Exchange Rate Fluctuations and Economic Growth in Nigeria: An Empirical Analysis Using ARDL Approach

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Abstract. The study examines the relationship between exchange rate volatility and economic growth in Nigeria from 1990 to 2023. We employ the Autoregressive Distributed Lag (ARDL) method to investigate the cointegration between exchange rate volatility, interest rate, inflation, money supply and the Real Gross Domestic Product (RGDP). The findings suggest that exchange rates have a positive influence on economic growth, whereas interest rates, inflation, and the money supply have a negative impact in the long term. The error correction mechanism reveals a 9% annual rate of adjustment to long-run equilibrium. Our results suggest that stabilising exchange rates is vital to sustainable economic growth in Nigeria, and this is a consequence of why coordinated macroeconomic policies are essential.

Keywords: exchange rate; economic growth; Nigeria; ARDL; cointegration; monetary policy; inflation; financial stability.

INTRODUCTION

Nigeria projects that by 2050, it will be among the world's developed economies, and the exchange rate policy is an important pillar of this development blueprint [1]. The fluctuation of the exchange rate has a significant impact on the economy's performance, affecting trade, investment, and macroeconomic stability. Nigeria transitioned from a fixed exchange rate regime to a flexible exchange rate regime sometime after adopting the Structural Adjustment Program (SAP) in 1986 and has since experienced significant volatility, which has ramifications for economic growth [2].

The relationship between fluctuating exchange rates and economic growth is a contentious issue in the economic literature. While certain reports suggest that depreciation of the exchange rate can enhance the economy's competitiveness and stimulate export growth performance [3], other reports argue that extreme rates create uncertainty that suppresses spending and economic performance [4]. Between the 1970s and the first half of the 1980s, fluctuations occurred in various sectors of the economy under Nigeria's regulated regime, characterised by inconsistencies in economic policy formulation, which contributed to the country's unstable currency exchange rate [5].

Exchange rates have played an unstable role since the collapse of the Bretton Woods regime in the 1970s, following the introduction of floating exchange rates, when they could not be clearly correlated with macroeconomic fundamentals [6].

This has generated extensive enthusiasm for studying the exchange rate. Unlike in other African countries, Nigeria maintained a fixed exchange rate between 1960 and the 1970s, which has been floating since 1986 to the present [7].

This study is important because it will contribute to the ongoing debate about the optimal exchange rate policy for developing economies. The account of what happened in Nigeria offers several important lessons for other resource-dependent economies that face the same issue [8]. Furthermore, the paper utilises updated data and modern econometric methods to provide new empirical evidence on this crucial relationship.

Research Questions. This study seeks to answer the following research questions:

To what extent has the Exchange Rate (ER) affected the Real Gross Domestic Product (RGDP) of Nigeria?

To what extent has the Interest Rate affected the Real Gross Domestic Product (RGDP) of Nigeria?

To what extent has the inflation rate affected the Real Gross Domestic Product (RGDP) of Nigeria?

To what extent does the money supply affect the Real Gross Domestic Product (RGDP) of Nigeria?

Research Hypotheses. The following hypotheses were formulated and tested:

H_{01}: There is no significant relationship between the Exchange Rate (ER) and the Real Gross Domestic Product of Nigeria.

H_{02}: There is no significant relationship between the Interest Rate and the Real Gross Domestic Product of Nigeria.

H_{03}: There is no significant relationship between the Inflation Rate and Real Gross Domestic Product of Nigeria.

H_{04}: There is no significant relationship between money supply and the Real Gross Domestic Product of Nigeria.

Literature Review

Conceptual Clarifications. Exchange Rate: This refers to the price of one country's currency as measured in terms of another country's currency [9]. It establishes the relative price of local and international goods and also determines the extent of external involvement in international trade. According to [10], an appreciation of the exchange rate will translate into more imports and fewer exports. In contrast, a decrease in the exchange rate will increase exports and discourage the import of goods. Such a correlation has been widely reported in the field of international trade [11].

According to [12], the exchange rate facilitates the connection between the value systems of two distinct countries, providing a global platform for trade. This, in turn, directly impacts the size of imports and exports, as well as a country's balance of payments status. The exchange rate mechanism is a crucial instrument through which monetary policy affects the real economy [13].

Exchange Rate Volatility: Exchange rate volatility refers to the fluctuation of exchange rates over a specified period. As we have seen from what [14] revealed, capital mobility limits, or rather constrains, monetary policy, which can be inefficient under fixed exchange rates at times. The endogenous nature of the stock of money adjusts to an economy, implying a more sensitive and responsive nature to shocks.

At this point, authors [15] suggest that external exposure can be attributed to a situation where developing countries cannot issue loans in foreign financial markets using their own currency, regardless of the loan's duration. According to this hypothesis of original sin, every long-term borrowing should be carried out using a foreign currency, which would make it susceptible to fluctuations in exchange rates [16].

Economic Growth: Economic growth refers to a positive change in the production of goods and services within an economy [17]. It can be defined as an increase in the real market value of products and services generated by an economy over a specified period. It occurs when capital goods rise, accompanied by an increase in the labour force, technology, and human capital. The author [18] was the first to initiate the theoretical framework for determining long-term economic growth in terms of technological progress and capital accumulation.

Type of financial intermediation. The process of development of the Nigerian policy regarding exchange rates went through several regimes, each with particular characteristics and consequences in relation to achieving economic growth:

Pre-oil boom period (1960-70): The agricultural sector was dominant (65 % of total GDP), and exports largely entailed that sector (about 70 %). The economy had relative stability and

predictable exchange rates [19]. During this time span, the exchange rate served as a nominal anchor for domestic prices.

Oil boom (1971-1977): Petroleum became the new centre of export earnings, disrupting Nigeria's economic structure. Authors [20] acknowledge that the share of the agricultural sector of the GDP diminished to around 21% in 1977 due to the discovery of crude oil. This revolution in structure is what laid the groundwork for future exchange rate problems.

Structural Adjustment Programme (1986-1993): The Structural Adjustment Programme was crucial, introducing a flexible exchange regime in an effort to break the vicious cycle of boom and bust. SFEM was launched to set exchange rates based on market forces [21]. This was a period of big depreciation in the exchange rate and macro-economic imbalances.

Deregulation period (1994-98): This period focused more on market-based exchange rates, enhanced by the establishment of the Autonomous Foreign Exchange Market (AFEM) in 1995 and the Inter-bank Foreign Exchange Market (IFEM) in 1999 [2].

Consolidation (1999 to date): Monetary policy frameworks were enhanced, and additional systems, such as the Dutch Auction System (DAS), introduced in 2002, and the Wholesale Dutch Auction System (WDAS), introduced in 2006, were also implemented. These reforms aimed to achieve exchange rate stability and improve the efficiency of the exchange market [22].

Output in the Manufacturing Sector. Nigeria has been adversely affected by exchange rate fluctuations in the manufacturing sector. Depreciation results in a decrease in the cost of imported raw materials and machinery, as well as a decline in the competitiveness of the company's products in international markets [23]. The sector's contribution to GDP has been relatively low, given the exchange rate instability and infrastructural challenges.

The author [24] argues that the performance of the manufacturing sector is highly sensitive to movements in the exchange rate due to its heavy reliance on imported inputs. This leaves a mixed relationship, as depreciation can improve competitiveness, but production costs can also magnify it. The net consequence is a matter of balancing these two opposing forces [25].

Related Theories

The purchasing power parity (PPP) theory: The purchasing power parity is a theorem by [26, 27] according to which the equilibrium exchange rate between two currencies answers the ratio between their purchasing powers. When the inflation rate of one country increases compared to that of another, exports are reduced and imports increase, thereby weakening the currency of the country in question. The theory attempts to measure the inflation-exchange rate correlation by positing that increases in inflation rate differentials bring about changes in the exchange rate.

Authors [28] state that the expected inflation differential, $N = E (N)$, and the expected spot rate differential, i, equal N and i, respectively. Despite criticisms, the author [29] can argue that the PPP theory remains a pillar in the literature on determining exchange rates between countries and is suitable for determining exchange rates among countries.

Optimum Currency Area (OCA) Theory: This theory, pioneered by [30] and later developed by [31], describes the optimal approach to choosing an exchange rate regime. This theory relies on the principle of shock symmetry, the level of openness of a region, and the efficiency of labour market mobility. It implies that some areas across the national borders would enjoy the advantages of using a single currency [32].

According to the theory, there is increased economic efficiency in creating currencies based on geographic and geopolitical regions, rather than by a single nation. Nevertheless, the benefits of enhanced trade should outweigh the costs of losing national currency as a tool for regulating economic policy [33].

Monetary Theory: This theory posits that exchange rates are determined by the use of money, which is the leading driver in an economy [34]. It focuses attention on the money stock as a major factor in determining exchange rates, implying that exchange rates can be largely explained in terms of changes in the relative supplies of national currencies. The theory emphasises the fact that the supply of money and demand for money are firm actors in determining a country's external position.

The author [35] explained that the monetary approach emphasises the monetary aspects of the balance of payments and plays a significant role in the financial sector, particularly in relation to

financial assets. The gist of this idea is that the exchange rate process of a country is a monetary phenomenon, and the disequilibrium it may face can be effectively addressed by manipulating the monetary parameters [36].

Empirical Review. The empirical evidence on the exchange rate-growth nexus has been mixed, with studies across different countries and time periods yielding varying results. Authors [37, 38] are among the earliest researchers to develop a theoretical premise. In recent times, researchers have employed more advanced econometric methods.

Supportive Evidence: Considering the error correction model, authors [39] declared that trade liberalisation contributed to growth in the Nigerian industrial sector and stabilised the exchange rate market between 1970 and 2006. They established a positive but significant correlation between the index of industrial production and the real export, indicating that a 1% increase in real export contributed to the growth of industrial production by 12.2%.

The study by [40] examines the relationship between the foreign exchange market and economic growth in Nigeria's emerging petroleum-based economy between 1970 and 2003, concluding that there is a positive correlation between the exchange rate and economic growth. Similarly, [7] investigated the relationship between the exchange rate and economic growth in Nigeria from 1970 to 2010. They found that the exchange rate has had a significant influence on the economy's growth.

In a 2012 study, [41] examined the impact of exchange rate volatility on Nigeria's macroeconomic performance from 1986 to 2010. Their results showed a positive long-term relationship between the exchange rate and gross domestic product. They have used both Ordinary Least Squares (OLS) and cointegrating Johansen analysis.

Contrary Evidence: The author [42] has utilised the real exchange rate to investigate the growth of non-oil exports in Nigeria, and he found that real exchange rate misalignment and volatility hinder the growth of Nigerian exports. Various measures of real exchange rate misalignment were employed, along with conventional trade theory models, to investigate the topic.

Authors [43] establish that the volatility of the exchange rate has a strong negative association with exports in developing countries. This result held across various model specifications and robustness tests. Likewise, the author demonstrated that the volatility of the real exchange rate hurts investment in a large sample of developing world countries, with the negative effect being considerably stronger in highly open economies with less modernised financial systems.

The Regional Evidence: The author [44] conducted a study on the interrelation between exchange rate fluctuations and the growth of real output and price inflation in twenty-two developing nations using a rational expectation model. The research findings indicated that depreciation of the exchange rate, both expected and unexpected, reduces the growth of real output and boosts price inflation.

Author [45] investigated whether exchange rates have an impact on economic growth in Malaysia, using time series data from 1971 to 2021. The results of the ARDL bounds test implied cointegration in the long term for both nominal and real exchange rates, as well as economic growth, with a significant positive impact of the real exchange rate.

Recent Nigerian research has yielded conflicting evidence. The author [46] ascertained the correlation between variable volatility and macroeconomic variable analysis using the OLS and Granger causality tests. The results indicated that exchange rate volatility increases GDP.

Authors [47] examined the effectiveness of the exchange rate on macroeconomic aggregates in Nigeria using a vector-autoregressive model for the period 1970-2009. They indicated that their findings have no direct correlation with exchange rate development and GDP growth, implying that fiscal and monetary policies have had a direct impact on the economy's development, rather than the changes in the exchange rate.

Authors [48] examined the relationship between exchange rate misalignment and balance of payments adjustment in Nigeria from 1973 to 2012, using a vector error correction model to assess the connection. They have observed that in Nigeria, exchange rate misalignment has had a positive effect on the balance of payment position.

METHODOLOGY

The type of research design I will adopt in this study is a correlation research design under the positivist paradigm, which aims to quantify the correlation between exchange rate volatility and Nigeria's output growth. Correlation design

creates associations among variables and demonstrates a cause-and-effect relationship between the dependent and independent variables [49]. Secondary data have been collected based on the CBN Statistical Bulletin, which covers the period from 1990 to 2023.

The selection of this period is based on data availability, as Nigeria's economy has experienced various exchange rate regimes during this time. The econometric model is defined in the standard theory of the growth literature [50]:

$RGDP = \beta_0 + \beta_1 EXCH + \beta_2 INTR +$

$\beta_3 IFLR + \beta_4 M2 + \mu_t$ (1)

where RGDP – Real Gross Domestic Product (proxy for economic growth); EXCH – Exchange Rate (Naira/USD); INTR – Interest Rate (%); IFLR – Inflation Rate (%); M2 – Money Supply growth rate (%); β_0, β_1 - β_4 – parameters to be estimated; μ_t = error term signifying other variables not captured in the study.

The research employs the ARDL error correction model, as developed by [51], which addresses the non-stationary issue by utilising the two-step framework. The benefits of the ARDL are that it

does not directly presuppose the I(0), I(1), or mutual cointegration of variables; it delivers intact estimates of long-run coefficients; and it permits short-run estimates and long-run estimates to be estimated jointly [52].

To conduct the analysis, the following procedures were followed: unit root testing using the Augmented Dickey-Fuller test (developed by [53]; bounds testing to determine cointegration under the Augmented Dickey-Fuller Regression-Linear Structural Model [51]; estimation of long-run and short-run models; and a test of model adequacy.

RESULTS AND DISCUSSION

Data Presentation. A total of 34 time series datasets were used, spanning 34 years in total, to capture annual data from 1990 to 2023. This sample size is sufficient for time series analysis and has sufficient degrees of freedom to offer effective estimation [54]. The variables are Real Gross Domestic Product as the dependent variable and Exchange Rate, Interest Rate, Inflation Rate, and Money Supply as independent variables, sourced from the Central Bank of Nigeria Statistical Bulletin.

Table 1 – Descriptive Statistics

Variable	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
RGDP	44574.83	42044.78	73583.53	20745.19	20294.37	0.129	1.345
EXCH	247.68	194.70	640.00	116.80	121.09	1.066	4.133
INTR	3.53	5.74	18.75	-31.45	10.34	-1.280	5.350
IFLR	18.39	12.95	72.84	5.39	15.93	2.152	6.756
M2	23.41	18.60	57.78	-2.01	15.66	0.576	2.444

The descriptive statistics indicate that there was significant variability in all the variables during the study period. The average exchange rate for the period was 247.68 Naira per USD, with a standard deviation of 121.09, which was relatively low, indicating a large variation in the Naira rate during the study. The average growth of Real GDP was 44,574.83 billion Naira. The large standard deviation of 15.93 in the rate of inflation

indicates a wide measure of price instability on the time scale.

The skewness indicates that the majority of the variables are positively skewed, except for the interest rate, implying that the variables have asymmetric distributions. The values of kurtosis fluctuate, with a majority of the variables exhibiting a peaked distribution compared to a normal distribution, indicating that extreme values are present.

Table 2 – Correlation Analysis

Variables	RGDP	EXCH	INTR	IFLR	M2
RGDP	1.000				

Variables	RGDP	EXCH	INTR	IFLR	M2
EXCH	0.535	1.000			
INTR	0.368	0.335	1.000		
IFLR	-0.342	-0.182	-0.774	1.000	
M2	-0.569	-0.240	-0.258	0.198	1.000

The correlation analysis reveals significant relationships between variables. RGDP and EXCH have a mild-to-moderately positive association (0.535), indicating that periods of currency depreciation coincided with growth. The fact that there is a negative correlation between RGDP and inflation rate (-0.342) is also in line with the monetary economics law, because high inflation reduces real economic activity. The high negative relationship between the interest rate and inflation rate (-0.774) indicates the type of monetary policy that was in effect at the time.

Table 3 – Unit Root Test Results

Variable	ADF at Level	5% Critical Value	Decision	ADF at 1st Difference	5% Critical Value	Final Decision
RGDP	-0.577536	-2.954021	Non-stat	-5.102046	-2.957110	I(1)
EXCH	-0.634319	-2.954021	Non-stat	-5.887716	-2.957110	I(1)
INTR	-3.334473	-2.954021	Stationary	-	-	I(0)
IFLR	-2.169733	-2.954021	Non-stat	-4.636034	-2.957110	I(1)
M2	-2.972561	-2.954021	Stationary	-	-	I(0)

The results of the Augmented Dickey-Fuller (ADF) test indicate some mixed order of integration in the variables. GDP, EXCH, and IFLR are stationary of first order I (1), that is, become stationary after first-order differencing, whereas INTR and M2 are I (0), that is, stationary. Such mixed integration can explain why ARDL methodology is appropriate, which uses variables of different integration orders.

Ordinary Least Squares Estimation. Cointegration Results: The Johansen cointegration test indicates the presence of one cointegrating relation among the variables. The Trace (72.75) is more than the critical value (69.82) at the 5% level of significance, whereas the Max-eigenvalue (42.01) statistic is also greater than its critical value (33.88). This indicates a long-run equilibrium relationship among the variables.

ARDL Bounds Test: An ARDL bounds test of cointegration was also conducted using the method introduced by [51]. The value of the F-statistic was larger than both the upper and lower critical values, indicating the existence of cointegrating relationships.

Table 4 – ARDL Long-run Results

Variable	Coefficient	Std. Error	t-Statistic	p-value	Significance
EXCH	24.55460	137.7142	0.178301	0.8599	Insignificant
INTR	-9359.484	11932.05	-0.784399	0.4402	Insignificant
IFLR	-6793.352	7847.225	-0.865701	0.3949	Insignificant
M2	-1999.078	1162.661	-1.719398	0.0979	Marginally sig
C	252910.2	235620.8	1.073378	0.2934	Insignificant

The long-run findings indicate that economic growth is positively related to the exchange rate, as expected, since competitive rates of exchange can contribute to economic growth. The coefficient indicates that a one-unit increase in the exchange rate (depreciation) will result in an increase of RGDP by 24.55 billion Naira, which is not statistically significant.

The interest rate, inflation rate, and money supply exhibit a negative correlation with economic growth, as predicted by economic theory. Higher interest rates may displace investment spending, inflation reduces the real economic activity, and rampant monetary expansion may cause macroeconomic volatility.

Error Correction Model: Error correction term (ECT-1) coefficient is -0.086892 and p-value is 0.0000, which indicates that there is a long-run inter-equilibrium relationship existing. The minus sign indicates that, in the short run, the system adjusts itself by exhibiting a corrective tendency towards equilibrium. The magnitude indicates that 8.7% of disequilibrium is experienced yearly in the short run, which is a slow pace of adjustment.

Model Diagnostics: R-squared = 0.808586 (81% of variations explained); Adjusted R-squared = 0.603501; F-statistic = 3.942672 (p-value = 0.007087); Durbin-Watson statistic = 2.695978

The large value of R2 indicates that the model provides a significant explanation of the variations in economic growth. The value of the significant F-statistic implies that the model is quite accurate, whereas the D-W statistic indicates that there is no first-order autocorrelation.

Test of Hypotheses. Using a 5% significance level.

Hypothesis 1: The Exchange rate is not significant in explaining the relationship between the dependent variable and the independent variables, as its coefficient is 24.55 and p = 0.8599 > 0.05. We agree with H o - exchange rate and RGDP are not significantly related. This result aligns with the findings [47], which did not establish a strong direct association between GDP growth and changes in the exchange rate in Nigeria.

Hypothesis 2: Interest rate is a negative coefficient (-9359.48) and statistically insignificant (p = 0.4402 > 0.05). We reject H0 - the interest rate and RGDP are not in any meaningful relationship. The finding concurs with those of [55], which revealed that interest rates have an insignificant negative effect on economic growth in Nigeria.

Hypothesis 3: The rate of inflation bears a negative coefficient (-6793.35) but is not significant at the cut-off point p = 0.3949 > 0.05. We also accept the absence of a significant relationship between the inflation rate and RGDP, which is also (H0) (H0 3). This is corroborated by [56], who concluded that the correlation between the balance of payments and the inflation rate is insignificant in Nigeria.

Hypothesis 4: A negative coefficient (-1999.08) and marginally significant (p = 0.0979) of money supply was obtained. Rejecting H0 at the 5% level, we conclude that there is no significant correlation between the amount of money and RGDP,

even though the correlation is close to significance at the 10% statistical level.

The study's findings provide significant insights into the exchange rate-growth nexus in Nigeria, contributing to the extensive literature on this topic. The result of the positive long-run relationship between the exchange rate and economic growth might not be significant. Still, it conforms to theoretical expectations and agrees with the findings of [7, 40], who documented a positive relationship between the exchange rate and economic growth in Nigeria.

Although the exchange rate coefficient is insignificant, depreciation may provide a certain competitive advantage; however, its impact on economic growth is not statistically significant. This observation is in agreement with [57], who concluded that there is no systematic relationship between the real exchange rate and economic growth in several countries studied. The outcome can be attributed to Nigeria's high reliance on oil exports, in which exchange competitiveness has had little importance since the commodity is priced globally in US dollar terms.

Although the degree of relationship was not statistically significant, the negative relationships between interest rates, inflation rates, and the money supply, as well as economic growth, are consistent with economic theory and past empirical studies. Higher interest rates will deter or delay private investment because they increase the cost of capital [58]. The negative correlation between inflation and growth lends credence to the well-established belief that price stability is favourable to economic growth, as evidenced by numerous studies, including [59, 60].

The speed of adjustment to long-run equilibrium is low (8.7% per year), indicating that Nigeria still has macroeconomic imbalances in its economy, as found in other studies conducted in developing countries [61]. This implies that policy responses are slow to realise their intended objective, and therefore, the issue of consistency in policy implementation over long-term durations is essential.

The significant R-squared level (81%) indicates that the chosen set of macroeconomic variables plays a crucial role in explaining the growth process in Nigeria, consistent with standard growth models in the literature [62]. However, the individual coefficients are statistically insignificant, indicating that there are other factors that

determine Nigeria's economic growth, which are not included in the model.

The results have significant policy implications. The positive, yet insignificant, relation between the exchange rate and growth indicates that exchange rate policy cannot be used singularly to promote sustainable economic growth in Nigeria. This aligns well with the arguments of [8], who suggest that resource-rich economies, such as Nigeria, require a comprehensive structural change beyond exchange management.

The findings also highlight the importance of macroeconomic stability. Although the focus interest rates and inflation show insignificant effects, they register negative coefficients, indicating that keeping interest rates and inflation low can have a positive contribution to the economy's growth. This aligns with the monetary policy goals of most central banks, including the Central Bank of Nigeria [22].

CONCLUSIONS

This work presents empirical results on the connection between the dynamics of exchange rates and economic development in Nigeria, using the ARDL methodology over the period 1990-2023. Although the results indicate theoretically desirable relations, the fact that the exchange rate is positively associated with economic growth and that rates of interest and inflation, along with the money supply, were statistically insignificant, suggests that exchange rate policy is inadequate in ensuring sustained economic growth in Nigeria.

The results indicate that Nigeria requires an absolute measure comprising stable exchange rates, sound monetary policy, and structural reforms to achieve sustained growth. The positive correlation between growth and exchange rate suggests that competitive exchange rates have the potential to foster economic growth, although this should be balanced against the need to maintain macroeconomic stability as a whole.

The relatively slow rate of adjustment (8.7% per year) in moving toward long-run equilibrium highlights the ongoing presence of macroeconomic imbalances and the continued need for policy efforts. This conclusion is especially crucial for policymakers who are tasked with maintaining coherent policies over extended periods to achieve the desired results.

Policy Recommendations

Exchange Rate Management: Adopt policies to curb the volatility of the exchange rate and minimise its excessive fluctuation, thereby making it more competitive. This would be a gradual process, as opposed to severe devaluations that generate uncertainty.

Monetary Policy Coordination: Seek to have coordinated fiscal and monetary policies to increase macroeconomic stabilisation. The Central Bank of Nigeria should maintain the inflation-targeting framework while also considering growth targets.

Economic Diversification: A broad-based economy must be developed to wean the economy off oil and prevent it from being exposed to fluctuations in external disturbances. That demands investing in the manufacturing, agricultural, and service sectors.

Institutional Strengthening: Enhance institutional capabilities for implementing policies and effective coordination. These cover the enhancement of regulatory agency capacity and policy consistency at various levels of government.

Infrastructure Development: Invest in strategic infrastructure that will help in spurring economic development and minimise the effect that external shocks will have on local production.

Limitations & Future Research. The main weakness of this study is that it is aggregate in nature and fails to elaborate on the dynamics within each sector and how transmission is occurring. In future studies, the impact of institutional quality, structural and sectoral dynamics in moderating the exchange rate-growth nexus in the case of Nigeria needs to be explored. There is also room to incorporate higher-frequency data and global factors into the studies to draw a more finely textured picture.

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