2.3.3 ASSET QUALITY

Think of asset quality as a sort of health checkup for a bank's financial well-being. It's like assessing the bank's savings and investments to see how risky they are and how much they could be worth if sold. This assessment is really important when you want to know how well a bank is doing overall (kind of like getting a checkup at the doctor's office).

One of the biggest factors that can make a bank vulnerable is the stuff it owns, like loans and investments. Banks are in the business of moving money around, especially by giving out loans. But there's a catch - when they give out loans, there's a risk that people might not pay them back. So, the quality of a bank's assets tells us how good they are at making and managing loans that get paid back. It's a super important way to figure out if a bank is financially stable.

Now, when we talk about the quality of an asset, we're basically looking at a bunch of different things. We check how many bad assets they have (ones that might not bring in money), how many people owe them money but haven't paid yet, how well the bank's

bosses can handle all their assets and deal with loans that are causing problems, if they've given out too many loans to just a few people, and how well they're prepared for loans that might not get paid back. It's like looking at a bunch of different health indicators to see how well the bank is doing financially.

2.3.4 EARNINGS ABILITY

In the world of banking, let's think about earning ability as the bank's knack for making money from its day-to-day activities. This is like the bank's first line of defense against any risks that might pop up while it's doing business. It's also the bank's way of protecting itself from running low on money due to a drop in the value of its assets.

Now, think of a bank's profits as a sort of measuring stick for how well it's doing. The better the quality of the money it's making, the more stable and reliable its profits will be.

In the world of banking research, there are four key ways to figure out if a bank's earnings are top-notch.

First, there's the Operating Profit to Average Working Funds (OP/AWF) ratio. This tells us how good the bank is at turning its activities into profit.

Then there's the Percentage Growth in Net Profit (PAT Growth). This helps us see how much the bank's profit has changed compared to the previous year.

The third one is the Net Profit to Average Assets (PAT/AA) ratio. This gives us an idea of how well the bank is using its assets to make money.

Last but not least, we have the Net Interest Margin (NIM). This ratio shows us the difference between the money the bank makes from interest on loans and the money it

has to pay out to depositors. It tells us how efficient the bank is at its job.

Out of all these ratios, this research really liked the one that looks at net interest revenue compared to total loans and advances. Why? Because it shows us how well the bank is doing at making money from loans and investments while also considering the costs it incurs. In other words, it's like a peek into the bank's efficiency.

2.3.5 SENSITIVITY TO MARKET RISK

Market risk sensitivity refers to how much a financial institution's profits and capital could be negatively affected by changes in various factors like interest rates, foreign exchange rates, commodity prices, or stock prices. It's like gauging a bank's ability to deal with unexpected ups and downs in the financial market. This assessment helps the management team keep an eye on potential trouble spots.

Understanding a bank's vulnerability to market risks is super important for decision-making. Market risks cover a wide range of potential problems that can directly impact how much money a bank makes and the overall value of its assets, liabilities, and other financial stuff. Even though experts have different ways to measure market risk, most agree that it's pretty similar to interest rate risk. To handle this, every bank should have a program that matches its size, what it does, how big its operations are, and how risky they are. So, whether a bank's program for dealing with interest rate risk is good enough depends on how well it can spot, measure, watch, and manage all the big interest rate changes.

This study measures how sensitive a bank is to market risks, following Wapmuk's

suggestion. According to Wapmuk, a useful way to see how sensitive a bank is to market risks is by looking at the ratio of the money it makes from interest on loans to how much stuff it has in total. This ratio shows how a bank's loan business connects to everything else it owns.

2.4 THEORETICAL REVIEW

To help you understand how prudential guidelines impact the financial performance of banks in Nigeria, this study uses the resource-based view (RBV) approach. The RBV idea looks inside a bank's own capabilities and assets to explain why some banks in the same industry are more profitable than others. It's like looking at what makes a person uniquely skilled at their job compared to their colleagues.

2.4.1 RESOURCE BASED VIEW (RBV)

In 1984, Wernerfelt introduced the term "resource-based theory," building upon Penrose's earlier concept from 1959, as Mintzberg noted in 1998. This theory, known as RBV, suggests that companies consist of both tangible and intangible assets.

According to Hitt, Ireland, and Hoskisson in 2012, a firm's resources encompass both concrete and abstract assets. Tangible resources are those that can be precisely measured in terms of their value per unit and include physical, financial, technical, and organizational elements. Intangible resources, on the other hand, are assets like human capital, creativity, and reputation.

To succeed, companies need to blend both tangible and intangible resources for enhanced performance, growth, and long-term sustainability, as emphasized by Sirmon, Hitt, Ireland, Gilbert in 2011 and Kor, Mesko in 2013. Differences in the balance of these resource types among businesses lead to varying levels of performance.

The RBV hypothesis proposes that if one type of resource remains constant, performance disparities will arise among businesses because some possess superior versions of that resource, as suggested by Liu, Timothy, Gao in 2010. This viewpoint, as explained by Wibowo and Handika in 2017, takes an "inside out" perspective on why firms succeed or fail in the market. It centers on unique company traits that are difficult for competitors to imitate, thus providing a competitive edge.

RBV proponents argue that while tangible resources can often be acquired from the resource market and mimicked by others, most intangible resources are inherently non-tradable and non-replicable. This property allows resource disparities to persist among firms over time. However, it's worth noting that physical assets like financial resources, equipment, and buildings are also necessary for a company's operations.

When a company combines its diverse resources, referred to as firm-specific characteristics, and effectively harnesses these traits, known as firm unique capacity, it gains the ability to integrate, grow, and adapt internal and external skills, thereby achieving a competitive advantage, as discussed by Teece, Pisano, Shuen in 1997, Kor, Mesko in 2013, and Idroes in 2015.

In the ever-evolving and highly competitive banking sector, where gaining a competitive edge is challenging, the RBV theory becomes crucial for achieving superior performance. This theory has been instrumental in studying the financial performance of banks. It assumes a strong positive link, and sometimes a causal relationship, between specific business resources and various metrics of firm performance.

By connecting internal bank resources, such as financial indicators, to financial performance, researchers can transform RBV theory from a theoretical framework into a practical tool for banking managers. This is particularly relevant in the context of Nigerian banks, where both financial and strategic aspects of performance are considered in relation to RBV theory. It offers a conceptual framework for understanding how effectively managing capital adequacy, asset quality, earnings, liquidity, and sensitivity to market risk can contribute to a bank's financial performance.

2.5 EMPIRICAL REVIEW

Kiplagat and Kalui (2020) took a close look at how prudential regulations affected the performance of commercial banks in Kenya between 2013 and 2017. They found that factors like managing liquidity, handling credit risks, and overall operational efficiency had a significant impact on these banks' performance. However, they didn't find a significant impact from factors like capital adequacy and the quality of assets.

Mugo and Shiundu (2020) dug into how prudential regulations influenced Kenyan banks' performance from 2013 to 2018. They used both primary and secondary data and

discovered that regulations related to capital adequacy and liquidity had a notable impact. Credit risk management also played a crucial role in determining the financial performance of these banks. Interestingly, they didn't find a significant relationship between bank size and the impact of prudential regulations.

Amahalu et al. (2017) focused on the impact of capital adequacy on the financial performance of quoted deposit money banks in Nigeria from 2001 to 2015. They used secondary data from various sources and found a positive and significant relationship between capital adequacy and financial performance.

David, Kithinji, and Njeru (2018) delved into the effects of Central Bank of Kenya's prudential guidelines on the financial performance of commercial banks in Nairobi. They collected primary data from 43 bank managers and used SPSS for analysis. Their study revealed that the Rate Capping Law in Kenya wasn't achieving its intended goal, and they found positive effects from capital adequacy and liquidity management on the financial performance of these banks.

Diana (2018) examined how Central Bank prudential guidelines influenced the performance of commercial banks in Kenya. They collected primary data through questionnaires and found that various guidelines related to loan loss, risk management, and corporate governance had a positive impact on these banks' financial performance.

Wakarindi (2018) investigated how prudential guidelines affected the financial performance of listed commercial banks in Kenya. They used secondary data and found that liquidity had a negative impact, while capital adequacy had a positive impact. Credit

risk also had a negative effect, and firm size had a positive influence on these banks' financial performance. However, their findings were specific to Kenya and might not apply to banks in Nigeria due to different economic conditions.

Aigbogun (2011) explored the impact of prudential guidelines on deposit money banks in Nigeria. They used both primary and secondary data and found that there was an increased need for bank supervision and that prudential guidelines helped in controlling non-performing loans (NPLs) and improving regulatory activities.

Similarly, Alhassan (2008) investigated the impact of prudential guidelines on credit risk management in Nigeria from 1990 to 2008. They found that the implementation of prudential guidelines hadn't significantly improved the quality of loan assets and earnings in Nigerian banks, emphasizing the need for better corporate governance and compliance with regulations.

Gabriel et al. (2018) studied the determinants of capital adequacy in Nigerian deposit money banks. They found that the return on assets (ROA) was the most critical factor affecting capital adequacy ratios (CAR), indicating that Nigerian banks had a high risk portfolio and low ROA.

Morshedur, Ali, and Mouri (2018) examined the relationship between risk-taking, capital regulation, and bank performance in Bangladesh. They found a negative relationship between risk-taking and capital regulation and a positive relationship between capital regulation and performance, as well as a negative relationship between risk and performance.

Josephat (2018) analyzed the impact of bank capital regulations on operating efficiency in Tanzania from 2009 to 2015. They found a positive relationship between capital ratio and bank operating efficiency, indicating that stricter capital regulations influenced banks to enhance their internal operations and risk management.

Jalloh (2017) investigated the effect of capital adequacy on the performance of Nigerian banks using the Basel Accord Framework. They found that capital adequacy significantly influenced profit after tax (PAT) and other financial indicators.

Badar et al. (2016) examined the impact of capital regulation on risk-taking behavior in Pakistani commercial banks. They found that Pakistani banks reduced their portfolio risk in response to stringent risk-based capital requirements.

Conversely, Josephat (2016) studied the efficiency of capital adequacy requirements in reducing risk-taking behavior in Tanzanian commercial banks. They found a direct relationship between capital ratios and risk-taking behavior and a positive association between profitability and bank capital.

Barno and Odonkor (2012) investigated the relationship between capital adequacy and the performance of Ghanaian banks. They found a negative and insignificant relationship between capital adequacy and return on assets (ROA) but a negative and significant relationship between capital adequacy and return on equity (ROE), indicating that increasing capital as a safety buffer affected profitability negatively.

Calistus et al. (2018) looked into liquidity management and firms' performance in the sugar industry. They found a negative relationship between liquidity management and

firm performance, suggesting that a higher value of liquidity current liability negatively influenced financial position.

Waswa, Mukras, and Oima (2018) examined the effect of liquidity on the financial performance of the sugar industry in Kenya. They focused on liquidity position, firm size, and return on assets (ROA) and found that liquidity management had a different impact on financial performance.

Giami and Obari (2017) investigated the interrelationship between liquidity and corporate performance of Nigerian banks. They found that reserve ratio and loan-to-deposit ratio negatively impacted bank performance, possibly due to industry structure.

Ahmad (2016) studied liquidity and solvency on banks' profitability in Amman, Jordan. They found that liquidity had a significant negative impact on profitability, while solvency had no impact.

Kartal (2016) analyzed liquidity and financial performance in the Turkish retail industry. They found a significantly positive relationship between financial performance and liquidity.

Okaro and Nwakoby (2016) investigated liquidity management and the performance of Nigerian deposit money banks. They found a negative and significant relationship between liquidity ratio and profitability and a positive and significant relationship between cash to deposit ratio and profitability.

Patty and Peter (2016) examined liquidity regulation on bank assets and liabilities. They found that macro-prudential regulation did not prevent a pro-cyclical pattern in the size of

balance sheets and risk-taking, with adjustments in liquidity ratios leaning towards the liability side.

Ryan and Hitoshi (2015) explored liquidity regulation in UK banks. They found that banks adjusted their asset and liability composition in response to tighter liquidity regulation, focusing on high-quality liquid assets and reducing short-term wholesale funding. There was no evidence that this regulation caused banks to shrink their balance sheets or reduce lending to the non-financial sector.

Kurawa and Abubakar (2014) investigated the relationship between liquidity and profitability among banks in Nigeria. They found no significant impact between liquidity and profitability.

Kajola, Babatunji, Olabisi, and Babatolu (2019) studied credit management and the financial performance of listed deposit money banks in Nigeria. They found that credit risk parameters had a significant relationship with return on assets (ROA) and return on equity (ROE).

Collins, Mepbari, Sira, and Grend (2018) examined credit management and bank performance in Nigeria. They found that credit management significantly affected bank performance

2.6 Statement of Research Gap

Several authors have collaborated on this study, but it's important to note that the data available in Nigeria is somewhat limited. All the researchers who conducted this study

took a broad approach, looking at the big picture. They essentially treated all the banks as if they were one single organization, focusing on common factors.

In simpler terms, they didn't consider each bank as a unique entity. Our research, on the other hand, aims to add to what we already know by closely examining how deposit money banks in Nigeria perform. We're taking a close-up view, looking at individual bank factors and also considering the broader economic context. Our goal is to show how these various factors impact a bank's performance.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter, we dive into how we conducted our research. We'll walk you through our research plan, the values that guided us, and the techniques we used. We'll also talk about the group of people we studied and who we considered part of that group, as well as those we left out. Furthermore, we'll take a closer look at where our data came from and delve into the model and tools we used to analyze that data. In a nutshell, this chapter breaks down how we approached our study in a more human-friendly way.

3.2 Research Design

This study took a close look at things by using a correlational approach, which is like figuring out if different parts of a puzzle fit together. Basically, we wanted to see if changes in one thing matched up with changes in another thing. In this case, we used a method to figure out if rules about how banks should be careful with money affected how well those banks did in Nigeria. After doing all the tests, we were able to see if our ideas were right and what we can learn from it all.

3.3 Population and sample of Study

All the banks currently operating in Nigeria were considered for our study. The Central

Bank of Nigeria has given the green light for 24 banks to conduct their operations in the country. However, we decided to focus our analysis on a more manageable group of 16 deposit money banks that are publicly listed on the Nigeria Exchange Limited (NGX). We made this choice to make it easier to access data because publicly traded companies are already closely monitored by the SEC, making their data readily available.

3.4 Source of Data Collection

The research relied on information collected from other sources, not directly gathered by the researchers themselves. They gathered this data from the yearly reports and financial records of all 16 banks that were part of the research. The type of research being conducted, along with its goals, timeline, and the specific factors being examined, influenced the choice of where to get this secondary data. To meet the research's goals, they needed to analyze historical data after the fact. It's worth noting that in their annual financial reports, banks typically include a section where they provide information related to the aspects being studied in this research.

3.5 Model specification

This study consists of one dependent variable, financial performance of banks represented by ROA and five independent variables, representing prudential guidelines indicators.

The multiple linear regression models that would be used is functionally expressed as follows:

$$ROA = f(CAR,ATQ,ERA,LQT,SMR) \dots\dots\dots (1)$$

The economic form of the model is specified as;

$$ROA = \alpha_0 + \beta_1 CAR + \beta_2 ATQ + \beta_3 ERA + \beta_4 LQT + \beta_5 SMR + \mu \dots\dots\dots (2)$$

Where;

ROA = Return on assets of banks

CAR = Capital adequacy of banks

ATQ = Asset quality of banks

ERA = Earnings ability of banks

LQT = Liquidity of banks

SMR = Sensitivity to market risk

α_0 = is the intercept

$\beta_1 - \beta_5$ = are the coefficients of the independent variables

μ = is the Stochastic variable

Based on Apriori expectation, the signs of the coefficient are given as;

$$\alpha_0 > 0$$

$$\beta_1 - \beta_5 > 0$$

Thus, we expect a positive relationship between the dependent variable (financial performance) and the independent variables.

3.6 Measurement and Operationalization of variables

Variables	Operational Definition	Type	Measurement	Source
Return on	Return on asset, often	Dependent	It is calculated by	Elsayed (2013)

asset	known as ROA, is a measure of a company's financial performance that reveals how successful a deposit money bank is in contrast to its total assets.	variable	dividing a bank's net income by its total assets.	and Miko (2010)
Capital adequacy	Capital adequacy is a ratio that indicates a bank's available capital as a percentage of its risk-weighted credit exposures. It is often abbreviated as "CAR".	Independent variable	It is calculated by dividing a bank's capital by its total asset.	(Federal Deposit Insurance Corporation - FDIC, 2019).
Asset quality	Asset quality (ATQ) is a measure that determines how successfully a bank produces, manages, and recovers loans, hence	Independent variable	It is measured as non performing assets to total asset.	Habib, Altan and Beduk (2014)

	gauging its financial soundness.			
Earnings ability	Profits ability examines a bank's profitability and describes its future earnings sustainability and growth.	Independent variable	This is net interest income to total loans and advances	Dang (2011), Ferrouhi (2014), Wapmuk (2016)
Liquidity	The liquidity of banks, often known as LQT, indicates the extent to which a bank is able to meet its commitments when they become due.	Independent variable	Total loans and advances to total deposits	Vieira (2010)
Sensitivity to market risk	This ratio assesses the bank's capacity to identify, track, manage, and control market risk as well as provide management with guidance for drawback	Independent variable	It is the net interest income to average total assets	Ferrouhi (2014), Yukse, Dincer and Hacioglu (2015)

	surveillance.			
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Source: Author's compilation 2023.

3.7 Techniques of Data Analysis

In our research, we used both descriptive and inferential methods to dive into the data. Think of descriptive methods as the data's storytellers – they help us understand the fundamental aspects of the dataset in a way that's easy to grasp. They provide straightforward summaries of the sample and measurements, laying the groundwork for further quantitative analysis (Linton, 2017).

To get a better picture of our dataset, we turned to descriptive statistics. These statistics helped us explore various aspects like how the data is spread out, where it tends to cluster, how much it varies, and if it follows a typical pattern. Imagine this as looking at the range of values (minimum and maximum), the center point (average or mean), how spread out the data is (standard deviation), and if it behaves differently from the norm (skewness and kurtosis).

In addition to these descriptive methods, we also used Pearson's Correlation. This was like playing matchmaker for our independent factors, seeing how strongly they were linked to each other, and also checking how they related to the dependent variables. It's like trying to understand the connections between different players in our research story.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSES

4.1 Introduction

In this chapter, we share and thoroughly examine the information we used to study how the rules aimed at ensuring financial stability affect the way banks in Nigeria handle deposits. We've gone about this by using a mix of mathematical and statistical tools to make sure that the numbers we generate are dependable enough to test the ideas we have in our study.

For the statistical part, we've looked at the data and used various techniques like describing the data and finding connections between different aspects of it. Meanwhile, for the more complex econometric analysis, we've employed a method called Panel Least Squared (PLS), which helps us crunch the numbers to gain more insights. You'll find the details of our data sources and the results in the appendices if you're interested.

4.2 Data Presentation

The data from 2010 to 2022 are presented in the appendix 1.

4.3 Data Analysis

4.3.1 Descriptive Statistics

Table 4.1 gives a descriptive summary of the dependent variable (ROA) and independent variables (CAR, ATQ, ERA, LQT and SMR) in Nigeria from 60 observations covering 2010 – 2022 (13 years period).

Table 4.1: Summary Statistics

	ROA	CAR	ATQ	ERA	LQT	SMR
Mean	2.484615	21.47692	5.448154	10.63892	50.02692	1.854154
Median	2.100000	21.40000	4.000000	7.800000	50.00000	1.200000
Maximum	5.600000	29.70000	25.90000	62.70000	80.90000	10.40000
Minimum	0.000000	13.60000	1.200000	1.900000	19.80000	0.100000
Std. Dev.	1.380069	3.471259	4.931884	13.22327	12.42126	1.623866
Skewness	0.584048	0.140708	2.895088	3.554052	-0.011242	3.115068
Kurtosis	2.762677	2.550997	11.35191	13.91939	2.776208	15.40696
Jarque-Bera	3.847922	0.760497	279.7180	469.7618	0.137010	522.0240
Probability	0.146027	0.683691	0.000000	0.000000	0.933789	0.000000
Sum	161.5000	1396.000	354.1300	691.5300	3251.750	107.5200
Sum Sq. Dev.	121.8938	771.1770	1556.703	11190.70	9974.418	168.7642
Observations	65	65	65	65	65	65

Source: Researcher's Computation Using E-views 9.0 (2023)

In Table 4.1, let's take a look at how banks are performing when it comes to deposit money. We'll start with Return on Assets (ROA), which has an average value of 2.484615 and a standard deviation of 1.380069. Essentially, this means that ROA doesn't stray too far from this average value, indicating a relatively steady performance over time. To put it simply, the difference between the highest (5.600000) and lowest (0.000000)

values helps us see how much ROA deviates. Also, it's worth noting that ROA has a tendency to skew towards higher values.

Now, when we examine the kurtosis, a measure of how flat or peaked the distribution is, it comes out to 2.762677. Since this is less than 3, it tells us that the distribution is somewhat flat, not very peaked (we call this "platykurtic"). Moreover, the p-value for ROA is 0.1146027, which is greater than 0.05 according to the Jarque-Bera test. In plain language, this means that ROA's distribution isn't skewed in any significant way.

Moving on to the independent variables, we have Capital Adequacy (CAR), Asset Quality (ATQ), Earnings Ability (ERA), Liquidity (LQT), and Sensitivity to Market Risk (SMR). These variables have their own averages and standard deviations, showing how much they deviate from their respective averages. For all of them, except Liquidity (LQT), there's a tendency for the values to skew towards the higher end. This suggests that there are instances where these variables exceed their averages.

When it comes to kurtosis, CAR and LQT have values less than 3, indicating a flattened distribution, while ATQ, ERA, and SMR have values greater than 3, showing a peaked distribution. In other words, the shape of the distribution is influenced by these kurtosis values.

Lastly, for CAR and LQT, with Jarque-Bera values of 0.760497 and 0.137010 and probabilities greater than 0.05, they are statistically insignificant, meaning they follow a fairly normal distribution. On the contrary, ATQ, ERA, and SMR have Jarque-Bera

values of 279.718, 459.7618, and 522.0240, respectively, with probabilities lower than 0.01, indicating they are statistically significant and don't follow a typical normal distribution pattern.

4.3 Correlation Matrix

It is really important to ensure that when we're doing economic analysis, the factors we use to explain things aren't too closely linked to each other. Think of it like making sure the pieces of a puzzle don't fit too perfectly. Additionally, it's a big deal to check out how the different things we're studying might be connected, especially at the beginning of our research. To do this, we use a tool called Pearson correlation analysis, which is like looking at how strong the relationships are between our main thing we're trying to understand and all the other factors we're considering. If these relationships are super strong, the number we get from this analysis is close to 1, which means they're really closely related. You can see the results of these correlation tests in Table 4.2.

Table 4.2: Spearman Correlation Matrix

	ROA	CAR	ATQ	ERA	LQT	SMR
ROA	1.000000					
CAR	0.448395	1.000000				
ATQ	-0.288144	-0.295943	1.000000			
ERA	-0.091810	0.263693	-0.047580	1.000000		
LQT	-0.130465	0.384925	-0.084642	0.166871	1.000000	
SMR	-0.408543	-0.423279	0.722062	-0.175862	-0.100530	1.000000

Source: Researcher's Computation Using E-views 9.0 (2023)

In Table 4.2, you can see a bunch of factors, each with their own unique connections, some strong and others not so much. ATQ, ERA, LQT, and SMR all seem to be buddies with ROA in a negative way. In simpler terms, when these factors go up, ROA tends to go down during the study period. On the flip side, CAR and ROA seem to be quite friendly, as they show a positive connection. Now, when it comes to the independent factors, they follow a similar pattern. None of these buddies seem to be super tight, as their connections, all less than 0.80, don't scream "multicollinearity." Long story short, these factors seem like a good bunch for doing some regression analysis.

4.4 Panel Least Square (PLS) Regression Estimation

Over the span of 13 years, from 2010 to 2022, we analyzed a set of data. In our initial analysis using the ordinary least squares (OLS) regression method, we found that the data exhibited autocorrelation with a Durbin-Watson (DW) statistic of 0.587600. This autocorrelation rendered the initial results unreliable, and you can find more details in the appendix.

To address this issue, we employed the Cochrane-Orcutt autoregressive approach, specifically the AR(1) model, to correct for the autocorrelation. After making this adjustment and narrowing down the time period from 2011 to 2022, we performed six iterations of analysis, including 60 relevant observations. Eventually, we achieved convergence and obtained conclusive results. These final outcomes are presented in Table 4.3 for your reference.

Table 4.3: OLS Regression Result of Prudential Guidelines and Performance of Deposit Money Banks in Nigeria

Dependent Variable	Independent Variables	Coefficient	t-Statistic	Probability
LROA	C	1.739448	2.011945	0.0493
	CAR	0.067168	2.047146	0.0456*
	ATQ	-0.024677	-0.910350	0.3668
	ERA	-0.006775	-0.611056	0.5438
	LQT	-0.001802	-0.211947	0.8330
	SMR	-0.134001	-2.068016	0.0435*
	AR(1)	0.838209	12.02818	0.0000
R ²	0.808182			
Adjusted R ²	0.78647			
F-statistic	37.21731	Prob(F-stat)	0.000000	
Durbin-Watson	2.065858			

Source: *Researcher's Computation Using E-views 9.0 (2023)*. * denotes significance @ 5% level

In Table 4.3, we've presented the outcome of our analysis for equation 2. The results are quite insightful. We found that the explanatory variables (CAR, ATQ, ERA, LQT, and SMR) collectively account for roughly 80% of the variations in the dependent variable, which is the performance of Nigeria's deposit money banks (ROA). Even after considering the degrees of freedom, this finding remains robust, as indicated by the adjusted R² value of approximately 78%. In simpler terms, our regression model fits the data quite well.

At a 1% significance level, the F-statistic, which gauges how well our model explains the data, stands at 37.21, with an associated probability value of 0.0000. This implies that the combined influence of the explanatory variables significantly impacts the performance of

deposit money banks in Nigeria. In other words, CAR, ATQ, ERA, LQT, and SMR are meaningful factors in understanding ROA.

Furthermore, we can confidently dismiss the possibility of autocorrelation, thanks to the Durbin-Watson statistic, which measures the presence of autocorrelation and has a value of 2.065858.

Our analysis also includes estimates for the deposit money bank performance equation in Table 4.3. Let's break down the coefficients:

CAR: The t-statistic for the CAR coefficient is 2.047146, with a corresponding probability value of 0.0456. This indicates that the CAR coefficient is not only positive but also statistically significant at the 5% level. In practical terms, a one-unit increase in CAR results in a 0.067168 unit increase in deposit money bank performance (ROA).

ATQ: The t-statistic for the ATQ coefficient is -0.910350, with a probability value of 0.3668. This negative sign and the p-value suggest that the ATQ coefficient is incorrectly signed and lacks statistical significance. Put simply, a one-unit increase in ATQ leads to a -0.024677 unit decrease in deposit money bank performance (ROA), but this result is not reliable.

ERA: The t-statistic for the ERA coefficient is -0.611056, with a probability value of 0.5438. Both values indicate that the ERA coefficient is negative and statistically

insignificant at the 5% level. In practical terms, a one-unit increase in ERA corresponds to only a -0.001802 unit rise in deposit money bank performance, a negligible effect.

LQT: The t-statistic for the LQT coefficient is -0.211947, with a probability value of 0.8330. These results suggest that the LQT coefficient is incorrectly signed (negative) and lacks statistical significance. Therefore, a one-unit increase in LQT results in a negligible -0.001802 unit decrease in deposit money bank performance.

SMR: The t-statistic for the SMR coefficient is -2.068016, with a probability value of 0.0435. This implies that the SMR coefficient is incorrectly signed (negative) but still has sufficient evidence to be considered significant. In practical terms, a one-unit increase in SMR leads to a more substantial -0.134001 unit decrease in deposit money bank performance (ROA).

In essence, our analysis indicates that CAR and SMR have meaningful and statistically significant impacts on deposit money bank performance, while the other variables (ATQ, ERA, and LQT) do not show statistically significant effects.

4.3 Hypotheses Testing

In this study, we're putting our hypotheses to the test using probability values, and we're going to explain it in a more relatable way.

Imagine we're trying to figure out if certain factors affect the performance of banks in Nigeria. We have a bunch of ideas, or hypotheses, about these factors.

Hypothesis One:

We first thought that the amount of money a bank has in reserve (known as the Capital Adequacy Ratio or CAR) might really change how well a bank does. After doing some math, we found that the chance of this being true is 0.0456, which is less than 0.05. So, we're saying that the money a bank has in reserve does indeed affect how well it does.

Hypothesis Two:

Next, we wondered if the quality of a bank's assets (ATQ) would make a big difference. The math here gave us a probability of 0.3668, which is higher than 0.05. So, we're saying that the quality of assets probably doesn't have a big impact on a bank's performance.

Hypothesis Three:

Then, we looked at how much a bank earns (EAR) and thought that might be important. But again, our math showed a probability of 0.5438, higher than 0.05, suggesting that a bank's earnings might not be a big factor.

Hypothesis Four:

We also checked if having a lot of cash on hand (Liquidity Ratio or LQT) made a difference. The probability value here was 0.8330, higher than 0.05, so we're saying that having lots of cash probably doesn't change a bank's performance much.

Hypothesis Five:

Lastly, we investigated how sensitive a bank is to changes in the market (Sensitivity to Market Risk or SMR). Our math showed a probability value of 0.0435, less than 0.05,

which means that being sensitive to market changes does indeed have a significant impact on a bank's performance.

So, in simpler terms, we looked at these different factors and found that some of them, like capital reserves and market sensitivity, really do affect how well banks perform in Nigeria, while others, like asset quality, earnings, and liquidity, don't seem to matter as much.

4.4 Discussion of Findings

The results of the study reveal that various factors, which can be understood in simpler terms as important elements, have different levels of influence on how well deposit money banks perform. Let's break it down:

Capital Adequacy Ratio (CAR): First, having a strong capital adequacy ratio significantly boosts the performance of banks that accept deposits. This means that when the CAR goes up by one unit, the performance of deposit money banks increases by about 0.067168. This finding aligns with what we expected and with research by Juliana (2017) and Ekemezie (2017), who also found a strong connection between a bank's performance and how much capital it has.

Asset Quality (ATQ): On the other hand, the quality of assets, in the context of Nigeria's deposit money banks, doesn't have a significant impact on their performance. So, if the asset quality improves by one unit, it won't significantly affect the performance of these banks, specifically causing only a tiny -0.024677 decrease. This result is surprising

because it contradicts the findings of Wakarindi (2018), who found a strong link between asset quality and bank performance. However, it agrees with research by Ryan and Hitoshi (2015) and others who didn't see a big impact.

Earnings Ability: As we expected, how much money a bank earns doesn't have a major impact on its performance. So, improving the quality of earnings won't significantly make these deposit money banks perform better. This result differs from what Okaro and Nwakoby (2016) found.

Liquidity Ratio: Surprisingly, the liquidity ratio doesn't seem to affect the performance of deposit money banks in Nigeria. This means that having more liquid assets doesn't make these banks perform significantly better. This result goes against what Ryan and Hitoshi (2015) discovered.

Sensitivity to Market Risk: Lastly, being sensitive to market risk has a notably negative impact on the performance of deposit money banks. This means that if these banks are too affected by changes in the market, their performance tends to decrease. So, it's a crucial factor that drags down their performance in Nigeria.

In a nutshell, the study found that capital adequacy is good for performance, asset quality doesn't matter much, earnings ability doesn't make a big difference, liquidity ratio doesn't help much, and being sensitive to market risk is bad for deposit money banks in Nigeria.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter concentrated on a summary of the empirical findings, a conclusion, and suggestions based on the findings.

5.2 Summary of Findings

The literature has extensively covered the role deposit money banks play in spurring economic growth. Its importance to the expansion and advancement of the economy cannot be overstated. The effectiveness of deposit money banks is mostly determined by the prudential guidelines set by the monetary authorities, and so this invariably has a multiplier effect on the processes involved in the development of the economy. This study investigates how prudential guidelines affect deposit money banks' performance in Nigeria against this background. The annual panel data from the CBN Statistical Bulletin were analyzed using descriptive statistics, correlation analysis, and the Panel Least Square (PLS) approach. The results notably revealed that:

1. The performance of deposit-taking banks is significantly impacted capital adequacy.
2. In Nigeria, asset quality does not significantly improve deposit money banks' performance.

3. The performance of deposit money banks is not significantly impacted by the earnings quality.

4. In Nigeria, liquidity ratio does not significantly improve deposit money banks' performance.

5. The performance of deposit-taking banks is significantly impacted by sensitivity to market risk.

5.2 Conclusion

In this research, we used various methods like descriptive statistics, correlation analysis, and panel least square (OLS) regression to understand how prudential guidelines affect the performance of deposit money banks in Nigeria from 2010 to 2022. Our study suggests that these guidelines, particularly when we look at capital adequacy and sensitivity to market risk, have a notable influence on the performance of deposit money banks in Nigeria. Interestingly, factors such as asset quality, earning management, and liquidity don't seem to have a significant impact on how these banks perform. So, in summary, our findings indicate that during the period we studied, prudential guidelines in Nigeria played a crucial role in shaping the performance of deposit money banks.

5.3 Recommendations

The following policy recommendations are offered for policy action based on the study's empirical findings:

1. In order to improve the performance of deposit money banks in Nigeria, the current capital adequacy ratio should be retained since it improves the performance of deposit money banks in Nigeria.
2. The performance of deposit money banks is impaired by increases in sensitivity to market risk. In order to enhance the performance of deposit money banks, sensitivity to market risk must be kept within an acceptable range.
3. To improve the performance of deposit money banks, Nigeria's monetary authorities must properly manage its prudential guidelines.

REFERENCES

APPENDIX

YEAR	BANK NAME	ROA	CAR	ATQ	ERA	LQT	SMR
2010	GTB Bank	3.09	19.43	3.1	7.80	49.7	2.85
2011	GTB Bank	3.73	20.68	3.45	8.20	52.65	2.85
2012	GTB Bank	5.2	24.23	3.43	9.46	53.32	0.10
2013	GTB Bank	4.69	23.91	3.58	8.87	50.32	0.31
2014	GTB Bank	4.23	21.40	3.15	8.10	40.07	0.61
2015	GTB Bank	4.07	18.17	3.21	8.26	42.21	0.91
2016	GTB Bank	4.7	19.8	3.7	9.0	19.8	4.3
2017	GTB Bank	5.3	25.7	7.7	10.4	25.7	0.8
2018	GTB Bank	5.6	23.4	7.3	9.2	41.4	0.3
2019	GTB Bank	5.6	22.5	6.5	9.3	49.3	0.3
2020	GTB Bank	5.5	25.9	6.4	9.3	38.9	1.2
2021	GTB Bank	4.3	23.8	6.0	6.7	38.3	0.5
2022	GTB Bank	3.6	24.1	5.2	6.7	49.9	0.6
2010	Access Bank	1.2	23	8	7.3	36.9	1.1
2011	Access Bank	2.6	21	8.1	8.3	72	1.8
2012	Access Bank	2.7	17.0	4.0	11.3	27.8	1.49
2013	Access Bank	1.6	20.6	2.4	5.7	32.5	2.1
2014	Access Bank	1.3	16.8	8.1	4.11	29.5	0.9
2015	Access Bank	2.1	17.9	3.1	6.2	38.2	2.1
2016	Access Bank	2.4	21.1	2.1	6.2	43.6	1.3
2017	Access Bank	1.6	22.5	4.8	5.8	47.3	1.7
2018	Access Bank	2.1	19.9	2.5	5.3	50.9	0.7
2019	Access Bank	1.6	20	5.8	6.6	47	1.1
2020	Access Bank	1.6	21	4.3	4.9	46	1.8
2021	Access Bank	1.6	24.5	4.0	4.3	50.7	2.0
2022	Access Bank	1.1	19.6	3.1	4.0	39.5	2.2
2010	UBA Bank	0	18	5.7	5.9	68.1	2
2011	UBA Bank	0	21.7	3.1	6.1	69	1.74
2012	UBA Bank	2.6	23.5	1.9	1.9	69.8	0.79
2013	UBA Bank	1.92	19	1.20	5.9	55.00	0.98
2014	UBA Bank	1.77	17	1.55	5.96	55.78	1.7
2015	UBA Bank	1.7	23	1.7	6.7	53	0.4
2016	UBA Bank	2.3	23.4	3.9	7.1	39	2
2017	UBA Bank	2.1	25.5	6.7	7	50	2
2018	UBA Bank	1.8	24	6.5	6.2	50	0.3
2019	UBA Bank	1.6	23.4	5.3	62.7	54.9	0.45

2020	UBA Bank	1.7	22.4	4.7	61.3	44.3	0.52
2021	UBA Bank	1.5	24.9	3.6	62.7	65.3	0.4
2022	UBA Bank	1.8	28.3	3.1	59.1	68.3	0.6
2010	First Bank	1.5	20.4	7.7	6.3	50.9	0.8
2011	First Bank	0.7	22.2	2.6	9.3	57.5	3.0
2012	First Bank	2.5	21.9	2.6	9.6	55.4	0.9
2013	First Bank	2.0	13.6	3.0	8.0	44.2	1.2
2014	First Bank	2.0	16.7	2.9	7.6	44.0	1.3
2015	First Bank	0.4	17.1	18.1	8.1	58.6	5.7
2016	First Bank	0.4	17.8	24.4	8.8	52.7	10.4
2017	First Bank	0.9	17.7	22.8	8.4	49.3	6.4
2018	First Bank	1.1	17.3	25.9	7.5	45.2	3.8
2019	First Bank	1.3	15.5	9.9	7.4	38.2	2.6
2020	First Bank	1.3	17.0	7.7	6.1	38.2	2.4
2021	First Bank	1.8	17.4	6.1	4.5	31.3	3.2
2022	First Bank	1.4	16.8	4.3	5.8	31.7	1.7
2010	Zenith Bank	3.11	28.9	1.7	8.03	55.9	0.73
2011	Zenith Bank	3.29	27.00	2.88	8.15	61	0.77
2012	Zenith Bank	4.08	29.70	3.15	8.19	61.40	0.94
2013	Zenith Bank	3.32	25.88	2.91	8.70	64.00	0.97
2014	Zenith Bank	2.90	20.00	1.75	8.10	46.80	0.90
2015	Zenith Bank	2.70	21.00	2.18	8.40	51.40	0.80
2016	Zenith Bank	3.00	23.00	3.02	7.70	59.60	1.40
2017	Zenith Bank	3.40	27.00	4.70	9.00	69.70	1.30
2018	Zenith Bank	3.3	25.0	4.98	8.9	80.9	0.9
2019	Zenith Bank	3.4	22.0	4.0	8.2	57.3	1.11
2020	Zenith Bank	3.1	23.00	4.29	7.9	62.5	1.5
2021	Zenith Bank	2.5	21.0	4.2	6.8	61.9	1.8
2022	Zenith Bank	2.2	19.1	4.4	6.2	66.2	1.2

	ROA	CAR	ATQ	ERA	LQT	SMR
Mean	2.484615	21.47692	5.448154	10.63892	50.02692	1.654154
Median	2.100000	21.40000	4.000000	7.800000	50.00000	1.200000
Maximum	5.600000	29.70000	25.90000	62.70000	80.90000	10.40000
Minimum	0.000000	13.60000	1.200000	1.900000	19.80000	0.100000
Std. Dev.	1.380069	3.471259	4.931884	13.22327	12.42126	1.623866
Skewness	0.584048	0.140708	2.895086	3.554052	-0.011242	3.115068
Kurtosis	2.762677	2.550997	11.35191	13.91939	2.776208	15.40696
Jarque-Bera	3.847922	0.760497	279.7180	459.7618	0.137010	522.0240
Probability	0.146027	0.683691	0.000000	0.000000	0.933789	0.000000
Sum	161.5000	1396.000	354.1300	691.5300	3251.750	107.5200
Sum Sq. Dev.	121.8938	771.1770	1556.703	11190.70	9874.418	168.7642
Observations	65	65	65	65	65	65

	ROA	CAR	ATQ	ERA	LQT	SMR
ROA	1.000000	0.448395	-0.288144	-0.091810	-0.130465	-0.408543
CAR	0.448395	1.000000	-0.295943	0.263693	0.384925	-0.423279
ATQ	-0.288144	-0.295943	1.000000	-0.047580	-0.084642	0.722062
ERA	-0.091810	0.263693	-0.047580	1.000000	0.166871	-0.175862
LQT	-0.130465	0.384925	-0.084642	0.166871	1.000000	-0.100530
SMR	-0.408543	-0.423279	0.722062	-0.175862	-0.100530	1.000000

Dependent Variable: ROA
Method: Panel Least Squares
Date: 09/21/23 Time: 11:00
Sample: 2010 2022
Periods included: 13
Cross-sections included: 5
Total panel (balanced) observations: 65

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.415681	1.061671	0.391534	0.6968
CAR	0.206689	0.048465	4.264739	0.0001
ATQ	0.009211	0.041037	0.224448	0.8232
ERA	-0.023379	0.011037	-2.118209	0.0384
LQT	-0.035436	0.012202	-2.904050	0.0052
SMR	-0.241117	0.132053	-1.825914	0.0729
R-squared	0.401712	Mean dependent var		2.484615
Adjusted R-squared	0.351010	S.D. dependent var		1.380069
S.E. of regression	1.111782	Akaike info criterion		3.137572
Sum squared resid	72.92755	Schwarz criterion		3.338284
Log likelihood	-95.97108	Hannan-Quinn criter.		3.216766
F-statistic	7.922958	Durbin-Watson stat		0.587600
Prob(F-statistic)	0.000009			

Dependent Variable: ROA
Method: Panel Least Squares
Date: 09/21/23 Time: 11:00
Sample (adjusted): 2011 2022
Periods included: 12
Cross-sections included: 5
Total panel (balanced) observations: 60
Convergence achieved after 6 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.739448	0.864560	2.011945	0.0493
CAR	0.067168	0.032811	2.047146	0.0456
ATQ	-0.024677	0.027107	-0.910350	0.3668
ERA	-0.006775	0.011088	-0.611056	0.5438
LQT	-0.001802	0.008502	-0.211947	0.8330
SMR	-0.134001	0.064797	-2.068016	0.0435
AR(1)	0.838209	0.069687	12.02818	0.0000
R-squared	0.808182	Mean dependent var		2.543333
Adjusted R-squared	0.786467	S.D. dependent var		1.378628
S.E. of regression	0.637059	Akaike info criterion		2.045372
Sum squared resid	21.50974	Schwarz criterion		2.289712
Log likelihood	-54.36116	Hannan-Quinn criter.		2.140947

F-statistic	37.21731	Durbin-Watson stat	2.065858
Prob(F-statistic)	0.000000		
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Inverted AR Roots	.84		
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