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Exchange Rate Volatility Issues and Prospects in Nigeria: A Review of Literature

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ABSTRACT

The exchange rate is the price of one currency in terms of another currency. It is also used to determine the level of output growth and purchasing power of the country's currency. Over the years, Nigeria has adopted various exchange rate regimes as a result of exchange rate volatility. The volatility of the exchange rate is a pervasive phenomenon with profound implications for global economic dynamics. This study investigates the multifaceted issues surrounding exchange rate volatility and explores the prospects that may emerge from these challenges. Through a comprehensive analysis of historical trends, theoretical frameworks, and empirical evidence, this study aims to contribute to a nuanced understanding of the complexities associated with exchange rate fluctuations. The study further identifies potential pathways for mitigating adverse effects and capitalizing on opportunities presented by exchange rate volatility.

Keywords: Exchange rate; exchange rate volatility; economic performance; interest rate; inflation

1. Introduction

In Nigeria today, exchange rate volatility is perhaps one of the most widely discussed issues by academicians, professionals, policymakers, and other concerned citizens (such as investors, lenders, local traders, importers, and exporters) (Damola, 2022). Over the years since its independence, Nigeria's currency rate has undergone several exchange rate administrations, moving from regulated to deregulated regimes to accelerate progress and boost the standard of daily life for the populace (Agu, 2020). A parallel system of exchange rates was put into place prior to 1992 in an effort to increase the foreign exchange market's performance. However, the fixed exchange rate system was reinstated in 1994 after the deregulated exchange rate system emerged between 1992 and 1993. After 1986, the Central Bank of Nigeria began a meticulous effort to regulate the quantity and price, which may be referred to as the regulated floating exchange rate governance regime (Ewubare & Amadi, 2017; George-Anokwuru et al., 2018).

Nigeria never achieved the success it had hoped for under any of these different exchange-rate regimes because of a poor management strategy for achieving an exchange rate that was stable (Bala et al., 2022). For example, the value of the naira versus the US dollar has continued to decline, starting at N 0.54 in 1980 and reaching N 2.02 in 1986 and N7.901 in 1990. The naira was fixed at N21.886 in 1994, N 86.322 in 1999, and N135.50 in 2004 due to the deregulation strategy. After that, the value increased to N 150.00 in 2009 and N 132.15 in 2005. The US dollar was worth N165 in the naira in 2015. However, the rate of exchange between the US dollar and the Nigerian naira has been concerning since the general election of 2015 and the inauguration of President Muhammadu Buhari. For example, in October 2016, the parallel market exchange rate of one US dollar to one naira was approximately N 500.00 (George-Anokwuru et al., 2018). Comparable assertions were made by Isola et al. (2023) who claimed that by the end of 2013, the value of the naira had declined by more than 113 percent and 240 percent relative to the US dollar between 2018 and 2023 and that by the end of 2018 and early 2023 around N363 and N800 were exchange for a U.S dollar. As a result, the weak naira's exchange rate against the US dollar distorted the country's economic growth and standard of living.

Agu (2020) opined that one key macroeconomic concept that affects the economic health of a country is the value of its currency, which is the exchange rate between two currencies that establishes a nation's level of global attractiveness. The exchange rate and its volatility on economic activity have significant effects on growth in a market economy when the desire for foreign currency is greater than the amount available of foreign currency (Alagidede & Ibrahim, 2017). Kevin and Guay (2019) argue that exchange rate volatility is an unavoidable aspect of life for nations that follow floating exchange rates. Since exchange rate fluctuations are a component of the system that helps countries respond and adapt to emerging news and economic downturns, they are not inherently harmful. As a result, fluctuations in exchange rates are a sign of economic expansion, which may also be attributed to a number of important factors, such as the real exchange rate, interest rates, inflation rates, and oil exports (Ewubare & Amadi, 2017).

Furthermore, given the underlying economic realities, Isola et al. (2023) contend that exchange rates are too volatile, posing serious management challenges for financial institutions, corporations, and economic regulators. In view of this, the foreign exchange market plays a central role in the

functioning of the global economy, acting as a conduit for international trade and investment (Kevin & Guay, 2019). Exchange rate volatility, characterized by unpredictable and significant fluctuations in currency values, has been a recurrent feature of this market (Frankel, 2018). Historical events, such as the collapse of fixed exchange rate systems and the emergence of floating regimes, underscore the dynamic nature of exchange rate movements (Alagidede & Ibrahim, 2017). Additionally, crises such as huge external debt, removal of oil subsidies, corruption, embezzlement, mono source of income, neglection of agriculture, bad management, poor level of unemployment, poor exportation, heavy dependence on importation coupled with Nigeria's financial crisis have highlighted the vulnerability of economies to abrupt changes in exchange rates (Meese & Rogoff. 2018; Damola, 2022).

Despite the extensive body of literature on exchange rate volatility, gaps persist in understanding the nuanced causes and consequences of these fluctuations. The research problem addressed in this study is twofold: first, to identify the primary drivers of exchange rate volatility, and second, to assess the potential economic and financial implications of such volatility on trade balances, investment decisions, and overall economic stability. By addressing these questions, this research aims to provide valuable insights for policymakers and market participants seeking to navigate the challenges posed by exchange rate volatility.

2. Literature Review

The main focus of this section is to provide a detailed understanding of the exchange rate volatility, issues and prospects on exchange rate volatility, and also the theoretical and empirical supports for the study.

2.1 Exchange Rate Volatility Concept

Jongbo (2019) asserted that the exchange rate "is the price of one currency in terms of another currency". The exchange rate is used to determine the value of various currencies in relation to each other and is important in determining trade and capital flow dynamics (Eze, 2018). Exchange rates can be either fixed or floating. Fixed exchange rates are decided by the central banks of a country whereas floating exchange rates are decided by the mechanism of market demand and supply (Benson & Victor, 2022). The nominal exchange rate is the rate at which one currency can be exchanged for another currency and the real exchange rate is the nominal exchange rate adjusted for differences in inflation rates between two countries (Barkoulas et al., 2022). The real exchange rate is used to compare the purchasing power of two currencies (Agu, 2020).

Exchange rate volatility refers to the tendency of foreign currencies to appreciate or depreciate in value, thus affecting the profitability of foreign exchange trades (Ajakaiye, 2021). It is the measurement of the amount that exchange rates change and the frequency of those changes (Ishak, 2019). Exchange rate volatility is at the forefront of academic, policy, and market participant discussions in developed and developing economies (Mpofu, 2016). The benefits and costs of exchange rate variations and their implications for the economy have been reviewed in the literature. Exchange rate volatility can be caused by a number of different factors, including inflation rates, interest rates, demand for foreign currency, stock market index, bank intervention, trade openness, reserve assets, buying and selling, and trading within the forex market (Ishak, 2019).

2.2 Determinants of Exchange Rate Volatility

Exchange rate volatility is influenced by a variety of factors. Here are some of the determinants of exchange rate volatility: (i) Macroeconomic factors such as inflation rates, interest rates, and economic growth rates can affect exchange rate volatility (Meese & Rogoff. 2018); (ii) Market sentiment, which is the overall attitude of investors towards a particular currency, can also influence exchange rate volatility (Ishak, 2019); (iii) Political factors such as government policies, political instability, economic governance, and geopolitical events can affect exchange rate volatility Edison et al., 2017); (iv) Speculation, which is the act of buying and selling currencies in anticipation of future price movements, can also contribute to exchange rate volatility (Flood & Rose, 2015); (v) Global economic conditions such as trade imbalances, capital flows, and commodity prices can also affect exchange rate volatility (Forbes & Rigobon, 2022; Bacchelta & VanWincoop, 2023; Fleming, 2023); (vi) Differences in interest rates between two currencies can lead to capital flows and impact exchange rates. Higher interest rates in one country compared to another can attract foreign capital, affecting exchange rate volatility. Widening interest rate differentials may contribute to increased exchange rate volatility (Engel, 2016); and (vii) Advances in technology, algorithmic trading, and high-frequency trading can influence the speed and efficiency of trading, impacting exchange rate dynamics. Rapid execution of trades and increased automation may contribute to short-term volatility (Bacchelta & VanWincoop, 2023).

2.3 Exchange Rate Volatility Issues

Exchange rate volatility is a complex phenomenon that can give rise to various issues, affecting economies, businesses, and financial markets. Here are key issues associated with exchange rate volatility:

Exchange rate volatility introduces uncertainty for businesses engaged in international trade. The fluctuating values of currencies can impact the profitability of transactions, affecting pricing strategies and profit margins, and also, make businesses face challenges in planning and decision-making, leading to increased hedging costs and potential disruptions to supply chains (Melitz, 2018). Obstfeld and Rogoff (2019) opined that persistent and large fluctuations in exchange rates can contribute to trade imbalances between countries. Sudden and unpredictable currency movements may result in a misalignment of trade flows, which can lead to economic distortions, affecting competitiveness and potentially triggering protectionist measures. Sharp

and unexpected movements in exchange rates can create disturbances in financial markets as investors may incur losses, and financial institutions can face heightened risks. The market participants may become more risk-averse, and financial stability can be jeopardized, especially if large and rapid currency movements trigger cascading effects in other markets (Eichengreen, 2018). In the same view, Campa and Goldberg (2019) asserted that exchange rate volatility influences investment decisions, particularly for multinational corporations. The uncertainty in currency values can lead to sub-optimal capital allocation and affect the attractiveness of foreign investments, as a result, businesses may delay or alter investment plans, impacting overall economic growth and capital flows. Exchange rate volatility can undermine macroeconomic stability such as fluctuations in currency values which can affect inflation rates, interest rates, and overall economic performance. The implication of this is that Central banks may face challenges in conducting effective monetary policy, and governments may need to implement additional measures to stabilize the economy (Aizenman & Marion, 2017). Reinhart and Rogoff (2019) suggest that countries with significant external debt denominated in foreign currencies face risks related to exchange rate movements. A depreciating domestic currency can increase the burden of servicing external debt. Exchange rate-related increases in debt servicing costs can strain fiscal budgets and potentially lead to financial crises (Reinhart & Rogoff, 2019). Exchange rate volatility poses challenges for businesses in maintaining competitiveness, particularly for export-oriented industries (Berman & Hericourt, 2020). Rapid currency movements can impact the cost structure and pricing strategies of firms, as countries heavily dependent on exports may face difficulties in international markets, affecting employment and economic growth (Ajakaiye, 2021). Speculative activities in the foreign exchange market are another issue that can exacerbate exchange rate volatility. Traders making bets on short-term currency movements can contribute to erratic and unpredictable price changes (Frankel & Froot, 2017). Increased speculative activities may lead to overshooting of exchange rates, making it challenging for businesses to plan and adjust to currency movements (Jongbo, 2019).

2.4 Exchange Rate Volatility Prospects

Here are some key considerations from extant literature regarding the prospects of exchange rate volatility are stated below:

A robust global economic recovery (such as improved economic indicators, increased trade volumes, and coordinated policy measures) among major economies can foster and contribute to stable exchange rates as increased economic activity and trade may reduce uncertainty (Shapiro, 2020). The divergence in interest rate policies among major central banks, especially the Federal Reserve, the European Central Bank, and the Bank of Japan, can impact exchange rate dynamics by giving a clear and consistent monetary policy that can contribute to reduced exchange rate volatility (Melitz, 2018). Geopolitical events, such as trade tensions, political instability, or conflicts, can contribute to exchange rate volatility (Ajakaiye, 2021). Clear communication and effective implementation of monetary policy measures can contribute to stable inflation expectations and, by extension, exchange rate prospects (Barkoulas et al., 2022). Reinhart and Rogoff (2019) opined that the evolution of trade relations (such as international trade negotiations, changes in tariffs, and global trade imbalances) among major economies can impact exchange rates. Trade agreements and disputes may influence market expectations. Advances in financial technology and changes in market dynamics, including algorithmic trading, may impact the speed and efficiency of foreign exchange markets and may offer new tools and platforms for managing exchange rate risk, providing businesses with more efficient hedging mechanisms (Hull & White, 2017). Increased education and awareness among businesses and investors about the dynamics of exchange rate markets may lead to more informed decision-making and proactive risk management (Levich, 2020). Strengthening global economic governance institutions, such as the International Monetary Fund (IMF), can contribute to better coordination and management of exchange rate policies globally (Jeanne & Rancière, 2021). Encouraging regional or international currency cooperation, such as the use of common currencies or currency baskets, can help mitigate the adverse effects of exchange rate volatility (McKinnon, 2019). Developing and adopting dynamic hedging strategies that adjust to changing market conditions can assist businesses in managing exchange rate risk more effectively (Taleb, 2017). Enhanced international policy coordination, facilitated through forums like the G20, can promote stability and reduce the likelihood of currency wars that contribute to exchange rate volatility (Ostry et al., 2022).

2.4.1 Theoretical Framework

Exchange rate volatility is a complex phenomenon that has been explored through various theoretical lenses. The following theoretical perspectives provide insights into the issues and prospects associated with exchange rate volatility. Portfolio balance theory and Purchasing power parity theory were adopted for the study. The study was based on the Purchasing power parity theory as the theory factors in the economic fundamentals such as interest rates, inflation, and income levels.

2.4.2 The Portfolio Balance Theory:

Branson et al. (1975) proposed the portfolio balance hypothesis. According to the hypothesis, locals split their money between three types of assets: international bonds, domestic bonds, and the monetary base. When these assets are held in the desired proportion by the investor, the exchange rate is in equilibrium. According to Efunta et al. (2022), one theory that explains the relationship between changes in exchange rates and stock market prices is the portfolio balance theory. In a similar vein, portfolio balance theory is among the most significant theories that explain the connection between capital flows and exchange rate volatility, according to Mohammadi and Su (2019). According to portfolio balance theory, when the private sector is content with holding financial assets, the current account balance reflects the government's fiscal deficit. The entire balance of payments deficit is a reflection of the government's incapacity to sell bonds to foreign investors without experiencing an unjustified decline in price (Eze & Okpala, 2014).

2.4.3 The Purchasing Power Parity Theory

The 16th century saw the introduction of the Purchasing Power Parity (PPP), which was later developed in 1918 by Swedish economist Gustav Cassel. The idea behind the purchasing power parity (PPP) theory is to explain how inflation and exchange rates are related. Theoretically, the ratio of the price levels in the two countries should match the exchange rate between the two currencies. Stated differently, the exchange rate ought to be modified to account for the disparity in inflation rates between the two nations (Mohammadi & Su, 2019). According to Jhingan (2023), the equality of the relative change in the price levels in the two countries establishes the equilibrium exchange rate between two inconvertible paper currencies. A common currency is used to measure international competitiveness. According to the theory of purchasing power parity, nations with higher rates of domestic inflation than their rivals would see an appreciating exchange rate.

2.5 Empirical Review

Rose (2020) examined the relationship between exchange rate volatility and volume of trade. The study found that higher exchange rate volatility negatively affects trade volumes, supporting the idea that uncertainty in currency values can impede cross-border transactions. Adler and Dumas (2019) carried out a study on the relationship between exchange rate volatility and foreign direct investment (FDI), the study demonstrated that exposure to currency risk influences the investment decisions of multinational corporations and impacts the flow of capital across borders. Meese and Rogoff (2018) empirically investigate the link between exchange rate volatility and macroeconomic stability. The results from the study show mixed results. The author concluded that predicting exchange rate movements is challenging and emphasizes the inherent difficulties in managing and stabilizing currency values. Engel (2016) conducted empirical research on the relationship between exchange rates, interest rates, and the risk premium. The study highlighted how fluctuations in exchange rates can lead to financial market disturbances, affecting asset prices and investor behavior. Empirical research by Shapiro (2020) delves into multinational financial management, emphasizing the importance of businesses adopting enhanced risk management strategies to navigate exchange rate volatility successfully. Obstfeld and Rogoff (2019) analyze the impact of interventions on exchange rate dynamics. The study concluded that there is a positive relationship between central bank interventions and exchange rate volatility. Menkhoff et al. (2022), investigated currency momentum strategies and the role of currency diversification in managing exchange rate risk. It was found that currency momentum strategies play a vital role in managing exchange rate risk. Hull (2022) conducted a study on the impact of financial derivates on exchange rate risk management. The result of the study revealed a positive association between options, futures, and other derivatives on exchange rate effectiveness. The study by Baldwin and Taglioni (2016) has explored how exchange rate volatility impacts global supply chains and production networks. The study emphasizes the importance of economic integration in mitigating the disruptive effects of currency fluctuations. Research by Kaminsky and Reinhart (2019) provides empirical evidence on the link between exchange rate volatility and financial crises. The study highlights how exchange rate movements often precede or coincide with broader financial instability. Burnside et al. (2021) have conducted empirical investigations into the relationship between interest rate differentials and exchange rate movements. The study suggests that interest rate differentials play a crucial role in explaining currency fluctuations. Ederington and Lee (2016), have investigated the role of information and news in influencing exchange rate volatility. The research sheds light on how unexpected news events can lead to significant fluctuations in currency values. Empirical evidence on the impact of international policy coordination on exchange rate stability is discussed by Obstfeld (2015). The study delves into trilemmas and trade-offs in international finance, emphasizing the importance of coordinated policies. Hull and White (2017) explore the impact of technological innovations on risk management strategies. The study emphasizes how advancements in financial technology can enhance the efficiency of risk management practices. A study by Jeanne and Rancière (2021) provides empirical insights into the effectiveness of currency unions in reducing exchange rate volatility. The study analyzes the optimal level of international reserves for emerging market countries within the context of currency unions.

3. Methodology

The research design method adopted for this study is exploratory-based library research. Exploratory-based library design was used as a result of the conceptual nature of the study. It is a review of documentary information on the researchable topic. Secondary sources of data were engaged and used in this study, the sources of information including relevant textbooks, journal articles, and other relevant materials in existence were used in explaining the research variables.

4. Conclusions and Recommendations

Exchange rate volatility remains a multifaceted challenge with far-reaching implications for global economic stability, trade, and investment. This study has explored various issues associated with exchange rate volatility, shedding light on its impact on trade dynamics, investment decisions, and macroeconomic stability. Additionally, the research has discussed the prospects that emerge from these challenges, presenting opportunities for risk management, policy adjustments, and international cooperation. In conclusion, the issues surrounding exchange rate volatility are complex and interconnected. The historical context, speculative activities, and competitiveness challenges underscore the need for a comprehensive understanding of the factors contributing to volatility. However, amidst these challenges, there are promising prospects that could enhance the resilience of economies and financial markets. Technological innovations, policy coordination, and education initiatives stand out as potential avenues for addressing and mitigating the adverse effects of exchange rate volatility.

Building upon the findings and insights garnered from extant literature, the following recommendations are proposed:

(i) Businesses and financial institutions should continually assess and enhance their risk management practices, leveraging technological innovations and diversified financial instruments to navigate exchange rate volatility effectively.

(ii) Governments and central banks should engage in increased international policy coordination and cooperation to address the root causes of exchange rate volatility, promoting stable economic conditions.

(iii) Educational institutions, policymakers, and financial market participants should collaborate to enhance awareness and understanding of exchange rate dynamics, empowering businesses and investors to make informed decisions.

(iv) Researchers and policymakers should continue to explore innovative solutions and conduct in-depth studies to deepen our understanding of exchange rate volatility and develop effective strategies for managing its impact on the global economy.

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