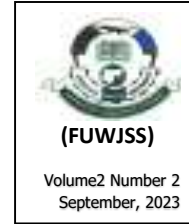


**MODERATING EFFECT OF MONEY SUPPLY
ON INFLATION RATE AND ECONOMIC
GROWTH IN NIGERIA (1981-2021)**

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Abstract

Economically, a rise in money supply causes inflation which eventually leads to a decline in economic growth. In this way, there is need for the moderation of money supply in an economy, as this has impact on inflation rate and economic growth in a given country. Using the Autoregressive Distributed Lag (ARDL) Model, this study investigates the moderating effect of money supply on the relationship between inflation rate and economic growth in Nigeria over the period 1981 to 2021. The results of the interaction model revealed that money supply has significant effect on the relationship between inflation rate and economic growth in Nigeria both in the short run and long run. Specifically, the results showed that with an increase in money supply, inflation rate significantly reduced economic growth in Nigeria. The results of the marginal effect also showed that at maximum level of money supply in Nigeria, inflation rate significantly reduced economic growth in the country. However, at average and minimum level of money supply, inflation rate had insignificant negative impact on economic growth in Nigeria over the period 1981 to 2021. Based on the results, the study recommends that government should pay closer attention to the high rate of inflation in the economy and take swift action to lower it by reducing the amount of money in circulation. In order to accomplish this,

the relevant government agencies should work to stop money leaks, theft, and diversion.

Keywords: Growth, Inflation, Money, Supply

Introduction

Many economists and decision-makers are concerned about the link between inflation rate and economic growth. When inflation is at its maximum level, it decreases productivity and growth, whereas a low and stable inflation rate encourages economic growth (Anochiwa & Maduka, 2015). The relationship between inflation and economic growth has been debated in macroeconomic theory (Onwubuariri, Bank-Ola & Oladeji, 2021). It has also created a protracted debate between structuralists and monetarists as a result (Onwubuariri et al, 2021). The structuralists argue that inflation is advantageous for economic growth, contrary to the monetarists' claim that it is destructive. Vinayagathan (2013) argues that whether or not inflation has an impact on real production growth depends on how it impacts savings and investment levels over the course of the short- and long-terms, respectively. According to Bal, Dash, and Subhasish (2016), it is critical to consider inflation rate while assessing economic development. Growth is hindered by inflation since it decreased investment and increased productivity. Excessive inflation is always the result of ongoing increases in the money supply which implied that money supply is a major factor that determine the level of inflation. Similar to this, the empirical findings of past studies revealed that while inflation in the double digits hinders growth, inflation in the single digits can be beneficial.

The high rate of inflation in Nigeria has been one of the main issues for the economy. Inflation in the economy is unavoidable since the government is unable to offer a long-term solution to this problem, demonstrating that the government lacks the power to halt the continued trend of rising prices for goods and services in the domestic economy (Eze & Nweke, 2017). According to research, local currency struggles to act as a medium of exchange and a store of value during an inflationary period without having a negative impact on the country's output level, income distribution, and employment level (Eze & Nweke, 2017). Inflation in Nigeria ranged from 20.8 percent in 1981 to 5.7 percent in 1986 to 7.360 percent in 1990. By 1996, inflation was 12.71 percent; by 2020, it was 13.2 percent; and by 2021, it was 15.50 percent (CBN, 2021). In addition, the real gross domestic product growth rate in 1981 was -13.12%, improved to 1.9% in 1986, and declined to 0.1% in 1991. The RGDP increased by 0.80%, 1.92%, 2.20%,

1.79%, and 3.64 percent by 2017, 2018, 2019, 2020, and 2021, respectively (World Bank, 2021).

In addition, the Central Bank of Nigeria routinely undertakes monetary policies to control inflation by assuring price stability and long-term economic growth. On September 22, 2020, the Central Bank reduced the Monetary Policy Rate (MPR) from 12.5 percent to 11.5 percent in order to decrease the amount of money in circulation in the economy (CBN, 2020). Nigeria's inflation rate is still high despite all the monetary policies the country's monetary authorities have put in place to lower it. Hence, this study seeks to investigate the relationship between inflation rate and economic growth in Nigeria in contingent with the level of money supply in Nigeria.

Conceptualizing Economic Growth

Economic growth, as defined by Onwubuariri, Oladeji, and Bank (2021), is an increase in a nation's output or income per person. The output is typically measured by the gross national product (GNP) or gross national income (GNI), which are terms that are interchangeable for determining an economy's total output of goods and services. Todaro and Smith (2006) define economic growth as the gradual process through which the economy's productive capacity is raised over time to result in higher levels of national production and income. On the other hand, by definition, an inflation rate occurs when there are too many people and too little commodities available. It is a continuous increase in the general prices of goods and services.

The relationship between inflation rate and economic growth has been theoretically established. The Keynesian theory of inflation serves as the foundation for this study theoretical framework. According to the theory, as employment increases, the overall demand for goods also increases and as results businesses increase their output to meet the demand by hiring more employees. As more people are hired by businesses, employment increases which lead to economic growth. Eventually, consumer demand for goods exceeds manufacturers' ability to supply it, which increases the cost of commodities and lead to inflation. Incorporating monetary theory, the theory of output, and the theory of employment through interest rates is a well-known feature of Keynesian theory. When money supply rises, interest rates fall, encouraging greater investment and aggregate demand, which in turn raises output and employment in the economy. Inflation that results from an imbalance in overall supply and demand is known as "demand-pull inflation," and it is a key concept of Keynesian economics. Prices increase in economies where aggregate demand is significantly greater than aggregate supply.

Numerous studies have been conducted in Nigeria and other countries on the relationship between the inflation rate and economic growth. Tariq

(2022) re-evaluate empirically the relationship between inflation and economic growth in Pakistan over the period of 1985 to 2019. The study applied the Autoregressive Distributive Lag (ARDL) Wald and F-Bound test for the analysis of data. The result indicated that inflation is negatively affecting economic growth and terms of trade in long run. The results showed that a moderate level of inflation is beneficial for growth and trade while high level or double-digit figure inflation is harmful to economic growth. This finding is in line with the study of Adaramola and Dada (2020), Ezeanyej and Ugochukwu (2015) among others but it is contrary with the work of Kenneth, Denis, and Okezie (2016). In Pakistan from 1985 to 2019, Tariq (2022) looked at the relationship between inflation and economic growth. The Autoregressive Distributive Lag (ARDL) Wald and F-Bound test was used in the study to analyze the data. The outcome showed that, inflation has a negative impact on both economic growth and terms of trade. This result is similarly to the finding of Eze and Nweke (2017) on the impact of inflation on economic growth in Nigeria, and Muhammad, Hazoor, Anam and Naeem (2014) on the relationship among economic growth, savings and inflation in Pakistani economy. Fouzia and Daniel (2021) looked into how inflation affected Malaysia's economic growth from 1961 to 2019. Granger causality test and the Vector Error Correction Model were used in the study's data analysis. The findings showed that there is a short-term negative association between GDP growth and inflation, but a long-term positive correlation. There is a bidirectional relationship between these two variables, according to the Granger Causality test. This results is consistent with the finding of Olugbenga and Oluwabunmi (2020) on the impact of inflation on the growth prospects of the Nigerian economy.

Onwubuariri, Oladeji and Bank-Ola (2021) evaluate the impact of inflation on Nigeria's economic growth over the period 1980 to 2019. Inflation rate, interest rate, exchange rate and government expenditure were the independent variables, while the gross domestic product was the dependent variable. The data were analyzed using the Autoregressive Distribution Lag (ARDL) model. Results indicated that inflation has negatively affected economic growth. The study concludes that while inflation and exchange rate negatively impact the Nigerian economy's growth, interest rate maintains a positive relationship. The study suggested that measures be put in place by the CBN through the Monetary Policy Committee to ensure that the rate of inflation is reduced to the barest minimum. The impact of inflation on the growth prospects of the Nigerian economy from 1980 to 2018 was analyzed by Olugbenga and Oluwabunmi (2020). Granger causality test and the Autoregressive Distributed Lag Model are used in the analysis of the study. According to the study's findings, money supply and interest rates have a positive and significant impact on

economic growth, whereas inflation and the real exchange rate have a significant negative impact. The causation outcome demonstrates the one-way links between the interest rate, exchange rate, government consumption spending, and GDP. Adaramola and Dada (2020) used the Ordinary Least Square estimation technique and Granger causality test to investigate how inflation affects the growth prospects of the Nigerian economy. The study's results showed that while money supply and interest rates have a positive and significant impact on economic growth, inflation and the real exchange rate have a significant negative impact. Additionally, the causality finding demonstrates the one-way links between interest rate, exchange rate, government consumption spending, and GDP, whereas there is no evidence of a causal connection between inflation and degree of openness and GDP. Ogu, Adagiri, and Abdulsalam (2020) used time series data for the years 1999 to 2017 to analyze how Nigeria's inflation affected economic growth. The study used the Ordinary Least Square (OLS) regression method and found that inflation in Nigeria has a insignificant but positive impact on economic growth. The outcome also showed that interest rates have a negative and significant impact on Nigeria's economic expansion. Onwubuariri, Oladeji, and Bank-Ola (2021) assess how inflation has affected Nigeria's economic growth from 1980 to 2019. Autoregressive Distribution Lag Model was used to evaluate the data. The findings showed that inflation has had a negative impact on economic growth. Eze and Nweke (2017) looked at the impact of inflation on economic growth in Nigeria over the years 1980 to 2015. The investigation used the cointegration approach, the vector error correction model, and the Granger causality test. The findings of the cointegration test provided proof that the chosen variables have a long-term relationship. The VECM results showed that inflation has a negative and negligible impact on Nigeria's economic growth. More specifically, it found that total export and government investment spending have a significant and negative impact on RGDP. The findings also show that private investment spending has a significant and favorable impact on RGDP. The Granger causality test resulted in no causal relationship between real GDP and inflation rate.

Kenneth, Denis, and Okezie (2016) employed a two stage least square estimation to examine the relationship between inflation rate and economic growth in Nigeria over the period 1981 to 2014. The study shows that inflation is beneficial to growth though not significantly while growth is significantly beneficial to inflation. The results further show that Money supply and trade openness are significant determinants of real GDP. The study therefore recommends that inflation be controlled to have its optimal effect on output while production be diversified to optimize its effect on inflation. Ezeanyej and Ugochukwu (2015) investigated the effect of

inflation on economic growth in Nigeria from 1991 to 2013 using Ordinary Least Square (OLS) method of simple regression model. The variables used in the investigation include gross domestic product (GDP) as the dependent variable, whereas inflation rate (INF) is the independent variable. The results showed that inflation has negative impact on economic growth in Nigeria. Muhammad, Hazoor, Anam and Naeem (2014) investigated the relationship among economic growth, savings and inflation; and as well estimated the threshold level of inflation for Pakistani economy. Simultaneous equation model was utilized in the study. The variables used in the study include GDP growth rate, inflation rate, savings rate, depreciation of exchange rate, total debt servicing, interest rate, unemployment rate and indirect taxes. Three equations were employed including 2SLS technique. The results of 2SLS showed that inflation and real interest rate negatively and significantly affect economic growth. After reviewing the previous studies, the following gaps were found. Firstly, little attempts have been made by the previous studies to investigate the relationship between inflation rate and economic growth in contingent with the level of money supply. This current study would use an interaction model to assess the relationship between inflation rate and economic growth in contingent with the level of money supply.

Research Methodology

Nature and Sources of Data

For the analysis, annual time series data covering the years 1981 to 2021 were employed. Data for the study obtained from the World Bank (2021) and the Central Bank of Nigeria (2021). The summary of the variables used are presented in Table 1

Table 1 Summary of variables

Variables	Measurement	Apriori Expectation
Dependent Variable		
Economic Growth (proxy by Gross Domestic Product Per Capital)	Constant 2010 USD	
Independent Variables		
Inflation Rate	Percentage	Negative
Exchange Rate	Naira per Dollar	Negative
Government Expenditure	Billions of naira	Positive
Money Supply	Billions of naira	Positive
Interaction Term (INF*MS)	-	Negative

Source: Author's computation, 2021

Model Specification

The model used for this study was adopted from the study of Onwubuariri, Oladeji and Bank-Ola (2021) on the relationship between Inflation and economic growth in Nigeria. The study adopted the model and introduced money supply as a control variable as shown below in equation 1

$$ECG_t = \beta_0 + \beta_1 INFR_t + \beta_2 EXR_t + \beta_3 GEX_t + \beta_4 MS_t + \varepsilon_t \dots \dots \dots 1$$

Where: EC= Economic Growth, INF = Inflation Rate , EXR = Exchange Rate , Rate, GEX = Government Expenditure, MS=Money Supply, ε_t = is the Error term, and t= time trend, $\beta_0 - \beta_4$ = parameters to be estimated, Furthermore, in order to achieve the objective of this study, an interaction term was added into the adopted model as follows:

$$ECG_t = \beta_0 + \beta_1 INFR_t + \beta_2 EXR_t + \beta_3 GEX_t + \beta_4 MS_t + \beta_5 (INR * MS)_t + \varepsilon_t \dots \dots \dots 2$$

Where: INF*MS=Interaction Term, Others as in equation 1

Technique of Data Analysis

Since most time series data are not stationary at level, the variables were subjected through a unit root test using the Augmented Dickey-Fuller. The study then uses the ARDL Bound test to cointegration method to conduct a cointegration test to see if the variables have a long-term relationship. The ARDL Bounds test for cointegration can take into account variables with I(1) or even variables with both I(1) and I(0) (Pesaran, Shin, and Smith, 2001). After that, the study employed the ARDL Model estimation technique to estimate the model's parameters.

Descriptive Statistics of the Variables

In Table 2, descriptive statistics for the variables are provided, including mean, standard deviation, minimum value, maximum value, skewness, kurtosis, and Jarque Bera.

Table 2: Descriptive Statistics of the Variables

	ECG	INFR	EXR	GEX	MS
Mean	1347.679	16.17382	108.1675	2494.307	552.0062
Maximum	3098.986	75.40165	399.9636	12164.15	4027.902
Minimum	270.224	0.686099	0.610025	9.6365	10.71926
Std. Dev.	873.169	14.41479	109.9115	3189.896	857.3583
Skewness	0.391869	2.16765	0.972937	1.406514	2.438163
Kurtosis	1.69681	8.559213	3.172454	4.206007	8.909058
Jarque-Bera	3.950607	84.90362	6.519282	16.00294	100.2715
Probability	0.138719	0	0.038402	0.000335	0

Log(ECG)	-3.198836	-3.526609	0.0992	-4.630858	-3.529758	0.0034	I(1)
Log(EXR)	-1.413068	-3.526609	0.8418	-5.745823	-3.529758	0.0002	I(1)
INFR	-3.638775	-3.526609	0.0390	-7.556268	-3.529758	0.0000	I(0)
GEX	-0.403217	-3.529758	0.9840	-7.970020	-3.529758	0.0000	I(1)
MS	-2.711710	-3.526609	0.2376	-7.303873	-3.529758	0.0000	I(1)
INFR*MS	-2.717266	-3.526609	0.2355	-7.416161	-3.529758	0.0000	I(1)

Source: Author's Computation, 2022 using EVIEWS 9. Where: log=logarithms, ECG=Economic Growth, INFR=Inflation Rate, EXR=Exchange Rate, GEX=government Expenditure, MS=Money Supply, INFR*MS=Money Supply

All variables, with the exception of inflation rate, which becomes stationary at level, are stationary at first difference, according to the results of the Augmented Dickey-Fuller Unit Root Test. Based on the findings of the unit root test, the variables employed for the analysis are considered to be integrated of order one and zero I(1) I(0).

ARDL Bounds Test to Cointegration

Since the ARDL Bounds test to cointegration approach can handle variables that are all integrated of order one and zero, it is used in this study. Table 4 displays the findings of the ARDL Bounds cointegration test.

Table 4: ARDL Bounds Test to Cointegration

Computed F-Statistic	K	5% critical Bound Test value	
		Lower Bound	Upper Bound
3.875612	5	2.62	3.79

Source: Author's Computation, 2021 using Eviews 9.

A 5% level of significance, the F- statistic value of 3.875612 is more than both the lower and upper bound critical values. The study's findings suggest that the variables included in the analysis have long-term cointegration.

ARDL Short-Run and Long Run Estimate

The study first chooses an optimal lag using the Akaike Information Criterion (AIC), and then it chooses the ARDL (1, 1, 1, 0, 0, 0) to analyze the data. The ARDL short run and long run estimations are shown in Tables 5A and 5B, respectively.

Table 5A: ARDL Short-Run Estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INFR)	-0.002347	0.001101	-2.115067	0.0446
D(LOG(EXR))	-0.268196	0.116232	-2.307424	0.0279
D(LOG(GEX))	0.099056	0.085404	1.159857	0.2550
D(LOG(MS))	-0.081764	0.068725	-1.189720	0.2432

D(LOG(INFR * MS))	-0.068021	-0.057922	1.174358	0.2492
ECT(-1)	-0.203880	0.072733	-2.803150	0.0087

Source: Author's Computation, 2022 using EVIEWS 9. Where: Where: D=Difference, log=logarithms, ECG=Economic Growth, INFR=Inflation Rate, EXR=Exchange Rate, INTR=Interest Rate. See EVIEWS main Output in Appendix 3

Table 5B: ARDL Long-Run Estimate

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFR	-0.029354	0.016361	-1.794171	0.0825
LOG(EXR)	0.201591	0.423695	0.475792	0.6376
LOG(GEX)	0.485853	0.227878	2.132072	0.0321
LOG(MS)	-0.401038	0.330548	-1.213254	0.2342
INFR*MS	-0.333630	0.142401	-2.342891	0.0218

Source: Author's Computation, 2022 using EVIEWS 9. Where: Where: log=logarithms, ECG=Economic Growth, INFR=Inflation Rate, EXR=Exchange Rate, GEX=Government Expenditure, MS=Money Supply, INFR*MS=Interaction Term.

The Error Correction Term (ECT) coefficient from the ARDL short run estimate shown in Table 5 exhibited a significant negative sign of -0.203880, which confirmed the existence of long-term cointegration between the variables considered in the analysis. The ECT term explained that 20 percent of the long-term disequilibrium will be adjusted annually.

Economic growth is anticipated to be negatively impacted by an increase in inflation. The ARDL models' short-run and long-run results, which are represented in Tables 5A and 6B, respectively, seem to confirm this assertion. The results showed that inflation rate has significant a negative effect on economic growth in the short run, while in the long run inflation rate has insignificant negative impact on economic growth. It explained that a unit increases in inflation rate will reduce economic growth by 0.002347 percent and 0.029354 percent in short run and long run respectively. The results of this study are similar with those of Babisho and Fredrick (2020), Muhammad, Hazoor, Anam, and Naeem (2014), all of which showed that rising inflation rates had a detrimental impact on economic growth. Furthermore, according to economic theory, an increase in money may lead to an increase in economic growth. The ARDL short run and long run estimate presented in Table 5A and Table 5B clearly contradict this claim because it showed that money supply has insignificant negative impact on economic growth. The coefficient revealed that a unit increase in money supply will insignificantly reduce economic growth by 0.081764 percent and 0.401038 percent in the short run and long run respectively.

According to theory, a rising exchange rate would be detrimental to economic growth. This theoretical claim was supported by the ARDL short run estimate shown in Table 5A, as exchange rates had a significant negative impact on economic growth. It revealed that a unit increase in exchange rate will reduce economic growth by 0.268196 percent which is consistent with the study of Onwubuariri, Oladeji and Bank-Ola (2021) and Adaramola and Dada (2020). However, the ARDL long run estimate presented in Table 5B contradicts this assertion because it revealed that exchange rate has insignificant positive impact on economic growth. It showed that a unit increase in exchange rate will significantly increase economic growth by 0.201591 percent in the long. According to theory, government spending should spur economic growth. The ARDL short run and long run estimate results, which are shown in Tables 5A and 5B, revealed that while government spending has insignificant positive impact on economic growth in the short run, it has a significant positive impact on economic positive impact on economic growth in the long run. This finding supported theoretical assertion. The coefficients revealed that a unit increase in government expenditure will increase economic growth by 0.099056 percent and 0.485853 percent in the short run and long run respectively.

It is expected that an increase money supply will lead to an increase in inflation and reduction in economic growth (Olugbenga, and Oluwabunmi, 2020). Based on this assertion, it now obvious that money supply may moderate the effect of inflation rate on economic growth. In order to verify this assertion, the study used money supply as moderating variable in the analysis and interacted it with inflation rate. The coefficient of the Interaction Term (INFR_MS) in the short run and long run presented in Table 5A and Table 5B showed a significant negative value at the 5% level, indicating that money supply moderate the relationship between inflation rate and economic growth in Nigerian both in the short run and long run. According to the coefficient, with an increase in money supply, inflation rate will significantly reduce economic growth in Nigerian by 0.333630 percent and 0.068021 percent respectively.

However, Brambor, Clark and Golder (2005) suggested that the interpretation of an interaction model is more efficient using the marginal effect. Therefore, this study estimate the marginal effects of inflation rate on economic growth for maximum, average and minimum level of money supply in Nigeria and presented the results in Table 6.

Table 6: Marginal effects of Inflation Rate on Economic Growth for Maximum, Average and Minimum level of Money Supply in Nigeria

<p>Maximum level of Money Supply (MS)= 4027.902</p> $ECG_t = \beta_0 + \beta_1 INFR_t + \beta_2 EXR_t + \beta_3 GEX_t + \beta_4 MS_t + \beta_5 (INFR * MS)_t + U_t$ $M.E = \frac{\Delta ECG_t}{\Delta INFR_t} = \beta_1 + \beta_5 MS_t$ $= -0.002347 + (-0.008021) * 4027.902$ $= -32.54$ <p>Marginal Effect (ME)= -32.54 New Std.Error=(8.510)</p> $t.sta = \frac{\text{Coeff. of the Marginal Effect}}{\text{New Std Error of the ME}}$ $t.sta = \frac{-32.54}{8.510}$ <p>t.stat [-3.824] Significant</p>	<p>Average level of Money Supply (MS)= 552.0062</p> $ECG_t = \beta_0 + \beta_1 INFR_t + \beta_2 EXR_t + \beta_3 GEX_t + \beta_4 MS_t + \beta_5 (INFR * MS)_t + U_t$ $M.E = \frac{\Delta ECG_t}{\Delta INFR_t} = \beta_1 + \beta_5 MS_t$ $= -0.002347 + (-0.008021) * 552.0062$ $= -4.43$ <p>Marginal Effect(ME)= -4.43 New Std.Error=(2.732)</p> $t.sta = \frac{\text{Coeff. of the Marginal Effect}}{\text{New Std Error of the of ME}}$ $t.sta = \frac{-4.43}{2.732}$ <p>t. stat [1.622] Insignificant</p>	<p>Minimum level of Money Supply (MS)= 10.71926</p> $ECG_t = \beta_0 + \beta_1 INFR_t + \beta_2 EXR_t + \beta_3 GEX_t + \beta_4 MS_t + \beta_5 (INFR * MS)_t + U_t$ $M.E = \frac{\Delta ECG_t}{\Delta INFR_t} = \beta_1 + \beta_5 MS_t$ $= -0.002347 + (-0.008021) * 10.71926$ $= 0.09$ <p>Marginal Effect(ME)= -0.09 New Std.Error=(0.194)</p> $t.sta = \frac{\text{Coeff. Of the Marginal Effect}}{\text{New Std Error of the ME}}$ $t.sta = \frac{-0.09}{0.194}$ <p>t.stat[0.464]=Insignificant</p>
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Source: Author’s Computation, 2021. **Note:**t-sta>1.96 (significant at 5%), t-sta <1.96 (insignificant at 5%). The computation of the new Standard Error was carried out as suggested by Brambor, Clark and Golder, (2005).

The results revealed that inflation rate has significant negative impact on economic growth at maximum level of money supply in Nigeria. According to the coefficient, at maximum level of money supply in Nigeria, inflation rate significantly reduced economic growth by 32.54 percent. However, at average and minimum level of money supply, inflation showed insignificant negative impact on economic growth. To be precise, at average and minimum level of money supply in Nigeria, inflation rate insignificantly reduced economic growth by 4.43 percent and 0.09 percent respectively.

Diagnostic Test

The diagnostic test results for the aforementioned ARDL estimate are displayed in Table 6.

Table 6: Diagnostic Test

Test	P-Values
Breusch-Godfrey Serial Correlation LM	0.7481
Heteroskedasticity :Breusch-Pagan-Godfrey	0.6713

Source: Author's Computation, 2021 using Eview 9.

According to the findings of the Breusch-Godfrey Serial Correlation LM test and the Breusch-Pagan-Godfrey heteroscedasticity test shown in Table 6, the model does not have the issue of serial correlation or heteroscedasticity because the observed R squares probability values are greater than percent.

Conclusion and Recommendations

This study investigates the moderating effect of money supply on the relationship between inflation rate and economic growth in Nigeria over the period of 1981 to 2021 through the application of Autoregressive Distribution Lag Model (ARDL) Model. The study concludes that the effect of inflation rate on economic growth in Nigeria depend significantly on the volume of money in circulation. The study also concludes that as money supply increases, inflation rate contribute significantly to the reduction of economic growth in Nigeria. This therefore contributes to the reduction of economic growth while government expenditure contributes to the growth of the economy. Results of the marginal effect conclude that at maximum level of money supply in Nigeria, inflation rate will significantly reduce economic growth. However, at average and minimum level of money supply in Nigeria, inflation rate will insignificantly reduce economic growth. Hence, the study recommends that since increase in money supply caused inflation to have negative impact on economic growth, the government needs to pay closer attention to the high rate of inflation in the economy and take swift action to lower it by reducing the amount of money available for use. In order to accomplish that, the relevant government agencies should work to stop money leaks, theft, and diversion since each of these causes inflation. Also, since increase in exchange rate showed significant negative impact on economic growth, government should work toward improving the value of naira by encouraging local production of good and services. The government needs to also should increase its level of spending to foster growth. Emphasis should be strongly placed on infrastructure development, such as power supply, so that the populace may make use of it to improve output

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