THE RELATIVE IMPACT OF FISCAL AND MONETARY POLICIES ON ECONOMIC GROWH IN NIGERIA

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ABSTRACT

This study was motivated by the conflict in theoretical and empirical literature on the comparative effect of fiscal and monetary policies on economic growth. The focus is on which of the two policies has a greater effect on promoting economic growth. Likewise, this study examined the relative impact of fiscal and monetary policy on economic growth in Nigeria from the year 1986 to 2020. The Autoregressive Distributed Lag (ARDL) method was employed as the estimation technique. The findings of this study showed that monetary policy has a greater impact on promoting economic growth in Nigeria. Interestingly, government expenditure was found to be negatively significant, and interest rates were deemed insignificant to the Nigerian economy. The study emphasizes the importance of institutional discipline and policy coordination between the finance ministry and the apex bank to achieve an optimal balance between fiscal and monetary policies.

Keywords: Fiscal policy; Monetary Policy; Economic growth; Relative impact

1. Introduction

In the wake of the Great Depression, monetary and fiscal policies emerged as indispensable tools for rectifying economic imbalances. The divergent approaches of fiscal proponents, exemplified by the ideas of John Maynard Keynes, and monetary advocates underscore a longstanding debate on the most effective means of stimulating economic prosperity. While fiscal policies advocate for government intervention, monetary policies champion central bank actions as the most effective means of correcting economic disparities. Despite decades of implementation, the ongoing inquiry into which policy yields superior outcomes in achieving macroeconomic objectives, particularly economic growth, remains a subject of scholarly debate.

Fiscal and Monetary policies in Nigeria are interconnected, influencing macroeconomic indicators profoundly. Government deficits are often financed by the Central Bank through WMAs (Central Bank of Nigeria, n.d.), injecting excess liquidity into the system and causing price and exchange rate distortions.

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The country's heavy reliance on oil exports exposes its economy to external shocks, as witnessed in the 1980s oil glut. Past stabilization efforts, such as the 1982 Economic Stabilization Act and the 1984 Austerity Measures, aimed to mitigate these vulnerabilities but faced challenges in execution and long-term effectiveness (Owosekun, 1985); (Aderibigbe 1985). The 1986 Structural Adjustment Programme, supported by IMF loans, introduced reforms to address economic imbalances, yet as noted by Omoruyi (1987) yielded mixed results, including a boost in agricultural exports, and increased inflation and production costs. Moreover, recent debates over fiscal policies, like fuel subsidies, underscore the ongoing need for targeted solutions to address Nigeria's economic challenges effectively.

Nigeria has undergone diverted monetary and fiscal policies with the change in regimes since the 1960s, all of which were implemented to restore a weakening economy, and sustain economic growth and balance in both the short and the long term. The country's economic potential is reported to be hampered by structural difficulties, including "inadequate infrastructure, tariff and non-tariff barriers to trade, obstacles to investment, lack of confidence in currency valuation, and limited foreign exchange capacity" (USAID, 2017). Notably, this inference is decades after the above structural programs, aiming to remove those same constraints, were enacted. The problem, hence, might run much deeper.

Idris (2017) underscores the substantial contribution of fiscal and monetary policies to economic growth, yet the study concluded that the existing institutions overseeing their regulations are notably weak in comparison to available resources and manpower. The findings of Abere & Akinbobola (2020) and Abubakar (2020) attest to the above findings. This weakness of institutions, as highlighted by literature, hinders the realization of optimal growth over the long term. The constraint is largely attributed to inefficiencies in decision-making and policy in-coordination. In light of these considerations, this study seeks to discern the relative impact of fiscal and monetary policies on economic growth in Nigeria, emphasizing the identification of possible constraints that impede the full potential realization of these policies.

The following key questions will be addressed: Does fiscal policy have any effect in promoting economic growth in Nigeria? Does monetary policy have any effect in promoting economic growth in Nigeria? Which of the two policies poses a higher effect on the economic growth? And are there any constraints on the achievement of the policies' full potential? The study is structured into six sections: Following the Introduction, Section Two entails the literature review; Section Three explains the methodology; Section Four presents the results and findings; Section Five discusses the findings and their policy implications; and Section Six offers a conclusion and recommendations based on the findings of the study.

2. Related Literature

Related literature entails a number of studies aimed at demystifying the comparative potency of fiscal and monetary policies on the economy. Wang *et al.* (2022) used the difference-in-difference model to

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determine the Role of fiscal and monetary policies in recovering the economy of China during the Covid-19 pandemic. Their findings pointed to fiscal policies been the sole option for improving household welfare in terms of employment and demand. This is in line with the findings of Adegboyo, Keji, and Fasina (2021) which, using the ARDL bound test for a period spanning 1985-2020, showed that fiscal policies in the long run tend to stimulate higher growth rates in the Nigerian economy. Similarly, Belchior *et al.* (2021) conducted a parallel study in Brazil using the Leeper Model and the Markov-switching model for a time span of 2002 to 2015. The results showed that both the monetary and fiscal policies were significant, but at certain time periods: fiscal dominance was witnessed in 2010 and between 2013 and 2014, while monetary dominance was witnessed in 2003, and between 2005 and 2007.
Tan *et al*. (2020) had analyzed the impact of monetary and fiscal policies on economic growth in Singapore, Malaysia, and Thailand using the ARDL Method from 1980 to 2017. The findings showed that fiscal policies were more effective in Thailand, while monetary policies were more effective in Malaysia and Singapore. The latter is in tandem to the findings of Idris (2019) who conducted a similar study in Nigeria using the OLS and Cointegration technique. He affirmed that both policies had a significant impact in promoting economic growth, but monetary policies had more impact in promoting such growth. In another dimension, Chadha S. *et al*. (2021) conducted a counterfactual analysis, te result revealed that a complementary approach had existed between fiscal and monetary policies in the United States' during the Covid-19 pandemic. This coordination proved to be most efficient in expanding the economy.

Bodurin and Samuel (2016) analyzed the impact of fiscal and monetary policies on economic growth from 1981 to 2015 using a Vector autoregressive model. The study found out that monetary policies had no significant effect on real GDP, while fiscal policies had de-stabilized the real-GDP, but that declined after a year. Conclusively, they recommended a fiscal policy leadership and policy coordination. Elake (2016), having examined a similar study using the Johansen Cointegration Test, Wald Test, and Vector Correction Method from 1981- 2014, reported no significant relationship between fiscal and monetary policy variables and real-gdp taken jointly in the short run, but a short run relationship does exist when each of the policy variables is modelled with the real GDP. Okorie et al. (2016), on the other hand, had maintained that monetary policy affects income faster than fiscal policy, and using the ARDL method, he had concluded that monetary policies do affect income more than fiscal policies in the short run, but the reverse is the case in the long run.

Existing literature has shed immense light on the comparative efficacy of fiscal and monetary policies on economic growth. However, there exists areas that have not been sufficiently addressed. The strength of fiscal and monetary policies largely depends on the Institutions in charge of exercising them. Related literature has mainly focused on macroeconomic factors that deter the policies' effectiveness like inflation or exchange rate, without adequately considering the strength of those institutions in charge of implementing them. Moreover, many studies have been generalized to analyze the role of those policies in stimulating economic growth with regards to all the macroeconomic objectives. There is a need to further analyze the impact of those policies on the objective that specifically relates to promoting economic growth in Nigeria.

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3. Methodology

This section entails the research methodology. It consists of the sources of data and empirical strategy, and model specification.

3.1 Data

This study employed a time series data, covering a period of 34 years, from 1986 to 2020. The choice of this time frame was intentional, as 1986 was the base year when policymakers had allowed changes in policy instruments to be subject to the market forces. The data for the variables, real GDP, interest rates, money supply, exchange rates, and inflation rates, was sourced from the CBN's statistical bulletin. The data for government expenditure was sourced from the NBS' website. All the variables will be converted to their natural logs to ensure a consistency in the units of measurement.

3.2 Model Specification

This study will use the real GDP as its dependent variable and fiscal and monetary policies' variables as its independent variables. To do this, it first employs the Anderson-Jordan equation used by Tadesse and Melaku (2019). The equation is most simplistic and predictive in analyzing relationships between variables. Mathematically, the model goes thus:

$$Y = f\,(F\ M\ W) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.1)$$

Where: Y stands for economic growth; F represents variables of fiscal policy; M represents monetary policy variables, and W are all other control variables most relevant to this study.

Tadasse and Melaku (2019) adapted a log linear form of this model rewritten as follows:

$$lnRGDP = \beta 0 + \beta 1lnM2 - \beta 2lnGE + \beta 3lnIR + \beta 4lnCPI + \beta 5lnNER + \beta 6lnTO + Ui \quad \ldots\ldots\ldots\ldots.. \quad (3.2)$$

In this study, economic growth will be proxied by the real GDP. Fiscal policy is represented by government expenditure, while monetary policy is represented by broad money supply. Control variables included are interest rates, inflation rate and exchange rates.

The above model, *(3.2),* is modified to suit this study, and the equation is rewritten thus:

$$lnGDP = \beta 1 + \beta 2ln(GEX) + \beta 4ln(BMS) + \beta 5ln(INR) + \beta 7ln(INF) + \beta 8ln(REX) + Ui \quad \ldots\ldots\ldots\ldots \quad (3.3)$$

Where:

GDP = Real Gross Domestic Product used to determine economic well-being.

GEX =Total government expenditure on recurrent and capital expenditure

BMS = Broad money supply

INR = Deposit Interest Rate

INF =Consumer Price Index

REX = Real Effective Exchange rate

Ui = Error term representing all other factors that affect real GDP

To test for the presence of a long run relationship, the study utilized the Autoregressive Distributed Lag (ARDL) model. Developed by Pesaran et al. (2001), this tool is ideal for time series data. it has the ability to handle mixed orders of integration among variables (whether solely I(0), I(1), or mutually integrated); it is also viable in handling a small sample size. Moreover, this method takes

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into account the simultaneous analysis of long and short-run relationships among variables through the use of an Error Correction model (ECM).

An unrestricted ECM of Equation (3.2) above is expressed as:

$$\Delta lnGDPt = \beta 1 + \beta 2 lnGE_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \sum_{j=1}^{q} \alpha j \Delta lnGE_{t-j} + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \mu t \quad (3.3)$$

$$\Delta lnGEXt = \beta 1 + \beta 2 lnGE_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} + \sum_{j=1}^{q} \alpha j \Delta lnGEX_{t-j} + \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \mu t \quad (3.4)$$

$$\Delta lnBMSt = \beta 1 + \beta 2 lnGEX_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{j=1}^{q} \alpha j \Delta lnGEX_{t-j} + \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \mu t \quad (3.5)$$

$$\Delta lnINRt = \beta 1 + \beta 2 lnGEX_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{j=1}^{q} \alpha j \Delta lnGEX_{t-j} + \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \mu t \quad (3.6)$$

$$\Delta lnINFt = \beta 1 + \beta 2 lnGEX_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{j=1}^{q} \alpha j \Delta lnGEX_{t-j} + \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \mu t \quad (3.7)$$

$$\Delta lnREXt = \beta 1 + \beta 2 lnGEX_{t-1} + \beta 3 lnBMS_{t-1} + \beta 4 lnINR_{t-1} + \beta 5 lnINF_{t-1} + \beta 6 lnREX_{t-1} + \sum_{n=1}^{u} \alpha n \Delta lnREX_{t-m} + \sum_{m=1}^{t} \alpha m \Delta lnINF_{t-m} + \sum_{l=1}^{S} \alpha l \Delta lnINR_{t-l} + + \sum_{k=1}^{r} \alpha k \Delta lnBMS_{t-k} + \sum_{j=1}^{q} \alpha j \Delta lnGEX_{t-j} + \sum_{i=1}^{P} \alpha i \Delta lnGDP_{t-i} + \mu t \quad (3.8)$$

The t is the white noise error term, assumed to be identically and independently distributed (i.i.d). Δ is the operator at first difference while t represents the time trend. Pessaran et al. (1996) developed two critical values, the lower and upper bound values. If the calculated F-Statistics of the ARDL bound is higher than the upper bound, then the null hypotheses of no cointegration is rejected, and the alternative hypotheses, showing the presence of a long-term relationship between the variables, is accepted. On the contrary, If the F-Statistics is lower than the lower bound, then we'll fail to reject the null hypothesis. Yet, if the F Statistics falls in between the two bounds, then the result will be indecisive, and the statistical significance of the error correction coefficient will determine our conclusion. The Error Correction Term (ECT) captures the adjustment back to equilibrium after a deviation, explaining long run dynamics.

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4. Results & Findings

Section four presents the estimated results, including a unit root test, cointegration test, and post-estimation tests. It begins with a stationarity test using the Augmented Dickey Fuller (ADF) & Philips-Peron (PP) unit root tests. The null hypotheses in both the ADF and PP tests suggest a presence of unit root (I.e., non-stationarity) in the series. If the probability of T-statistics is above the 0.05 level of significance, the null hypothesis will be rejected and the alternative, which deems the series stationary, will be accepted. Otherwise, we would fail to reject the null. The probability values are given in parentheses (). Table 4.1 presents the Unit root test results.

Table 4.1: **ADF and PP Unit Root Tests Results**

Variables	**Level**		**First Difference**		**Remark**
	ADF	**PP**	**ADF**	**PP**	
LGDP	-0.719812	-0.472212	-3.475347	-3.331207	I(1)
	(0.82820)	(0.8847)	(0.0152)**	(0.0214)**	
LGEX	-1.549394	-1.501824	-10.20308	-10.76631	I(1)
	(0.7911)	(0.8092)	(0.0000)*	(0.0000)*	
LBMS	-1.192717	0.190573	-3.770679	-4.071233	I(1)
	(0.8956)	(0.9970)	(0.0312)**	(0.0157)**	
LINR	-3.855844	-3.882176	-3.736308	-6.184028	I(0)
	(0.0254)**	(0.0240)**	(0.0376)**	(0.0001)*	
LINF	-3.762065	-3.758414	-3.665502	-6.994158	I(0)
	(0.0314)**	(0.0317)**	(0.0420)**	(0.0000)*	
LREX	-3.669736	-6.010748	-3.757765	-6.153257	I(0)
	(0.0385)**	(0.0001)*	(0.0317)**	(0.0001)*	

*Source: Results extracted by author using Eviews 9. Note: * and ** imply significance at 1% and 5% respectively.*

The variables are noted to have mixed levels of integration with LINR, LINF, and LREX integrated at Level, while LGDP, LGEX, and LBMS are integrated at first order I(1). With these results, the ARDL Method becomes the most suited technique for this study.

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4.1 ARDL Method

4.1.1 Bounds Test for Cointegration

The aim of this study remains to ascertain the relative impact of fiscal and monetary policies in Nigeria. To begin with, we must determine if at all a long-term relationship exists between the policies and economic growth using their proxies. The ARDL model was, hence, used to test for cointegration. The result of the bound test is given in Table 4.1 thus:

Table 4.2 ARDL Bound Test Results

Significance	Lower Bound	Upper Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68
F-statistic	**8.498515***	

Results extracted by author using Eviews 9.

The F- Statistics generated (8.498515) is higher than the 5% upper bound critical value. In accordance to the rule of the two asymptotic critical values, the null hypothesis of "no long-run relationship exist" would be rejected. Subsequently, the long-run ARDL Model would be estimated to analyse the long-run coefficient of each variable.

4.1.2 ARDL Long-Run Model

The best ARDL model, with a maximum dependent lag of 3, was selected on the basis of the Akaike Information Criterion (AIC). The estimated long run coefficients based on the ARDL Bound Testing approach is given in the table below:

Table 4.3: ARDL Bound Testing: Estimated Long Run Coefficients

Variable	Coefficient	Std. Error	T-Statistic	Probability
LGEX	-0.332488*	0.054656	-6.083328	0.0000
LBMS	0.412848*	0.051876	7.958317	0.0000
LINR	-0.138683	0.091715	-1.512112	0.1544
LINF	-0.302902**	0.105007	-2.884601	0.0128
LREX	-0.344724*	0.099160	-3.476426	0.0041
C	31.628230	1.375042	23.001639	0.0000

*Results extracted by author using Eviews 9. Dependent Variable: LGDP Selection Model: ARDL (3, 2, 2, 1, 2, 3)The * and ** imply significance at 1% and 5% respectively.*

Table 4.3 presents the estimated long-run coefficients. The results show that Government Expenditure (LGEX), Broad Money Suppy(LBMS) and Real Effective Exchange Rate (LREX) are statistically significant at the 1% level, while the Inflation Rate (LINF) is significant at 5%. This

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demonstrates the existence of a long-run relationship between these variables and the dependent variable, real GDP. This, however, is with the exception of the Interest Rate (LINR) which was found to be statistically insignificant. Additionally, all the independent variables were found to be negatively related to the dependent variable with the exception of BMS.

The results show that a 1% increase in government expenditure is expected to decrease the real GDP by approximately 0.33% with other things remaining equal. This goes against Keynesian Economics, which postulates the expansionary effect of an increase in government spending. Likewise, the expectation on the significant, negative effect of Interest rates has been rendered flawed with the insignificance of the variable.

Money supply has been found to have a substantial positive effect on the real GDP with a 1% increase translating into a 0.40% increase in the real GDP. The results of Inflation and exchange rates show that a 1% increase in each, *ceteris paribus*, will lead to a 0.30% and 0.34% decrease on the real GDP respectively**.**

The reliability of the stated results is dependent upon certain assumptions, which must be tested and passed in order to avoid a case of an erroneous estimation. Table 4.4 presents the long run estimation diagnostics test results.

Table 4.4: Diagnostics Test of the Long Run Estimates

Test	**Null Hypothesis**	***F*-statistics**	**Prob**	**Remarks**
Serial Correlation: Breusch-Godfrey serial correlation LM test	No Serial Correlation	0.411445	0.6725	Accept H0
Heteroscedasticity: Breusch-Godfrey test	Homoscedastic	1.202149	0.3737	Accept H0
Normality: Jarque-Bera test	Residuals are Normally Distributed	0.331755	0.847150	Accept H0
Functional Form: Ramsey RESET test	Model is Correctly Specified	0.020033	0.0724	Accept H0

Note: The Statistic and Probability of the Jacque Bera test is the Test Statistics($\chi 2$)

With each probability been higher than the 0.05 probability, the null hypothesis for each test is accepted. Consequently, the model has been proven to have a homoscedastic error term, independent residuals, normally distributed residuals, and the right functional form.

4.1.3 ARDL Cointegrating Form: Error Correction Model

While the objective of a long-run relationship has been achieved, it is equally important that the short-run dynamics of the model are tested with the aid of the ECM. Table 4.5 presents the ARDL (3, 2, 2, 1, 2, 3) results chosen on the basis of the Akaike Information Criterion (AIC).

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Table 4.5: ARDL Error Correction Model

Variable	Coefficient	Std. Error	T-Statistic	Probability
D(LGDP(-1))	-0.025978	0.097742	-0.265779	0.7946
D(LGDP(-2))	0.280210*	0.091249	3.070836	0.0089
D(LGEX)	0.030208	0.019620	1.539678	0.1476
D(LGEX(-1))	0.045423	0.021885	2.075565	0.0583
D(LBMS)	-0.076872**	0.028316	-2.714816	0.0177
D(LBMS(-1))	-0.096517**	0.035952	-2.684623	0.0187
D(LINR)	-0.013152	0.011721	-1.122075	0.2821
D(LINF)	-0.065562*	0.006651	-9.858081	0.0000
D(LINF(-1))	0.028542*	0.005881	4.853238	0.0003
D(LREX)	0.031591**	0.010883	2.902866	0.0123
D(LREX(-1))	0.059535*	0.015641	3.806249	0.0022
D(LREX(-2))	0.036450*	0.009924	3.673016	0.0028
ECM(-1)	-0.327868*	0.037161	-8.822968	0.0000

Results extracted by author using Eviews 9.Dependent Variable: LGDP. Selection Model: ARDL (3, 2, 2, 1, 2, 3).
R-squared 0.913900, Adj -squared 2 0.794684, F-statistic 7.665932 (0.000286) Durbin-Watson stat 2.237162
Akaike info criterion -4.956094, Schwarz criterion -4.085814, Hannan-Quinn criter. -4.667621
*The * and ** imply significance at 1% and 5% respectively.*

The lag dependent is observed to be significant only at lag 2 (lagged by two years, the real GDP has an insignificant effect on itself in the preceding year, but has a significant effect on itself in the year before that). Both values of government expenditure are unexpectedly insignificant on real GDP in the short run. Contrarily, broad money supply is significant at its current and lagged values both**,** but with both values displaying a negative impact on the real GDP. The interest rate, once again, has no significant effect on the real GDP. Meanwhile, the rate of inflation shows that while its current value is negatively related to the real GDP, its lagged value is positively related to the GDP. The exchange rate, lagged by three periods, all show a positive relationship to the real GDP in the short run- contrary to its negative status in the long run. The Error Correction term (ECM(-1)) is estimated at -0.327868, following its principle of being negative, significant, and less than one. This coefficient shows the speed of adjustment to long term equilibrium. Thus, the estimated value tells us that a deviation from long run equilibrium is corrected by 33% the next year.

These findings have supported Objective 1 and 2 of this study, showing that fiscal policy and monetary policy do have a significant effect on economic growth.
While monetary policy (proxied by broad money supply) is significant in both the short and long run, fiscal policy (proxied by government expenditure) is only significant in the long run. To answer objective 3 of which of the policies has a higher effect in promoting economic growth, we look at the sign and magnitude of each proxy's coefficient. As seen above, government expenditure has an insignificant impact in the short run and a negative coefficient in the long run, while broad money supply has negative coefficients in the short run, but a positive coefficient in the long run. Consequently, it wouldn't be rocket science to deduce that monetary policy has a higher effect in promoting economic growth in Nigeria within the timeframe under study. This is in tandem with the

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findings of Idris (2019) while been contrary to the findings of Bodurin and Samuel (2019) and Adegboyo, Keji, and Fasina (2021).

Subsequently, it is crucial to test for model stability. This is tested through the use of the Cumulative sum (CUSUM) and the Cumulative sum of squares (CUSUMQ). Figures 4.1 and 4.2 present the graph for each.

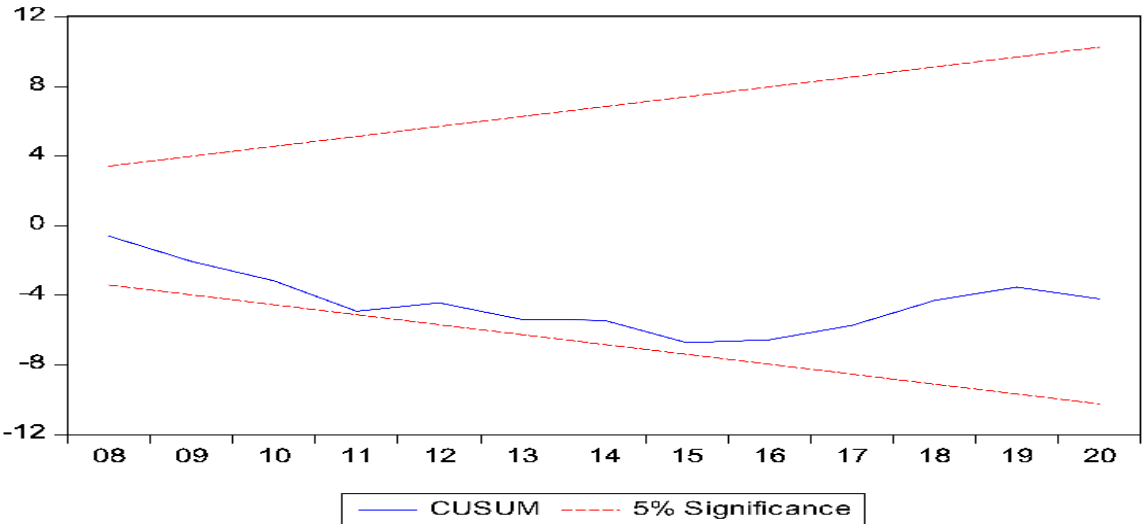

Figure 4.1: Stability Test: CUSUM

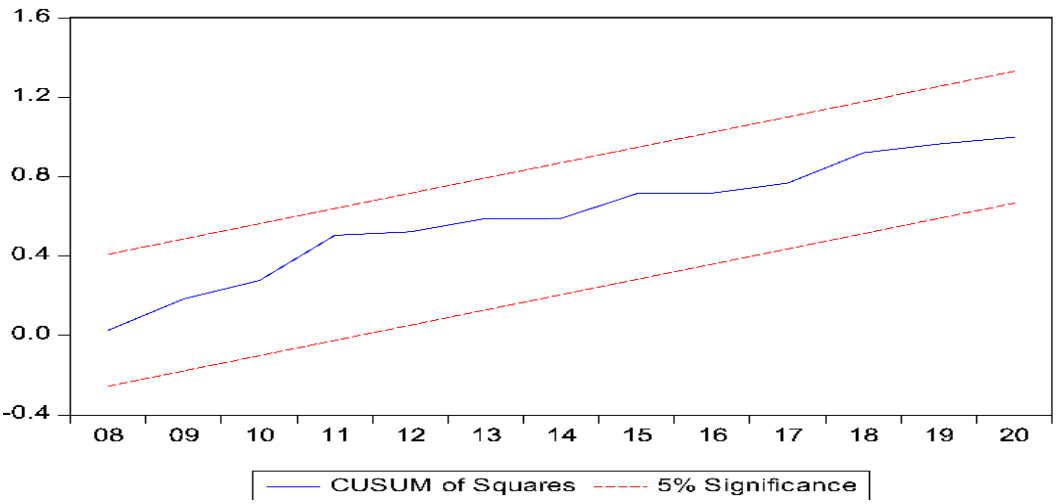

Figure 4.2: Stability Test: CUSUMQ

As can be seen in both figures, the model does not exceed the threshold and both CUSUM and CUSUMQ fall within the 5% critical bound. The model, hence, is confirmed to be stable, and the reliability of the findings have been affirmed.

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5. Discussion & Implications of Findings

The aim of this study is to deduce the relative impact of fiscal and monetary policy in Nigeria. The specific objectives are to: examine the effect of fiscal policy on economic growth: examine the effect of monetary policy on economic growth; identify which of the two policies has a higher effect in promoting economic growth in Nigeria; and identify if there are any constraints on the achievement of the policies' full potential.

While objectives 1, 2, and 3 have been achieved, it is crucial to make economic sense of those findings and determine if theoretical and empirical evidence can support those conclusions.

Government expenditure was found to be insignificant in the short run while having negative significance in the long run. A possible explanation for this could be the "crowding-out" effect. When a government is large and borrows a lot to finance its expenditure (as is the case with Nigeria- a country with trillions in public debt (DMO, 2023), this would increase the demand for loanable funds thereby increasing the interest rates. A consequence of this is the crowding out of private investment whereby the latter is discouraged by high interest rates. This leads to lower investment by businesses and a further low blow to output- all having a negative effect on economic growth. While this finding is not conventional, it does conform to the result of Bappayahya et al. (2020) which showed that each of the coefficients of capital and recurrent government expenditure was insignificant to economic growth in Nigeria in the short run.

Moreover, the insignificance of the interest rate variable in both the short and the long run could attest to the findings above. Interest rates are tools of monetary policy that, in promoting economic growth, are steadily decreased or kept at bay. With the huge demand for credit from the government, however, the crowding-out effect sinks in. There could be more explanations attesting to the insignificances of these policies like high credit-obtaining restrictions and poor microfinance banks. For the sake of this study, however, which lies one of its significances in the effect of institutional quality on the potency of the policies, we say that government institutions play adverse roles in economic growth through their policies. Excessive government expenditure tends to offset economic growth through demand pull- higher interest rates. Aleksandrovich and Upadhyaya (2015) contend this finding as they also deduced that a large government may negatively impact growth, while also attributing that to the crowding-out effect.

The broad money supply coefficient was the only one to possess positive significance in the long run, whilst being negatively significant in the short run. The former case conforms to the Keynesian theory of the expansionary effect of an increase in money supply on economic growth. The short-run negativity could be attributed to demand-pull inflation after a monetary surge, such that the CBN had to tighten measures to curb the inflationary effect, which would steadily decrease economic growth.

On the CBN FAQ webpage (Central Bank of Nigeria, n.d), the apex bank was asked if the Federal Government's policies tend to "frustrate" its monetary policies. It affirmed this by saying that when the Bank finances government deficit through Ways and Means Advances, a direct consequence of that is distortions in the monetary base, i.e. adverse effect on the price level and exchange rates. With

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this, we look at the inflation rate variable which was found to possess negative significance in both the short and long run. While conventional economic theory tends to tolerate low rates of inflation as a by-product of economic growth, double digits are a call for disaster. With the rate of Nigeria's inflation advancing to 30% (Central Bank of Nigeria, 2023), the steep rise in the general price level is certain to have a contractionary effect on economic growth due to a rise in the costs of production. The exchange rates are another thing, found to possess negative significance in both the short run and the long run. A possible reason could be the high inflationary effect of increased money supply, which adversely affects the value of the Naira. The relationship between inflation and exchange rates can be bi-directional though. Nigeria, being an oil-producing nation, can have its exchange rates destabilized due to an external shock, which makes imports more expensive. This further exacerbates inflation in the long run as proffered by the Cost-Push inflation theory. These findings are backed up by that of Olamide et al. (2022) and Iheanachor and Ozegbe (2021), both concurring that exchange rate volatility and high inflation have a negative effect on economic growth.

With these findings, the study can provide possible answers to Objective 4 of its research: Constraints do exist in the achievement of the full potential of fiscal and monetary policy in promoting economic growth in Nigeria. Some of the possible constraints are excessive government expenditure which leads to a crowding out effect on investment; high inflation rates; and exchange rate volatility. In essence, one of the constraints to fiscal and monetary policy in promoting economic growth in Nigeria is the country's institutional practices, with all other things being equal. The findings of Idris (2019), Abere & Akinbobola, (2020), and Abubakar (2020) all point to a positive relationship between qualitative institutions and the effectiveness of government policies on economic growth in Nigeria.

6. Conclusion & Policy Recommendation

It is a general consensus among economists that fiscal and monetary policies are stabilization tools that can be used to correct imbalances in an economy. The key idea here is that those tools can only serve the purpose of "stabilization" *if* wielded correctly. The results have affirmed that the two policies do have a significant effect, while also noting that monetary policy has a greater impact in promoting economic growth. Subsequently, the important question of what are the constraints on the achievement of said expected potential follows. While more studies are required to categorically assess the effect of government institutions on the potency of fiscal and monetary policy, this study was able to pinpoint possible factors that pose a threat to these policies and reaffirm the scholarly consensus that economic policies do not work effectively without institutional discipline.

In tandem with the findings of this study, the author proposes a few recommendations: The problem of the crowding-out effect should be tackled from the root. The government needs to diversify its revenue-generating sources to other productive sources, so as to tame its excessive loan collation. Moreover, the annual budgets need to be scrutinized more for cases of budget padding.

The CBN can maintain a sustained expansion of the money supply in the long run while maintaining contractionary measures to tackle inflation in the short run.

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While single digits of inflation can be tolerated as a by-product of growth, the double-digit inflation in Nigeria is most pronounced and significant in both the short and long run. The CBN and the ministry of finance need to coordinate and double down on contractionary measures that align with Nigeria's economic conditions.

While appreciation of the Naira was found to decrease economic growth, a feasible recommendation would not be to solely devalue the Naira, but to simultaneously improve Nigeria's export capacity such that its products and services would generate more revenue in the international market.

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