Acta Universitatis Danubius
ŒCONOMICA

Business Administration and Business Economics

Fiscal Deficit and Exchange Rate Movement: Empirical Evidence from Nigeria

Ahmed Olwatobi Adekunle[1]

Abstract: For the case of using fiscal deficit by policy makers, economists have conflicting views and have incessantly debate on how it affects exchange rate movement. This study empirically investigates the attendant connection for the Nigerian case from 1985-2018. At first, we review related literature sequel to which we utilized appropriate econometric techniques. The study uses the bounds testing Autoregressive Distribution Lag (ARDL) method to evaluate the long run and short run relationships amid fiscal deficits and exchange rate depreciation. Amongst others, one finding was that for the Nigerian economy, fiscal deficit depicts indirect impact on exchange rate depreciation - an indication that government fiscal deficit is not a major cause of exchange rate movements for the periods studied. In effects, we recommend that in other to attain both internal and external balance in pursuance of core value of fiscal policy, fiscal management without political interests should be conducted and other macroeconomic policies should be properly implemented as they may have been the cause of sporadic exchange rate depreciation.

Keywords: Fiscal Deficit; Exchange Rate; Macroeconomic Policies

JEL Classification: E62; F31; F41

1. Introduction

Given the effects of exchange rate movement on macroeconomic variables like debt, openness, real gross domestic product (RGDP), and gross rate of broad money supply (GMS2), among others, exchange rate issues have continued to cause concern among financial analysts. As a result of injection of money and limiting fiscal policies, variations in income, prices, and interest rates are stimulated by fiscal deficits, which in turn affect exchange rate fluctuations (Richard, 2007; Ferrara et al., 2021; Afonso et al., 2022). By reducing the personal income tax, the government can raise disposable

[1] Walter Sisulu University, South Africa, Address: Private Bag X1, UNITRA, 5117, South Africa, Corresponding author: aadekunle@wsu.ac.za.

income, which in turn boosts consumption and causes exchange rates to fluctuate. For a nation like Nigeria which desired foreign products so much, consumption of imported items leads to a need for additional international monies (i.e pounds and dollar), which causes the foreign currency to appreciate and the domestic currency to depreciate (Nwosa, 2017).

Similarly, if government spending does not coincide with an increase in domestic productive activity, as government outlays rises could amount to general rise in price pressure in the economy. The amount spends on domestic consumption turn out to be more luxurious on the global shop due to this increase in domestic prices, while foreign goods become more affordable. Due to the low cost of foreign goods, there is a large demand for them, which raises the value of the foreign currency while depreciating the native currency (Adesoye, 2012; Ndikumana et al., 2022).

The enormous influxes of foreign exchange earnings that are frequently associated with rising oil prices also lay the foundation for a stable exchange rate by affecting the nation's foreign reserves. As opposed to this, in the current situation, the native currency's devaluation has risen in tandem with the decline in the price of oil.

The aforementioned factors, as well as modifications to the exchange rate system, capital account liberalization, and sovereign default risk, have an impact on the theoretical link between fiscal policy and currency rates. A fiscal expansion should result in a temporary increase in the exchange rate under conditions of high capital mobility, a steady country premium, and a flexible exchange rate mechanism (Ahmad et al., 2019; Caselli et al., 2021).

Contrarily, given the limited capital mobility, it is anticipated that the exchange rate will decline as the fiscal spending rises imports and the current account deficit (Edda, 2005). The connection amid fiscal strategy and currency rate is complex from an empirical standpoint. Fiscal deficit and the movement of exchange rate have been linked in certain research to be positively and significantly correlated with one another1, but other studies have found no correlation between the two variables (Caselli et al., 2021).

The drive of this research work is to reevaluate the effects of fiscal deficits for local and global variables, beginning with the reactions to the fluctuation of the real exchange rate in Nigeria. Notwithstanding the large number of research that have looked at the connection amid fiscal deficits and exchange rate movement, domestic studies have only recently focused on this problem in reference to the Nigerian economy. Whereas other research in Nigeria concentrated on exchange rate management and price setting, the majority of studies in Nigeria exclusively examined government spending and economic growth. Examining the correlation between budget deficits and exchange rate movement in Nigeria from 1985 to 2018 seemed worthwhile given the neglect of earlier studies.

Based on the extensive literature that is currently available on the calculation of numerous aspects driving the movement of exchange rate, the lack of expertise on this subject is particularly striking. The fiscal policy's overarching objective is to stabilize the economy. Consequently, it is not necessary to overstate the economic importance of researching how fiscal policy affects exchange rates. This current evaluation is essential for Nigeria's fiscal administrator to protect the country's local currency against variations in the global system via official revenue collection (mostly taxes) and government expenditure (spending). As a result, this study will help Nigeria's fiscal administrator in their forecasting for the country's economic development by highlighting how fiscal policy can have an impact on the country's currency and how to protect the value of the nation's currency.

With the current economic issues caused by the swiftly deteriorating global oil price and foreign exchange gains, the government has every motivation to try to fix the foreign currency rate effectively and offer incentives for sustainable investment in Nigeria (Adesoye, 2012). The study's results would therefore offer a rudimentary knowledge of how fiscal policy affects exchange rates and hence provide pertinent information that might direct future research on the topic.

2. Fiscal Deficits and Exchange Rates in Nigeria

Fiscal deficit has plagued the Nigerian government for many years. From N809.87 billion in 2009 to N1, 706.01 billion in 2010 and N1, 158.52 billion in 2011, the fiscal deficits have remained in the ascendant. Since it meant the government had to make up the loss in revenue, the period's growing fiscal imbalance provided a significant challenge to the government's financial operations. From N2.41 trillion in 2016 to N11.34 trillion in 2023, the fiscal deficit increased by 370.54 percent.

Additionally, it runs counter to the government's commitment to making sure the deficit followed a medium-term decreasing trend in order to accomplish sound fiscal consolidation and inclusive growth. The nation was successful in increasing its financial reserves to roughly US$9 billion, and in 2012, the overall fiscal deficit was just 2.41% of GDP as a result of the reduction of oil price subsidies by 50% and the slow pace of capital project implementation. The government in Nigeria has more control over the economy through the use of fiscal tools, one of which is the operation of the budget deficit. With the exception of the years 1970, 1971, 1973, 1974, 1979, 1980, and 1996, the government has consistently adopted an expansionary budgetary strategy (CBN, 2005). Nonetheless, this has an impact on macroeconomic factors including interest rates, exchange rates, inflation, consumption, and investment, among others, which act as a conduit for the budget deficit's impact on economic growth. Prior to the 1967–1970 civil war, Nigeria's budgetary system began to have budget deficits in the 1957–1970 period and became chronic in the 1970s (Oyejide,

1972). To date, Nigeria has only had seven years of budget surplus. CBN (2005). (2005).

The Naira has continued to weaken against the US dollar despite several government initiatives to maintain exchange rate stability (as well as prevent its swings and misalignment). As an illustration, the value of the Naira increased in relation to the US dollar, rising from N0.7143 in 1970 to N0.6159 in 1975 and then to N0.5464 in 1980. Nonetheless, the 1980s saw a decline in the exchange rate. As an illustration, the value of the naira declined from N0.6100 in 1981 to N2.0206 in 1986 and then further to N8.0378 in 1990. After gaining some stability in the middle of the 1990s, the exchange rate continued to decline, reaching N102.1052, N120.9702, and N133.5004 in 2002, 2002, and 2004, respectively. Later, in 2005, 2006, and 2007 correspondingly, the exchange rate increased to N132.147, N128.6516, and N117.968. The Naira's value versus the US dollar fell to N170 at the start of 2009. According to CBN, the official rate of the Naira against the US dollar (US$) dropped from N148.88/US$1 in 2009 to N150.3/US$1 in 2010 and further to N153.85/US$1 in 2011. With the current exchange rate between the two currencies, the average Naira value per $1 will be N460.419 in February 2023. (CBN, 2023).

3. Literature Review

While some research concentrated on the connection between exchange rate and other macroeconomic factors, others looked at the relationship between fiscal policy variables and other macroeconomic variables. Few people have studied how fiscal policy and currency rate interact. According to Bhatia (2008), fiscal policy refers to the procedures and activities that the government uses in respect to the income and expense sides of its budget, as well as the overall effects of government spending and taxation on income, production, and employment. Dwivedi (2009) defined fiscal policy as the government's plan for taxation, spending, and other financial actions to accomplish particular national goals. The two primary fiscal policy instruments used to achieve macroeconomic goals are taxes and public spending. Ijeh (2008) once more defines fiscal policy as the government's strategy for raising and allocating funds to meet goals including full employment, a stable price level, aggregate demand, and sustained economic growth and development. The means utilized to accomplish fiscal policy, according to the author, are taxes, government expenditure, the government budget, public debts, and subsidies (Odili, 2015). In a panel data analysis involving the nations in the euro area, Baillie (2006) evaluate the effects of the mix of government spending on the behavior of the real exchange rate. They note that increased public investment causes a fall in the relative price of non-tradables, which may result in real depreciations, but increased public consumption causes real appreciation. According to Jingping, and Jian (2009), fiscal deficit inconsistencies in both countries (of bilateral transactions on a dollar basis) or at least in a country that

is ostensibly dominant (such as the US) can frequently cause real exchange rates to revert to the mean more quickly. This result supported the claim that monetary policy has greater effects on exchange rates in advanced economies without fiscal deficits. Additionally, they noted that emerging nations are not excluded because their economies have a dynamic web of relationships between macroeconomic variables.

Ogunsakin (2013) In order to investigate the relationship between these factors, this paper examines the behavior of the bilateral real exchange rate and fiscal variables in Nigeria from 1970 to 2012. By extending the previously provided list of the Instrumental Variable to include the once-lagged values and the necessary variables in creating the link, the Hildreth-Lu grid search method and the Ordinary Least Square and Instrumental Variable (OLS, IV) analytical methodology are used. The empirical finding indicates that real devaluation enhances fiscal balance and that budget deficit affects real exchange rate behavior. Once more, the increase in income brought on by the depreciation of the currency rate causes imports to rise and the balance of payments to decline.

Observing that certain emerging economies have seen significant real exchange rate appreciation in recent years, Kuncoro (2015) found that this has led to concerns about competitiveness and prompted governments to respond with a variety of mitigating policies. Their research demonstrates that fiscal policy can help to reduce these pressures. using 28 emerging market economies as a sample from 1983 to 2011. They calculate a dynamic model of the real exchange rate and discover that long-term appreciation pressures may be mitigated by a permanent fiscal adjustment. They concentrate on the case of Brazil to highlight the significance of these findings. Their findings imply that Brazil's real appreciation pressures will likely be reduced if fiscal restraint is maintained while public investment is increased.

Ezeh and Obi (2016) looked at the connection between fiscal adjustment and currency devaluation in Nigeria from 1981 to 2014. The study specifically looked at how much currency devaluation impacts Nigerian government spending and earnings. Cointegration, Vector Error Correction, Ordinary Least Squares, and Granger Causality were all used in the study.

The study's findings indicated that there is a direct and positive correlation between some chosen budgetary variables and currency devaluation. In order to drastically reduce budget deficits, the report advised the Nigerian government to rationalize and restructure its spending in favor of productive economic activities. Alagidede and Ibrahim (2016) looked at the factors that influence exchange rate volatility and looked at how excessive swings in the currency rate affect Ghana's economic growth. The study's findings demonstrated that while exchange rate shocks tend to mean revert, misalignments have a relatively slow tendency to correct themselves, which can have negative effects in the short term as economic agents adjust their consumption and investment decisions. Kuncoro (2015) examines the effect of fiscal policy credibility

on Indonesia's currency rate stabilization from 2001 to 2013. The study discovered that the influence of fiscal rules commitment depends typically on aspects of credible fiscal policy using quarterly data analysis. Contrarily, the enormous deficit rule policy has no effect on the exchange rate and does not contribute to the stabilization of exchange rates. On the one hand, the credible debt rule policy lowers exchange rate fluctuation. The study came to the conclusion that fiscal policy's credibility needs to be improved in order to stabilize the foreign exchange market and suggested included this recommendation in the program to stabilize exchange rates. Using time series data from 1960 to 2012, Shuaib, Ekeria, Augustine, and Ogedengbe (2015) investigated the effect of fiscal policy on the growth in Nigeria. The study's findings demonstrated that fiscal policy and growth are directly related. According to the study's recommendations, the government should make sure fiscal policy is effective in generating economic growth. Muse (2015) investigated how deregulation affected Nigeria's relationship with foreign aid and fiscal behavior. The Chow test was employed in the study to explore for structural alterations that would have had a significant effect on the relationship between foreign aid and fiscal behavior ever since deregulation was enacted.

4. Model Specification and Estimation Procedure

4.1. Model Specification

This study examines whether the budget deficit has a substantial impact on exchange rate depreciation in order to identify how it affects the movement of exchange rates in the foreign exchange market. We estimate the following theoretical model to be used in modeling:

$$EXRD = f(FISD, DEBT, RGDP, OPEN, GMS2) \quad (1)$$

Exchange rate depreciation (EXRD), government fiscal deficit (FISD), growth rate of the stock of government debt (DEBT), growth rate of the gross domestic product (RGDP), trade openness (OPEN), and growth rate of the broad money supply are the variables used (GMS2). Our stochastic model's error term is denoted by E. Expectations for a priori signs are: α_0, α_1, α_2, $\alpha_5 > 0$ and α_3, $\alpha_4 < 0$ (this suggests that all the variables except OPEN and GRGDP are expected to have positive impact on exchange rate depreciation). Ceteris paribus, while More exchange rate depreciation will result from rising fiscal deficit, debt levels, and broad money supply; conversely, higher GDP is anticipated to result in higher exchange rates (or reduced depreciation). Regarding openness, it is expected that the economy will have a greater tendency to increase trade as exports rise, which will raise inflows and ultimately lead to exchange rate appreciation.

4.2. Methodology and Estimation Procedure

The study employs the bounds testing *Autoregressive Distribution Lag (ARDL)* test proposed by Pesaran et. al. (2001) to examine the long run and short run relationships between fiscal deficits and exchange rate depreciation. Before using the ARDL to estimate the error correction model (ECM) and the long run parameters, we carried out necessary pretest – both unit root and cointegration tests to justify the applicability of ECM.

$$\Delta X_t = \beta_0 + \beta_1 X_{t-1} + \mu_t \tag{2}$$

$$\Delta X_t = \beta_0 + \beta_1 X_{t-1} + \sum_{i=1}^{n} \alpha_i \Delta X_{t-1} + E_t \tag{3}$$

The ARDL is used to estimate our long and short run relationship. The approach is the appropriate technique for our study for three reasons. First, adopting the bound testing approach means that pretest such as unit root is not may not all be integrated of same order. Secondly, the long-run and short run (parsimonious ECM) parameters of the models can be simultaneously estimated.

The ARDL model specification for equation (1) is;

$$\begin{aligned}\Delta InEXRD_t = \alpha &+ \sum_{i=1}^{\eta} \beta_i \Delta InEXRD_{t-i} + \sum_{i=0}^{b_1} \gamma_i \Delta InFISD_{t-i} + \sum_{i=0}^{b_2} \delta_i \Delta InDEBT_{t-i} \\ &+ \sum_{i=0}^{b_3} \mu_i \Delta InRGDP_{t-i} \\ &+ \sum_{i=0}^{b_4} \Omega_i \Delta InOPEN_{t-i} + \sum_{i=0}^{b_5} \omega_i \Delta InGMS2_{t-i} + \pi_1 InEXRD_{t-1} \\ &+ \pi_2 InFISD_{t-1} + \pi_3 InDEBT_{t-1} \\ &+ \pi_4 InRGDP_{t-1} + \pi_5 InOPEN_{t-1} + \pi_6 InGMS2_{t-1} + \varepsilon_t\end{aligned} \tag{4}$$

$$InEXRD_t = \Psi + \sum_{i=1}^{\eta} \theta_i InEXRD_{t-i} + \sum_{i=0}^{b_1} \theta_i InFISD_{t-i} + \sum_{i=0}^{b_2} \theta_i InDEBT_{t-i} + \sum_{i=0}^{b_3} \theta_i InRGDP_{t-i} + \sum_{i=0}^{b_4} \theta_i InOPEN_{t-i} + \sum_{i=0}^{b_5} \theta_i InGMS2_{t-i} + \varepsilon_t \tag{5}$$

$$\Delta InEXRD_t = \rho + \sum_{i=1}^{\eta} \beta_i \Delta InEXRD_{t-i} + \sum_{i=0}^{b_1} \gamma_i \Delta InFISD_{t-i} + \sum_{i=0}^{b_2} \delta_i \Delta InDEBT_{t-i} + \sum_{i=0}^{b_3} \mu_i \Delta InRGDP_{t-i} + \sum_{i=0}^{b_4} \Omega_i \Delta InOPEN_{t-i} + \sum_{i=0}^{b_5} \omega_i \Delta InGMS2_{t-i} + \lambda ecm_{t-1} + \varepsilon_t \quad (6)$$

Where: $ecm_{t-1} represents$ the error correction term lagged for one period and λ = the coefficients for measuring speed of adjustment in equation (6). In this ECM equation, we assume a lag length of *t-i*. Each coefficients of equation 6 represents the short run dynamics of the model.

5. Empirical Results from Data[1]

Table 1. Unit Root Test for Stationarity in I (0)

(The compilation includes L and T)

Variables	DF	ADF test	ADF	ADF Critical Value	Remarks
EXRD	0.6241	0.3258	1	2.8872	Non-stationary
FISD	0.0343	1.6317	2	2.8870	Non-Stationary
DEBT	4.2394	3.8190	1	2.8872	Stationary
OPEN	5.5514	7.8823	1	2.8872	Stationary
RGDP	2.5554	1.3724	1	2.8872	Non-Stationary
GMS2	7.2613	6.9809	1	2.8872	Stationary

Source: Author compilation, 2023. L = Linear; T = Trend

Table 2. Unit Root Test for Stationarity in I (1)

(The compilation includes L and T)

Variables	AD	ADF test	ADF Lag	ADF Critical	Order of
EXRD	7.0211	7.3411	1	3.4501	I(I)
FISD	0.4408	2.1156	2	3.4497	I(I)
DEBT	3.7579	4.3632	1	3.4501	I(0)
OPEN	9.5017	7.8311	1	3.4501	I(0)
RGDP	7.7441	8.9154	1	3.4501	I(I)
GMS2	9.5311	6.2684	1	3.4501	I(0)

Source: Author compilation, 2023. L = Linear; T = Trend

[1] This study relies on historical quantitative time series data spanning from 1990Q1 to 2010Q4 which are available in secondary forms and are *sourced* from the statistical bulletin of the *CBN*, Annual bureau of statistics

Table 3. ARDL Bound Test

Computed F-Statistic: 8.146	Lag (K) = 3
Critical Bound Value (1%)[1]	I(0): 4.218, I(1): 5.650

The findings in Tables 1 and 2 demonstrate that the DF/ADF test-statistics cannot be used to support the null hypothesis of non-stationary for all the series. Not every variable is integrated in the same sequence. In other words, certain variables are either I(0) or pure I. (1). The ARDL methodology is categorically a suitable method for our estimation if all I(0) and I(1) series are mutually cointegrated. When each variable is taken into account as a dependent normalized variable in the ARDL-OLS regressions, the derived F-statistics (Wald test) results are displayed in Table 3. The calculated F-statistics (8.146) are greater than the upper bound critical value (5.650) at 1% error level, according to this result. This leads us to the conclusion that the estimated ARDL models exhibit a long term cointegration relationship. The null hypothesis of no cointegration is thereby disproved. This suggests that representative independent variables and exchange rate depreciation (EXRD) are cointegrated. Our test demonstrates cointegration, which implies that the long-run relationship is not spurious and that the error correction representation may be derived. Whereas Tables 5 and 6 give the results of the short-run dynamic coefficients and the model diagnostic and stability tests, respectively, Table 4 reports the result achieved by standardizing on EXRD in the long run.

Table 4. Estimated Long Run Coefficients of lnEXRD

	Coefficient	*p-value*
Const	2.0592	0.0517*
lnFISD	76295.8	0.0195**
lnDEBT	2.0345	0.0813*
lnRGDP	-1.8103	0.0877**
InOPEN	-2.0288	0.1240
InGMS2	-3.4801	0.0061*

[1] Notes: Critical values are extracted from Narayan (2005); Unrestricted Intercept and No Trend (Case III).

Table 5. Regression results for the ECM

Regressor	Coefficient	Standard	*p-value*
INPT	8.59660	7.16900	0.233
Δ InFISD	-0.023	0.00010	0.022
Δ InDEBT	-0.159	0.30928	0.606
Δ InRGDP	-0.053	0. 38229	0.890
Δ InGMS2	0.6865	0.42550	0.110
ΔInOPEN	-0.0110	0.0557	0.8447
ECM(-1)	-0.3000	0.00000	0.000
R-squared	0.7844	Adjusted R-squared	0.7224
F-stat	4.7720		

Table 6. Diagnostic Tests Results

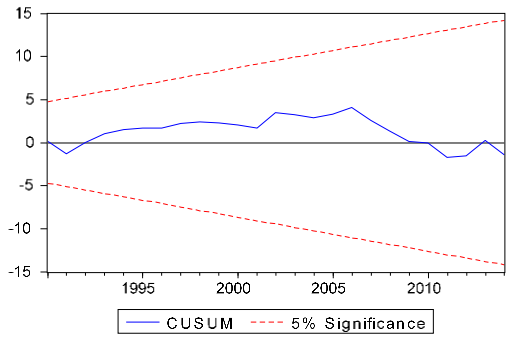
Test	Results	*p-value*
Ramsey Test	9.23020	0.002
Normality test	35.2541	0.001
Heteroskedasticity Test:	17.3121	0.4223
Breusch-Godfrey LM Test:	1.91391	0.2521
Source: Author's Computation		

The outcome demonstrates that the 5% level of the fiscal deficit variable is significant. The outcome demonstrates that a 1% rise in the fiscal deficit causes an exchange rate depreciation of about 2.3%. All other factors, excluding the level of openness, are important.

Only the coefficient of changes fiscal deficit is significant on the short-term representation at 5% with a negative sign, indicating that changes in fiscal deficit have a significant negative impact on changes in exchange rate depreciation for the period under study. That is, contrary to a priori expectations, the operational fiscal deficit is not a significant factor in exchange rate depreciation. This goes against earlier research presented by Rodriguez's concept (1989). Also, although this was not considerable, stocks of external debt had a negative impact on exchange rate depreciation. The GDP coefficient was correctly signed as anticipated, but it was not noteworthy. The wide money supply's growth coefficient was correctly signed, but at 5%, it was not noteworthy. Nonetheless, at a 12 percent level, it was considerable. Changes in the set of accompanying explanatory variables used only accounted for 78% of the systematic variation in the value of changes in exchange rate depreciation.

It was discovered that the ECM's coefficient had the proper sign (being negative), was substantial in size, and was also extremely important. Theoretically, an exchange rate depreciation from its long-run (or equilibrium) stable course shows a feedback effect, suggesting that any perturbation or disequilibrium will automatically adjust back to the long-run equilibrium entirely at a high speed of 30 percent in each period tested. With an R^2 of 78 percent, the regression for the underlying ARDL fits very well. As there is no residual serial correlation and the overall model is extremely significant, the model may be suitable for any agenda for formulating policy. Further diagnostic tests against serial correlation, functional form misspecification, and non-normal errors show that the model is valid (Table 6). At 5%, the heteroscedasticity test was negative. This supports Shrestha et al (2005) 's assertion that it is normal to detect heteroscedasticity since the time series that make up the ARDL equation may be of mixed order of integration, i.e., I(0) and I(1).

It is usually advisable to visually investigate the stability of the calculated coefficient of the error correction model (Pesaran and Shin, 1999). Also, a graphical depiction of the recursive residual's cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) is constructed. The cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) plots from a recursive estimation of the model are presented in Figure 1 and also show that the coefficients have remained stable across the sample period.



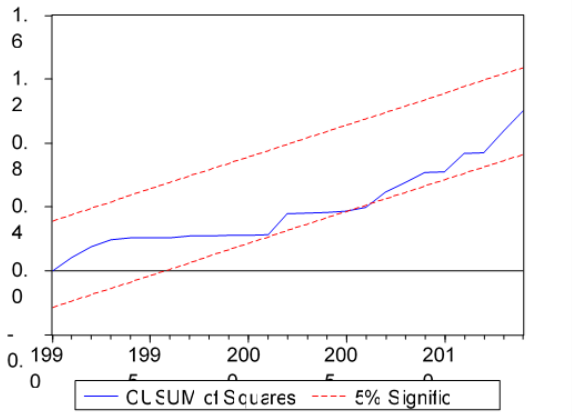


Figure 1. Stability Test

5.1. Policy Implications of Results

The first implication of this study's findings is that they demonstrate cointegration. This indicates that there was a long-term steady relationship between the depreciation of the exchange rate and the broad money supply, the fiscal deficit, the government's external debt, the degree of openness, and the growth rate of GDP. The second implication of our findings is that the expansion of the money supply has a highly significant impact on the depreciation of the exchange rate over the long term. This was consistent with economic theory, which holds that currency fluctuations are heavily influenced by it. The last policy conclusion of our finding is that, in contrast to a priori anticipation, operating budget deficit is not a significant factor in exchange rate depreciation. This goes against earlier research presented by Rodriguez's concept (1989).

6. Conclusions and Recommendation

This study looked at how the budget deficit affects the movement of the currency rate quantitatively. The analysis was an effort to determine how Nigeria's persistent fiscal policy operations or management over the years have interacted with expectations, capital flow, and consequent exchange rate changes. Our results showed that, over the time periods examined, the relationship between exchange rate depreciation and fiscal deficits was long-lasting and consistent when channeling variables such government external debt, openness, GDP growth rate, and wide money supply were taken into account. Yet, this relationship is not as such (as expected), which prevents a decline in the exchange rate. In essence, we found that the prolonged depreciation of the exchange rate after the implementation of SAP and trade liberalization in the 1980s was not caused by fiscal deficit. So, it's possible that additional variables or

macroeconomic (including monetary) policy actions contributed to the decline in the exchange rate. Moreover, the impact was remained strong and substantial for short term dynamics.

The study makes the suggestion that in order to achieve both internal and external balance in line with the goal of fiscal policy, rightful fiscal management free of political interests should be carried out while taking into account the severe negative impact it has on the exchange rate and, as a result, the trade position of the economy. We suggest that debt reduction efforts also include tax increases. This is due to the fact that raising taxes tends to lower the exchange rate of nations with excellent inflation and debt records, whereas spending cutbacks and deficit reduction tend to strengthen the exchange rate of nations with bad inflation and debt records. Also, reducing the budget deficit has diverse consequences on the demand for funds, both directly and indirectly, which have an impact on how the exchange rate is affected. By lessening the government's need for finances, deficit reduction can result in a weaker currency.

References

Adesoye, A. B. (2012). Exchange rate policy and price determination in Nigeria: Testing the long run relevance of PPP model. *European Journal of Humanities and Social Science*, 14(1), pp. 667-683.

Afonso, A.; Huart, F.; Jalles, J. T. & Stanek, P. (2022). Twin deficits revisited: A role for fiscal institutions? *Journal of International Money and Finance*, 121(1), p. 102506.

Ahmad, H. A. & Aworinde, O. B. (2019). Are fiscal deficits inflationary in African countries? A new evidence from asymmetric cointegration analysis. *The North American Journal of Economics and Finance*, 50, pp. 121-142.

Alagidede, P. & Ibrahim, M. (2016). On the Causes and Effects of Exchange Rate Volatility on Economic Growth: Evidence from Ghana. *Working Paper, International Growth Centre (IGC).*

Baillie, R. T. & Kilic, R. (2006). Do Asymmetric and Nonlinear Adjustments Explain the Forward Premium Anomaly? *Journal of International Money and Finance* 25, pp. 22-27.

Bhatia, H. L. (2008). *Public Finance.* 26th Ed. Jangpura, New Delhi: Vikas Publishing House PVT Ltd.

Caselli, F. & Wingender, P. (2021). Heterogenous effects of fiscal rules: The Maastricht fiscal criterion and the counterfactual distribution of government deficits. *European Economic Review*, 136, pp. 102-120.

Dickey, D. A. & Fuller, W. A. (1979). Distribution of Estimators for Autoregression Time Series with a Unit Root. *Journal of US Statistical Association.* 74 (4), pp. 29-31.

Dickey, D. A. & Fuller, W. A. (1981). Likelihood Ratio Tests for Autoregression Time Series with a Unit Root. *Econometrics.* 49, pp. 1057-1072.

Dwivedi, D. N. (2008). *Managerial Economics* (7th ed.). Jangpura New Delhi: Vikas Publishing House PVT Ltd.

Edda, Z. (2005). How Does Fiscal Policy Affect Monetary Policy in Emerging Market Countries? *Banks for International Settlement (BIS) Working Paper,* No. 174.

Ezeh, M. C. & Obi, K. (2016). Currency Devaluation and Fiscal Adjustment in Nigeria. *British Journal of Economics, Management and Trade*, 13(2), pp. 1-13.

Ferrara, L.; Metelli, L.; Natoli, F. & Siena, D. (2021). Questioning the puzzle: Fiscal policy, real exchange and inflation. *Journal of International Economics*, 133(1), p. 103524.

Ganelli, G & Rankin, N. (2020). Fiscal deficits as a source of boom and bust under a common currency. *Journal of International Money and Finance*, 104, pp. 102-129

Ijeh, M.C. (2008). *Public Finance in Focus*. Justice Jeco Press & Publishers Ltd.

Jingping, J. L. & Jian, Y. (2009). Fiscal Deficits and Mean Reversion in Real Exchange Rates. *Seminar Paper Presented at Texas A&M University, University of Colorado Denver and the 2008 Financial Management Association Annual Meeting.*

Kuncoro, H. (2015). Credible Fiscal Policy and Exchange Rate Stabilization. *Journal of Economics and Development Studies*, 3(2), pp. 7-18.

Muse, B.O. (2015). Foreign Aid and Fiscal Behaviour in Nigeria: An Impact assessment of Deregulations. *IOSR Journal of Economics and Finance (IOSR-JEF),* 6(1), pp. 104-113.

Nandi, A. (2019). Fiscal deficit targeting alongside flexible inflation targeting: India's fiscal policy transmission. *Journal of Asian Economics*, 63, pp. 1-18

Ndikumana, L.; Nkurunziza, J. D.; Martin, M. E. S. Mulugeta, S. & Kelbore, Z. G. (2022). Monetary, fiscal and structural drivers of inflation in Ethiopia: new empirical evidence from time-series analysis. *Review of Development Economics*, 22(1), pp. 157-175.

Nwaobi, C. G. (2003). Balance of Payment as a Monetary Phenomenon: An Econometric Case Study of Nigerian Economy. *Journal of International Finance* No.0307001.

Nwosa, P. I. (2017). Fiscal Policy and Exchange Rate Movement in Nigeria. *CECONOMICA*, 13(3), pp. 115-127.

Odili, O. (2015). Macroeconomic Variables and Exchange rate Dynamics in Nigeria. *Journal of Business Administration and Management Sciences Research,* 4(8), pp. 166-179.

Ogunsakin, S. (2013). The Causative Factors in Exchange Rate Behaviour and its Impact on Growth of Nigerian Economy. *European Scientific Journal*, 9(7), pp. 199-288.

Richard, K. (2007). No Miracle Here: Trade Policy, Fiscal Policy and Economic Growth, *Journal of Development Studies*, *Taylor and Francis Journals*, 43(7), pp. 1248-1269.

Shuaib, I. M.; Ekeria, O. A. & Ogedengbe, A. F. (2015). Fiscal Policy: Nigerian Experiences from 1960-2012. *Asian Journal of Agricultural Extension Economics and Sociology*, doi:10.9734/AJAEES/2015/14699.