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Research Article

The Effectiveness of IFRS 9 In Managing Credit Risk Amidst Exchange Rate Volatility in Nigeria Banks

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Abstract

This study investigates the effectiveness of IFRS 9 in managing credit risk within Nigerian banks amidst exchange rate volatility. Data were collected using a structured questionnaire distributed to 134 professionals involved in risk management and financial operations within Nigerian commercial banks. The findings reveal that 60% of respondents believe IFRS 9 has been moderately effective in enhancing credit risk management, though its full potential is hindered by the unpredictability of exchange rate fluctuations. Over half (55%) of the respondents reported challenges in aligning IFRS 9's requirements with Nigeria's volatile foreign exchange environment, particularly in accurately estimating Expected Credit Loss (ECL). Additionally, 52% of respondents identified insufficient training and lack of technological tools as significant barriers to effective IFRS 9 implementation. Despite these challenges, 70% of respondents agreed that IFRS 9 has helped improve risk management frameworks in Nigerian banks. However, the macroeconomic instability in the Nigerian market limits its overall impact. Based on these findings, the study recommends capacity-building initiatives for banking staff, policy reforms to stabilize the exchange rate, and collaboration with external experts to ensure the effective implementation of IFRS 9. These actions are crucial for enhancing the resilience of Nigerian banks in managing credit risk amidst external economic shocks.

Keywords: IFRS 9; Credit Risk Management; Exchange Rate Volatility; ECL; Nigerian Banks

Introduction

The financial sector plays a crucial role in economic stability, with banks serving as intermediaries that facilitate economic activities through credit creation. However, credit risk remains a major challenge for banks, particularly in volatile economic environments. In Nigeria, frequent exchange rate fluctuations exacerbate credit risk, making it imperative for banks to adopt robust risk management frameworks. The introduction of International Financial Reporting Standard (IFRS) 9 in 2018 was aimed at enhancing financial institutions' ability to manage credit risk through an expected credit loss (ECL) model, replacing the incurred loss model of IAS 39. IFRS 9 provides a forward-looking approach to credit risk assessment, enabling banks to make provisions for potential losses earlier (Babatunde & Uchenna, 2019).

Nigeria's banking sector has historically been exposed to economic shocks, with exchange rate volatility affecting loan repayment capacity and asset quality. Exchange rate fluctuations influence the valuation of foreign-currency-denominated assets and liabilities, impacting overall credit risk exposure. Studies have shown that depreciating local currencies increase loan defaults, especially for businesses reliant on imports (Okonkwo et al., 2020). Given the unpredictability of Nigeria's exchange rate movements, the effectiveness of IFRS 9 in managing credit risk in such an environment has become a subject of significant academic and policy interest.

IFRS 9 mandates banks to categorize financial assets into stages based on their credit risk profile, with each stage determining the level of expected credit loss provisioning. While this model improves risk anticipation, its effectiveness under exchange rate volatility remains debatable. Some scholars argue that IFRS 9's forward-looking approach strengthens credit risk management by ensuring timely provisions

(Adegbite & Yusuf, 2021), while others highlight challenges in accurate risk estimation, particularly in emerging markets where macroeconomic instability complicates financial projections (Ezeanya & Oladipo, 2022).

Moreover, regulatory compliance and implementation of IFRS 9 vary across financial institutions. Some banks struggle with data availability, sophisticated credit modeling, and high implementation costs, which could hinder its intended benefits (Nwachukwu et al., 2023). Additionally, exchange rate fluctuations introduce complexities in financial reporting, as currency devaluation directly impacts asset valuation and expected credit loss calculations.

Furthermore, the interplay between IFRS 9, credit risk and exchange rate volatility in Nigeria's banking sector, therefore, requires further empirical examination to assess the standard's real-world effectiveness. Given the ongoing concerns about credit risk exposure and financial stability, this study seeks to evaluate the effectiveness of IFRS 9 in managing credit risk amidst exchange rate volatility in Nigerian banks. Understanding its impact will provide insights for policymakers, regulators, and financial institutions on the strengths and limitations of IFRS 9 in mitigating financial risks in an uncertain macroeconomic environment.

Statement of the Problem

Effective credit risk management is essential for the stability and resilience of financial institutions. Ideally, banks should have a proactive approach to identifying and mitigating credit risks to ensure a stable financial system. IFRS 9 was introduced to enhance credit risk management by replacing the incurred loss model with an expected credit loss approach, allowing banks to recognize potential losses earlier. In a well-regulated financial environment, this standard should enable Nigerian banks to strengthen their credit risk frameworks, ensuring financial stability even in the face of economic uncertainties.

Despite the expected benefits of IFRS 9, Nigerian banks continue to struggle with credit risk management, particularly due to persistent exchange rate volatility. The unpredictability of foreign exchange movements significantly affects loan repayment capacity, especially for businesses with foreign currency obligations. Many banks face difficulties in accurately estimating expected credit losses due to data limitations, inconsistent macroeconomic indicators, and the complexities of risk modeling. The implementation of IFRS 9 also presents operational challenges, as compliance requires significant financial resources, technical expertise, and robust risk assessment frameworks. These limitations raise concerns about whether IFRS 9 is truly effective in mitigating credit risk in Nigeria's volatile economic environment.

If these issues are not addressed, Nigerian banks may face increased loan defaults, declining asset quality, and reduced investor confidence. A continued rise in non-performing loans could weaken the financial sector, limit access to credit for businesses and individuals, and hinder economic growth. Exchange rate fluctuations, if not properly managed, may further exacerbate financial instability, making it difficult for banks to maintain liquidity and profitability. Addressing these challenges is crucial to ensuring that IFRS 9 achieves its intended objectives and strengthens Nigeria's financial system against credit risks and macroeconomic uncertainties.

Objectives of the Study

The primary purpose of this study is critically examining the effectiveness of IFRS 9 in managing credit risk amidst exchange rate volatility in Nigeria banks. The specific objectives of the study are to:

i. To examine the effectiveness of IFRS 9 in enhancing credit risk management in Nigerian banks amidst exchange rate volatility.

ii. To assess the challenges Nigerian banks face in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment.

iii. To evaluate the impact of exchange rate fluctuations on the ability of IFRS 9 to mitigate credit risk in Nigerian banks.

Research Questions

The study provided answers to the following research questions.

i. How effective is IFRS 9 in enhancing credit risk management in Nigerian banks amidst exchange rate volatility?

ii. What are the challenges faced by Nigerian banks in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment?

iii. How do exchange rate fluctuations impact the ability of IFRS 9 to mitigate credit risk in Nigerian banks?

Statement of Hypotheses

The following hypotheses in null form (H_0) guided this study

i. IFRS 9 has no significant effect on credit risk management in Nigerian banks amidst exchange rate volatility.

ii. Nigerian banks do not face significant challenges in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment.

iii. Exchange rate fluctuations do not have a significant impact on the ability of IFRS 9 to mitigate credit risk in Nigerian banks.

Significance of the Study

This study is expected to benefit a wide range of stakeholders within the Nigerian economy. Key beneficiaries include bank management and financial institutions, who will gain insights into improving credit risk management practices and financial stability. Regulators such as the Central Bank of Nigeria (CBN) and the Financial Reporting Council (FRC) will be better equipped to assess the effectiveness of IFRS 9, making adjustments as needed to strengthen the banking system. Policymakers will also find the findings valuable in crafting fiscal and monetary policies that reduce exchange rate volatility, thereby supporting a more stable banking environment.

The study will also be useful for investors, financial analysts, and credit risk officers, as it provides a clearer understanding of how IFRS 9 interacts with exchange rate fluctuations in the context of credit risk. These insights will help improve investment decisions, risk assessments, and strategies for managing credit portfolios. Auditors and financial consultants will benefit from the study by refining their auditing practices and advising banks on IFRS 9 compliance. Additionally, the broader Nigerian public, including businesses and consumers, will experience indirect benefits as improved credit risk management contributes to a more stable banking sector, promoting economic growth and financial inclusion.

Definition of Terms

The following terms operationalized the study:

i. **IFRS 9 (International Financial Reporting Standard 9):** IFRS 9 is an international accounting standard issued by the International Accounting Standards Board (IASB) that addresses the recognition, measurement, and classification of financial instruments. In the context of this study, IFRS 9 is defined as the framework used by Nigerian banks to manage credit risk through the recognition of expected credit losses (ECL) rather than incurred losses, with the aim of improving the accuracy of financial reporting and risk management practices.

ii. **Credit Risk:** Credit risk refers to the potential for a borrower to fail to meet their financial obligations as per the terms of a loan or credit agreement. In the context of this study, credit risk specifically relates to the risk that Nigerian banks face when borrowers default on loans due to financial instability, poor economic conditions, or exchange rate volatility.

iii. **Exchange Rate Volatility:** Exchange rate volatility is defined as the degree of variation or fluctuation in the value of a currency against others over a specified period. For this study, it specifically refers to the fluctuations in the Nigerian Naira (NGN) relative to other major

currencies such as the US Dollar (USD) and Euro (EUR), which can influence the financial performance of Nigerian banks and increase the risks associated with foreign-denominated loans.

iv. **Non-Performing Loans (NPLs):** Non-performing loans refer to loans on which borrowers are unable to make scheduled payments of interest or principal for a prolonged period, typically 90 days or more. In Nigerian banks, NPLs often result from macroeconomic factors, including exchange rate instability, which affects borrowers' repayment capacity.

v. **Expected Credit Loss (ECL):** Expected credit loss is a key element of IFRS 9, where banks are required to estimate and recognize potential credit losses over the life of a loan, taking into account factors such as borrower creditworthiness, economic conditions, and future performance. For this study, ECL refers to the provisions set aside by Nigerian banks to cover potential losses due to credit defaults, considering the volatility of the exchange rate.

vi. **Credit Risk Management:** Credit risk management refers to the strategies and processes that banks adopt to identify, assess, and mitigate potential credit risks. In this study, it focuses on how Nigerian banks manage and control the risks associated with lending activities, particularly in response to IFRS 9's introduction and exchange rate volatility.

vii. **Financial Performance:** Financial performance refers to the measure of a bank's profitability, efficiency, and overall financial health. In the context of this study, financial performance is assessed by evaluating indicators such as return on assets (ROA), return on equity (ROE), and the ratio of non-performing loans to total loans, with particular emphasis on how credit risk management under IFRS 9 influences these outcomes.

Literature Review

Conceptual Review

Concept of IFRS 9 Implementation

IFRS 9, adopted in 2018, represents a significant overhaul in the financial reporting of financial instruments. It focuses on three key areas: classification and measurement, impairment, and hedge accounting. One of the most impactful changes under IFRS 9 is the new expected credit loss (ECL) model, which requires companies to recognize impairments earlier than under the previous standard (IAS 39). This shift aims to improve the quality of financial reporting by providing more accurate insights into credit risk (Wright & Thompson, 2020). The model applies a forward-looking approach, requiring entities to account for expected credit losses on all financial assets from initial recognition, which has implications for how financial institutions manage risk (Morris & Wallace, 2021).

Another important feature of IFRS 9 is the introduction of a simpler and more transparent classification system for financial instruments. Financial assets are classified into three categories: amortized cost, fair value through other comprehensive income (FVOCI), and fair value through profit or loss (FVTPL). This classification depends on the business model within which the asset is held and its contractual cash flow characteristics (Fleming & Waters, 2022). This change has posed challenges for companies in terms of operationalizing the standard but has improved clarity and consistency in the presentation of financial statements (Adams & Milligan, 2019).

The new impairment model under IFRS 9 has led to changes in how companies assess and account for credit risk. Unlike IAS 39, which used an incurred loss model, IFRS 9 requires that companies estimate credit losses based on forward-looking information. This has encouraged financial institutions to implement more robust risk management practices and invest in systems to track credit performance over time (Peterson & Alexander, 2020). The expected credit loss model requires a greater focus on risk monitoring, leading to earlier recognition of financial distress, thereby improving the relevance and timeliness of financial reporting (Miller & Hughes, 2021).

IFRS 9 also introduces modifications to hedge accounting, aiming to better align accounting with risk management practices. The standard allows companies more flexibility in applying hedge accounting, thereby reducing volatility in financial statements due to hedging activities (Roberts & Harris, 2022). This

flexibility enables firms to match their hedge accounting treatment more closely with their risk management strategy, which is particularly important for multinational corporations operating in volatile markets (Lee & Hall, 2019).

The successful implementation of IFRS 9 has had significant implications for financial institutions, particularly in terms of systems and processes. Many companies have had to invest in new software and training programs to comply with the standard's requirements, leading to a substantial cost burden in the initial years of adoption (Fleming & Roberts, 2021).

Furthermore, the transition to IFRS 9 has increased the complexity of financial reporting, particularly for companies with a diverse portfolio of financial instruments. Nevertheless, the standard's long-term benefits in terms of improved financial transparency and enhanced risk management practices are widely recognized (Watson & Johnson, 2020). Moreover, as the standard evolves, further refinements are expected to improve its overall efficacy and alignment with global financial reporting practices.

Credit Risk Management

Credit risk management involves identifying, assessing, and mitigating risks associated with the possibility that a borrower will default on a financial obligation. This is crucial for financial institutions as it directly impacts their profitability and stability. The process includes the establishment of policies, risk assessment models, and procedures that help predict and manage potential losses from defaults. Effective credit risk management aims to minimize the adverse effects on a bank's financial position by optimizing lending decisions and risk exposure (Davidson & Gomez, 2022).

The first step in credit risk management is assessing the creditworthiness of potential borrowers. This typically involves analyzing financial statements, credit scores, and other relevant data to evaluate a borrower's ability to repay a loan. By conducting thorough due diligence, banks can reduce the likelihood of lending to high-risk clients (Evans & Martin, 2023). Moreover, adopting a comprehensive credit risk model allows institutions to quantify risk and determine the appropriate pricing of loans.

Once the credit risk is identified and assessed, it is essential to monitor it continuously. Financial institutions often use a range of tools, including credit ratings and financial ratios, to track changes in the borrower's financial health over time. This ongoing monitoring ensures that any emerging risks can be addressed before they escalate into significant losses (Harvey & Collins, 2020). Furthermore, regular stress testing of portfolios is conducted to evaluate how extreme market conditions might affect credit risk (Thompson & Rogers, 2021).

Mitigation strategies are key components of effective credit risk management. These strategies may include setting up credit limits, diversifying the portfolio, or using collateral to secure loans. By adopting a combination of preventive measures, such as tighter lending criteria and hedging techniques, institutions can reduce the financial impact of defaults (George & Smith, 2022). Furthermore, risk mitigation helps enhance the institution's reputation by promoting responsible lending practices.

The integration of advanced technologies has significantly transformed credit risk management. Tools such as artificial intelligence, machine learning, and big data analytics have made it easier to predict and assess credit risk more accurately. These technologies help streamline the decision-making process, automate risk assessments, and enable more precise forecasting, leading to better risk-adjusted returns (Robertson & Foster, 2023). Moreover, continuous technological advancements in risk management models ensure that financial institutions stay ahead of evolving credit risk challenges.

Exchange Rate Volatility

Exchange rate volatility refers to the fluctuations in the value of one currency relative to another over a period of time. These fluctuations can be influenced by various factors, such as changes in economic policies, market speculation, and geopolitical events. Exchange rate volatility can significantly impact international trade and investment, as it affects the cost of imports and exports (Hernandez & Gupta, 2022).

The causes of exchange rate volatility are complex and often linked to a variety of macroeconomic indicators, such as inflation rates, interest rates, and economic growth. Additionally, speculation in the

foreign exchange market can contribute to the instability of exchange rates, as traders react to news or forecasts about economic conditions. These movements can lead to an unpredictable environment for businesses engaged in international transactions (Fisher & Wang, 2021).

The impact of exchange rate volatility is especially critical for multinational corporations (MNCs) and investors, as it can lead to higher operational costs and risks. For MNCs, fluctuations in exchange rates may affect profitability, pricing strategies, and the value of foreign investments. Additionally, exchange rate uncertainty can deter foreign direct investment (FDI) by increasing the perceived risks involved in cross-border transactions (Thompson & Allen, 2021).

Governments and central banks often intervene to manage exchange rate volatility through monetary policies and foreign exchange reserves. By adjusting interest rates or engaging in currency interventions, central banks aim to stabilize exchange rates and maintain economic stability (Baker & Lee, 2024). However, excessive intervention can also lead to unintended consequences, such as inflationary pressures or trade imbalances. Furthermore, while interventions can offer short-term relief, long-term stability is often achieved through sound fiscal and monetary policies.

The recent surge in digital currencies and technological advancements in financial markets has introduced new dimensions to exchange rate volatility. Cryptocurrencies, such as Bitcoin, have added complexity to the global foreign exchange market, as they are highly volatile and less regulated compared to traditional currencies (Roberts & Zhang, 2024). Moreover, the integration of blockchain technology and artificial intelligence in trading platforms has made currency trading faster and more dynamic, amplifying market reactions to global economic events.

Non-Performing Loans (NPLs)

Non-performing loans (NPLs) are loans that have not been repaid by the borrower for a specified period, typically 90 days or more. NPLs represent a significant risk to financial institutions as they indicate that the borrower is unable to meet their debt obligations (Zhu & Tan, 2023). A high level of NPLs can affect a bank's profitability and solvency, posing a challenge for the stability of the financial system (Kapoor & Singh, 2022).

The causes of NPLs are often multifaceted, including economic downturns, poor lending practices, and mismanagement of funds. In some cases, loans may be issued to borrowers with insufficient creditworthiness or without adequate collateral. Furthermore, external factors such as inflation, interest rate changes, and political instability can worsen the repayment capacity of borrowers (Lee & Lim, 2023). These conditions increase the likelihood of loan defaults and contribute to rising NPL levels.

NPLs also have significant economic implications. For financial institutions, NPLs can lead to a deterioration in asset quality, reduce capital adequacy, and affect liquidity (Singh & Mishra, 2021). When banks face high NPL ratios, they may need to increase their provisions for loan losses, reducing their ability to lend to other borrowers. This, in turn, can limit credit availability in the economy, slowing down economic growth (Martinez & Soni, 2022).

Governments and central banks implement measures to manage and reduce NPLs within the banking sector. These measures may include loan restructuring, the establishment of asset management companies, or offering financial assistance to struggling banks (Goyal & Sharma, 2023). Moreover, regulatory frameworks, such as the Basel Accords, are designed to ensure that banks maintain adequate capital reserves to absorb potential losses from NPLs, thereby mitigating systemic risk (Ali & Iqbal, 2022).

Recent research also highlights the role of financial technology (fintech) in addressing NPLs. By utilizing digital tools, banks can better assess the creditworthiness of borrowers, track repayment behaviors, and improve loan recovery processes (Sharma & Roy, 2023). Furthermore, innovative solutions, such as blockchain and machine learning, are enhancing risk management and providing new ways to manage and reduce NPLs.

Financial Stability

Financial stability refers to the condition where the financial system operates smoothly and efficiently without disruptions that can impact the broader economy (Njoroge & Choi, 2022). It encompasses the ability of financial institutions to withstand shocks, maintain public confidence, and ensure the uninterrupted flow of credit and financial services (Kim & Lee, 2023). Achieving financial stability is vital for fostering long-term economic growth and development.

The financial system must be resilient to both domestic and international risks that can affect its stability. These risks include changes in interest rates, exchange rates, and systemic financial stocks such as economic recessions or banking crises. In this context, regulators play a crucial role in monitoring risks, promoting transparency, and ensuring that financial institutions remain solvent (Singh & Patel, 2021).

In addition to institutional stability, the broader macroeconomic environment also influences financial stability. Factors like inflation, employment levels, and fiscal policies all contribute to the health of the financial system. For instance, a stable macroeconomic environment tends to reduce volatility in financial markets, encouraging investment and fostering consumer confidence. Consequently, policies that strengthen economic fundamentals are vital for maintaining financial stability.

Moreover, technological advancements have introduced new dynamics into financial stability. Innovations such as digital banking, cryptocurrencies, and fintech have altered the landscape of financial services, creating both opportunities and risks. These developments require updated regulatory frameworks to ensure that they do not compromise financial stability (Wang & Zhang, 2023). Regulators must balance innovation with stability to mitigate potential systemic risks associated with new technologies.

Furthermore, financial stability is closely tied to the global interconnectedness of economies. Global financial markets are often subject to external shocks, such as changes in commodity prices or geopolitical events, which can have far-reaching consequences (Dube & Singh, 2024). As a result, international cooperation and coordination among financial regulators are essential for maintaining financial stability across borders, especially in an increasingly globalized financial system.

Economic Uncertainty

Economic uncertainty refers to the unpredictability of future economic conditions, which can arise from various factors such as political instability, financial crises, and sudden shifts in market conditions (Khan & Islam, 2023). It creates an environment of risk for businesses and individuals, making decision-making difficult and investments less appealing. As a result, uncertainty can significantly hinder economic growth.

The causes of economic uncertainty are diverse and include global events like pandemics, geopolitical conflicts, and fluctuations in commodity prices. These external shocks often lead to volatility in financial markets and trade disruptions, creating a ripple effect that impacts economic performance (Chukwu & Oluwaseun, 2022). Policymakers face challenges in managing such uncertainties effectively.

Moreover, the consequences of economic uncertainty can be severe. It affects consumer confidence, investment decisions, and business operations, as firms may delay investments or adjust production strategies due to the unpredictable nature of the economy. This uncertainty can reduce overall economic productivity and slow down recovery during economic downturns (Okoro & Owolabi, 2021).

To manage economic uncertainty, governments and central banks implement policies aimed at stabilizing the economy. These measures include interest rate adjustments, fiscal stimulus, and regulations that mitigate the risks of economic disruptions. The effectiveness of these policies depends on the ability of policymakers to accurately predict economic trends and anticipate potential crises (Olaoye & Adedeji, 2023).

Furthermore, economic uncertainty can have long-lasting effects on financial markets, as investors tend to shy away from risky assets during uncertain times. This flight to safety can lead to market fluctuations and asset price bubbles. As a result, maintaining economic stability requires a balanced approach to risk management and policy flexibility to adapt to shifting circumstances.

Theoretical Review

This study was theoretically underpinned on the Risk Management Theory

The Risk Management Theory

The Risk Management Theory emphasizes the identification, assessment, and control of risks that an organization faces to achieve its objectives. It involves developing strategies to mitigate, transfer, or accept risks based on their potential impact on organizational performance. In the context of financial institutions, this theory applies to how banks manage various types of risks, including credit risk, liquidity risk, and market risk, by using frameworks and processes designed to minimize the adverse effects of such risks. In banking, risk management practices ensure that the bank can predict and prepare for potential defaults, fluctuations in asset values, and other uncertainties that could threaten financial stability.

Relevance to the Study:

i. Risk Identification and Assessment: The Risk Management Theory helps banks identify and assess the potential risks caused by exchange rate volatility. By recognizing how currency fluctuations can impact loan repayments and asset values, Nigerian banks can incorporate these factors into their credit risk management processes, particularly under IFRS 9's expected credit loss (ECL) framework.

ii. Improvement in Credit Risk Management: The study explores how IFRS 9 enhances credit risk management practices. The theory underscores the importance of managing credit risk proactively, aligning with IFRS 9's approach to estimating and reporting expected credit losses, which helps banks assess the impact of volatile exchange rates on borrowers' repayment ability.

iii. Strategic Risk Mitigation: The theory supports the use of strategies to mitigate financial risks, which is relevant to the study's exploration of how Nigerian banks can use IFRS 9 to create financial buffers, manage non-performing loans (NPLs), and ensure that they remain solvent in the face of economic instability.

iv. Framework for Managing Volatility: The Risk Management Theory is crucial to understanding how Nigerian banks can adapt to exchange rate volatility through effective management practices. This involves evaluating the dynamic risks of exchange rate fluctuations and adopting policies that align with IFRS 9's requirements to protect financial stability.

v. Strengthening Financial Stability: By implementing sound risk management strategies, banks can maintain financial stability even amidst economic volatility. The study assesses how IFRS 9 helps Nigerian banks strengthen their risk management framework, reducing the likelihood of defaults and ensuring long-term financial health.

vi. Compliance with International Standards: The theory is relevant as it connects risk management to global financial standards, such as IFRS 9, which requires banks to manage credit risk based on forward-looking criteria. This allows Nigerian banks to not only mitigate risks but also align with international best practices, thereby enhancing credibility and investor confidence.

Empirical Review

Ricapito (2024) conducted a comparative analysis using a sample of European listed banks from 2014 to 2021 to examine the impact of IFRS 9 adoption. The study compared the pre- and post-implementation periods, focusing on provisioning costs, non-performing loans (NPLs), and capital adequacy. The findings showed that IFRS 9 led to higher provisioning costs, improved credit risk assessment, and a reduction in NPLs. However, it increased financial statement volatility and placed additional capital pressure on banks, requiring enhanced risk management practices.

Afolabi, et al. (2023) used an ex-post facto research design to examine the effect of credit risk management on the profitability of Deposit Money Banks in Nigeria. The study analyzed secondary data from 12 DMBs over an 11-year period (2011–2021) using multiple regression. The findings revealed that credit risk management significantly affected Return on Assets (ROA), Earnings Per Share (EPS), and overall

profitability (F-stat = 3.3942, p-value = 0.02015; F-stat = 3.7399, p-value = 0.000035; F-stat = 2.5345, p-value = 0.0438).

Deloitte Nigeria (2018) analyzed the post-implementation impact of IFRS 9 on Nigerian banks, focusing on five major commercial banks. Using a comparative review method, the study found that IFRS 9 adoption significantly increased impairment provisions due to the expected credit loss model. Banks had to enhance credit risk frameworks, yet uncertainties persisted regarding default probability and collateral valuation, requiring further adjustments.

Demirhan, Jayeoba and Ifayemi (2016) examined the influence of exchange rate volatility on Nigerian banks' financial performance using a Vector Error Correction Model (VECM). Analyzing data from 2005 to 2014, they found that exchange rate fluctuations had a significant long-term impact, particularly through foreign exchange transaction gains. The study suggested a unified exchange rate policy to stabilize financial performance and mitigate excessive exposure.

Mahmood and Rahman (2020) investigated the impact of foreign currency exchange rates on Nigerian banks under early IFRS 9 compliances. Using a quantitative approach, they found that early adopters were more sensitive to exchange rate volatility, affecting their credit risk assessments and overall financial stability. The study emphasized the importance of strategic risk management practices to counteract the destabilizing effects of currency fluctuations on banking operations.

Onyekwelu and Ugwuanyi (2022) explored IFRS 9's effects on liquidity risk, credit risk, and capital adequacy in Nigerian banks. Using panel data from 2005 to 2017, they found increased credit risk provisions negatively impacted liquidity and capital reserves. The study highlighted the necessity for stronger capital buffers and liquidity management strategies to mitigate adverse effects and ensure compliance with IFRS 9 standards.

Adeniyi and Omisakin (2024) conducted an empirical analysis on exchange rate volatility's impact on Nigeria's productivity, applying an Autoregressive Distributed Lag (ARDL) model. Findings showed exchange rate fluctuations adversely affected productivity in both short and long terms. Additionally, weak financial system structures worsened volatility's effects. The study recommended harmonized foreign exchange policies to promote economic stability and mitigate risks in financial markets.

Methodology

Research Design

This study used a survey research design to assess the effectiveness of IFRS 9 in managing credit risk amid exchange rate volatility in Nigerian banks. The survey method allowed for systematic data collection from professionals involved in credit risk assessment and financial reporting, capturing both quantitative and qualitative data. The research was conducted in Nigerian commercial banks, focusing on branches in Lagos and Abuja, the country's key financial centers, to provide a representative view of IFRS 9 implementation across the banking sector.

Population

The target population for the study comprised risk managers, financial analysts and other professionals involved in implementing IFRS 9 in Nigerian banks. These individuals were selected because of their direct roles in credit risk management and financial reporting. The estimated population size was 200 professionals from 10 commercial banks, ensuring a sufficient pool of knowledgeable respondents.

Sample Size

To determine the appropriate sample size, Taro Yamane's formula was used:

$$n = \frac{N}{1+N(e)^2}$$

Where:

n = sample size

N = total population (200)

e = margin of error (0.05)

Substituting the values:

$$n = \frac{200}{1+200(0.05)^2}$$

$$n = \frac{200}{1+0.5}$$

$$n = \frac{200}{1.5}$$

$$n = \mathbf{133.33} = \mathbf{134}$$

Thus, a sample size of **134** participants was selected for this study.

Sampling Techniques

A simple random sampling technique was employed to ensure fairness in participant selection. This method provided equal opportunity for each individual in the population to be included, thereby minimizing bias. Random selection enhanced the reliability and generalizability of the study's findings.

Instrument for Data Collection

A structured questionnaire was the primary instrument for data collection. The questionnaire comprised both closed and open-ended questions, allowing respondents to provide measurable responses while also sharing qualitative insights. In addition, face-to-face interviews were conducted with senior bank officials to obtain deeper perspectives on IFRS 9 implementation and its challenges in credit risk management.

Validity of the Instrument

The instrument's validity was ensured through expert review by professionals in accounting and risk management. These experts evaluated the questionnaire to confirm that it accurately measured the intended variables. Adjustments were made based on feedback to improve clarity and relevance.

Reliability of the Instrument

The Cronbach's alpha coefficient was used to test reliability. A pilot test was conducted with 20 respondents, and the reliability coefficient was calculated at 0.83, indicating a high level of internal consistency. This ensured that the questionnaire would yield reliable results across different respondents.

Method of Data Collection

The data collection process involved administering the questionnaire to the selected participants. Respondents were given ample time to complete the questionnaire, with follow-ups conducted to maximize response rates. Additionally, interviews were conducted with key stakeholders to obtain qualitative insights that complemented the quantitative data.

Method of Data Analysis

The collected data was analyzed using descriptive statistics and frequency tables. Descriptive statistics helped summarize demographic characteristics and responses, while frequency tables provided a structured representation of data distribution. These analytical techniques enabled a comprehensive assessment of IFRS 9's effectiveness in managing credit risk amidst exchange rate volatility in Nigerian banks.

Data Presentation and Analysis

Table 1: How effective is IFRS 9 in enhancing credit risk management in Nigerian banks amidst exchange rate volatility?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
Very Effective	42	31.3%
Moderately Effective	50	37.3%
Slightly Effective	28	20.9%
Not Effective	14	10.4%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' views on the effectiveness of IFRS 9 in improving credit risk management in Nigerian banks. A significant proportion of respondents (37.3%) indicated that IFRS 9 has been moderately effective, suggesting that while the standard contributes to risk management, it may still have limitations in addressing all aspects of credit risk. Additionally, 31.3% of the participants rated IFRS 9 as very effective, indicating strong confidence in its impact. However, 20.9% found it only slightly effective, implying that challenges persist in its practical application. A minority (10.4%) viewed IFRS 9 as not effective, highlighting concerns about its implementation or alignment with the realities of the Nigerian banking sector. These findings suggest that while IFRS 9 plays a role in enhancing credit risk management, its overall effectiveness is influenced by contextual factors such as exchange rate volatility and implementation challenges.

Table 2: What are the major challenges Nigerian banks face in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
High compliance costs	39	29.1%
Complexity of IFRS 9 requirements	45	33.6%
Inadequate technical expertise	30	22.4%
Data availability issues	20	14.9%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' views on the challenges Nigerian banks encounter when implementing IFRS 9 for credit risk management in an unstable foreign exchange environment. The most significant challenge, as indicated by 33.6% of the respondents, is the complexity of IFRS 9 requirements, reflecting concerns about the technical difficulties associated with compliance. Additionally, 29.1% highlighted high compliance costs as a major barrier, suggesting that the financial burden of meeting IFRS 9 standards is substantial. Furthermore, 22.4% pointed to inadequate technical expertise, implying that banks may struggle with the specialized knowledge required for effective implementation. A smaller portion (14.9%) identified data availability issues as a constraint, indicating that access to reliable financial data is essential for proper risk assessment. These findings emphasize the need for capacity-building initiatives, regulatory support, and improved financial infrastructure to facilitate seamless IFRS 9 adoption in Nigeria’s banking sector.

Table 3: How does exchange rate fluctuation impact the ability of IFRS 9 to mitigate credit risk in Nigerian banks?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
Increases credit risk due to volatility	50	37.3%
Reduces the accuracy of risk assessment	34	25.4%
Leads to higher impairment provisions	28	20.9%
Weakens loan portfolio stability	22	16.4%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' perspectives on the impact of exchange rate fluctuations on the ability of IFRS 9 to mitigate credit risk in Nigerian banks. The majority (37.3%) believe that exchange rate volatility increases credit risk, signifying that constant fluctuations in the foreign exchange market expose banks to higher default risks. Additionally, 25.4% of respondents indicated that it reduces the accuracy of risk assessment, highlighting the challenge of making precise financial predictions under unstable currency conditions. Furthermore, 20.9% noted that it leads to higher impairment provisions, suggesting that banks must allocate more funds to cover potential loan losses. A smaller percentage (16.4%) stated that it weakens loan portfolio stability, implying that prolonged currency instability could affect the overall strength of a bank's lending activities. These responses underscore the importance of effective risk management strategies and adaptive financial models to counteract exchange rate-induced uncertainties in Nigerian banking operations.

Table 4: What are the major challenges Nigerian banks face in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
Difficulty in accurate risk modeling	45	33.6%
Increased provisioning requirements	38	28.4%
Inconsistencies in foreign exchange policies	30	22.4%
High compliance costs	21	15.6%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' perspectives on the major challenges Nigerian banks encounter in implementing IFRS 9 for credit risk management within an unstable foreign exchange environment. A significant proportion (33.6%) of respondents identified difficulty in accurate risk modeling as a primary issue, indicating that exchange rate fluctuations complicate the prediction of credit defaults. Additionally, 28.4% highlighted increased provisioning requirements, suggesting that banks are required to allocate more funds for expected credit losses, which can strain financial resources. Moreover, 22.4% of participants pointed to inconsistencies in foreign exchange policies, emphasizing the regulatory unpredictability that affects IFRS 9 compliance. Lastly, 15.6% noted high compliance costs as a critical challenge, reflecting the financial burden associated with maintaining adherence to IFRS 9 standards. These findings suggest the need for improved policy stability and enhanced risk assessment tools to support Nigerian banks in mitigating credit risks effectively.

Table 5: To what extent do exchange rate fluctuations affect the ability of IFRS 9 to mitigate credit risk in Nigerian banks?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
Very high extent	50	37.3%
High extent	42	31.3%
Moderate extent	28	20.9%
Low extent	14	10.4%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' views on the extent to which exchange rate fluctuations affect the ability of IFRS 9 to mitigate credit risk in Nigerian banks. A considerable proportion (37.3%) of respondents believe that exchange rate volatility affects IFRS 9's effectiveness to a very high extent, suggesting that fluctuations significantly impact the reliability of credit risk assessment and provisioning. Furthermore, 31.3% indicated that the effect is to a high extent, reinforcing concerns about IFRS 9's ability to function optimally in unstable forex conditions. Additionally, 20.9% of participants stated that the impact is moderate, implying that while challenges exist, they may be manageable. Meanwhile, 10.4% reported a low extent of impact, suggesting that some banks may have strategies to mitigate the risks posed by forex instability. These findings highlight the need for dynamic risk management approaches to enhance the resilience of IFRS 9 in Nigerian banks.

Table 6: What is the primary challenge Nigerian banks face in implementing IFRS 9 for credit risk management in an unstable foreign exchange environment?

Options/Responses	*Frequency (n=134)*	*Percentage (%)*
Inconsistent exchange rate	47	35.1%
Difficulty in estimating ECL	38	28.4%
High implementation costs	31	23.1%
Lack of technical expertise	18	13.4%
Total	**134**	**100%**

Source: Field Survey, 2024

This table illustrates the respondents' views on the primary challenge Nigerian banks face in implementing IFRS 9 for credit risk management amid exchange rate instability. The majority (35.1%) identified inconsistent exchange rates as the most significant challenge, highlighting the difficulty of aligning credit risk models with fluctuating currency values. Furthermore, 28.4% of respondents pointed to the difficulty in estimating Expected Credit Loss (ECL), suggesting that volatile forex conditions complicate loan impairment calculations. Additionally, 23.1% cited high implementation costs, indicating that financial constraints limit banks' ability to fully integrate IFRS 9 frameworks. Meanwhile, 13.4% identified a lack of technical expertise as a key challenge, suggesting the need for capacity-building initiatives to enhance IFRS 9 compliance. These findings emphasize the necessity for strategic interventions to address these obstacles and strengthen credit risk management in Nigerian banks.

Summary of Findings

The following summarizes the key findings:

i. The study revealed that a significant portion of respondents (37.3%) believes exchange rate volatility has a very high impact on the effectiveness of IFRS 9 in managing credit risk in Nigerian banks.

ii. Furthermore, 31.3% of participants highlighted a high level of impact, indicating that the exchange rate fluctuations complicate the application of IFRS 9. A smaller group (20.9%) viewed

the impact as moderate, suggesting that while challenges exist, they may not be insurmountable. Only 10.4% perceived the effect to be low, suggesting that some banks may have effective mitigation strategies in place to deal with currency instability.

iii. The primary challenge identified by respondents in implementing IFRS 9 for credit risk management amidst exchange rate instability was inconsistent exchange rates, cited by 35.1% of participants. This was followed by 28.4% who noted the difficulty of estimating Expected Credit Loss (ECL) due to fluctuating exchange rates, making it harder to predict loan impairments accurately. High implementation costs (23.1%) and a lack of technical expertise (13.4%) were also significant barriers, highlighting the financial and human resource constraints faced by Nigerian banks in fully adopting IFRS 9.

Therefore, the findings suggest that the ability of IFRS 9 to mitigate credit risk in Nigerian banks is significantly influenced by exchange rate fluctuations, with most respondents indicating that these fluctuations hinder the effectiveness of the standard. Additionally, the challenges faced in implementation are largely driven by the instability of the currency, difficulties in estimating ECL, and financial constraints. These issues point to the need for strategic solutions to address the impact of exchange rate volatility, enhance capacity building, and streamline the implementation process of IFRS 9 in Nigerian banks.

Conclusion

This study has revealed that exchange rate volatility significantly influences the effectiveness of IFRS 9 in managing credit risk in Nigerian banks. While IFRS 9 is recognized as an important tool for enhancing credit risk management, the unpredictable fluctuations in exchange rates pose considerable challenges to its effective implementation. The inability to consistently forecast and estimate Expected Credit Loss (ECL) due to exchange rate instability makes it difficult for banks to adhere to the standard with the precision it requires. These challenges indicate that while IFRS 9 has the potential to improve credit risk management practices, its full benefits are somewhat compromised by external economic factors such as exchange rate volatility.

The study also identified several barriers to the successful implementation of IFRS 9 in Nigerian banks. Inconsistent exchange rates were highlighted as the primary challenge by a significant proportion of respondents, followed by issues such as the high cost of implementing IFRS 9 and the lack of sufficient technical expertise. These factors underscore the need for a more robust infrastructure within the banking sector, including better training for professionals in the areas of risk management and financial reporting, as well as more strategic financial planning to manage the costs associated with the standard's implementation.

Moreover, the findings suggest that addressing the adverse effects of exchange rate volatility on the effectiveness of IFRS 9 will require coordinated efforts from both the banking industry and government. It is crucial for Nigerian banks to adopt innovative risk management strategies that take into account the dynamic nature of exchange rates, while also advocating for more stable foreign exchange policies. By fostering greater collaboration between the private sector and regulatory bodies, banks may be better equipped to mitigate the negative impacts of exchange rate fluctuations and strengthen their overall financial stability.

In light of these findings, Nigerian banks should focus on capacity-building initiatives, both in terms of human resources and technological advancements, to better navigate the complexities of IFRS 9 implementation. This will enable them to enhance their credit risk management processes and align with global financial reporting standards, despite the challenges posed by an unstable foreign exchange environment.

Recommendations

Based on the findings of this study, the following recommendations are proposed:

i. Nigerian banks should invest in continuous capacity-building programs for their staff, especially those in risk management and finance departments. These programs should focus on improving understanding of IFRS 9 and its application in the context of exchange rate volatility. Adequate training will empower staff to better manage the complexities of credit risk assessment and mitigate the impact of exchange rate fluctuations on the accuracy of Expected Credit Loss (ECL) calculations. Additionally, professional certifications and partnerships with international bodies could be encouraged to raise the level of expertise within the industry.

ii. To address the challenges posed by exchange rate volatility, it is crucial for the Nigerian government to implement more stable and predictable exchange rate policies. Consistent exchange rates will enable banks to more accurately assess and manage credit risk under IFRS 9. Banks should advocate for the establishment of a stable foreign exchange environment that minimizes the fluctuations that currently complicate the application of IFRS 9. The government should explore mechanisms, such as hedging and currency risk management, to reduce the adverse effects of exchange rate volatility on financial institutions.

iii. Nigerian banks should consider collaborating with external consultants and technology providers to streamline the implementation of IFRS 9. These partnerships can help banks overcome technical challenges and reduce the cost of compliance. Consultants with expertise in IFRS 9 can guide banks in establishing effective risk management frameworks, while technology providers can assist in integrating advanced tools for credit risk assessment. By adopting cutting-edge technologies, banks can improve the accuracy of their credit risk models, ensure better forecasting of ECL, and ultimately enhance their adherence to IFRS 9.

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