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# MONETARY POLICY AND SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA

Mathias A. Chuba<sup>1</sup> & Lawal D. Yusuf<sup>2</sup>

<sup>1</sup>Department of Economics, Achievers University Owo, Ondo State, Nigeria <sup>2</sup>Department of Economics, Kogi State University Anyigba, Kogi State, Nigeria

\*Corresponding Author: Mathias A. Chuba

Corresponding Author Email: <a href="machuba50@gmail.com">machuba50@gmail.com</a>

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## **ABSTRACT**

Achieving the 2030 sustainable development goals (SDGs) in Nigeria requires sustainable and inclusive economic growth. There is no consensus among economists on the effect of monetary policy on economic growth. The results of previous studies on the effect of monetary policy on economic growth in Nigeria are mixed. The main objective of this paper is to evaluate the effect of monetary policy on economic growth in order to ascertain if monetary policy can be used to achieve SDGs in Nigeria. The effect of monetary policy on economic growth in Nigeria from 1991 to 2020 was evaluated using ordinary least squares regression model. The findings indicated that there is long-run relationship between economic growth and money supply, treasury bill rate and domestic credit provided by banks in Nigeria. The money supply and domestic credit provided by banks had significant positive effect on economic growth; and short-term policy interest rate had significant negative effect on economic growth in Nigeria in line with economic theory. Monetary policy is a veritable tool that can be used to achieve SDGs in Nigeria. Economic growth will increase and SDGs will be achieved in Nigeria if money supply and domestic credit provided by banks are increased and short-term policy interest rate is reduced. Increasing economic growth touches on the objectives of monetary policy of the Central Bank of Nigeria and calls for radical and proactive monetary policy towards achieving SDGs.

**Keywords:** Monetary Policy, Economic Development, Ordinary Least Squares Model, Nigeria

JEL Classification: C01, E52, O11

#### INTRODUCTION

The world leaders present at the 70th Session of the United Nations General Assembly in September 2015, took another historic step when they adopted the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). The 2030 Agenda for Sustainable Development envisions a present and a future that is economically sustainable, socially inclusive and environmentally resilient. This is expressed in the framing of the 17 SDGs, 169 targets and 230 key performance indicators. Stated simply, the SDGs are a universal call to action to end poverty, safeguard the planet and ensure that all people enjoy peace and prosperity by the year 2030 (Orelope-Adefulire, 2020). The comprehensive 17 SDGs adopted to transform the world are: no poverty; zero hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reduced inequality; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace and justice strong institutions; and partnerships to achieve the goal.

Achieving the 2030 SDGs in Nigeria requires sustainable and inclusive economic growth. Economic growth reduces poverty and hunger; improves health and education, affords clean water and sanitation, guarantees decent work; enables responsible consumption and production; guarantees peace and justice strong institutions; among others. Whether monetary policy can be used to achieve SDGs in Nigeria depends on the effect of monetary policy on economic growth.

There is no consensus among economists on the effect of monetary policy on economic growth. In classical view, an increase in the money supply, leads to an increase in the price level, but the real income, the rate of interest and the level of real economic activity remain unaffected (Jhingan, 2003). In Keynesian view, an increase in the money supply, leads to an increase in income, output and employment through a fall in interest rate and an increase in investment (Jhingan, 2003). In monetarists view, an increase in the money supply, leads to an increase in real output in the short run and it is neutral on real output in the long run (Amacher and Ulbrich, 1986).

The results of previous studies on the effect of monetary policy on economic growth in Nigeria are mixed. Adefeso and Mobolaji (2010) and Kareem et al. (2013) found that monetary policy had a significant positive effect on economic growth in Nigeria. John and Udoye (2018) and Omodero (2019) found that monetary policy had no effect on economic growth in Nigeria. Ogbonna and Uma (2017) and Shaibu and Enofe (2021) found that monetary policy had a significant negative effect on economic growth in Nigeria. One is not certain of the effect of monetary policy on economic growth in Nigeria.

The main objective of this paper is to evaluate the effect of monetary policy on economic growth in order to ascertain whether monetary policy can be used to achieve SDGs in Nigeria. This study is significant because it reveals that monetary policy had a significant positive effect on economic growth and it is a veritable tool that the Central Bank of Nigeria can use to achieve SDGs in Nigeria.

This paper consists of five sections. The next section is literature review. Section 3 presents the methodology. The results are discussed in section 4 and conclusions relevant to research findings are drawn in section 5.

#### LITERATURE REVIEW

Beginning from a regime of exchange rate targeting in 1959 under the Bretton Woods system, the framework changed to that of direct monetary targeting in 1973 and indirect monetary targeting from 1991 to date. In the first two regimes, monetary variables were administratively fixed with markets playing no role except to absorb the determined quantities. During direct monetary targeting, the authorities set the interest rate and issue directives to operating banks on sectoral credit allocation while identifying priority sectors. The indirect regime, however, derived from financial liberalisation and is characterised by the use of market based instruments to manage the level of money stock in the system. Accordingly, the CBN fixes the target for monetary aggregates that are consistent with broad macroeconomic objectives while the market determines the cost and flow of capital. Under the indirect regime, the primary policy instrument is the open market operations (OMO) complemented by discount window operations and reserve requirements (Ononugbo, 2012). The mandates of the CBN as specified in the CBN Act of 1958 include: issuing of legal tender currency; maintaining external reserves to safeguard the international value of the currency; promoting monetary stability and a sound financial system; and acting as banker and financial adviser to the Federal Government. Consistent with its legal mandates, the objectives of monetary policy of the CBN since its inception, have been the following: achievement of domestic price and exchange rate stability; maintenance of a healthy balance of payments position; development of a sound financial system; and promotion of rapid and sustainable rate of economic growth and development (Nnanna, 2001).

This section presents different views among economists about the influence of monetary policy on economic growth. In the classical system, the main function of money is to act as a medium of exchange. It is to determine the general level of prices at which goods and services will be exchanged. This relationship between money and the price level is explained in terms of the quantity theory of money. The classical quantity theory of money states that the price level is a function of the supply of money. Algebraically, MV = PT where M, V, P, and T are the supply of money, velocity of money, price level and the volume of transactions (or real total output). The equation tells that the total money supply MV equals the total value of output PT in the economy. Assuming V (the velocity of money) and T (the real total output) to be constant, a change in the supply of money (M) causes a proportional change in the price level (P). The classicists believed that there was always full employment in the economy. An increase in the money supply, according to the classicists, leads to an increase in the price level, but the real income, the rate of interest and the level of real economic activity remain unaffected (Jhingan, 2003: 636).

Keynes believed in the existence of unemployment equilibrium. In a situation of unemployment, Keynes advocated cheap money policy. So when the supply of money is increased, its first effect is on the rate of interest which tends to fall. Given the marginal efficiency of capital, a fall in the rate of interest will increase investment. The increased investment will raise effective demand through the multiplier effect thereby increasing income, output and employment (Jhingan, 2003: 637).

In the monetarists view, when the Fed expands the money supply, individuals and banks find that their nominal money balances are in excess of what they want to hold. Remember that nominal money demand depends primarily on money income according to the quantity theory

equation,  $M^d = kPY$ . Now the Fed increases the money stock from  $M^s_1$  to  $M^s_2$ . At the current level of money income,  $PY_1$ , money supply ( $M^s$ ) exceeds money demand ( $M^d$ ). People attempt to spend their excess cash balances. As they do, the level of money income will tend to rise. This process will continue until people are satisfied with their larger cash balances as a fraction of a larger PY. An increase in Ms will raise money income (PY) from  $PY_1$  to  $PY_2$  (Amacher and Ulbrich, 1986: 292-293). Monetarists believe that the economy will be at full employment in the long-run. In the monetarists view, an increase in money supply will lead to an increase in real output in the short-run. Money supply, according to the monetarists, affects the price level and it is neutral on real output in the long-run.

There are many empirical studies on the effect of monetary policy on economic growth in the developed and developing countries. Senbet (2011) examined the relative impact of fiscal versus monetary actions on output in US from 1959 to 2010 using Granger Causality test and vector autoregressive (VAR) model. The result of the investigation revealed that monetary policy influenced real output better than fiscal policy in the US economy. Osasohan (2014) evaluated the effect of monetary policy on economic growth in the United Kingdom from 1940 to 2012 employing vector error correction (VEC) model. The findings indicated that money supply had a positive effect on economic growth. Starr (2005) determined the effects of monetary policy on output and prices in four core CIS countries (Russia, Ukraine, Kazakhstan, and Belarus) from 1995 to 2003 using the Granger causality approach. The findings showed that there was not enough evidence as to the real effect of monetary policy in the four CIS countries, though the interest rate had a significant effect on the output in Russia. Jawaid et al. (2011) determined the effects of monetary, fiscal and trade policies on economic growth in Pakistan from 1981 to 2009 utilizing cointegration and error correction model (ECM). They found significant positive long-run and short-run relationships between monetary policy (money supply) and economic growth. Lashkary and Kashani (2011) evaluated the effect of monetary variables on economic growth in Iran from 1959 to 2008 employing econometric analysis on a monetarists' approach. They found that money supply had insignificant effect on economic growth.

Montiel et al. (2012) examined financial architecture and the monetary transmission mechanism in Tanzania from 2002M1–2010M9 utilizing both recursive and structural VAR models. They found that monetary policy had no effect on economic growth. Havi and Enu (2014) investigated the relative effectiveness of monetary policy and fiscal policy on economic growth in Ghana from 1980 to 2012 using ordinary least squares (OLS) regression model. They found that money supply had a significant positive impact on economic growth.

Adefeso and Mobolaji (2010) examined the relative effectiveness of fiscal policy and monetary policy on economic growth in Nigeria from 1970 to 2007 using cointegration and ECM. They found a significant positive effect of money supply on economic growth. Kareem et al. (2013) analyzed the effects of fiscal and monetary policies on economic growth in Nigeria from 1998 to 2008 applying OLS regression model and correlation matrix. They found that narrow money and broad money had a significant positive effect on economic growth.

John and Udoye (2018) determined the effect of monetary policy on Nigerian economy from 1995 to 2016 employing OLS regression model. The findings indicated that interest rate, exchange rate, and broad money supply had an insignificant negative effect on economic growth in Nigeria. Omodero (2019) examined the role of money supply in boosting economic growth in Nigeria from 2009 to 2018 using OLS regression technique. The findings revealed that broad

money supply (M2) had insignificant negative effect on real GDP, while total monetary liabilities (M3) and credit to private sectors exerted insignificant positive effect on real GDP. Ogbonna and Uma (2017) examined monetary policy, inflation and economic growth in Nigeria from 1980 to 2016 using Johansen cointegration test and VEC model. They found that money supply, exchange rate, interest rate and inflation rate had significant relationships with economic growth. Broad money supply had a significant negative relationship with economic growth.

Shaibu and Enofe (2021) investigated the relationship between monetary policy instruments and economic growth in Nigeria from 1986 to 2018 using autoregressive distributed lag (ARDL) model. They found that broad money supply had significant negative relationship with economic growth and interest rate had significant positive relationship with economic growth in Nigeria and these results are not in line with economic theory.

The results of previous studies on the effect of monetary policy on economic growth in Nigeria are mixed. Adefeso and Mobolaji (2010) and Kareem et al. (2013) found that monetary policy had significant positive effect on economic growth in Nigeria. John and Udoye (2018) and Omodero (2019) found that monetary policy had no effect on economic growth in Nigeria. Ogbonna and Uma (2017) and Shaibu and Enofe (2021) found that monetary policy had significant negative effect on economic growth in Nigeria. One is not certain of the effect of monetary policy on economic growth and hence on SDGs in Nigeria.

The instruments of monetary policy are of two types: first, quantitative, general or indirect; and second, qualitative, selective or direct. The affect the level of aggregate demand through the supply of money, cost of money and availability of credit (Jhingan, 2003: 616). In evaluating the influence of monetary policy on economic growth, money supply, short-term policy interest rate and domestic credit provided by banks should be included in the model. The previous studies in Nigeria did not include these three variables in economic growth model simultaneously. The previous studies in Nigeria could not determine the effects of money supply, short-term policy interest rate and domestic credit provided by banks on economic growth in Nigeria concurrently. Hence, the previous studies in Nigeria could not determine the relative effectiveness of money supply, short-term policy interest rate and domestic credit provided by banks on economic growth in Nigeria.

# **METHODOLOGY**

## Theoretical Framework of the Study

The theory of monetary policy is the theoretical framework of the study. The instruments of monetary policy are of two types: first, quantitative, general or indirect; and second, qualitative, selective or direct. The affect the level of aggregate demand through the supply of money, cost of money and availability of credit. When the supply of money is increased, its first effect is on the rate of interest which tends to fall. Given the marginal efficiency of capital, a fall in the rate of interest will increase investment. The increased investment will raise effective demand through the multiplier effect thereby increasing income, output and employment. When prices are depressed, the central bank lowers the bank rate. It is cheap to borrow from the central bank on the part of commercial banks. The latter also lower their lending rates. Businessmen are encouraged to borrow more. Investment is encouraged. Output, employment, income and demand start rising and the downward movement of prices is checked. Selective credit controls are used to influence specific types of credit for particular purposes. They usually take the form of changing margin requirements to control speculative activities within the economy. In case

of recession in a particular sector, the central bank encourages borrowing by lowering margin requirements (Jhingan, 2003: 616-617).

## **Model Specification**

This paper employs ordinary least squares regression model. Based on the theoretical framework of the study, gross domestic product, money supply (M<sub>2</sub>), treasury bill rate (short-term policy interest rate) and domestic credit provided by banks are included in the model. The functional form of the model for this study is stated in equation (1) below.

$$GDP = f(BMS, TBR, DCB)$$
 (1)

Where GDP is gross domestic product, BMS is broad money supply, TBR is treasury bill rate, DCB is domestic credit provided by banks and f is functional notation. The long-run relationship between gross domestic product and money supply, treasury bill rate and domestic credit provided by banks are expressed with an ordinary least square (OLS) regression model in equation (2).

$$GDP = \alpha_0 + \alpha_1 BMS + \alpha_2 TBR + \alpha_3 DCB + U_t$$
 (2)

Where  $\alpha_0$  is constant term,  $\alpha_1$ ,  $\alpha_2$  and  $\alpha_3$  are the long run coefficients and  $U_t$  is the residual at time t. The coefficients,  $\alpha_1$ ,  $\alpha_2$  and  $\alpha_3$  measure the long-run effect of a change in money supply, treasury bill rate and domestic credit provided by banks on gross domestic product respectively. Based on the theoretical framework of the study, the coefficients of money supply, domestic credit provided by banks are expected to be positive and the coefficient of treasury bill rate is expected to be negative.

## **Model Estimation Procedure**

The Augmented Dickey-Fuller (ADF) unit root test of Dickey and Fuller (1979) is used to verify whether the variables are non-stationary. The long-run relationships among the variables are verified using the Johansen (1988) cointegration test. The ordinary least squares regression model is estimated in order to determine the long-run relationship between gross domestic product and money supply, treasury bill rate and domestic credit provided by banks. The statistical reliability of the model is tested using R-squared, F-statistic, p-value of F-statistic and Durbin-Watson statistic. The data is analyzed using e-view 9.

# **Source and Description of Data**

The empirical analysis is conducted using annual data. The time span covered is 1991 to 2020. The choice of 1991 as a base year is due to the fact that the use of indirect monetary targeting started in Nigeria in 1991. The choice of 2020 as a terminal year is premised on the fact that the annual time series data of the variables that are used for the study are available up to that year. The gross domestic product at 2010 constant market prices, broad money supply, treasury bill rate and domestic credit provided by banks are used in this study. The gross domestic product and treasury bill rate are used as proxies of economic growth and short-term policy interest rate respectively. All the data, except the data of treasury bill rate are in billions naira. Treasury bill rate is measured in percentage. The data of all the variables are obtained from Central Bank of Nigeria Statistical Bulletin.

## RESULTS AND DISCUSSION

The Augmented Dickey-Fuller unit root test is presented in Table 1. All the variables are non-stationary at levels because ADF test statistic is less than test critical values in absolute terms and p-value of each variable is greater than 5 percent at 1 percent, 5 percent and 10 percent

levels of significance. All the variables are stationary at first differences because ADF test statistic is greater than test critical values in absolute terms and p-value of each variable is less than 5 percent at 1 percent, 5 percent and 10 percent levels of significance. The ADF test indicates that all the variables are of the same order of integration at 1 percent, 5 percent and 10 percent level of significance.

Table 1
Augmented Dickey-Fuller Unit Root Test

Variables	Levels		First Differen	Order of	
	ADF Test Statistic	Prob*	ADF Test Statistic	Prob*	Integration
GDP	-0.4435	0.9743	-5.8453	0.0002	I(1)
BMS	-0.5175	0.8628	-4.2633	0.0064	I(1)
TBR	-2.3351	0.1684	-5.2427	0.0002	I(1)
DCB	-0.5643	0.9735	-5.8453	0.0002	I(1)

Test critical values: 1% level -3.689194

5% level -2.971853 10% level -2.625121

\*Mackinnon (1996) one sided p-values

Source: Author's Computation Using E-view 9.

The Johansen test for cointegration vectors is shown in Table 2. The Trace statistic is greater than 5 percent Critical Value and p-value is less than 5 percent for none and at most 1 hypothesized numbers of cointegrating equations. The Trace statistic is less than 5 percent Critical Value and p-value is greater than 5 percent for at most 2 and at most 3 hypothesized numbers of cointegrating equations. The Trace test denotes rejection of 2 hypothesized numbers of cointegrating equations at 5 percent level. The Trace test indicates 2 cointegrating equations at the 5 percent level. The Max-Eigen statistic is greater than 5 percent Critical Value and p-value is less than 5 percent for none and at most 1 hypothesized numbers of cointegrating equations. The Max-Eigen statistic is less than 5 percent Critical Value and p-value is greater than 5 percent for at most 2 and at most 3 hypothesized numbers of cointegrating equations. The Maximum Eigenvalue test denotes rejection of 2 hypothesized numbers of cointegrating equations at the 5 percent level. The Maximum Eigenvalue test indicates 2 cointegrating equation at the 5 percent level. Both the Trace and Maximum Eigenvalue tests indicate that all the variables are cointegrated or there is long-run equilibrium relationship among them.

Table 2

Johansen Test for Cointegration Vectors

Hypothesized	Trace				Maximum Eigenvalue	
No. of CE (s)	Trace Statistic	0.05 Critical Value	Prob**	Max- Eigen Statistic	0.05 Critical Value	Prob**
None *	74.8953	47.8561	0.0000	39.5417	27.5843	0.0009
At most 1 *	35.3536	29.7971	0.0103	21.1559	21.1316	0.0496
At most 2	14.1978	15.4947	0.0777	14.1075	14.2646	0.0629
At most 3	0.09026	3.84147	0.7638	0.09026	3.84147	0.7638

\*denotes rejection of the hypothesis at the 0.05 level

\*\* Mackinnon- Haug- Michelis (1999) p-values

**Source:** Author's computation using e-view 9.

The ordinary least squares estimates of GDP are presented in table 3. The coefficient of money supply is positive and statistically significant. The money supply has a significant positive effect on gross domestic product. The coefficient of treasury bill rate is negative and statistically significant. The treasury bill rate has a significant negative effect on gross domestic product. The coefficient of domestic credit provided by banks is positive and statistically significant. The domestic credit provided by banks has a significant positive effect on gross domestic

product in Nigeria. The money supply, treasury bill rate and domestic credit provided by banks are effective in influencing economic growth in Nigeria in the long run. The results of this investigation are in tandem with that of Adefeso and Mobolaji (2010) and Kareem et al. (2013) because they found that money supply had a significant positive effect on economic growth Nigeria.

The coefficient of determination is 93.38 percent. This implies that 93.38 percent variation in gross domestic product is explained by money supply, treasury bill rate and domestic credit provided by banks; and 6.62 percent variation in gross domestic product is explained by other factors outside the model. The F-statistic of 122.3065 and p-value of F-statistic of zero percent shows that the overall regression model is statistically significant. The Durbin-Watson statistic is 1.5271 which is approximately equals to 2. This shows that the estimated regression model is free from autocorrelation.

Table 3
Ordinary Least Squares Estimates of GDP

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Variables	Coefficient	Std. Er	cor t-Statistic	Prob.			
С	19.0405	3.4388	5.5369	0.0000			
BMS	4.5152	0.5974	7.5576	0.0000			
TBR	-2.4532	0.5130	-4.7824	0.0001			
DCB	5.0185	2.0492	3.9610	0.0407			
R-squared: 0.9338	F-statistic: 12	22.3065	Prob(F-statistic): 0.0000	D-W: 1.5271			

**Source:** Author's Computation Using É-view 9.

# CONCLUSIONS AND RECOMMENDATIONS

The following conclusions based on research findings are drawn. There is long-run relationship between gross domestic product and money supply, short-term policy interest rate and domestic credit provided by banks in Nigeria. The money supply and domestic credit provided by banks had significant positive effect on economic growth; and short-term policy interest rate had significant negative effect on economic growth in Nigeria in line with economic theory. The money supply, short-term policy interest rate and domestic credit provided by banks are effective in influencing economic growth in Nigeria in the long run. Monetary policy is a veritable tool that can be used to achieve SDGs in Nigeria. In order to increase economic growth and achieve SDGs, money supply and domestic credit provided by banks should be increased and short-term policy interest rate should be reduced. Increasing economic growth touches on the objectives of monetary policy of the Central Bank of Nigeria and calls for radical and proactive monetary policy towards achieving SDGs.

## References

- Adefeso, H. A., & Mobolaji, H. I. (2010). The fiscal-monetary policy and economic growth in Nigeria. *Pakistan Journals of Social Sciences*, 7(2), 137-142.
- Amacher, R. C., & Ulbrich, H. H. (1986). *Principles of macroeconomics*. Cincinnati, Ohio, South-Western Publishing Co.
- Dickey, D. A., & Fuller, W. A. (1979). Distribution of the estimators for autoregressive time series with a unit root. *Journal of the American Statistical Association*, 74(366), 427-431.
- Havi, E. D. K., & Enu, P. (2014). The effect of fiscal policy and monetary policy on Ghana's economic growth: Which policy is more potent? *International Journal of Empirical Finance*, 3(2), 61-75.

- Jawaid, S. T., Quadri, F. S., & Ali, N. (2011). Monetary-fiscal-trade policy and economic growth in Pakistan: Time series empirical investigation. *International Journal of Economics and Financial Issues*, 1(3), 133-138.
- Jhingan, M. L. (2003). *Macro-economic theory* (11<sup>th</sup> revised and enlarged ed.). Delhi, Vrinda Publications (P) Ltd.
- Johansen, S. (1988). Statistical analysis of cointegrating vectors. *Journal of Economic Dynamics and Control*, 12, 231-254.
- John, E. I., & Udoye, O. N. (2018). Effect of monetary policy on Nigerian economy. *Journal of Humanities, Management and Social Sciences*, 1(1), 190-217.
- Kareem, R. O., Afolabi, A. J., Raheemand, K. A., & Bashir, N. O. (2013). Analysis of fiscal and monetary policies on economic growth: Evidence from Nigerian democracy. *Current Research Journal of Economic Theory*, 5(1), 11-19.
- Lashkary, M., & Kashani, H. B. (2011). The impact of monetary variables on economic growth in Iran: A monetarists' approach. *World Applied Sciences Journal*, 15(3), 449-456.
- Monteil, P., Adam, C., & O'Conell, S. (2012). Financial architecture and the monetary transmission mechanism in Tanzania. *CSAE Working Paper*, WPS 03.
- Nnanna, O. J. (2001). Monetary policy framework in Africa: The Nigerian experience. *Central Bank of Nigeria* (pp. 1-13).
- Ogbonna, B. M., & Uma, K. E. (2017). Monetary policy, inflation and economic growth in Nigeria. *International Journal of Research in Management, Economics and Commerce*, 7(10), 126-134.
- Omodero, C. O. (2019). The role of money supply in economic growth enhancement: The case study of Nigeria. *Journal of Business School*, 2(2), 71-78.
- Ononugbo, M. C. (2012). *Monetary policy in developing countries: The case of Nigeria* (Ph. D thesis), Leeds University Business School, The University of Leeds, United Kingdom.
- Orelope-Adefulire, P. A. (2020). Integration of the SDGs into national development planning in Nigeria: A second voluntary national review, published in Nigeria by the office of the Senior Special Assistant to the President on SDGs, OSSAP-SDGs, The Federal Secretariat, Phase II Abuja, Nigeria.
- Osasohan, A. (2014). The impact of monetary policy on the economy of the United Kingdom: A vector error correction model. *European Scientific Journal*, 10(16), 19-42.
- Senbet, D. (2011). The relative impact of fiscal versus monetary actions on output: A vector autoregressive (VAR) approach. *Business and Economics Journal, BET-25*, 1-11.
- Shaibu, I., & Enofe, E. E. (2021). Monetary policy instruments and economic growth in Nigeria: An empirical evaluation. *International Journal of Academic Research in Business and Social Sciences*, 11(5), 864-880.
- Starr, M. A. (2005). Does money matter in the CIS? Effects of monetary policy on output and prices. *Journal of Comparative Economics*, *33*(3), 441-461.