INTERNATIONAL JOURNAL OF ARTS MANAGEMENT AND PROFESSIONAL STUDIES
E-ISSN: 2814-0389, ISSN: 2814-0370
VOL. 5, ISSUE 3, 2025
AVAILABLE ONLINE: www.ijamps.com

Exchange Rate Fluctuations and their Effects on Nigeria's Economic Performance

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Abstract

Persistent variations in the currency rate impact Nigeria's economic performance, which this paper aimed to discuss. This study set out to answer why Nigeria's monetary authorities have been so unsuccessful in their recent attempts to achieve internal and external balances. According to the research, Nigeria's economic growth was severely hindered in the long term by the currency rate, inflation, and net direct foreign direct investments. The overall conclusion drawn from this study is that Nigeria's economic progress is hindered by excessive exchange rate swings. The study's empirical findings support the recommendation that Nigeria diversify its exports in agriculture and increase agro-investment. The government should implement meaningful changes to influence the system and mitigate the negative impact of an unstable foreign exchange market on Nigeria's economy.

Keywords: Exchange rate fluctuations, monetary policy, economic growth, Nigeria

Introduction

Significant foreign exchange rate market volatility has been a problem for the Nigerian economy (Kelikume and Nwani, 2019; Osabuohien et al., 2018). Because of its devastating effects on developing nations' economies, such as Nigeria's, exchange rate fluctuation—the ongoing gyration in nations' foreign exchange markets—has recently emerged as a prominent topic of discourse in international finance literature (Alagidede and Ibrahim, 2017; Barguellil et al., 2018; Senadza and Diaba, 2017).

When the notorious Structural Adjustment Programme (SAP) was developed and implemented in 1986 as part of the Economic Recovery Program (ERP), it brought reforms to Nigeria's financial sector. As part of the changes, in the late 1980s, the fixed exchange rate regime was replaced with a free-floating one. The rationale behind this shift was the hope that more liquid currency markets would stabilise the economy and put it on a growth path, thus ending the boom-and-bust cycle. Consumer pricing stability, investment volumes, investment terms, and exchange rate channels are all predicted to experience growth-enhancing effects. In 1981, the exchange rate was ₦1 to 0.90 cents, suggesting that Nigerians actively encouraged the Naira's overvaluation until the structural adjustment program (SAP) was enacted. This led to the over-reliance of the Nigerian economy on imported input rather than exported output, which in turn supported imports while discouraging non-oil exports. When a country's imports are higher than its exports, the balance of payment becomes negative, and that country's currency loses value relative to other countries' currencies. According to Oborogi (2020), the value of that country's currency relative to other currencies will be low. For instance, the Nigerian Naira to dollars is $1 = 197.00, the British pound sterling is £1 = 281.29, and so on. The massive increase in the value of the Naira relative to the dollar, from approximately ₦120/$ to over ₦180/$, during 2008 and 2009 was a result of the negative influence of the worldwide economic and financial crisis on the currency rate of Nigeria. Because of the ongoing decline in the price of crude oil on the global market, Nigeria's foreign profits and national revenue have dropped precipitously. As a result of the developed world's refocused efforts on renewable energy sources like wind, bio-energy, and solar, demand for crude oil has fallen, sending prices tumbling. In the last three months of 2020, a barrel of crude oil cost $38.77, down from $110 in the middle of 2018 and below $50 in early 2019. This further reduced Nigeria's ability to use its foreign earnings and revenues to fund critical areas that will raise living standards, expand employment, and boost economic activity and per capita income.

In light of the monetary authorities' (MAS) determined pursuit of internal and external balances and the improvement of living conditions for Nigerian citizens, this study is driven by a desire to understand why. But efforts to guarantee domestic price stability and accomplish the aforementioned macroeconomic aims have had scant success in recent times. Since 1994, the government has made multiple attempts to stabilize the exchange rate and maintain sustainable economic growth. Therefore, it is necessary to raise the following research issues to lead this assessment. Why does the Nigerian currency continue to fluctuate over time? To what extent does the ebb and flow of the currency affect the productivity of the Nigerian economy? Finding the answers to these questions would shed light on the relationship between the Nigerian currency rate and economic performance, which is crucial for policymakers, public and private investors, and other economic actors.

The concerns regarding the impact of exchange rate fluctuations on various aspects of economies, both developed and developing like Nigeria, have undergone significant development. These fluctuations have been found to affect exports, employment growth, trade, inflation, investment, overall economic activity, and growth. Numerous studies have explored these consequences (Abdoh et al., 2016; Caselli et al., 2017; Fauceglia, 2020; Vieira and MacDonald, 2016; Vo and Zhang, 2019)

Consequently, this study employs the autoregressive distribution lag (ADRL) approach to empirically test a framework based on the optimal currency area (OCA) theory in order to determine the effects of exchange rate changes on the performance of the Nigerian economy. The ideas of shock symmetry, openness level, and labor market mobility form the basis of the theory. This theory postulates that a fixed exchange rate system can boost commerce and GDP growth by making hedging against fluctuations in exchange rates easier and cheaper, and by lowering the currency premium associated with interest rates, it can encourage investment. On the other hand, it has the potential to impede, postpone, or halt the relative price adjustment process, which is essential for trade and output growth.

Literature Review

The Foreign Exchange Policies of Nigeria: A Comprehensive Review

Over the past sixty years, there have been multiple changes in the regimes and policies that govern the exchange rate of the Nigerian currency. Adopting a fixed exchange rate with the British Pound Sterling in 1960 signalled the start of its transition away from a fixed parity. In 1967, the Pound Sterling's value was reduced, resulting in the implementation of a parity exchange agreement with the US dollar. The implementation of the parity exchange rate strategy was suspended in 1972 as the US dollar began to strengthen relative to the British pound. The re-establishment of stable parity with the British Pound occurred in 1973 due to the depreciation of the US Dollar. In 1974, the Nigerian currency was fixed to the US Dollar and the British Pound to mitigate the impact of depreciation. The nominal exchange rate of the Naira had a consistent increase during the 1970s, primarily due to significant rises in the price of crude oil in the global market. The decrease in foreign reserves and imbalances in the balance of payments resulted from excessive dependence on imports, a decrease in non-oil exports, and capital outflow triggered by the appreciations in the nominal exchange rates. As to the findings of Eze and Okpala (2014), the agricultural sector in Nigeria experienced a decline due to an increase in the country's marginal propensity to import. In 1978, the Naira was fixed to a basket of twelve currencies, including those of significant trading partners. Nevertheless, in 1985, the approach implemented in 1978 was discarded in favour of fixed Naira/dollar exchange rates. As stated by Eregha et al. (2016), the Naira was intentionally overvalued before 1986 as a result of the existing exchange rate regulations.

The Structural Adjustment Programme Package implemented currency deregulation in September 1986 to address the issues arising from the Naira's overvaluation. The Structural Adjustment Program has another instrument in its armoury known as the Second-tier Foreign Exchange Market or SFEM. The primary objective of SFEM was to develop a mechanism that would effectively determine and allocate exchange rates to provide both immediate stability and a sustainable balance of payments equilibrium. Godfrey and Agwu (2019) state that the primary objective of SFEM is to determine a rational Naira exchange rate by analysing the correlation between supply and demand. The objectives include boosting non-oil exports, ensuring optimal resource utilization, eliminating currency trafficking through the unregulated parallel foreign exchange market, encouraging foreign exchange inflows and discouraging outflows, and maintaining a favourable balance of payments for the country. Several modifications were made to accomplish the goals of SFEM, such as the conversion of the Foreign Exchange Market (FEM) into the Autonomous Foreign Exchange Market (AFEM), the implementation of the Dutch Action System, and the establishment of the wholesale Dutch Auction System. In July 1987, the emergence of problems regarding the prices in the first and second-tier markets led to the implementation of the FEM as a solution. To expand the scope of FEM, the Bureau de change was founded in 1989. The system of foreign exchange rates was reintroduced in 1994. The Autonomous Foreign Exchange Market (AFEM) was introduced in 1995 as a measure to counteract the effects of deregulation. The interbank foreign exchange market (IFEM) was reestablished in 1999. Following the abolition of the official exchange rate on January 1, 1999, the two currency rates were merged. The return of the Dutch Auction System (DAS) in 2002 was prompted by increasing demand pressure in the foreign exchange market and the ongoing depletion of the country's external reserves. In 2006, the market saw additional liberalization by implementing wholesale DAS, establishing a more accurate Naira exchange rate. Thus far, the Nigerian government has let its exchange rate fluctuate between two extremes: complete regulation and unrestricted floating. In 2016, the regulatory authority CBN reestablished the "Flexible Exchange Rate Inter-bank Market" (Eregha et al., 2016), a managed floating FOREX market.

Financial Markets and Exchange Rate Management in Nigeria

Economic policies in Nigeria, such as the country's currency rate and capital control measures, have been impacted by political considerations, according to a literature and data study (Akinlo and Onatunji, 2020). To appease their political paymasters, politicians implement policies that do not take economic reality into account, but rather represent the preferences of those in power. Accordingly, the Nigerian central bank's capital restriction measures and exchange rate policies implemented after independence have been influenced by political expediencies and preferences. That the country's foreign exchange policies are so unstable and inconsistent throughout government regimes is, in fact, mostly attributable to the political circumstances of the period, which in turn explain the country's varied and, at times, contradictory exchange rate policies and policy regimes.

Several political considerations, such as the timing of elections, are likely to impact exchange rate policy, as shown above. Many people look at the purchasing power, export costs, price level, and real wage—all of which are impacted by the real exchange rate—as indices to choose their leader in the next election. As a matter of fact, governments often put off devaluing their currencies till after the election, rather than appreciating them before (Kaltenbrunner and Painceira, 2017). Although there may be sound economic reasons to devalue the currency, governments may choose not to do so for political rather than economic reasons due to the widespread opposition to a decline in the purchase power of the national currency.

In Nigeria, the character and nature of the political leadership have an impact on capital restriction measures and exchange rate regulations. Regimes and administrations that lean toward the West often follow the lead of international financial institutions like the World Bank and the International Monetary Fund, which call for more economic liberalization. An exchange rate system based on the market is pursued by these regimes. In this respect, the administrations of Chief Olusegun Obasanjo (1999–2007) and General Ibrahim Babangida (1985–1993) stand out. Conversely, governments that are not anti-Western but also do not believe in the worldwide movement towards economic liberalization often opt for a fixed exchange rate regime. Take General Sani Abacha's administration as an example (1994–1998).

Theoretical Framework

The OCA Theory, or the Optimal Currency Area

Mundell and McKinnon's (1961) and McKinnon's (1963) revolutionary optimal currency area (OCA) theory is still used as a theoretical basis for exchange rate policy. Maintaining steady trade and business cycles is a central tenet of this ideology. The principles of symmetry of shocks, degree of openness, and labor market mobility form its basis. Theoretically, a fixed exchange rate system can boost investment by lowering the currency premium from interest rates and speeding up trade and output growth by lowering the cost of hedging against exchange rate unpredictability. However, it can also impede trade and output growth by halting or reducing the relative price adjustment process, which is essential.

These days, most people think of the exchange rate as something that only happens in the financial sector, and theories about it are based on asset market or portfolio balance approaches to the balance of payments and money. However, conventional wisdom holds that trade flows are key to understanding exchange rate fluctuations over the long term. Traditional theories are still important in the long term, but attention has moved to modern theories of exchange rates because finance flows have surpassed commercial flows (Salvatore, 2012).

Economic Growth and the Volatility of Exchange Rates

The relationship between currency rates and economic growth and performance over short, medium, and long periods of time has been the subject of heated controversy in the literature on international finance and commerce. In presenting their idea of optimal currency areas (OCA), Mundell (1961) and McKinnon (1963) laid the groundwork for this argument. Scholars in this field, however, cannot agree on anything. While Greenaway-McGrevy (2018) and Ismailov and Rossi (2018) found a long-term correlation between exchange rates and macroeconomic fundamentals, the current literature in international finance states that exchange rates are unpredictable, particularly when looking at the short-term (Della et al., 2009). In their study, Bristy (2014) employed the optimum currency area (OCA) theory to assess the influence of financial development and exchange rate volatility on the long-term economic growth of Bangladesh. Exchange rate volatility was found to be inversely related to economic growth in Bangladesh, according to the empirical investigation. Using monthly time-series data from 1980 to 2013, Alagidede and Ibrahim (2017) looked at the effects of exchange rate volatility on Ghana's economic performance using the vector error correction model (VECM). According to studies, an excess of volatility is limiting Ghana's economic advancement. There are constraints on how much growth can be fostered through resource utilization and the introduction of innovative practices.

Having a reasonable and stable exchange rate allows economies to realize their full growth and development potential, according to Libman (2018). Business uncertainty, higher levels of competition, lower productivity and profitability, and higher local prices all contribute to excessive exchange rate volatility, which in turn slows economic growth. The correlation between fluctuating exchange rates and sustained increases in output over time was the subject of research by Ahiabor & Amoah (2019). There is a non-linear relationship between the changes in real exchange rates and the changes in output in emerging market countries, according to empirical evidence. Their findings suggest that a relatively stable real exchange rate greatly reduces production volatility and shocks, in contrast to a very volatile rate, which has the opposite effect.

Adelowokan et al. (2015) examined the impact of currency volatility on investment and growth in Nigeria using the vector error correction (VEC) approach. Research shows that while interest rates and inflation are positively affected by volatility, investment and growth are negatively affected. Both developed and developing economies are hindered by fluctuations in the real exchange rate, according to research by Rapetti et al. (2012). The impact of private consumption on the volatility of currency rates in Sub-Saharan Africa was also examined by Oseni (2016). The study found a negative correlation between currency volatility and industrial sector performance using econometric methodologies such as generalized method of moments (GGM) dynamic panel regression.

Nonetheless, prior research has shown that the exchange rate significantly affects economic growth, which in turn leads to beneficial results. The relationship between real exchange rate fluctuations and the long-term economic growth of industrialized and developing economies from 1970 to 2009 was investigated by Vieira et al. (2016). A high level of volatility boosted the pace of growth of real GDP, according to the study's authors, whereas a low level of volatility had the reverse effect. Instead of exchange rate misalignment, stable exchange rates appear to be the main factor propelling long-term growth. This becomes clear when we take into account a model that accounts for both the level and misalignment of the exchange rate, as well as exchange rate volatility. Neither of the variables matters much in this model. An

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increase in the value of the exchange rate causes imports to rise and exports to fall, according to Aliyu (2011). The inverse is also true: as the exchange rate falls in value, exports rise and imports fall. The substitution of locally made items for imported ones is another probable outcome of a currency decline.

As a result, the trade balance shifts from importing to exporting countries, which influences the GDP growth of both groups of countries.

Previous research yielded inconclusive results, according to the aforementioned empirical and theoretical study. The research is based on previous studies that have shown a link between the currency rate and GDP growth, and on the fact that different political regimes in Nigeria have implemented currency policies that are at odds with one another.

Conclusion

A number of factors significantly impacted Nigeria's GDP growth rate, including the exchange rate (EXR), inflation rate (INF), and net foreign direct investment (NFDI). Conversely, interest rate (INT) has a long-term, beneficial and substantial effect on economic growth. Total economic growth in Nigeria is severely impacted by fluctuations in the naira's value versus the dollar. A stronger Naira relative to the dollar is beneficial for the Nigerian economy regardless of the circumstances. According to our findings, persistently high levels of volatility impede growth. But does it always work like this? If the answer was affirmative, serious consequences could follow. The results imply that policymakers can hit their growth targets in the near term by manipulating the exchange rate regime to increase real gross domestic product (RGDP), even though this link weakens over time.

Implications

Mundell (1961) and McKinnon (1963) propose implementing a fixed and stable exchange rate regime to enhance trade efficiency, stimulate output growth by reducing uncertainties and hedging costs, and promote investments by lowering premium exchange rates. This approach aligns with the principles of optimal currency area (OCA) theory. Based on this research, it has been found that interest rates have a positive and beneficial influence on the long-term economic growth in Nigeria. On the other hand, the exchange rate, net direct foreign investment, and inflation rate all have adverse effects. When policymakers focus on achieving economic growth in the short term, it appears that changing the exchange rate regime would cause an increase in real gross domestic product (RGDP). Nevertheless, with time, this connection will deteriorate.

From a practical perspective, the state plays a vital role in ensuring economic stability. Therefore, it would be advisable for the state to promote the diversification of agricultural exports and investments in agriculture. The Nigerian economy would experience tangible growth and a rise in foreign exchange earnings through the agro-allied and oil-allied sectors. Ultimately, it is imperative for the Nigerian government to enact effective economic reforms that would directly influence the currency exchange rate, thereby minimizing the adverse consequences of an unstable exchange rate on the nation's trade flow.

Limitations and Future Directions

The purpose of this study was to apply the optimal currency area (OCA) theory to the growth rate of the Nigerian economy as a measure of economic performance and to determine the effect of exchange rate variations on this rate. But, there are a few caveats and limits to the study that can provide a rich environment for the growth of new lines of inquiry. The results may not be applicable to a broader context because this study was based on an examination that was limited to Nigeria. The results may, however, apply to a wide variety of frontiers and developing economies outside Nigeria. Therefore, in order to ensure that their findings can be applied to other countries, future research may concentrate on investigating the relationships between frontier and emerging economies' exchange rates, trade-openness, and economic performance.

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