

## Monetary Policy and Economic Growth of Nigeria: Time-Series Evidence from Nigeria (1981-2022)

<sup>1</sup>F. O. C. Osunkwo, <sup>2</sup>Uke, Kalu Ejibe & <sup>3</sup>Omoruyi, Pamela Owamagbe

<sup>1&2</sup>*Economics Department, Abia State University, Uturu- Nigeria.*

<sup>3</sup>*Economics Department, Faculty of Social Sciences, University of Benin, Nigeria.*

Article DOI: 10.48028/ijprds/ijasepsm.v11.i2.02

---

### Abstract

---

The study examined the impact of monetary policy on the economic growth of Nigeria; for the period 1981-2022. The study used Gross Domestic Product as a proxy for economic growth and employed it as the dependent variable; whereas, monetary policy rate, Cash Reserve Ratio, Treasury Bills, and liquidity rate respectively were used as the explanatory variables to measure monetary policy. Hypotheses formulated were tested using Autoregressive Distributed Lagged (ARDL) Bound co-integration test ECM. The study revealed that the Cash reserve ratio (CRR) and Treasury Bill Rate (TBR) were positive and statistically significant on Gross Domestic Product in Nigeria. Monetary Policy Rate (MPR) has a negative and is statistically significant to economic growth in Nigeria. While the Liquidity ratio had a negative and insignificant impact on Gross Domestic Product in Nigeria. The ECM result reveals that the error correction term is negative and statistically significant, and this corroborates and shows evidence of a certain return to the short-run equilibrium in the model. Therefore, the study recommends that monetary authorities should give priority attention to CRR and TBR monetary policy tools as they will produce a more desirable result in terms of economic stabilization.

**Keywords:** *Monetary policy rate, Cash reserve ratio, Liquidity ratio*

---

Corresponding Author: **F. O. C. Osunkwo**

### **Background to the Study**

Monetary policy is certainly every one of the key drivers of economic development through its impact on economic variables. Economic growth is important in an economy because it is anticipated to steer to a discount within the level of poverty, help narrow the inequality gap within the society, create employment moreover and improve livelihoods. The growing importance of monetary policy as opined by Chipote & Makhetha-Kosi (2014) has made its effectiveness in influencing economic growth a priority for most governments. Despite the lack of agreement among economists regarding the operation of monetary policy and the scope of its impact on the economy, Nkoro (as reported in Chipote & Makhetha-Kosi, 2014) noted that there is an intriguingly strong agreement that it has some measure of influence on the economy.

The Nigerian economy for the past decades has been facing myriads of economic challenges such as persistent fiscal imbalances exacerbated by loss-making public enterprises; extensive government intervention in the economy through regulations and restrictions on the private sector and on foreign trade; the low growth rate of income; poor control of inflation; high rate of unemployment; recurring balance of payment crisis and financial repression and the structural resource allocation. Experience shows that the sustained implementation of policies to address such shortcomings does, over time, lead to substantial improvements in economic performance (Falade & Folorunso, 2015).

### **Statement of Problem**

No economy is protected from economic instability such as a high unemployment rate, balance of payment disequilibrium, inflation, unsustainable growth rate, etc. as we experience here in Nigeria. Economic fluctuations in Nigeria with its attendant growth problems can be attributed to some domestic and external factors.

Most of the studies in the monetary concentrate on how monetary policies as a whole affects economic growth without highlighting the policy instruments and examining the extent to which each actually contributed to the growth of the economy. Few works have been done using the monetary policy rate, Cash Reserve ratio, and liquidity rate as proxies for monetary policy of which their empirical findings indicate Interest rate, and monetary policy rate had negative relationships with economic growth while the Cash reserve ratio had a positive relationship with economic growth. Cash Reserve ratio has a positive and significant impact on economic growth while the monetary policy rate interest and liquidity rate on the other hand had a negative but highly significant impact on GDP, (Anowor & Okorie, 2016). Therefore, the problem of this work is to investigate and ascertain the impact of the aforementioned monetary policy tools on the economic growth of Nigeria.

### **Objectives of the Study**

The main objective of this study is to examine the impact of monetary policy on economic growth of Nigeria. The specific objectives include to:

1. To determine the impact of monetary policy rate on economic growth in Nigeria.
2. To examine the effect of Cash Reserve Ratio on economic growth in the Nigeria economy.

3. To ascertain the impact of liquidity ratio on economic growth in Nigeria
4. To evaluate the impact of Treasury Bill Rate on economic growth in Nigeria.

### **Research Questions**

The following research questions will help to achieve the above objective.

- i. What is the relationship between monetary policy rate and economic growth in Nigeria?
- ii. What is the relationship between Cash Reserve Ratio and economic growth in Nigeria?
- iii. To what extent does the liquidity ratio impact on the GDP in Nigeria?
- iv. To what extent does the Treasury Bill Rate impact on economic growth in Nigeria?

### **Research of Hypothesis**

Ho<sub>1</sub>: Monetary policy rate has no effect on economic growth in Nigeria.

Ho<sub>2</sub>: There is no significant relationship between Cash Reserve Ratio and economic growth in Nigeria.

Ho<sub>3</sub>: liquidity ratio has no significant effect on economic growth.

Ho<sub>4</sub>: Treasury Bill Rate has no significant relationship on economic growth.

### **Review of Related Literature**

#### **Conceptual Framework**

The decisions and actions taken by central banks to control the amount of money in circulation and the availability of credit in the economy are referred to as monetary policy. In the current context, the majority of economies use monetary policy efforts to promote economic growth and advance economic momentum. The control of the economy's interest rates is one of the most effective tools for monetary policy that policymakers have at their disposal. According to Bernanke (2020), policy interest rates are used to limit the amount of money available in the economy by limiting the amount of money available as interest rates rise. This lowers the demand for money as the cost of acquiring funds increases.

By modifying interest rates, the need for the central bank to maintain financial reserves, the trade of government securities, and exchange management, the monetary policy has had an impact on Nigeria's money supply (Okorie, Sylvester & Simon-Peter 2019). Bodunrin (2016) distinguished between two monetary policy strategies: contractionary and expansionary monetary policy. The expansionary monetary policy, on the other hand, increases the supply of money and lowers interest rates, whilst the contractionary monetary policy works to reduce the amount of money available and raise interest rates. According to Nwoko, Ihemeje, and Anumadu (2020), the Nigerian government relies on monetary policy to accomplish its macroeconomic aims and objectives, including creating jobs, fostering economic growth and development, regulating the balance of payments, and maintaining cost stability.

#### **Theoretical Framework**

The "quantity theory" of money and the liquidity preference theory were used in the study to explain how monetary policy affects economic growth in Nigeria.

### **The Traditional Perspective on Monetary Policy**

The quantity theory of money serves as the foundation for the traditional economists' (Fisher, 1911) understanding of monetary policy.  $MV = PT$ , or Fisher's equation of exchange, is used to describe the quantity theory of money most frequently.

According to the conventional quantity theory of money, the supply of money affects the level of prices. Mathematically,  $MV=PT$ , where M, V, P, and T stand for money supply, money velocity, price level, and transaction volume (or real total output). According to the equation, the total amount of money in circulation (MV) equals the total amount of economic production (PT). A change in the supply of money (M) results in a corresponding change in the price level (P), presuming V (the velocity of money) and T (the total output) are constant.

### **A Keynesian Approach to Monetary Policy**

Keynesian theory (1936) rejected the direct and proportionate relationship between money and pricing. Both of them concur that the interest rate serves as an indirect means of doing it. They also challenge the notion that because T in the equation of exchange may be considered as fixed, the economy is constantly at or near its natural level of real GDP. They also contest the notion that the rate of money circulation is constant. According to Keynesians, a monetary policy that is more expansive lowers interest rates by expanding the quantity of loanable funds that are accessible through the banking system. Real GDP rises when overall spending on investments and interest-sensitive consumer goods increases when interest rates are low. As a result, monetary policy may have an indirect impact on real GDP (Gali, 2008; Mankiw & Taylor, 2007).

### **The Monetarist Approach to Financial Policy**

A school of thinking called monetarist was founded by Friedman in 1963. This line of thought is a contemporary adaptation of traditional macroeconomics. They created a more nuanced and useful variation of the quantity theory of money. Like any school of thought, Friedman (1963) highlighted that the availability of money was the main element influencing the health of the economy and that an effective monetary policy was necessary to keep it stable. He also believes that the money supply should increase at a fixed rate rather than being controlled and altered by the monetary authority(ies) in order to encourage a constant growth rate. Friedman further asserted that the money supply can be retained in a variety of forms, including cash, bonds, stocks, physical assets, and human capital, since it may be required for purposes other than the anticipated transaction. Each type of this wealth has a varied yield and a distinct characteristic of its own. In the end, these effects will boost overall money demand and boost output.

### **Empirical Studies**

Anowor and Okorie (2016), reexamined the relationship between Nigeria's monetary policy and economic growth using the Error Correction Model technique. It utilized secondary time series information spanning the years 1982 to 2013. The results showed that an increase of one unit in Nigeria's Cash Reserve Ratio (CRR) resulted in an increase of roughly seven units in economic growth. Since monetary policy, among other things, tries to achieve the

macroeconomic objectives of steady economic development and price stability, the result was in line with economic theory.

Ufoeze et al.(2018) investigated how Nigeria's monetary policies affected economic growth. The study examined time-series data from 1986 to 2016. Along with the Ordinary Least Squares method, tests for the unit root and co-integration were also performed. The discovery of the outcome reveals a long-term relationship between the factors. The key finding of this study also showed that the impact of investment, interest rates, and monetary policy rates on economic growth in Nigeria is quite small.

Omodero and Okafor explore how monetary policy tools affected Nigeria's economic development stability from 1998 to 2018 in their paper from 2020. The findings demonstrate that while money supply has a significant beneficial impact on economic growth stability, interest rates and exchange rates have small negative effects and cannot be considered at the 5% level of significance.

Katuala (2020), examined the impact of monetary policy on monetary stability (internal and external) and economic growth in the Democratic Republic of the Congo from 1990 to 2019. Thus, in order to evaluate the empirical characteristics of the Congolese monetary multiplier, the stability and predictability of the multiplier were examined. The structural VAR model (B-SVAR), the ADF unit root, and cointegration were applied. The results displayed the following stylized data: (i) The relationship between the base and the money supply is constant across time. This could be in favor of the multiplier's usage in the DR Congo's monetary and policy targeting; (ii) the shocks to the key rate haven't had the expected effect on economic growth; and (iii) oil prices haven't changed much and (iv) Demand shocks have an impact on the dynamic nature of monetary stability.

Abille and Mpuure in 2020 investigate the significance of monetary policy as a tool for growth in the Ghanaian economy. The investigation covered 1983 through 2017. The cointegration of the variables was examined using the ARDL limits test approach. The results proved the cointegration of the variables. The results also showed that, although having a substantial long-term positive influence on Ghana's economy, the money supply has a sizable short-term negative impact. The loan rate, it was found, had a big positive impact on growth in the short term but a negligible negative impact on growth in the long run.

Marshal (2019) looks at Nigeria's monetary policy transmission channels and economic growth from 1960 to 2016. The investigation used the vector autoregression model. The study made a number of intriguing discoveries. First, the unit root test findings show that, despite the fact that all of the transmission channel variables seem stationary at the first difference, they are all non-stationary at the level. All of the series are therefore of order I (1). Naturally, this allowed the co-integration test to proceed, which demonstrated that Nigeria's monetary policy transmission channels and economic growth have a lasting relationship. Once it was established that the variables under examination are co-integrated, the study went on to estimate the vector autoregressive model. Macroeconomic output in Nigeria and the channels

through which monetary policy is conveyed are highly positively associated in the near term, according to the baseline result of the vector autoregressive model.

Guenichi and Hamdi (2020) examine how the monetary policy decisions of the Tunisian central bank impact both overall and sectoral economic growth. The research used a Vector Error Correction Model to evaluate quarterly data from 2000 to 2018. It is believed that long-term economic growth has a positive correlation with interest rates and a negative correlation with inflation.

Lee Chin (2020), investigates the impact of monetary and fiscal policies on economic growth in Malaysia, Singapore, and Thailand between 1980 and 2017. The autoregressive distributed lag (ARDL) technique was used to discover the long-term connection. Additionally, a number of econometric models, such as the dynamic ordinary least squares technique (DOLS), canonical cointegration regression (CCR), and totally modified least squares method (FMOLS), are employed to verify the robustness. Every model generates trustworthy results; therefore the results are stable and strong. The main findings of this study demonstrate that: (a) interest rates in the three nations studied have a negative impact on economic growth. (b) Government spending in Thailand had a positive impact on economic growth, in contrast to Malaysia and Singapore, where it had a negative impact. (c) The fiscal policy of Thailand performs better than the monetary policies of Malaysia or Singapore. JEL classifications E52, E58, E62, and C01 are used.

Ibrahim, (2019), assessed the impact of Nigeria's monetary policy on economic growth. It used quarterly data between 1986 and 2018. The empirical analysis of the study used the Granger causality test and the Autoregressive Distributed Lag (ARDL) model. The results of the study showed that the monetary policy rate (MPR) had a positive impact on economic growth; however, this effect was not statistically significant. Wide money supply (M2) had a far more positive and statistically significant impact on economic growth in Nigeria as a tool for monetary policy.

In summary, the overall findings of the works reviewed so far indicate that there is somehow a general consensus that there is a direct relationship between monetary policy and economic growth. However, while the robustness of most of the work reviewed could be widely acclaimed, it will be noteworthy that there are some flaws inherent in some others which could somehow hinder the robustness of their results and which this work is intended to correct.

## **Research Methodology**

### **Preamble**

Okpara (2014) ascertain that, the core of any research lies on its methodology since the acceptability and the reliability of the findings depends on the appropriateness of the specified and the analytical tools employed. When models are wrongly or even rightly specified with inappropriate method applied to their analysis, the consequence will be “Spuriousity” of results and hence misleading conclusions.

**Model Specification**

This study will be based on monetary policy variables and its impact on the Gross Domestic Product (GDP) and how it affects the economy of Nigeria at large. To indulge in empirical analysis between the monetary policy and economic growth in Nigeria; Gross Domestic Product (GDP) will be used as endogenous variable while; Cash Reserve Ratio (CRR), Monetary Policy Rate (MPR), Treasury Bill Rate (TBR) and Liquidity Ratio (LQR) will be used as the exogenous variables.

Having highlighted on these variables, our complete macroeconomic model for the determination of long-run impact of monetary policy on economic growth are stated first; in its implicit non stochastic form as shown below:

$$GDP = f(MPR, CRR, TBR, LQR) \dots \dots \dots (1)$$

$$\ln GDP_t = b_0 + b_1 MPR_t + b_2 CRR_t + b_3 TBR_t + b_4 LQR_t + t \dots \dots \dots (2)$$

Where:

- GDP= Gross Domestic Product as proxy for economic growth
- MPR = Monetary Policy Rate
- LQR = Liquidity Ratio
- TBR= Treasury Bill Rate
- CRR = Cash Reserve Ratio

Where;

- $b_0$  = constant term or intercept.
- $b_1, b_2, b_3$  and  $b_4$  = Parameters of the model to estimated
- $U_t$  = Error term (Stochastic term)

A critical evaluation of this system of equation will help us draw conclusion on the long run effect of monetary policy instruments on economic growth.

**Result interpretation**

The summary of the unit root test results for our variables are presented in table 1.

**Table 1:** Stationarity Test Result

Variables	ADF @Level	ADF@ 1 <sup>st</sup> difference	Critical Level 1%	Critical Level 5%	Max lag	Order of Integration
LNGDP	-1.047477	-3.208447	-3.621023	-2.943427	1	I(1)
CRR	-0.280763	-5.794335	-3.621023	-2.943427	1	I(1)
LQR	-1.597936	-3.4906297	-3.621023	-2.943427	1	I(1)
MPR	-3.264184	-8.569458	-3.615588	-2.941145	1	I(0)
TBR	-3.054809	-6.779492	-3.615588	-2.941145	1	I(0)

**Source:** Author's regression output

The result in table 1 shows that the independent variable, Gross Domestic Product (LGDP) is stationary at first difference i.e. integrated of order I(1). The variables Cash Reserve Ratio

(CRR) and Liquidity Ratio (LQR) were stationary at 1<sup>st</sup> difference i.e. integrated of order I(1). Finally, Monetary Policy Rate (MPR) and Treasury Bill Rate (TBR) were stationary at level (Integrated of order I(0). The summarized result presented in table 1 shows that at various levels of significance (1% and 5%). The difference stationary process (DSP) of the statistical package E-views was used to generate the difference state of the variables. Having determined that the variables are integrated of different orders which justify the use of ARDL (bounds test cointegration) for variables.

### ARDL Co-integration / Bound Test

**Table 2:** Bound Test

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	7.781611	10%	2.2	3.09
K	4	5%	2.56	3.49
		2.5%	2.88	3.87
		1%	3.29	4.37
Actual Sample Size	34		Finite Sample: n=35	
		10%	2.46	3.46
		5%	2.947	4.088
		1%	4.093	5.532
			Finite Sample:	
		10%	2.525	3.56
		5%	3.058	4.223
		1%	4.28	5.84

**Source:** Author's regression output

In order to ascertain the existence of a long-run relationship among the variables in equation or model above, the F-statistic (Wald test) for the bounds test (Pesaran, 2001) was computed following the ARDL bounds test. The F-statistic and critical bounds values for testing the null of no cointegrating relationship in table 2. The computed F-statistics of 7.78161 was found to exceed the lower and upper bounds critical value of 2.56 and 3.49 respectively for a significance level of 5%. Therefore, the null hypothesis of no cointegration is rejected. This implies, there exists a long run relationship among the variables.



## ADRL Error Correction Regression

**Table 3:** ADRL Error Correction Regression

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLOG(GDP(-1))	-0.335409	0.137859	-2.432986	0.0717
DLOG(GDP(-2))	-0.211681	0.102342	-2.068377	0.1074
DLOG(GDP(-3))	-0.596698	0.115452	-5.168360	0.0067
DLOG(GDP(-4))	-0.604981	0.120438	-5.023169	0.0074
D(CRR)	0.026358	0.005359	4.918587	0.0079
DLOG(CRR(-1))	0.039324	0.005680	6.923592	0.0023
DLOG(CRR(-2))	-0.007400	0.005898	-1.254647	0.2779
DLOG(CRR(-3))	0.007436	0.004403	1.688954	0.1665
DLOG(CRR(-4))	0.013442	0.004089	3.287339	0.0303
DLOG(MPR)	-0.150432	0.080263	-1.874241	0.1342
DLOG(MPR(-1))	-1.108726	0.112227	-9.879277	0.0006
DLOG(MPR(-2))	-0.827586	0.136506	-6.062658	0.0037
DLOG(MPR(-3))	-0.543544	0.089202	-6.093412	0.0037
DLOG(MPR(-4))	-0.568622	0.089207	-6.374190	0.0031
DLOG(LQR)	0.009179	0.053566	0.171362	0.8723
DLOG(LQR(-1))	0.068602	0.053571	1.280587	0.2696
DLOG(LQR(-2))	-0.126399	0.081374	-1.553316	0.1953
DLOG(LQR(-3))	-0.123690	0.047089	-2.626721	0.0584
DLOG(LQR(-4))	-0.061874	0.038429	-1.610068	0.1827
DLOG(TBR)	0.029886	0.049939	0.598457	0.5818
DLOG(TBR(-1))	0.129615	0.037100	3.493699	0.0250
DLOG(TBR(-2))	0.047971	0.057561	0.833390	0.4515
DLOG(TBR(-3))	0.268627	0.048113	5.583244	0.0050
DLOG(TBR(-4))	0.285424	0.050394	5.663884	0.0048
CointEq(-1)*	-0.024764	0.002416	-10.24948	0.0005
R-squared	0.976954	Mean dependent var	0.194710	
Adjusted R-squared	0.915497	S.D. dependent var	0.103874	
S.E. of regression	0.030196	Akaike info criterion	-4.020790	
Sum squared resid	0.008206	Schwarz criterion	-2.898466	
Log likelihood	93.35343	Hannan-Quinn criter.	-3.638045	
Durbin-Watson stat	2.996239			

**Source:** Author's regression output

From the ECM Regression results in table 3 above, Monetary policy rate (MPR) has a negative and significant relationship at 5% level of significance with Gross Domestic Product (GDP) at lag 1, 2, 3 and 4. Since the relationship is significant, we reject the null hypothesis  $H_{01}$ . Also in Hypothesis  $H_{02}$  Cash Reserve Ratio (CRR) has a positive and significant relationship at 5% level of significance with Gross Domestic Product (GDP) at lag 1 and 4. Since the relationship is significant, we reject the null hypothesis  $H_{02}$ .

Furthermore, in  $H_3$ , Liquidity Ratio (LQR) has an insignificant relationship with Gross Domestic Product (GDP) at all levels. Since the relationship is insignificant, we accept the null hypothesis  $H_3$ . While, Treasury Bill Rate (TBR) has a positive and significant relationship at 5% level of significance with Gross Domestic Product (GDP) at lag 1, 3 and 4. Since the relationship is significant, we reject the null hypothesis  $H_4$ . Also, the result in table 3 reveals that the error correction term is negative and statistically significant and this corroborates and shows evidence of a certain return to the short run equilibrium in the model. The negative value shows that there exists an adjustment speed from short-run disequilibrium towards the long-run equilibrium.

The coefficient of determination ( $R^2$ ) shows that the independent variables explain about 97% of total variation in the dependent variable (GDP). Meanwhile the serial correlation test in table 4 reveals that there is no problem of serial correlation.

**Table 4:** Serial Correlation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	3.345218	Prob. F(2,2)	0.2301
Obs*R-squared	26.17531	Prob. Chi-Square(2)	0.0000

**Source:** Author's regression output

### Discussion of Findings

From the results estimated above in Table 3 Cash reserve ratio (CRR) and Treasury Bill Rate (TBR) were positive and statistically significant, monetary policy rate has a negative and statistically significant to economic growth. While liquidity ratio has a negative and insignificant relationship with economic growth. The implication of the results is that among the monetary policy variables reassessed, it was only monetary policy rate (MPR), Cash reserve ratio (CRR) and Treasury Bill Rate (TBR) that was significant in impacting on economic growth. This showed that as monetary authorities increase the Cash reserve ratio of financial institutions the more effective the money supply will improve economic growth in the Nigerian economy. Finding is in consonance with study of (Anowor & Okorie, 2016) which result revealed that a rise in Cash Reserve Ratio (CRR) leads to higher growth for the Nigerian economy, because it leads to higher economic growth. The Error correction mechanism of the error correction model was negative and statistically significant, implying that a long run relationship exists among the variables. It also showed that if there is short run disequilibrium in economy, in the long run the economy can return to equilibrium with a speed of adjustment.

### Summary of Findings

This research work sought to determine the effect of monetary policy on Economic growth in Nigeria.

The findings from our data analysis revealed and confirmed the following:

1. There is a short run relationship between monetary policy variables and economic growth under the period covered.

2. The Cash Reserve Ratio as one of the monetary policy instruments showed a unit rise lead to an increase in the economic growth in Nigeria.

The finding is in line with (Efanga, Hanson & Umoh, 2020) that result showed that a unit increase in Cash Reserve Ratio (CRR) led to approximately unit increase in economic growth in Nigeria.

### **Conclusion**

The researcher has been able to examine the effect of monetary policy on economic growth in Nigeria. Following the behavioural pattern of the variables, the researcher adopted Autoregressive Distributed Lagged (ARDL) Bound cointegration test ECM and Serial Correlation LM Test in the study. The study shows that monetary policies like MPR, CRR, and TBR are statistically significant to economic growth in Nigeria. While that of LQR shows an insignificant relationship with economic growth. Which also corroborates the work of (Bernite and Benson, 2018) which revealed that monetary policy has a significant effect on economic growth in Nigeria.

### **Recommendations**

In the light of the findings of this study, the following recommendations are considered necessary for short-, medium- and long-term implementations.

1. To fasten up the rate of growth of the Nigerian economy, the government needs to initiate and push forward effective and efficient monetary policy measures via Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), Liquidity Ratio (LQR) and Treasury Bills Rate (TBR) etc.
2. The study recommends that monetary authorities should give priority attention to Liquidity Ratio as it will produce a more desired result in terms of economic stabilization.
3. The study also recommends that there is the need for the Central Bank of Nigeria (CBN) to embark on a comprehensive monitoring of monetary policy instruments and aggregates and place less emphasis on monetary policy rate (MPR) alone. It is important to combine other instruments which the central bank can control effectively like the Cash Reserve Ratio (CRR) and Treasury Bills Rate (TBR) as it is more effective.
4. Finally, It is therefore prudent that in seeking to promote economic growth, Nigeria's banks should be committed to the mission of price stability, as well as improving the regulatory and supervisory frameworks to secure a strong financial sector for efficient intermediation.

## References

- Abille, A. B., & Mpuure, D. M., (2020). Effect of monetary policy on economic growth in Ghana, *Applied Economics Journal, Kasetsart University, Faculty of Economics, Center for Applied Economic Research*. 27(2).
- Anowor, O. F., & Okorie, G. C., (2016). A reassessment of the impact of monetary policy on economic growth: Study of Nigeria, *International Journal of Developing and Emerging Economies*, 4, 82-90.
- Bernanke, B. S., (2020). The new tools of monetary policy. *Am Econ Rev*. 110:943–83. DOI: 10.1257/aer.110.4.943
- Bodunrin, O., (2016). *The impact of fiscal and monetary policy on Nigerian economic growth*, 10.13140/RG.2.2.29718.40005.
- Chipote, P., & Makhetha-Kosi, P., (2014). Impact of Monetary Policy on Economic Growth: A Case Study of South Africa, *Mediterranean Journal of Social Sciences MC SER Publishing, Rome-Italy*, 5 (15), 76-84.
- Fasanya, I. O., Onakoya, A. B. O., & Agboluaje, M. A., (2013). Does monetary policy influence economic growth in Nigeria? *Asian Economic and Financial Review*, 3(5), 635-646.
- Fisher, I., (1911). *The purchasing power of money. 2nd edition*, Macmillan Co: New York.
- Friedman, M., & Meiselman, D., (1963) *The relative stability of monetary velocity and the investment multiplier in the United States, 1897-1958*. In: *Stabilization Policies*, Prentice-Hall, Englewood, 165-268.
- Hénock, K., (2020). *Monetary stability and economic growth in the democratic republic of Congo [Politique Monétaire, Stabilité Monétaire Et Croissance Économique En République Démocratique Du Congo]*, " Working Papers hal-02616124, HAL.
- Guenichi, H., & Khalfaoui, H., (2020). The impact of monetary policy on overall and sectoral economic growth: Evidence from Tunisian central bank in crisis periods, *International Journal of Monetary Economics and Finance, Inder science Enterprises Ltd*, vol. 13(5),
- Ibrahim, V., (2019). Monetary policy and economic growth in Nigeria: An autoregressive distributed Lag (ARDL) analysis, *Advances in Social Sciences Research Journal*. 6. 10.14738/assrj.63.6273.
- Nkoro, E., (2005). *The study of monetary policy and macroeconomic stability in Nigeria*, University of Benin. Benin City.

- Nwoko, N. M., IHEMEJE, J. C., & ANUMADU, E., (2020). The impact of monetary policy on the economic growth of Nigeria. *African Research Review*, 10(3), 192-206.
- Okoro, A. S., (2013). Impact of monetary policy on Nigeria economic growth, *Prime Journal of Social Sciences*. 2 (2). 195-199.
- Okorie, D., Sylvester, M. A., & Simon-Peter, D. A. C., (2019). Relative effectiveness of fiscal and monetary policies in Nigeria, *Asian Journal of Social Science Studies*, 2, 1.
- Omodero, C., & Okafor, M., (2020). Monetary policy mechanisms and economic growth stability in Nigeria, *Research in World Economy*. 11. 225. 10.5430.
- Ufoeze, L. O., Odimgbe, S. O., Ezeabalisi, V. N., & Alajekwu, U. B., (2018). Effect of monetary policy on economic growth in Nigeria: An empirical investigation, *Annals of Spiru Haret University Economic Series*, 1, 123-140.