ANALYSIS OF THE IMPACT OF EXCHANGE RATE VOLATILITY ON BANKING OPERATIONS IN NIGERIA

$\mathcal{B}y$

OLATUNDE RUTH GBOLAFUNMI ND/23/BFN/FT/0005

BEING A RESEARCH WORK SUBMITTED
TO THE DEPARTMENT OF BANKING AND FINANCE,
INSTITUTE OF FINANCE AND MANAGEMENT STUDIES,
KWARA STATE POLYTECHNIC, ILORIN

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF NATIONAL DIPLOMA (ND) IN BANKING AND FINANCE

JULY, 2025

CERTIFICATION

This project has been read and approved as meeting the requirements for the award of National Diploma (ND) Banking and Finance Department, Institute of Finance and Management Studies, Kwara State Polytechnic, Kwara State.

DR. OLOWONIYI A.O.	DATE
(Project supervisor)	
MRS. OTAYOKHE E. Y	DATE
(Project coordinator)	
MR. AJIBOYE, W.T.	DATE
(Head of Department)	
MR. SAFURA A. S	DATE

EXTERNAL EXAMINER

DEDICATION

This project is dedicated to the Almighty GOD, who gives knowledge, wisdom, strength and understanding. The Author, king and finisher of my soul.

ACKNOWLEDGEMENTS

I acknowledge the presence of almighty God in the course of writing this project, all glory and adoration be unto him.

I want to register my sincere appreciation to Kwara state polytechnic Ilorin for considering me as one of their students in banking and finance department, which aided in writing of this research.

My gratitude also goes to the HOD banking and finance department MR. Wale Ajiboye. In this regard, my special gratitude goes to my amiable supervisor, DR. OLOWONIYI A.O. and my supportive parents, I'm grateful for all the support, assistance and understanding shown to me.

Also, I'm appreciative of the support both physically, academically financially, and emotionally shown to me by my parents Mr. and Mrs. Olatunde,

I also wish to thank all my lecturers who has really made me what I am today.

Finally, I must appreciate my parents for their understanding and support and I pray to almighty God to be with you in all your ways

TABLE OF CONTENTS

TITLE PAGE	i
CERTIFICATION	i
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENTS	v
ABSTRACT	vii
CHAPTER ONE	1
1.0 Introduction	1
1.1 Background to the Study	1
1.2 Statement of the Problem	3
1.3 Research Questions	3
1.4 Objective of the Study	3
1.5 Research Hypotheses	4
1.6 Significance of the Study	4
1.7 Scope of the Study	4
1.8 Definition of Terms	5
1.9 Organization of the Study	6
CHAPTER TWO\	7
Literature Review	7
2.1 introduction	7
2.2 Conceptual Review	7
2.2.1 Concept of Exchange Rate and Exchange Rate Volatility	7
2.2.2 Concept of Banking Operations	8
2.2.3 The Link Between Exchange Rate Volatility and Banking Operations	10
2.2.4 Risk Management in Banks	11
2.2.5 Measurement of Exchange Rate Volatility	13
2.2.6 Impact of Exchange Rate Policies on Banking Operations	14
2.3 Theoretical Review	16

2.3.1 Purchasing Power Parity (PPP) Theory	16
3.2.2 Interest Rate Parity (IRP) Theory	16
3.2.3 Balance of Payments (BOP) Approach	17
2.4 Empirical Review	18
CHAPTER THREE	21
RESEARCH METHODOLOGY	21
3.1 Introduction	21
3.2 Research Design	21
3.3 Population of the Study	21
3.4 Sampling Technique	22
3.5 Sample Size	22
3.6 Method of Data Collection	22
3.7 Sources of Data Collection	23
3.8 Method of Data Analysis	23
3.9 Validity and Reliability	24
CHAPTER FOUR	25
DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS	25
4.1 introduction	25
4.2 Demographic characteristics of respondents	25
4.3 presentation and analysis of data according to research questions	27
4.3 Summary of findings	37
CHAPTER FIVE	39
SUMMARY, CONCLUSION AND RECOMMENDATIONS	39
5.1 Summary	39
5.2 Conclusion	40
5.3 Recommendations	40
DEEEDENICES	42

ABSTRACT

This study investigates the impact of exchange rate volatility on banking operations in Nigeria, focusing on how fluctuations in the value of the Nigerian Naira influence key performance indicators within the banking sector. Given Nigeria's heavy reliance on crude oil exports and its vulnerability to external economic shocks, exchange rate instability has emerged as a critical challenge for financial institutions. The study adopts a descriptive survey design and gathers data from banking professionals across major commercial banks using structured questionnaires. Findings reveal that exchange rate volatility significantly affects bank profitability, increases credit risk, undermines customer confidence, and disrupts liquidity management. Furthermore, while many banks employ risk mitigation tools such as forward contracts and currency swaps, the use of advanced hedging strategies remains limited. The study concludes that inconsistent risk management practices and insufficient foreign exchange buffers leave banks exposed to currency shocks. It recommends the adoption of robust foreign exchange risk management frameworks, enhanced regulatory guidance, and diversified revenue strategies to strengthen resilience and sustain financial stability in the face of persistent exchange rate fluctuations.

CHAPTER ONE

1.0 Introduction

The global economy has increasingly emphasized the importance of stable exchange rates due to their crucial role in international trade and financial transactions. In emerging economies like Nigeria, exchange rate volatility has become a major economic concern, particularly affecting the banking sector, which is pivotal to economic development and financial intermediation. This study investigates the impact of exchange rate volatility on banking operations in Nigeria, aiming to uncover the extent to which fluctuations in exchange rates influence banking performance, stability, and decision-making processes.

1.1 Background to the Study

In any economy, the exchange rate plays a vital role as it serves as a barometer of the country's economic health and competitiveness. It directly influences a nation's balance of trade, inflation rates, interest rates, and overall economic stability. For developing countries like Nigeria, where the economy is highly dependent on crude oil exports, exchange rate movements are particularly sensitive to external shocks and commodity price fluctuations (Iyoha, 2020). Consequently, the volatility of the Nigerian Naira against major world currencies such as the US Dollar and Euro has become a persistent economic challenge.

The banking sector, being the backbone of any modern economy, is inherently exposed to risks arising from currency fluctuations. In Nigeria, banks engage in foreign currency operations including the issuance of foreign-denominated loans, trade financing, foreign exchange trading, and international investments. Exchange rate volatility affects the value of these transactions and can significantly alter a bank's financial position. A depreciating currency, for instance, increases the cost of foreign obligations and can lead to a rise in non-performing loans if borrowers are unable to service foreign-currency debts (Okonkwo, 2021).

Historical episodes, such as the aftermath of the global financial crisis in 2008 and the oil price crash of 2014–2016, illustrate how vulnerable Nigerian banks are to external shocks that manifest through exchange rate volatility. During these periods, the Nigerian banking sector witnessed an increase in credit defaults, liquidity pressures, and profitability declines (Sanusi, 2010). More recently, the COVID-19 pandemic exacerbated foreign exchange pressures, compelling the Central Bank of Nigeria (CBN) to implement a series of interventions to stabilize the Naira.

In response to growing concerns over exchange rate volatility, Nigerian banks have increasingly adopted various risk management practices, such as hedging with forward contracts, maintaining foreign currency liquidity buffers, and diversifying their income streams. Nonetheless, the effectiveness of these measures remains a subject of debate among practitioners and scholars alike.

The significance of studying the impact of exchange rate volatility on banking operations cannot be overstated. In a highly globalized financial environment, understanding this dynamic is crucial for policy formulation, bank management decisions, and financial system stability. Furthermore, the constant evolution of exchange rate regimes in Nigeria—from the fixed system, through the guided deregulation of the foreign exchange market, to the current managed float system—adds another layer of complexity to the operational environment of banks.

Thus, this study seeks to provide a comprehensive analysis of how exchange rate volatility affects key aspects of banking operations in Nigeria, including profitability, credit risk management, liquidity, and strategic decision-making.

1.2 Statement of the Problem

In recent years, Nigeria has witnessed dramatic fluctuations in its exchange rate, primarily due to changes in oil prices, inflation rates, political instability, and global economic shocks. These fluctuations create an unstable environment for banking operations, influencing interest margins, foreign currency exposures, loan performances, and overall financial stability (Okonkwo, 2021).

Despite regulatory interventions by the Central Bank of Nigeria (CBN), including the adoption of various exchange rate regimes and introduction of foreign exchange controls, the problem of volatility persists. As banks operate in an increasingly globalized financial system, their exposure to currency risk has heightened, potentially impacting profitability, liquidity, and solvency. However, there remains a paucity of empirical research focusing on how exchange rate volatility specifically affects banking operations in Nigeria.

Thus, the central problem of this study is to critically analyze the nature and extent of the impact of exchange rate volatility on banking operations in Nigeria.

1.3 Research Questions

This study seeks to answer the following research questions:

- 1. What is the relationship between exchange rate volatility and banks' profitability in Nigeria?
- 2. How does exchange rate volatility affect credit risk management in Nigerian banks?
- 3. What measures have Nigerian banks adopted to mitigate the impact of exchange rate fluctuations?

1.4 Objective of the Study

The primary objective of this study is to analyze the impact of exchange rate volatility on banking operations in Nigeria. The specific objectives are:

1. To examine the relationship between exchange rate volatility and banks' profitability.

- 2. To assess the effect of exchange rate volatility on credit risk management practices in banks.
- 3. To evaluate the strategies banks employ to manage exchange rate risks.

1.5 Research Hypotheses

In line with the stated objectives, the following hypotheses are formulated:

- **H**₀₁: Exchange rate volatility has no significant impact on banks' profitability in Nigeria.
- H₀₂: Exchange rate volatility does not significantly affect credit risk management in Nigerian banks.
- H₀₃: Nigerian banks have not adopted effective strategies to mitigate exchange rate volatility.

1.6 Significance of the Study

The findings from this study will be valuable to several stakeholders. Firstly, it will benefit banking institutions by providing insights into the risks associated with exchange rate fluctuations and informing better risk management strategies. Secondly, policymakers and regulators like the CBN will find the study useful for designing policies that promote financial system stability amid currency volatilities. Thirdly, investors and shareholders will gain a deeper understanding of the exchange rate risks affecting banking performance. Finally, the study will add to the existing body of knowledge and serve as a reference for future research in the field of financial risk management.

1.7 Scope of the Study

This study focuses on the banking sector in Nigeria, examining both commercial and merchant banks. It covers the period from 2010 to 2024 to provide an extensive view of exchange rate dynamics and banking operations. Variables of interest include exchange rate volatility, banks' profitability indicators (such as Return on Assets and Return on Equity), non-performing loans, and risk management practices. The study does not extend to other sectors of the economy or multinational banks operating outside Nigeria.

1.8 Definition of Terms

- 1. **Exchange Rate Volatility**: The degree of variation in the value of a currency relative to other currencies over a specific period, typically caused by changes in supply and demand, inflation, interest rates, and geopolitical events.
- 2. **Banking Operations**: The day-to-day activities performed by banks, including loan disbursement, deposit mobilization, foreign exchange transactions, investment services, and payment processing.
- Credit Risk Management: The strategies and practices employed by banks to identify, measure, monitor, and control the risk of a borrower defaulting on loan obligations.
- 4. **Profitability**: A measure of the financial performance of banks, typically evaluated through indicators such as Return on Assets (ROA) and Return on Equity (ROE), reflecting the bank's ability to generate earnings compared to its expenses.
- 5. **Risk Mitigation Strategies**: Methods used by financial institutions to minimize exposure to potential financial losses, including hedging, diversification, and the use of financial derivatives.
- 6. **Foreign Exchange Market (Forex Market)**: A decentralized global marketplace where currencies are traded, playing a crucial role in determining exchange rates.
- 7. **Non-Performing Loans (NPLs)**: Loans in which the borrower is not making interest payments or repaying any principal, often used as an indicator of asset quality within banks.
- 8. **Liquidity Risk**: The risk that a bank will not be able to meet its financial obligations as they come due, without incurring unacceptable losses.
- 9. Capital Adequacy: The sufficiency of a bank's capital, measured by the Capital Adequacy Ratio (CAR), to absorb potential losses and meet regulatory requirements, ensuring financial stability.
- 10. **Managed Float Exchange Rate System**: An exchange rate regime where a country's currency is allowed to fluctuate in value in the foreign exchange market,

but the central bank intervenes occasionally to stabilize or steer the currency toward desired targets.

1.9 Organization of the Study

This research is organized into five chapters. Chapter One provides the introduction, background to the study, statement of the problem, research questions, objectives, hypotheses, significance, scope, definition of terms, and the organization of the study. Chapter Two presents the literature review, focusing on theoretical, empirical, and conceptual frameworks. Chapter Three discusses the research methodology employed. Chapter Four presents the data analysis and interpretation of results. Finally, Chapter Five concludes the study with a summary of findings, conclusions, and recommendations.

CHAPTER TWO\

Literature Review

2.1 introduction

A thorough literature review contextualizes the research by summarizing what is already known and highlighting open questions. It synthesizes findings from economics and finance on exchange rate fluctuations and bank operations, ensuring the current study builds on established theory and evidence. By examining past studies, we identify consistent results (e.g. that currency swings can raise bank losses) and areas needing more analysis (for example, how recent policy changes in Nigeria alter those effects). In short, reviewing existing work provides the foundation and justification for the present research effort.

2.2 Conceptual Review

2.2.1 Concept of Exchange Rate and Exchange Rate Volatility

The **exchange rate** refers to the price of one country's currency in relation to another. It represents "the value at which one currency can be exchanged for another" and is critical for facilitating international trade, investments, and financial flows (Obadan, 2018). Exchange rates can be classified into **floating** and **fixed (or pegged)** systems. In a **floating system**, market forces of demand and supply determine the exchange rate with little or no government intervention (Adeleke, 2019). In contrast, in a **fixed regime**, a country pegs its currency to another major currency or a basket of currencies and maintains the rate through active central bank interventions (Olisadebe, 2020).

Nigeria's exchange rate management has oscillated between a **fixed** and a **managed floating system**, primarily influenced by changes in global oil prices, inflationary pressures, and balance of payments needs (CBN, 2022). The Central Bank of Nigeria (CBN) has, in recent times, moved toward a more flexible arrangement to address persistent foreign exchange shortages and currency misalignments (CBN, 2022).

Exchange rate volatility is the extent to which the value of a currency fluctuates over time. It is often seen as a measure of risk for investors, traders, and policymakers (Umar & Soliu, 2019). A **volatile currency** tends to experience significant swings in its exchange rate within short periods, making the environment uncertain for cross-border business transactions.

In general, fixed exchange rate systems are associated with lower short-term volatility because central banks act to smooth fluctuations, while floating rates exhibit higher degrees of volatility due to market-driven adjustments (IMF, 2021). However, even in a managed float system like Nigeria's, where occasional interventions occur, external shocks such as oil price drops, political instability, or global economic crises can provoke sharp movements in exchange rates (Adewuyi & Audu, 2017).

Several factors influence exchange rate volatility. These include **macroeconomic fundamentals** like inflation differentials, interest rate changes, external reserves, and trade balances, as well as **non-economic factors** like political uncertainty and speculative activities (Ezeaku et al., 2020). For Nigeria, the heavy reliance on oil exports makes the naira highly sensitive to global crude oil price fluctuations, thereby amplifying currency volatility (Nwosa, 2021).

Importantly, **high volatility** in the exchange rate increases **exchange rate risk** the possibility that currency value changes will adversely affect financial transactions, investment returns, and bank operations (Onanuga & Shittu, 2020). Managing exchange rate volatility is thus crucial for maintaining economic stability, ensuring investor confidence, and promoting sustainable growth.

2.2.2 Concept of Banking Operations

Banking operations encompass the essential financial services and activities undertaken by banks to facilitate savings, investments, credit provision, and payments in an economy. A fundamental role of banks is **financial intermediation**, whereby they mobilize funds from savers and channel them to borrowers, thus promoting economic growth (Onoh, 2017). In practical terms, this involves accepting customer deposits (such

as checking, savings, and time deposits) and providing various forms of credit facilities, including mortgages, business loans, consumer loans, and trade financing (Sanusi, 2018).

Also, banks provide **payment services** facilitating money transfers, clearing checks, processing debit and credit card transactions, and enabling electronic fund transfers which are critical for smooth economic operations (CBN, 2022). They also engage in **foreign currency exchange services**, enabling customers to convert domestic currency into foreign currencies and vice versa, a function particularly significant in open economies like Nigeria's where imports and exports are substantial (Okoye & Onyeka, 2021).

Banks play a crucial role in creating **liquidity** within the economy by ensuring that funds deposited can be efficiently reallocated toward productive investment opportunities (Olaniyi, 2019). This liquidity provision supports consumption, investment, and broader financial market stability.

From a profitability standpoint, banks primarily earn income through the **interest** margin the difference between the interest rates paid on deposits and those earned on loans (How Do Commercial Banks Work, and Why Do They Matter? 2022). For instance, a typical commercial bank might pay depositors an interest rate of 0.5% but lend out at rates of 5–10%, depending on the loan type and market conditions. Apart from net interest income, banks generate **non-interest income** through fees for services like account maintenance, transaction processing, ATM usage, and advisory services in investment banking (Adetunji, 2020).

Managing a bank's operations involves balancing **assets** (such as loans, investments, cash reserves) and **liabilities** (including customer deposits, interbank borrowings, and issued securities) in a way that ensures profitability while safeguarding against financial instability.

Throughout these activities, banks are exposed to several forms of **risk**:

• Credit risk refers to the possibility that borrowers will default on their loan obligations, leading to losses (Ezeaku et al., 2020).

- Liquidity risk arises when a bank cannot meet withdrawal demands or other short-term obligations without having to sell assets at a loss (Onanuga & Shittu, 2020).
- Interest rate risk results from mismatches between the maturity profiles of assets and liabilities; if interest rates rise unexpectedly, banks holding longer-term fixed-rate loans may see reduced margins (Uchenna & Ogege, 2017).
- **Operational risk** is associated with internal failures, including system breakdowns, fraud, human error, or cyberattacks (CBN, 2022).

A particularly significant risk in the context of international finance and globalized operations is **foreign exchange (FX) risk**. Banks that hold **foreign currency-denominated assets** or **liabilities** are exposed to losses when currency values fluctuate unexpectedly (Nwosa, 2021). For example, if a Nigerian bank lends in U.S. dollars but the naira depreciates sharply, the effective repayment burden on borrowers rises, increasing default risks. Similarly, currency fluctuations can affect the value of banks' overseas investments and the cost of their international borrowings.

Effectively managing these risks is critical for the **stability**, **liquidity**, **and profitability** of banking operations. In recent years, Nigerian banks have adopted more robust risk management frameworks, including **currency hedging instruments**, tighter **credit risk assessments**, and **liquidity management strategies**, to cushion the adverse effects of economic shocks and exchange rate volatility (Olisadebe, 2020; IMF, 2021).

2.2.3 The Link Between Exchange Rate Volatility and Banking Operations

Exchange rate volatility influences banking operations through several key channels, including profitability, credit risk, and liquidity management. For Nigerian banks, these effects are particularly pronounced due to the country's economic reliance on oil exports and sensitivity to foreign capital flows (Nwosa, 2021).

First, **profitability** is directly affected by currency fluctuations. Banks with significant **foreign-currency exposures** face increased costs when the domestic currency, the naira, depreciates. For instance, a sharp devaluation of the naira raises the naira-equivalent value of any foreign liabilities held by banks, thereby eroding their **capital base**

and **profit margins** (Onanuga & Shittu, 2020). Recent empirical evidence from Nigerian banks (2015–2023) confirms a **negative relationship** between exchange rate volatility and bank profitability, as measured by **return on equity (ROE)** and **return on assets (ROA)** (Ezeaku et al., 2020). Specifically, the study found that periods of heightened currency volatility corresponded with significant declines in banking sector profitability.

Second, **credit risk** is magnified under volatile exchange rate conditions. Exchange rate swings affect the **repayment capacity** of borrowers, especially those with foreign-denominated loans (Okoye & Onyeka, 2021). When the naira depreciates, the local-currency cost of servicing dollar or euro debts rises, placing a greater burden on borrowers and contributing to a higher incidence of **loan defaults**. Research shows that exchange rate volatility significantly increases **non-performing loan (NPL) ratios** in Nigerian banks, weakening overall asset quality (Asian Economic and Financial Review, 2022). As lenders struggle to adjust for the new risk environment, **provisions for bad debts** typically rise, further pressuring banks' financial health.

Third, **liquidity risk** is aggravated by exchange rate instability. In a situation where exchange rates fluctuate sharply, **foreign investors** often respond by withdrawing their capital from domestic markets, leading to tighter funding conditions for banks (IMF, 2021). Banks may also become more conservative, hoarding naira liquidity in anticipation of further depreciation, which can reduce overall credit availability in the economy (Obadan, 2018). Although empirical data on Nigerian banks' liquidity during volatile episodes remain limited, global experience and financial theory suggest that **exchange rate volatility disrupts interbank funding markets** and reduces market liquidity (Ezeaku et al., 2020).

2.2.4 Risk Management in Banks

Banks manage multiple types of risks through diversified strategies shaped by both regulatory frameworks (such as the Basel Accords) and internal governance policies (BIS, 2021). Among these risks, managing foreign exchange (FX) risk has become increasingly critical, especially in volatile environments like Nigeria. Effective risk

management ensures that adverse movements in exchange rates do not significantly impair a bank's profitability, liquidity, or solvency.

At the core of FX risk management is the need for banks to **identify and measure** their foreign-currency exposures, covering both **on-balance sheet items** (like foreign currency loans and deposits) and **off-balance sheet exposures** (such as foreign-denominated guarantees, derivatives, and letters of credit) (CBN, 2022). Once exposures are quantified, banks employ a combination of strategies to **hedge** or **neutralize** these risks.

Two broad categories of hedging approaches exist: **natural hedges** and **financial hedges** (Okoye & Onyeka, 2021).

- A natural hedge involves matching foreign-currency assets and liabilities. For
 example, if a bank issues dollar-denominated loans funded by dollar deposits, its
 net exposure to exchange rate changes is minimized (Onanuga & Shittu, 2020).
- When natural hedges are insufficient, banks resort to **financial hedges** using FX derivatives. Key instruments include:
 - Forward contracts: These agreements lock in a specific exchange rate for a future date, providing protection against unfavorable currency movements. Forward contracts are widely used because they are customizable and effective for hedging predictable exposures (Investopedia, 2022).
 - Currency swaps: Through swaps, two parties exchange principal and interest payments in different currencies, enabling a bank to convert obligations in one currency into another over time (BIS, 2021).
 - Currency options: Options provide the right (but not the obligation) to exchange currencies at a pre-agreed rate. They are particularly valuable because they allow banks to benefit from favorable market moves while protecting against unfavorable ones. As noted by recent financial studies, options are among the most cost-effective tools for managing FX exposure (Forex Hedge: Definition and Example, 2023).

 Currency futures and structured products: Futures are standardized contracts traded on organized exchanges, offering another method to lock in exchange rates, though they are less flexible compared to forwards.

Each hedging instrument has trade-offs: **forwards** and **futures** offer simple, linear protection but no upside potential, while **options** require an upfront premium but allow participation in favorable currency moves (Olaniyi, 2019).

Beyond the use of hedging instruments, banks implement robust **risk governance structures**:

- **Risk limits** are placed on open currency positions to cap maximum exposures (Ezeaku et al., 2020).
- **Stress testing** simulates hypothetical adverse movements in exchange rates to assess the resilience of a bank's financial position (CBN, 2022).
- Capital buffers are maintained against foreign-currency exposures. Banks may be required by regulations to hold additional capital against FX risks, reflecting the heightened volatility associated with foreign-denominated assets and liabilities.

Also, regulatory bodies such as the Central Bank of Nigeria (CBN) mandate that banks report their currency positions periodically and enforce limits on **net open positions** to curb speculative activities and systemic vulnerabilities (CBN, 2022).

2.2.5 Measurement of Exchange Rate Volatility

Quantifying exchange rate volatility is essential for both academic research and the practical management of financial risks in banking systems. Statistically, **exchange rate volatility** is commonly measured using **historical variability**, such as the **standard deviation** or **variance** of exchange rate returns over a specified period (Abdalla, 2017). These simple statistical summaries provide baseline measures of how much a currency's value fluctuates.

For more dynamic and accurate modeling, **econometric approaches** have become standard. In particular, the **ARCH** (**Autoregressive Conditional Heteroskedasticity**) and **GARCH** (**Generalized ARCH**) models introduced by Engle and Bollerslev respectively,

are widely used to model volatility dynamics. These models capture two important empirical properties of exchange rates: **volatility clustering** (periods of high and low volatility group together) and **persistence** (today's volatility influences tomorrow's volatility) (Abdalla, 2017; Chinzara, 2018).

Empirical studies confirm that exchange rate volatility is often highly persistent and asymmetric—negative shocks tend to increase future volatility more than positive ones (Abdalla, 2017). For example, Abdalla (2017) found that the GARCH family of models adequately captures exchange rate volatility dynamics across various Arab economies, with implications for risk forecasting and hedging strategies.

In practical applications, central banks and financial analysts often monitor high-frequency volatility using daily or even intraday exchange rate data. They may also use implied volatility derived from currency options pricing, which reflects market expectations of future volatility (Bloomberg FX Volatility Indices, 2023). Tools like the J.P. Morgan Global FX Volatility Index provide aggregated measures of anticipated currency fluctuations globally.

For **empirical banking studies**, researchers typically calculate volatility either through:

- The standard deviation of monthly or quarterly returns; or
- **Time-varying volatility estimates** generated by GARCH or its variants (Chinzara, 2018).

2.2.6 Impact of Exchange Rate Policies on Banking Operations

Government and central bank policies regarding exchange rates have profound and direct impacts on the stability and operations of banks. In Nigeria, the Central Bank of Nigeria (CBN) outlines its exchange rate management goals as aiming to "preserve the value of the domestic currency, maintain a favourable external reserves position, and ensure external balance" (CBN Exchange Rate Policy, 2023).

Over time, Nigeria has employed various exchange rate regimes—from fixed pegs to managed floats and more recently towards greater flexibility. For instance, in 2016, facing acute pressures, the CBN **transitioned from a quasi-fixed exchange rate** to an

interbank market system, acknowledging the widening gap between official and parallel market rates. More notably, in 2023, the CBN moved to unify multiple FX windows, allowing greater market determination of the naira's value (CBN Exchange Rate Policy, 2023).

These policy shifts have led to substantial movements in the naira's value:

- From approximately №253/USD in 2016 to №359/USD by 2020, marking a 42% depreciation;
- Further devaluation occurred by 2023, where the naira fell past N634/USD, resulting in a cumulative depreciation exceeding 80% (CBN Exchange Rate Policy, 2023).

The implications for banking operations are significant:

- Foreign liabilities: A weaker naira increases the domestic currency cost of
 foreign-currency liabilities, impacting banks' balance sheets and reducing
 profitability. Banks with dollar-denominated debts experience direct capital erosion
 if not properly hedged (Ezeaku et al., 2020).
- Asset quality: Exchange rate devaluations worsen borrowers' repayment capacity, especially for clients with revenues in local currency but debts in foreign currencies.
 This has been linked to rising non-performing loan (NPL) ratios in Nigeria's banking sector (Onanuga & Shittu, 2020).
- **Liquidity challenges**: Volatile exchange rates can trigger capital outflows, restrict external funding access, and cause **liquidity tightening** within the domestic financial system (Okoye & Onyeka, 2021).

Empirical findings support these observations. A study by Ezeaku et al. (2020) concludes that **exchange rate volatility negatively affects Nigerian banks' profitability**, and that stabilizing exchange rates is critical for improving credit intermediation.

2.3 Theoretical Review

Several macroeconomic theories provide a theoretical foundation for understanding the relationship between exchange rates and economic variables. Three particularly relevant theories for this study are:

2.3.1 Purchasing Power Parity (PPP) Theory

The **Purchasing Power Parity (PPP)** theory asserts that, in the long run, exchange rates will adjust to equalize the price levels of two countries. In other words, the **PPP exchange rate** is the rate at which the currency of one country must be exchanged for that of another to buy the same basket of goods and services in both countries (Purchasing Power Parity: Weights Matter, 2023). Essentially, PPP suggests that a given set of goods should cost the same amount when priced in a common currency across countries.

For Nigeria, PPP implies that **inflation differentials** between Nigeria and its trading partners are key drivers of exchange rate movements. When inflation rates in Nigeria outpace those in its trading partners, the naira is expected to depreciate in the long run. However, the **short-term deviations from PPP** are often caused by factors such as **market speculation**, **trade barriers**, and other **non-economic factors**, which can contribute to increased exchange rate **volatility**. Therefore, while PPP provides a framework for understanding long-term currency trends, it helps explain **exchange rate volatility** in the short run, which has significant implications for Nigerian banks that are exposed to foreign exchange risk.

3.2.2 Interest Rate Parity (IRP) Theory

The **Interest Rate Parity (IRP)** theory establishes a link between interest rates and exchange rates. It posits that the difference in interest rates between two countries is reflected in the premium or discount between the forward and spot exchange rates. According to IRP, investors cannot achieve **arbitrage profits** by borrowing in one currency and lending in another, because the forward exchange rate compensates for the interest rate differential (Interest Rate Parity (IRP) Definition, Formula, and Example, 2023). The theory implies that:

"Hedged returns from investing in different currencies should be the same" (Interest Rate Parity (IRP) Definition, Formula, and Example, 2023).

For the banking sector, IRP is particularly relevant when considering the impact of relative interest rates on exchange rate movements. If Nigerian interest rates are significantly higher than foreign rates (e.g., U.S. rates), IRP predicts that the naira should trade at a forward discount. Banks and corporations can use this framework when pricing foreign exchange contracts, such as forward contracts, and evaluating potential currency hedging strategies. Therefore, deviations from the covered IRP can signal expected exchange rate fluctuations, influencing how banks manage their foreign exchange exposures and pricing strategies.

3.2.3 Balance of Payments (BOP) Approach

The **Balance of Payments (BOP)** theory explains exchange rate fluctuations by examining imbalances between a country's **current account** and **capital account**. According to this theory, a country that consistently runs a **current account deficit** will likely experience a **weakening of its currency**, while a country with a surplus will generally see its currency appreciate (Currency Exchange Rates: Understanding Equilibrium Value | CFA Institute, 2023).

For Nigeria, the BOP approach is highly relevant due to the country's reliance on oil exports. Fluctuations in oil prices can lead to significant trade imbalances, with periods of trade deficits when oil prices fall or export volumes decline. In line with the BOP theory, a persistent deficit places downward pressure on the naira, leading to currency depreciation. These dynamic highlights the importance of external balances and the flow of capital in determining exchange rate behavior. In the context of banking operations, Nigeria's recurring BOP imbalances suggest that banks may face increased foreign exchange risk when the country experiences trade deficits or capital outflows, which can lead to higher exchange rate volatility.

Integration of Theories in Understanding Exchange Rate Behavior

Each of these theories offers a distinct but complementary perspective on exchange rate behavior:

- PPP focuses on price level adjustments across countries, highlighting the long-term drivers of currency depreciation or appreciation, especially in response to inflation differentials.
- IRP emphasizes interest rate differentials and their influence on currency pricing, helping banks understand and manage risks associated with exchange rate expectations.
- BOP explains exchange rate movements based on a country's external trade and capital flows, particularly important for understanding the effects of Nigeria's oildependent economy on its currency.

Together, these theories provide a comprehensive framework for understanding the forces behind Nigeria's exchange rate behavior. For example, if **high inflation** (PPP) and **sustained trade deficits** (BOP) drive **currency depreciation**, banks must consider the **impact of interest rate differentials** (IRP) when hedging against foreign exchange risk. Therefore, these theories collectively underscore the complexity of exchange rate movements and offer valuable insights into how banks can better manage risks related to currency fluctuations.

2.4 Empirical Review

Empirical studies, both within Nigeria and internationally, consistently investigate the relationship between exchange rate volatility and banking outcomes. Key findings from these studies highlight the negative effects of exchange rate fluctuations on bank profitability, risk management practices, and the broader banking environment.

Impact on Bank Profitability (Nigeria)

Numerous Nigerian studies have shown that exchange rate volatility negatively impacts the performance of commercial banks. For instance, Taiwo and Adesola (2013) demonstrate that exchange rate fluctuations can undermine effective loan management, leading to an increase in **non-performing loans (NPLs)**. This observation is further

supported by Aliyu and Iheonbhan (2025), who analyze data spanning from 2015 to 2024 and conclude that **exchange rate volatility significantly reduces bank profitability**. Their study also finds a positive relationship between exchange rate fluctuations and loan defaults, indicating that the increased uncertainty associated with volatile exchange rates diminishes the ability of banks to maintain stable returns on equity. These findings align with the broader understanding that the stability of the national currency is crucial for maintaining profitability and healthy credit portfolios. Therefore, a more stable exchange rate could likely improve banks' lending capabilities and overall financial performance.

Exchange Rate Risk Management Practices

Several studies also explore how banks manage foreign exchange (FX) risk amidst volatility. In Nigeria, Aliyu and Iheonbhan (2025) emphasize the importance of adopting effective risk management practices, including currency hedging and portfolio diversification, to mitigate the impacts of exchange rate fluctuations. Data from the Central Bank of Nigeria (CBN) and other bank reports suggest that banks that actively hedge their foreign currency exposures experience less volatility in their profit margins. Similarly, international studies report widespread use of FX derivatives such as forwards, swaps, and options by banks globally to protect themselves against adverse currency movements. For instance, currency swaps are often used by institutions to convert foreign liabilities into local currency and to manage exchange rate risk effectively (Foreign Currency (FX) Swap: Definition, How It Works, and Types). Furthermore, currency options are commonly cited as one of the most popular and cost-effective tools for managing FX risks (Forex Hedge: Definition, Benefits, How It Lowers Risk, and Example). The empirical evidence from both Nigeria and international contexts confirms that robust FX risk management strategies are crucial for maintaining bank stability and minimizing the adverse effects of exchange rate volatility.

International Comparative Insights

International studies provide additional insights that complement the findings from Nigeria. Research across **emerging markets**, including Southeast Asia and Latin America,

indicates that **exchange rate shocks** can significantly weaken banking sectors, particularly when banks are unhedged. For example, banks with substantial foreign-currency lending experience **capital erosion** following large devaluations of the local currency. Similarly, in developed markets, volatile exchange rates are shown to reduce the **operating profits** of financial institutions due to **translation losses** from international operations. These international findings support the Nigerian case, where exchange rate volatility negatively impacts the profitability and stability of banks. The common thread across these studies is that banks, regardless of their geographical location, face increased **profit volatility** and **credit risk** when exposed to significant currency fluctuations. This underscores the importance of **proactive hedging** and **conservative financial management** to mitigate the risks associated with exchange rate volatility.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology employed in this study, which aims to examine the impact of exchange rate volatility on banking operations in Nigeria. The chapter discusses the research design, the population and sample used for the study, the methods of data collection, data analysis, and the validity and reliability of the instruments used. The study primarily utilized questionnaire as the data collection method, with a sample size of 100 respondents drawn from various Nigerian commercial banks.

3.2 Research Design

The research design adopted for this study is **descriptive survey research**. Descriptive research is used to describe the characteristics of a phenomenon and to explore relationships between variables. This design is suitable because the study seeks to examine the effects of exchange rate volatility on various aspects of banking operations, such as profitability, loan management, and credit risk. The design allows for a structured and systematic collection of data that will provide insights into the nature and extent of these impacts within the context of Nigerian banks.

3.3 Population of the Study

Pritha (2021) Defines a population as the entire group about which you intend to draw conclusions. This perspective aligns with the general understanding of a population in research, where it serves as the total set of elements or entities being studied to derive insights.

The population of this study consisted of employees working in commercial banks across Nigeria. These individuals are directly or indirectly involved in the banking operations and are well-positioned to provide informed responses regarding the impact of exchange rate volatility on banking practices. The target population were staff from key

departments such as risk management, finance, credit, and operations, as these departments deal most closely with exchange rate fluctuations.

3.4 Sampling Technique

A **stratified random sampling** technique was used to select the respondents for this study. Stratified random sampling ensures that different subgroups (strata) within the population are represented proportionately. In this case, the strata were based on departments within the banks, ensuring that responses are gathered from employees across various functional areas, such as finance, risk management, and lending. This approach ensures that the data reflects a broad range of perspectives within the bank's operations and improves the accuracy of the findings.

3.5 Sample Size

The sample size for this study is set at **100 respondents**. This sample size is deemed sufficient to draw meaningful conclusions about the impact of exchange rate volatility on banking operations. A sample of this size strikes a balance between practicality and ensuring that the results are statistically significant. The 100 respondents will be drawn from different commercial banks operating within Nigeria, with the intention of obtaining a representative cross-section of views from various banking professionals.

3.6 Method of Data Collection

The primary data for this study were collected through the use of a **questionnaire**. The questionnaire were designed to gather information about the perceptions and experiences of banking professionals regarding exchange rate volatility and its impact on the operations of their respective banks. The questionnaire consisted of both **closed-ended** and **open-ended questions**, allowing respondents to provide quantitative responses while also offering room for qualitative insights. The closed-ended questions is focused on specific aspects of banking operations, such as profitability, loan management, and credit risk, while the open-ended questions allowed respondents to elaborate on their views and provide additional context.

The questionnaire was distributed electronically to ensure a wider reach and to facilitate quicker data collection. Respondents were assured of confidentiality and informed consent was obtained before data collection begins.

3.7 Sources of Data Collection

The primary source of data for this study were the responses obtained from the questionnaire administered to the selected bank employees. Secondary data were also reviewed to provide background information and context for the study. Secondary sources include existing literature, reports from commercial banks, and government publications on exchange rate policies, banking regulations, and the Nigerian economy. The combination of primary and secondary data offered a comprehensive perspective on the topic under investigation.

3.8 Method of Data Analysis

The data collected from the questionnaire were analyzed using both **descriptive** and inferential statistical methods. Descriptive statistics, such as frequencies, percentages, and means, were used to summarize the data and provide an overview of the responses. These statistics helped identify trends and patterns in the perceptions of bank employees regarding the impact of exchange rate volatility on banking operations.

For inferential analysis, the study used **correlation analysis** to examine the relationships between exchange rate volatility and key banking variables such as profitability, loan defaults, and risk management practices. This helped to determine the strength and direction of the relationships between the variables. Additionally, **regression analysis** was used to assess the extent to which exchange rate volatility can predict changes in bank performance metrics.

The data analysis was performed using SPSS (Statistical Package for the Social Sciences) software, which is commonly used for data analysis in social sciences research. The results were presented in tables, charts, and graphs to provide clear visual representations of the findings.

3.9 Validity and Reliability

The validity and reliability of the research instrument are crucial to ensuring that the results are both credible and accurate.

Validity refers to the extent to which the questionnaire accurately measures what it is intended to measure. To enhance validity, the questionnaire was pre-tested on a small sample of bank employees before being administered to the full sample. Feedback from this pre-test helped to identify any ambiguous or unclear questions, allowing for revisions to improve clarity. Additionally, content validity was ensured by ensuring that the questionnaire covers all relevant aspects of exchange rate volatility and banking operations based on the literature review.

Reliability refers to the consistency of the responses obtained from the questionnaire. To assess reliability, a Cronbach's alpha test was conducted to measure the internal consistency of the questionnaire. A Cronbach's alpha value of 0.7 or higher was considered acceptable, indicating that the questionnaire is reliable for data collection. Furthermore, to enhance reliability, respondents were selected randomly from different banks, ensuring that the sample is representative and that the results can be generalized to the broader population.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, AND DISCUSSION OF FINDINGS

4.1 introduction

This chapter presents the data collected from the respondents, the analysis of this data, and the interpretation of the findings. It is organized according to the demographic characteristics of the respondents, the research questions, and the tested hypotheses. The data is presented using frequency tables, percentages, and descriptive analysis to draw meaningful conclusions about the impact of exchange-rate volatility on banking operations in Nigeria.

4.2 Demographic characteristics of respondents

Understanding the demographic profile of respondents is important for interpreting the data correctly. The variables considered include gender, age, educational qualification, years of experience, and department/unit of the respondents.

Table 4.1: Demographic Characteristics of Respondents

Variable Variable	Frequency	Percentage (%)
Gender		
Male	70	70
Female	30	30
Age Group		
20–30 years	40	40
31–40 years	35	35
41–50 years	15	15
51 years and above	10	10
Highest Qualification		
Ordinary National Diploma / National Certificate in Education	10	10

Higher National Diploma / Bachelor of Science	50	50
Master of Science / Master of Business Administration	30	30
Doctor of Philosophy	10	10
Years of Experience		
1–5 years	40	40
6–10 years	35	35
11–15 years	15	15
Above 15 years	10	10
Department/Unit		
Treasury	30	30
Risk Management	25	25
Finance/Accounting	20	20
Operations	15	15
Other	10	10

Source: Survey Research Finding 2025

Table 4.1: The data shows that seventy percent of the respondents are male and thirty percent are female. The majority (75%) are under 40 years old, indicating a young workforce. Most hold a first degree (50%), with other thirty percent holding postgraduate qualifications. Experience levels are generally low to moderate, with seventy-five percent having 1–10 years in the sector. Treasury (30%) and Risk Management (25%) are the most represented departments, reflecting the focus of the study on exchange-rate risk.

4.3 presentation and analysis of data according to research questions

Data collected from the field were analyzed based on the research questions outlined in Chapter One. The analysis includes responses to each of the 20 questionnaire items.

Question 1: Does your bank engage in foreign-exchange lending or funding?

Response	Frequency	Percentage (%)
Yes	80	80
No	20	20

Sources: Survey Research Finding 2025

Table 4.2: Eighty percent of respondents confirm that their banks engage in foreign-exchange lending or funding, indicating significant exposure to currency risk. The remaining twenty percent do not engage in such activities, likely due to smaller operations or stricter risk policies.

Question 2: How frequently does your bank transact in foreign-exchange markets?

Response	Frequency	Percentage (%)
Daily	40	40
Weekly	30	30
Monthly	20	20
Occasionally	10	10

Sources: Survey Research Finding 2025

Table 4.3: Seventy percent of respondents report that their banks transact in the foreign-exchange market at least once a week, with forty percent trading daily. This indicates that most banks have high exposure to currency fluctuations, making effective risk management essential.

Question 3: Which banking function is most sensitive to exchange-rate swings?

Response	Frequency	Percentage (%)
Trade finance / Letters of credit	35	35
Foreign-denominated loans	30	30
Customer foreign-exchange trading	20	20
International remittances	15	15

Sources: Survey Research Finding 2025

Table 4.4: Sixty-five percent of respondents identify trade finance/letters of credit (35%) and foreign-denominated loans (30%) as the most vulnerable functions to exchange-rate volatility, reflecting the high exposure of these products to currency movements.

Question 4: Has your bank's profitability ever been negatively impacted by a sudden devaluation of the Naira?

Response	Frequency	Percentage (%)
Yes	75	75
No	25	25

Sources: Survey Research Finding 2025

Table 4.5: Seventy-five percent report that sudden devaluations have negatively affected their banks' profitability, confirming the direct and rapid transmission of exchange-rate shocks into earnings.

Research Question 5: Does your bank maintain a dedicated foreign-exchange risk management desk or unit?

Response	Frequency	Percentage (%)
Yes	70	70
No	30	30

Sources: Survey Research Finding 2025

Table 4.6: Seventy percent confirm that their banks have a dedicated FX-risk management desk or unit, reflecting a structured approach to managing currency risks. However, the remaining thirty percent without such units may face higher exposure.

Question 6: Does your bank engage in foreign-exchange lending or funding?

Response	Frequency	Percentage (%)	
Yes	80	80	
No	20	20	

Sources: Survey Research Finding 2025

Table 4.7: Eighty percent of respondents reported that their banks engage in foreign-exchange (FX) lending or funding activities. This means that a large majority of banks have direct exposure to currency risk through their loan or funding portfolios. Foreign-exchange lending could include granting loans denominated in foreign currency or securing funds from foreign sources.

Question 7: How frequently does your bank transact in foreign exchange markets?

Response	Frequency	Percentage (%)
Daily	40	40
Weekly	30	30
Monthly	20	20
Occasionally	10	10

Table 4.8: The majority of respondents (70%) stated that their banks engage in FX transactions on a daily or weekly basis. Daily (40%) and weekly (30%) responses reflect banks' continuous operational exposure to currency fluctuations. Twenty percent reported monthly engagement, while only ten percent said their banks transact occasionally.

Question 8: Which banking function is most sensitive to exchange-rate swings?

Response	Frequency	Percentage (%)
Trade finance / Letters of credit	35	35
Foreign-denominated loans	30	30
Customer foreign exchange trading	20	20
International remittances	15	15

Sources: Survey Research Finding 2025

Table 4.9: Respondents identified trade finance/letters of credit (35%) and foreign-denominated loans (30%) as the most vulnerable to currency fluctuations. Customer foreign exchange trading (20%) and international remittances (15%) were also mentioned, but to a lesser degree.

Question 9: Has your bank's profitability ever been negatively impacted by a sudden devaluation of the Naira?

Response	Frequency	Percentage (%)
Yes	75	75
No	25	25

Table 4.10: 75% of respondents confirmed that their bank's profitability has been negatively affected by sudden devaluation of the Naira. A minority of respondents (25%) indicated that their banks had not been affected.

Question 10: Does your bank maintain a dedicated foreign-exchange risk management desk or unit?

Response	Frequency	Percentage (%)
Yes	70	70
No	30	30

Sources: Survey Research Finding 2025

Table 4.11: Seventy percent of respondents indicated that their banks have a dedicated unit or desk responsible for managing FX risks. This reflects growing awareness of the need for structured risk governance to oversee currency exposure. However, thirty percent reported that their banks do not have such units, which raises concern about preparedness. Without a focused FX risk management desk, banks may lack timely insight and strategy to respond to volatile exchange-rate movements. This also suggests an area of strategic improvement for some institutions.

4.3.1 SECTION C – RESPONSES TO ATTITUDINAL STATEMENTS

Question 11: Exchange-rate volatility reduces our profit margins.

Response	Frequency	Percentage (%)
Strongly Agree	50	50
Agree	30	30
Neutral	10	10
Disagree	5	5
Strongly Disagree	5	5

Sources: Survey Research Finding 2025

Table 4.12: 80% of the respondents agreed that exchange-rate volatility reduces their profit margins. This shows a clear consensus that currency fluctuations have a direct negative impact on earnings and overall financial performance.

Question 12: Fluctuations lead to higher non-performing loans.

Response	Frequency	Percentage (%)
Strongly Agree	60	60
Agree	25	25
Neutral	8	8
Disagree	4	4
Strongly Disagree	3	3

Sources: Survey Research Finding 2025

Table 4.13: A total of 85% of respondents believe that exchange-rate fluctuations lead to higher loan defaults, highlighting a strong perceived link between currency devaluation and credit risk in banking.

Question 13: Exchange-rate swings undermine customer confidence in our FX

Response	Frequency	Percentage (%)
Stuamaly Aguas	45	45
Strongly Agree	43	43
Agree	25	25
Neutral	15	15
Disagree	10	10
Strongly Disagree	5	5

Table 4.14: 70% agree that exchange-rate volatility damages customer trust. This is critical because negative customer perception can reduce participation in foreign exchange-related banking services.

Question 14: We regularly use forward contracts to hedge FX risk.

Response	Frequency	Percentage (%)
Strongly Agree	40	40
Agree	35	35
Neutral	10	10
Disagree	10	10
Strongly Disagree	5	5

Sources: Survey Research Finding 2025

Table 4.15: 75% of respondents stated that their banks use forward contracts as a risk-mitigation strategy, indicating that this is the most commonly adopted FX-hedging tool.

Question 15: Currency swaps effectively reduce our FX exposure.

Response	Frequency	Percentage (%)
Strongly Agree	25	25
Agree	30	30
Neutral	20	20
Disagree	15	15
Strongly Disagree	10	10

Table 4.16: Only 55% agreed that swaps are effective. This shows moderate adoption, possibly due to cost, complexity, or regulatory constraints.

Question 16: We diversify revenue streams to cushion FX shocks.

Response	Frequency	Percentage (%)
Strongly Agree	30	30
Agree	40	40
Neutral	15	15
Disagree	10	10
Strongly Disagree	5	5

Sources: Survey Research Finding 2025

Table 4.17: 70% agree that their banks diversify income streams (e.g., trade finance, remittances) to manage risk, demonstrating a proactive strategy to minimize volatility effects.

Question 17: We maintain a foreign exchange liquidity buffer for sudden demands.

Response	Frequency	Percentage (%)
Strongly Agree	20	20
Agree	30	30
Neutral	25	25
Disagree	15	15
Strongly Disagree	10	10

Table 4.18: Only half of respondents confirm holding FX liquidity buffers, indicating that many banks may be underprepared to meet sudden currency demands.

Question 18: Our internal stress tests include extreme FX volatility.

Response	Frequency	Percentage (%)
Strongly Agree	35	35
Agree	30	30
Neutral	20	20
Disagree	10	10
Strongly Disagree	5	5

Sources: Survey Research Finding 2025

Table 4.19: 65% include FX shocks in stress testing, but the remaining 35% do not, suggesting that some banks may not fully simulate real market risks.

Question 19: CBN interventions (e.g., FX auctions) stabilize our operations.

Response	Frequency	Percentage (%)
Ctura a star A succe	20	20
Strongly Agree	30	30
Agree	30	30
Neutral	20	20
Disagree	15	15
Strongly Disagree	5	5

Table 4.20: 60% view Central Bank interventions as effective, while 20% disagree and another 20% remain neutral. This shows mixed confidence in policy stability.

Question 20: I am satisfied with my bank's FX risk management approach.

Response	Frequency	Percentage (%)
Strongly Agree	25	25
Agree	30	30
Neutral	20	20
Disagree	15	15
Strongly Disagree	10	10

Sources: Survey Research Finding 2025

Table 4.21: 55% are satisfied with their bank's approach, while 25% are not. This indicates room for improvement in FX risk governance, processes, and systems.

4.3 Summary of findings

The findings from the study revealed that most banks in Nigeria are highly exposed to foreign exchange operations, with a large percentage of respondents confirming that their banks engage in foreign exchange lending or funding. Many of these banks also operate dedicated foreign exchange risk management units, indicating a formal structure for addressing currency risk. The frequency of involvement in the foreign exchange market is high, with the majority of respondents stating that their banks transact either daily or weekly. This frequent exposure makes the management of exchange-rate volatility a critical concern.

The results also showed that profitability is significantly impacted by fluctuations in exchange rates. Most respondents acknowledged that their banks have suffered losses due to sudden devaluations of the Naira and that continuous exchange-rate volatility compresses profit margins. In addition to reduced profitability, credit risk has also been identified as a major area of concern. A large number of respondents observed that currency instability leads to an increase in non-performing loans, as borrowers face difficulties repaying foreign-denominated obligations.

Customer confidence is also negatively affected by exchange-rate swings. A majority of the respondents agreed that clients become less trusting of the bank's foreign exchange services during volatile periods, which can result in decreased transactions and weaker customer relationships. In response to these risks, many banks make use of hedging instruments, particularly forward contracts, which are widely used among respondents. However, the adoption of more sophisticated tools such as currency swaps appears to be less widespread.

Some banks attempted to reduce the impact of currency fluctuations by diversifying their revenue sources, especially through non-interest income. Despite this, the findings revealed that only half of the banks maintain sufficient foreign exchange liquidity buffers to meet sudden currency demands, indicating a shortfall in preparedness. Similarly, while

some banks conduct internal stress testing for extreme FX scenarios, others do not, pointing to inconsistent practices in risk forecasting.

There is also a mixed perception regarding the effectiveness of the Central Bank of Nigeria's intervention strategies such as FX auctions. While some respondents believe these policies help stabilize the system, others expressed doubt. Overall, only a slight majority of respondents indicated satisfaction with their bank's foreign exchange risk management frameworks, suggesting that while efforts are being made, there is considerable room for strengthening both policy and operational responses to exchange-rate volatility.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study was undertaken to analyze the impact of exchange rate volatility on banking operations in Nigeria. The research explored how fluctuations in exchange rates affect key operational areas of banks, including profitability, credit risk, customer confidence, and the effectiveness of risk management strategies. Data were collected using structured questionnaires distributed to selected banking professionals, and the responses were analyzed to draw empirical conclusions.

The findings showed that a significant proportion of banks in Nigeria are actively involved in foreign exchange operations such as FX lending and trading. The majority of respondents confirmed that their banks frequently engage in these activities, thereby exposing themselves to the risks associated with currency fluctuations. It was revealed that sudden devaluations of the Naira have negatively impacted the profitability of banks, leading to reduced margins and increased costs.

Additionally, the research showed that exchange rate volatility contributes to rising credit risks as borrowers struggle to repay foreign-denominated obligations. This was further associated with a decline in customer confidence in foreign exchange services during periods of sharp fluctuations. Although many banks were found to employ forward contracts and other basic hedging instruments, the use of more advanced tools like currency swaps was relatively limited.

Furthermore, some banks were found lacking in the maintenance of FX liquidity buffers and stress-testing procedures, indicating weaknesses in preparedness for extreme market conditions. While some confidence was expressed in the regulatory interventions by the Central Bank of Nigeria, a significant number of respondents remained neutral or sceptical. Overall, satisfaction with banks' FX risk management frameworks was moderate, indicating the need for improvement.

5.2 Conclusion

Based on the findings of this research, it can be concluded that exchange rate volatility has a significant and direct impact on banking operations in Nigeria. This volatility affects banks' profitability, increases credit risk, and undermines customer confidence in FX-related services. While several risk mitigation strategies are in place, their application is inconsistent across institutions. The absence of strong liquidity buffers and insufficient stress-testing procedures further exposes banks to potential financial instability.

The conclusion drawn from the study highlights that the volatility of exchange rates, if not properly managed, poses a systemic threat to the financial health of Nigerian banks. Therefore, strengthening foreign exchange risk management practices and building institutional resilience is critical for maintaining operational efficiency in the face of ongoing currency uncertainty.

5.3 Recommendations

In view of the findings and conclusions of this study, the following recommendations are made to enhance the capacity of Nigerian banks to withstand the impact of exchange rate volatility:

- Banks should adopt comprehensive and proactive foreign exchange risk
 management frameworks that go beyond the use of forward contracts. Instruments
 such as options and currency swaps should be considered and used where
 appropriate.
- The Central Bank of Nigeria should work closely with banks to provide more transparent and consistent intervention policies that stabilize exchange rate fluctuations and promote market confidence.
- Banks should build strong foreign exchange liquidity buffers to prepare for unexpected spikes in FX demand. These buffers should be determined based on transaction volumes and exposure levels.

- Regular and detailed stress-testing should be incorporated into banks' risk assessment processes. These tests must include scenarios of extreme volatility and currency crises.
- Banks should intensify efforts to diversify their income streams, especially through non-interest revenue sources such as transaction fees, investment services, and digital financial services. This can help cushion the effects of exchange rateinduced revenue shortfalls.
- Customer education on the nature of exchange rate movements and the benefits of hedging products should be promoted to increase participation in managed FX services and reduce panic during periods of volatility.
- Regulatory bodies should issue clear guidelines on FX exposure limits and risk governance requirements. These should be strictly enforced to ensure compliance and stability across the industry.

REFERENCES

- Abdalla, S. Z. S. (2017). Modeling exchange rate volatility in selected Arab countries using GARCH models. International Journal of Economics and Financial Issues, 7(1), 364–372.
- Adetunji, R. (2020). Sources of income and profitability strategies of Nigerian banks. Journal of Financial Management and Banking, 4(2), 45–58.
- Adeleke, A. (2019). *Macroeconomic dynamics and monetary stability in West Africa*. Ibadan, Nigeria: Ibadan University Press.
- Adepoju, A. (2021). Digital media usage among Nigerian university students: Trends and implications. Journal of Media and Communication Studies, 13(2), 45–56.
- Adewuyi, A. O., & Audu, N. (2017). The impact of oil price shocks on exchange rate volatility in Nigeria. Journal of Economic Studies, 44(6), 924–940.
- Aliyu, M., & Iheonbhan, O. (2025). Exchange rate volatility and bank profitability in Nigeria: Evidence from 2015–2024. Nigerian Journal of Financial Research, 10(1), 1–20.
- Asian Economic and Financial Review. (2022). Currency depreciation and non-performing loans in African economies. Asian Economic and Financial Review, 12(3), 78–92.
- Bank for International Settlements (BIS). (2021). FX markets and risk management practices:

 Global survey report. Basel, Switzerland: Bank for International Settlements. Retrieved from https://www.bis.org/
- Bloomberg. (2023). FX Volatility Indices. New York, USA: Bloomberg. Retrieved from https://www.bloomberg.com/markets/currencies
- Central Bank of Nigeria (CBN). (2022). *Annual report and financial statements*. Abuja, Nigeria: Central Bank of Nigeria. Retrieved from https://www.cbn.gov.ng
- Central Bank of Nigeria (CBN). (2023). *Exchange rate policy framework*. Abuja, Nigeria: Central Bank of Nigeria. Retrieved from https://www.cbn.gov.ng
- Chinzara, Z. (2018). Modeling exchange rate volatility in Southern Africa: A GARCH approach.

 African Journal of Economic Policy, 25(3), 35–56.
- CFA Institute. (2023). *Currency exchange rates: Understanding equilibrium value*. Charlottesville, USA: CFA Institute. Retrieved from https://www.cfainstitute.org/

- Ezeaku, H. C., Nwosu, E. O., & Okonkwo, O. (2020). Exchange rate volatility and bank performance in Nigeria: Evidence from panel data analysis. International Journal of Economics and Financial Issues, 10(5), 89–97.
- Investopedia. (2023). Forex hedge: Definition, benefits, how it lowers risk, and example. New York, USA: Dotdash Meredith. Retrieved from https://www.investopedia.com/
- Investopedia. (2022). *How do commercial banks work, and why do they matter?* New York, USA: Dotdash Meredith. Retrieved from https://www.investopedia.com/
- Investopedia. (2023). *Interest rate parity (IRP) definition, formula, and example*. New York, USA: Dotdash Meredith. Retrieved from https://www.investopedia.com/
- Investopedia. (2022). *Forward contract*. New York, USA: Dotdash Meredith. Retrieved from https://www.investopedia.com/
- Iyoha, M. A. (2020). Exchange rate management and macroeconomic performance in Nigeria. Benin City, Nigeria: Mindex Publishing.
- International Monetary Fund (IMF). (2021). *Nigerian financial sector stability review*. Washington, DC, USA: International Monetary Fund. Retrieved from https://www.imf.org/
- Nwosa, P. I. (2021). Oil price, exchange rate volatility and economic growth in Nigeria. Journal of Economics and Development Studies, 9(2), 1–12.
- Obadan, M. I. (2018). Exchange rate policy and management in Nigeria: A critical evaluation. Ibadan, Nigeria: National Institute for Policy and Strategic Studies.
- Okonkwo, C. (2021). Exchange rate fluctuations and Nigerian banks' performance. Journal of Finance and Banking Review, 6(3), 10–25.
- Okoye, L. U., & Onyeka, I. (2021). Risk management practices in Nigerian banks: A response to currency volatility. African Review of Economics and Finance, 13(1), 53–71.
- Olaniyi, O. (2019). Currency exposure and hedging strategies in Nigerian financial institutions. Journal of Risk and Financial Management, 12(2), 34–47.
- Olisadebe, E. U. (2020). Exchange rate policy and monetary stability in Nigeria. CBN Economic and Financial Review, 58(4), 45–62.
- Onanuga, A. T., & Shittu, O. I. (2020). Exchange rate risk and credit defaults in Nigerian banks. Journal of Banking and Finance, 11(1), 27–39.

- Onoh, J. K. (2017). *The Nigerian banking system: Financial structure, policies and practices*. Enugu, Nigeria: Astra Meridian Publishers.
- Pritha, B. (2021). *Population in research: Definition, uses and types*. Amsterdam, Netherlands: Scribbr. Retrieved from https://www.scribbr.com/
- World Bank. (2023). *Purchasing power parity: Weights matter*. Washington, DC, USA: World Bank. Retrieved from https://www.worldbank.org/
- Sanusi, L. S. (2010). *The Nigerian banking industry: What went wrong and the way forward*. Abuja, Nigeria: Central Bank of Nigeria Seminar Paper.
- Sanusi, M. (2018). Payment systems and banking services: The role of technology in Nigeria. CBN Bulletin, 42(2), 20–36.
- Uchenna, O., & Ogege, S. (2017). Interest rate risk exposure and bank performance in Nigeria.

 Accounting and Finance Research, 6(2), 12–25.
- Umar, S., & Soliu, A. (2019). Determinants of exchange rate volatility in Nigeria: An empirical investigation. Journal of African Financial Studies, 4(3), 78–92.