



## FOREIGN EXCHANGE MANAGEMENT AND PROFITABILITY OF DEPOSIT MONEY BANKS IN NIGERIA

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### Abstract :

*This study investigated the effect of foreign exchange management on the profitability of Deposit Money Banks (DMBs) in Nigeria by obtaining data from five banks between 2020-2024. Regression analytical method was adopted for this study. It was found out that foreign reserves significantly and positively affected return on asset. The study concluded that foreign exchange management profoundly influenced bank profitability in Nigeria. It was recommended that there should be forex risk management and foreign reserves for strategic planning, and investing in exchange rate forecasting tools for DMBs.*

**Keywords:** foreign exchange management, profitability, ROA, ROE, DMBs

### INTRODUCTION

Deposit Money Banks (DMBs) play a pivotal role in the economic development of any nation, serving as financial intermediaries that mobilize savings and channel them into productive investments. In Nigeria, the banking sector is a critical component of the financial system, facilitating domestic and international trade, investment, capital flows, and the economy as a whole (CBN, 2023). A significant aspect of their operations, particularly in an import-dependent and oil-revenue-driven economy like Nigeria, is foreign exchange management. Foreign exchange refers to the currency of another country, or a financial instrument that facilitates transactions between countries (Mishkin, 2018).

The management of foreign exchange by DMBs involves handling foreign currency transactions, managing foreign currency exposures, and adhering to the regulatory frameworks set by the Central Bank of Nigeria (CBN). These activities are crucial for the banks' liquidity, solvency, and ultimately, their profitability. Profitability, often measured by financial performance metrics such as Return on Assets (ROA) and Return on Equity (ROE), indicates a bank's efficiency in generating income from its assets and equity (Rose & Hudgins, 2017).

Nigeria's economy has historically been susceptible to fluctuations in global oil prices, leading to periods of foreign exchange scarcity and volatility (IMF,



2022). Such volatility directly impacts DMBs' operations, affecting their ability to meet customers' foreign currency demands, manage their foreign currency-denominated assets and liabilities, and engage in international trade finance. The Central Bank of Nigeria, through its monetary policy tools, including foreign reserves, exchange rate policies (real and nominal), and the Monetary Policy Rate (MPR), strives to maintain macroeconomic stability and manage foreign exchange flows (CBN, 2023). However, the effectiveness of these policies and their subsequent impact on the profitability of DMBs remain a subject of ongoing research and debate. Understanding the intricate relationship between foreign exchange management practices and the financial performance of DMBs is therefore essential for policymakers, bank management, and investors (Adu et al., 2025).

The Nigerian economy has experienced significant foreign exchange volatility over the past decades, characterized by periods of depreciation, scarcity, and multiple exchange rate windows. These dynamics pose substantial challenges for Deposit Money Banks. Fluctuations in the exchange rate can lead to revaluation gains or losses on foreign currency-denominated assets and liabilities, directly impacting a bank's balance sheet and income statement. Furthermore, the availability and management of foreign reserves by the Central Bank of Nigeria influence the supply of foreign exchange to the interbank market, affecting DMBs' ability to facilitate international transactions for their clients and manage their own foreign currency positions (Adu et al., 2024).

The monetary policy rate (MPR), as a key tool of monetary policy, also indirectly influences foreign exchange markets by affecting capital flows and the attractiveness of domestic investments (CBN, 2023). High MPRs might attract foreign portfolio investment, potentially strengthening the local currency, while low MPRs could lead to capital flight. DMBs must navigate these monetary policy signals in their foreign exchange operations.

Despite the critical role of foreign exchange in DMBs' operations and the prevailing volatility, there is often a disconnect between theoretical understanding and practical implications for bank profitability in Nigeria. Existing literature sometimes provides general insights but may lack specific empirical evidence linking various facets of foreign exchange management (foreign reserves, real and nominal exchange rates, and monetary policy rate) to the core profitability metrics (ROA and ROE) of Nigerian DMBs over a sustained period. This study seeks to bridge this gap by providing a comprehensive analysis of how these specific foreign exchange management variables influence the financial performance of DMBs in Nigeria, thereby addressing the persistent challenges faced by the banking sector in an unstable foreign exchange environment (Adu&Ajigbotoso, 2024).

The primary objective of this study is to examine the effect of foreign exchange management on the profitability of deposit money banks in Nigeria, while the specific objectives is to:

ascertain the effect of foreign reserves on the return on assets (ROA) of Deposit Money Banks in Nigeria.

How do foreign reserves affect the return on assets (ROA) of Deposit Money Banks in Nigeria?

Research Hypothesis

H<sub>0</sub>: Foreign reserves do not significantly affect the return on assets (ROA) of Deposit Money Banks in Nigeria.

### **Literature Review**

#### **Conceptual Review**

**Foreign Exchange Management:** Foreign exchange management encompasses the strategies and practices employed by financial institutions, particularly Deposit Money Banks (DMBs), to handle foreign currency transactions, mitigate foreign exchange risks, and comply with regulatory guidelines. It involves managing foreign currency exposures arising from international trade, investment, and capital flows (Madura, 2018).

Effective foreign exchange management is thus crucial for banks as it directly impacts their liquidity, solvency, and overall financial performance (Akpan et al., 2025). Furthermore, foreign exchange management involves understanding and reacting to various types of foreign exchange risk, including transaction risk, translation risk, and economic risk, all of which can significantly affect a bank's financial position (Ezeani & Oladele, 2021).

#### **Profitability**

Profitability refers to the ability of a business to generate earnings, revenues, or profits relative to its expenses, assets, or equity. It is a key indicator of a company's financial health and operational efficiency (Brigham & Houston, 2019). For DMBs, profitability is essential for their sustainability, growth, and ability to attract capital. Good returns recorded by banks attract greater investments, and creditors are encouraged to finance their debt (NDIC, 2023). This study focuses on two widely accepted measures of profitability: Return on Assets (ROA) and Return on Equity (ROE).

#### **Return on Assets (ROA)**

ROA measures how efficiently a bank is using its assets to generate profits. A higher ROA indicates better asset utilization and operational efficiency (Kieso et al., 2018). It shows how well a bank's management is converting the bank's assets into net income.

#### **Return on Equity (ROE)**

ROE measures the return generated on the shareholders' investment. It reflects how well a bank is using equity financing to generate profits. A higher ROE suggests that the bank is effectively leveraging its equity to create value for its shareholders (Ross et al., 2019). It indicates the effectiveness of the bank in using the money invested by its shareholders to generate profits.

#### **Foreign Reserves**

Foreign reserves are external assets held by the central bank in foreign currencies. They serve multiple purposes, including backing domestic currency, facilitating international transactions, stabilizing the exchange rate, and providing a buffer against external shocks.

In Nigeria, the Central Bank of Nigeria (CBN) is vested with the mandate to maintain and manage these external reserves to safeguard the international value of the Naira, maintain confidence in Nigeria's monetary and exchange rate policies, and ensure the country can meet its external obligations. The level and management of foreign reserves directly influence the availability of foreign exchange in the economy, impacting DMBs' access to foreign currency for their operations and clients. Historically, Nigeria's foreign exchange reserves have been primarily derived from crude oil production and sales. Adequate foreign reserves can also enhance a country's creditworthiness, potentially lowering borrowing costs for banks and other entities (Okwu & Obiwuru, 2010).

## RESEARCH AND METHOD

### Population of the Study

The population of this study covered all licensed Deposit Money Banks in Nigeria, as regulated by the Central Bank of Nigeria. As of April 2024, there are 24 licensed commercial banks, including both domestic and foreign-owned entities operating within Nigeria's banking sector, covering the period 2020 - 2024.

### Method of Data Collection

The study relied exclusively on secondary data.

### Data Analytical Method

Data were analyzed using descriptive statistics and multiple regression analysis.

## RESULTS AND DISCUSSION OF FINDINGS

### Panel Regression Results

The results of the Fixed Effects panel regression are presented below:

Variable	Coefficient ( $\beta$ )	p-value
FR	0.017	0.021
NER	0.005	0.047
SIZE	0.024	0.013
AGE	-0.001	0.432

Foreign Reserves (FR) exhibited a statistically significant positive impact on ROA, with a coefficient of 0.017 and a p-value of 0.021 (which is less than 0.05). This implies that a one-unit increase in foreign reserves leads to a 0.017 percentage point increase in ROA, holding other factors constant. This finding suggests that a robust level of foreign reserves, indicative of macroeconomic stability, positively contributes to the efficiency with which banks generate profits from their assets.

### Testing of the Hypothesis

Based on the p-values obtained from the Fixed Effects panel regression analysis, the null hypotheses formulated in Chapter Three were formally tested against a conventional significance level of 0.05.

Hypothesis	Result (p-value)	Decision
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H<sub>0</sub>: FR does not affect ROA      0.021      Reject H<sub>0</sub>

For Hypothesis H<sub>0</sub>: Foreign Reserves (FR) does not affect ROA: The p-value obtained was 0.021. Since  $0.021 < 0.05$ , the null hypothesis is rejected. This leads to the conclusion that Foreign Reserves have a statistically significant positive impact on Return on Assets (ROA) of Deposit Money Banks in Nigeria.

### **Summary, Conclusion and Recommendations**

#### **Summary of Findings**

Foreign Reserves (FR) have a significant positive effect on Return on Assets (ROA). This indicates that an increase in the nation's foreign reserves, signifying greater macroeconomic stability, directly contributes to the efficiency with which banks generate profits from their assets.

#### **Conclusion**

The findings highlighted that a stable and robust foreign reserve position, coupled with the nuanced effects of nominal exchange rate depreciation, can enhance banks' asset-based profitability.

#### **Recommendations**

Based on the comprehensive findings and conclusions drawn from this study, the following actionable recommendations are proposed for various stakeholders within the Nigerian financial ecosystem:

1. **Enhance Forex Risk Management and Hedging Strategies:** Given the significant impact of both nominal and real exchange rates on profitability, DMBs must invest more robustly in sophisticated foreign exchange risk management frameworks. This includes developing and implementing comprehensive hedging strategies (e.g., using forward contracts, options, or swaps) to mitigate adverse currency movements that could erode profitability.
2. **Monitor MPR and Foreign Reserves for Strategic Planning:** Banks should establish dedicated units or leverage existing treasury functions to continuously monitor trends in the Monetary Policy Rate and the nation's foreign reserves. These macroeconomic indicators should be integral inputs into their strategic planning, asset-liability management, and pricing decisions to optimize lending rates, deposit mobilization, and investment portfolios in response to anticipated policy shifts.

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