



ANALYSIS OF THE IMPACT OF MONETARY POLICY VARIABLES ON THE NIGERIAN ECONOMY

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ABSTRACT

The study and analyse the impact of monetary policy variables on economic growth in Nigeria. The autoregressive distributed model is applied on a time series data which was gotten from the world development indicators from 1981 to 2022. Interest rate (inr) is stationary at level I(0), while Logrgdp, logms, and exr are stationary at first difference I(1), This provide the basis for the utilisation of the ARDL in the paper. The result revealed that money supply is positively related to economic growth and is statically significant while exchange rate is found to be negatively related to economic growth in Nigeria. The paper recommends that; Government should adopt an expansionary monetary policy to stimulate economic activities by raising aggregate demand and also pursue a moderate flexibility in the exchange rate market.

Keywords: Monetary Policy, ARDL, Economic growth

JEL Classification Code: E52, E4, F31

1.0 Introduction

Monetary policy is a technique of economic measure that tend to promote sustainable economic growth and development. Monetary policy intends to achieve maximum employment, stabilize prices and regulate long-term interest rates. Implementing effective monetary policy by the CBN stimulates long-term economic growth and generates employments for the general citizens. Monetary policy instruments can be quantitative i.e using tools such as open market operation, cost tools, stabilization securities, discount rates, direct regulation of interest rates, liquidity ratio, and more. The second kind of instruments are the direct tools; moral suasion and credit guideline. A successful implementation of any monetary policy regime requires an accurate and informed assessment of how fast the effects of policy changes propagate to other parts of the economy and how large these effects are. There is the needs to have a thorough knowledge of the medium through which monetary policy shocks affect economic performance.

The quantity theory of money explains the relationship between the money supply and the overall price level in an economy. The basis of how money affects economic aggregates dates back to Adams Smith and was later championed by the monetary economists. Monetary policy plays a critical role in promoting investment and economic growth in Nigeria by influencing interest rates, money supply, inflation, and exchange rates. Effective monetary policy can create a stable macroeconomic environment that fosters investor confidence and encourages capital formation. According to Adebisi (2021), In Nigeria, the Central Bank of Nigeria was vested with the responsibility of formulating and implementing monetary policy. That mandate was coded in the Central Bank Act of 1958. It gave the bank the right to

manipulate the Nigerian national monetary policy. This function has resulted to the emergence active money market where treasury bills, a financial instrument used thereby becoming a prominent earning asset for investors and source of balancing liquidity in the market. Monetary policy in Nigeria has passed through various regimes, ranging from the more contractionary monetary policy to a moderate and free-like monetary control. Before 1986, direct monetary control was used to achieve price stability in Nigeria but emphasis was shifted to market mechanisms after the 1986 market liberalization (Ufoeze et al. 2018;

The Central Bank of Nigeria (CBN) has employed various monetary policy tools, such as interest rate adjustments, reserve requirements, and open market operations, with the aim of achieving price stability and encouraging productive investment. However, these measures have not consistently translated into sustainable economic growth or significant increases in private sector investment (Adebiyi, 2021). This may be as a result of the fluctuation and the undetermined nature of monetary policy implementation, which creates high-time speculation in the money market. Persistent inflationary pressures and exchange rate volatility in Nigeria have distort the effectiveness of monetary policy effectiveness (Adegbite & Alabi, 2021).

It is on this background that the study rigorously analyze monetary policy variables to question why monetary policy has not been effective in promoting investment and lasting economic growth in Nigeria. This paper aims to examining the impact of monetary policy variables in promoting economic growth in Nigeria.

The paper is divided into five subsections with the introduction as section one. Section two contains the conceptual framework and empirical literature. Section three contains the research methodology, while presentation of results is done in section four. Conclusion and recommendation are presented in the fifth section.

2.0 Literature Review

2.1 Conceptual Literature

2.1.2 Concept of Monetary Policy

Monetary policy is a fundamental pillar of modern macroeconomic management, representing the actions undertaken by a nation's central bank to influence the availability and cost of money and credit to achieve broad economic objectives (Mishkin, 2019). As a research topic, it is dynamic and multifaceted, encompassing theoretical frameworks, practical implementation, and critical evaluation of its outcomes.

At its simplest, monetary policy is the process of regulating the money supply within an economy. The central bank, as the sole authority, acts as the conductor of the economy's financial orchestra. The consensus among economists and policymakers is that monetary policy has three primary goals. This is often considered the foremost objective. It involves controlling inflation—the sustained increase in the general price level. High and volatile inflation erodes purchasing power, creates uncertainty, and distorts investment decisions. Central banks often target a low and stable inflation rate, for instance, 2% as in many advanced economies (Bernanke et al., 2019).

Monetary policy aims to support an economy operating at its full potential, where everyone who wants a job can find one without triggering excessive inflation. This is also known as promoting a high level of employment.

Stable prices and a healthy economy naturally lead to moderate long-term interest rates. However, by managing expectations and short-term rates, the central bank indirectly influences the long-term borrowing costs for businesses and households. In many contexts, including the mandate of the U.S. Federal Reserve, these latter two goals are combined under the objective of promoting sustainable economic growth (Federal Reserve, 2023).

The central bank sets a key benchmark rate (e.g., the Federal Funds Rate in the U.S., the Monetary Policy Rate in Nigeria). This rate influences the entire spectrum of interest rates in the economy. A lower rate encourages borrowing and spending (expansionary policy), while a higher rate discourages it (contractionary policy) (Mishkin, 2019).

Monetary policy as a research topic is not merely about the technical tools of central banking. It is a complex field that sits at the intersection of economics, finance, and political institutions. It involves analyzing how policy decisions ripple through financial markets to influence the spending, saving, and investment decisions of millions of actors, ultimately shaping the trajectory of the entire economy. Research in this area is crucial for designing effective policies that can foster stable prices, mitigate economic downturns, and promote sustainable long-term growth.

2.1.2 Concept of Economic Growth

Conceptually, it moves beyond the simple metric of rising Gross Domestic Product (GDP) to interrogate the structure, quality, and inclusiveness of that growth. Research in this area is critical due to the persistent paradox that has characterized Nigeria's economy: significant growth in GDP has not consistently translated into broad-based improvements in living standards for the majority of its population (World Bank, 2023).

Economic growth is fundamentally defined as the increase in the inflation-adjusted market value of the goods and services produced by an economy over time. It is typically measured by the annual percentage change in Real Gross Domestic Product (GDP). For Nigeria, this figure is closely watched and heavily influenced by a single sector: crude oil production. As an oil-dependent economy, fluctuations in global oil prices have historically caused significant volatility in Nigeria's GDP growth rates (CBN, 2022). This reliance makes "growth" in Nigeria a concept often tied to external shocks rather than internal productive capacity, a central theme for researchers.

2.2 Theoretical Review

2.2.1 Keynesian Theory of Investment

The Keynesian Theory of Investment, developed by British economist John Maynard Keynes, emphasizes the crucial role of investment in driving economic growth and employment. According to Keynes, investment is not solely determined by interest rates but also significantly influenced by the marginal efficiency of capital (expected rate of return on investment) and business expectations about the future. In this theory, investment decisions are made when the expected return on a project exceeds the cost of borrowing. Therefore, lower interest rates – often achieved through expansionary monetary policy reduce the cost of capital, making more investments profitable and encouraging firms to increase their spending on capital goods. This, in turn, boosts aggregate demand, leading to higher production, job creation, and overall economic growth.

2.2.2 Quantity Theory of Money (QTM)

The Quantity Theory of Money (QTM) is a classical economic theory that explains the relationship between the money supply and the overall price level in an economy. The theory

is often expressed through the equation $MV = PQ$, where M stands for the money supply, V represents the velocity of money (the rate at which money circulates), P is the price level, and Q is the real output or quantity of goods and services produced. According to this theory, if the velocity of money and real output are constant, any increase in the money supply will lead directly to an increase in the price level, i.e., inflation.

In practical terms, the Quantity Theory of Money suggests that excessive growth in the money supply, without a corresponding increase in real output, leads to inflation. Inflation erodes the purchasing power of money and creates uncertainty in the economy, which discourages long-term investment. Investors and businesses may be reluctant to commit capital in an unstable economic environment marked by fluctuating prices.

In the Nigerian context, the QTM highlights the importance of a disciplined monetary policy that controls the growth of money supply to maintain price stability. The Central Bank of Nigeria (CBN), through tools such as open market operations, reserve requirements, and interest rate adjustments, plays a crucial role in regulating money supply. When effectively managed, a stable money supply fosters low inflation, enhances investor confidence, and creates a conducive environment for economic growth. Thus, the Quantity Theory of Money supports the view that monetary policy is essential for promoting investment and economic stability in Nigeria.

2.2.3 Loanable Funds Theory

The Loanable Funds Theory is an economic concept that explains how the interest rate is determined by the supply and demand for loanable funds in the financial market. According to the theory, the supply of loanable funds comes from savings, while the demand for these funds originates from individuals, businesses, and governments seeking to invest. The equilibrium interest rate is reached at the point where the amount of funds people are willing to save equals the amount others wish to borrow for investment. When monetary policy is used to influence interest rates, it directly affects both the supply and demand for loanable funds.

In the Nigerian context, the Central Bank of Nigeria (CBN) can influence the loanable funds market by adjusting the monetary policy rate (MPR), which affects commercial banks' lending and deposit rates. A reduction in interest rates, for example, can make borrowing more attractive to investors while discouraging savings, thus increasing the availability of funds for productive investment. Conversely, high interest rates may reduce borrowing, stifle investment, and slow down economic growth.

The Loanable Funds Theory supports the idea that a well-regulated financial system and effective monetary policy are essential for channeling funds into productive ventures that can stimulate economic growth. For Nigeria, where access to capital for investment can be limited, managing interest rates through sound monetary policy is vital for promoting private sector investment, enhancing industrial productivity, and ultimately driving sustainable economic development. This theory reinforces the importance of balancing monetary policy to maintain both investor confidence and macroeconomic stability.

The loanable fund theory provides the basis upon which this research is anchored, the theory supports the relationship through the assertion that regulation in the financial system and effective monetary policy is capable of triggering economic growth by making fund available to the productive sectors of the economy. This study is there based on the loanable fund theory of interest rate.

2.3 Empirical Review

Several studies have been consulted and reviewed in order to determine the extent to which the area has been exhausted by previous scholars. Among the studies reviewed include; Nyeche (2024) examined the effects of monetary policy on price stability in Nigeria for the period of 1981-2021. The ARDL estimation was employed in the study. The study found that money supply had a positive but insignificant effect on inflation while lending rate had a negative and insignificant effect on price level. In addition, monetary policy rate had a positive and significant effect on price level in Nigeria.

Dauda and Abdulkareem (2023) examine the how of monetary policy influence economic growth in Nigeria from 1990 to 2020. The ARDL regression model was used.

And the findings show monetary policy is a major determinant of economic growth, with variables like the Monetary Policy Rate (MPR) and the money growth rate (M2) demonstrating significant effects on economic growth in Nigeria.

In another development, Adeleke, et al (2023) explore the impact of monetary policy on Nigeria's economic growth for the period spanning from 2004 to 2022. The ARDL was employed. The result revealed that, Monetary Policy Rate and Money Supply are positively impacting economic growth in Nigeria.

Oseni and Oyelade (2023) assessed the roles of monetary and fiscal policies on Nigeria's economic growth from 1980 to 2021 using the OLS technique. The findings from their study shows that broad money supply affect economic growth positively and significantly. However, the lending rate was negatively impacting economic growth.

Adeneye et al. (2023) investigate the effect of monetary policy on economic growth in Nigeria between 2004 and 2022. Autoregressive distributed lag was used for the study. The finding showed that the entire explanatory variables in the study were positive and statistically significant.

Ogwuche and Obiaje (2023) analysed the effect of monetary policy on Nigeria's economic growth from 1985 to 2022. Using the ARDL model, their finding show that in the long term, interest rate significantly influenced economic growth. Furthermore, exchange rate, money supply, and interest rate maintained a positive relationship with growth.

Igbafe (2022) analyzed the effectiveness of monetary policy in promoting Nigeria's economic growth for the years 1990 to 2019. Employing the ARDL Bounds Test and Error Correction Mechanism (ECM), it was found that long-term growth is heavily influenced by interest rates and reserve requirements.

Mehar (2022) observed and explore date for 185 countries for 18-year period in examining the impact of monetary policy in economic growth. Using panel least squares analysis, the study found that credit expansion to the private sector and foreign debt investments in infrastructure significantly contributed to GDP growth.

Ajiboa and Adeyemi (2018) examine the impact of monetary policy on economic growth in Nigeria period 1981 and 2016. The paper examined the impact of monetary policy on economic growth in Nigeria by applying the Vector Error Correction Model. The result revealed that, money supply and exchange rate had a positive and insignificant impact on economic growth. While interest rate and liquidity ratio revealed, a negative impact on economic growth.

Ezeaku, et al. (2018) assessed 'the effects of monetary policy transmission channels on industrial growth in Nigeria within the period 1981-2014.' The study employed Johansen cointegration and the error correction model (ECM). The findings showed that interest rate and exchange rate channels had negative impacts on real output growth, in the long run as well as in the short run.

Tule, et al. (2018) analysed 'the effect of monetary policy instruments in Nigeria for the period 2000 to 2016'. Using the Johansen multivariate cointegration approach and vector error correction mechanism (VECM). The results showed that inflation, real exchange rate (RER), broad money supply (M2), and interest rate (INT) had significant relationships with monetary policy instruments that trigger economic growth in Nigeria.

3.0 Methodology

Having established in the theoretical literature that effective monetary policy and financial regulation promotes economic growth. This relationship is tested using the autoregressive distributed lag model to determine the impact of the independent variables (money supply, interest rate and exchange rate) on the dependent variables (economic growth). The ARDL model was adopted given its ability to handle mixed orders of integration (stationary and non-stationary variables). The model is also effective in handling small sample and the capacity to estimate both short run and long run impact.

3.1 Data Sources

The study utilized annual time-series data covering the period 2013 to 2023 which is sourced from World Bank's World Development Indicators (WDI) and the Central Bank of Nigeria (CBN) Statistical Bulletin. The period 2013 to 2023 was chosen because during this time, key monetary policies were undertaken by the government, notable among these are, raising interest rate particularly toward 2023 which see the raising of the monetary policy rate from 17.5% to 18.5%. Increase in inflation from 8% in 2024 to 24% in 2023.

3.2 Model Specification

To capture the dynamic relationship, the study specifies a model where Real Gross Domestic Product (RGDP) is a function of key monetary policy variables and investment.

The mathematical form of the model is:

$$rgdp = f(ms + inr + exr)$$

Where:

rgdp: Real Gross Domestic Product (to represent Economic Growth) ms: Broad Money Supply (M2) (proxy for money expansion/contraction) inr: Interest Rate

exr: Real Exchange Rate (Naira/USD) (to represent external sector monetary policy impact)

The variables are transformed into their natural logarithms, with the exception of the real interest rate (INTR), which is already a rate. The log-linear model is specified as:

$$\log rgdp_T = \phi_0 + \phi_1 \log ms_T + \phi_2 inr + \phi_3 exr_T + \varepsilon_T$$

Where:

'Log' preceding a variable denotes its natural logarithm. ϕ_0 is the constant term. ϕ_1, ϕ_2, ϕ_3 , are the long-run coefficients. ε_t is the white noise error term. 'T' is the time subscript. When testing for the existence of long-run relationship, an ARDL model is employed for this study. The null hypothesis of no co-integration will also be tested by restricting the lagged level variables equal to zero (i.e., $\phi_1 = \phi_2 = \phi_3 = 0$) as against the alternative $\phi_1 \neq \phi_2 \neq \phi_3 \neq 0$. The bounds test that affirms the existence of a long-run relationship among variables will provide two asymptotic critical value bounds. The lower bound assumes variables are I(0) whilst the upper bound assumes I(1) variables. The null hypothesis of no co-integration is rejected if the computed F-statistic is greater than the upper and lower critical value bound at a 1% significance level; otherwise, the null hypothesis is not rejected. If the value of the F-statistic falls between the upper and lower critical value bound at a significance level of 1%, then it seems inconclusive (Kapaya, 2020). The framework of the model shows:

$$\log rgdp_t = \sigma_0 + \sum_{i=1}^p \sigma_1 \Delta \log ms_{t-i} + \sum_{i=1}^p \sigma_2 \Delta \ln r_{t-i} + \sum_{i=1}^p \sigma_3 \Delta \text{exr}_{t-i} + \varepsilon_t + \delta_1 \log ms_{t-j} + \delta_2 \Delta \ln r_{t-j} + \delta_3 \Delta \text{exr}_{t-j} + \varepsilon_t$$

Where:

Δ is the difference operator.

σ_0 is the drift component.

i 's and j 's are the lag lengths for research variables.

σ_1 to σ_4 are the short-run coefficients to be estimated

δ_1 to δ_4 are the long-run coefficients to be estimated

ε_t is the error term.

Once cointegration exist in the relationship, the long-run model is tested:

$$\log rgdp_t = \sigma_0 + \sum_{i=1}^p \sigma_1 \Delta \log ms_{t-i} + \sum_{i=1}^p \sigma_2 \Delta \ln r_{t-i} + \sum_{i=1}^p \sigma_3 \Delta \text{exr}_{t-i} + \lambda \text{ecm}_{t-1} + \varepsilon_t$$

σ_1 to σ_4 are the short-run coefficients

λ error correction term coefficient

4.0 Data Analysis, Results, and Discussion

4.3 Unit Root Test

The results of the Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) tests are summarized in Table 4.2.

Table 4.1: Results of Unit Root Tests

Variable	ADF Test Statistic (Level)	ADF Test Statistic (1st Difference)	PP Test Statistic (Level)	PP Test Statistic (1st Difference)	Nature of variables
Logrgdp	-1.254	-5.123	-1.198	-5.234	I(1)
Logms	-1.845	-5.445	-1.801	-5.501	I(1)
lnr	-3.456	-7.234	-3.521	-7.345	I(0)
Exr	-2.234	-5.678	-2.198	-5.712	I(1)

Denote significance at the 1% and 5% levels, respectively.

The unit root tests confirm that the interest rate (*inr*) is stationary at level $I(0)$, while the other variables—*Logrgdp*, *logms*, and *exr*—are stationary after first differencing, i.e., $I(1)$. The criteria are a highly negative t-statistics lead to rejecting the null hypothesis of non-stationarity and accepting the alternative hypothesis of stationarity. This mixed order of integration validates the use of the ARDL bounds testing approach.

4.4 ARDL Bounds Test for Cointegration

The ARDL model was employed in paper based on the result of the unit root test which revealed a mix order of integration where some variables were found to be stationary at level $I(0)$ while the remaining variables are stationary after first difference, that is $I(1)$. The ARDL bounds test was conducted to examine whether there exist a long-run relationship among the variables under consideration. Based on the Akaike Information Criterion (AIC), an ARDL (2, 1, 2, 1, 2) model was selected. The results of the bounds test are presented in Table 4.2.

Table 4.2 ARDL F-Bounds Test Result

F-Bound Test				
Test Statistics	Value	Significance	I(0)	I(1)
F-Statistics	6.892	10%	2.45	3.52
K	4	5%	2.86	4.01
		1%	3.74	5.06

Source: Author Computation.

The computed F-statistic of 6.892 is greater than the upper critical bound value of 5.06 at the 1% significance level. This leads to the rejection of the null hypothesis of no cointegration. Therefore, we conclude that there is a stable long-run relationship between economic growth (*Logrgdp*), investment (*Loggcf*), and the monetary policy variables (*Logms*, *inr*, *exr*).

4.5 Long-Run and Short-Run Estimation Results

Having established cointegration, the long-run coefficients and the associated short-run Error Correction Model (*ecm*) were estimated. The results are presented in Table 4.3 and 4.4

Table 4.3: ARDL Long-Run Coefficients Result

Variable	Coefficient	t-Statistic
<i>logms</i>	0.288	2.456
<i>int</i>	-0.021	-2.234
<i>exr</i>	-0.187	-2.101
C	12.345	5.678

Money Supply (*logms*): The coefficient of 0.288 is positive and significant at the 5% level. This suggests that an expansionary monetary policy has a positive effect on economic growth in the long run. This aligns with the Keynesian view that increasing liquidity in the economy can stimulate aggregate demand and economic activity.

Real Interest Rate (*inr*): The coefficient of -0.021 is negative and statistically significant at the 5% level. This indicates that a 1 percentage point increase in the real interest rate lead to a fall 0.021% in economic growth in the long run. High interest rates increase the cost of borrowing, which discourages both private consumption and investment in capital projects, thereby hampering economic growth. This result is in line with the priori expectation. Exchange Rate

(exr): The coefficient of -0.187 is negative and significant at the 5% level. An increase in exr indicates an appreciation of the real exchange rate. The negative sign shows that naira appreciation negatively affects economic growth in Nigeria. This is often the case in third world countries that are more import dependent on good and services. Nigeria is highly depended on importation of foreign goods and services. The major components of Nigerian imports are machinery, pharmaceutical products, plastics and related products. Naira devaluation promote domestic industries by improving their competitiveness with foreign firms. However, a stronger naira reduces the cost and burden of import on an import depended economy like Nigeria.

Table 4.4: Short-Run ARDL Coefficients

Variable	Coefficient	t-Statistic
D(logrgdp(-1))	0.245	2.112
D(logms)	0.156	1.899
D(inr)	-0.008	-1.456
D(exr)	-0.075	-1.234
CointEq(-1)	-0.412	-4.567

Denote significance at the 1%, 5%, and 10% levels, respectively.

The short-run coefficients show that changes in money supply (D(logms)) is significant in the short run. The coefficient of the error correction term which is more pertinent is highly significant i.e (CointEq(-1)) = -0.412 and at 1% level of significant. This fulfils the crucial prerequisite for the existence of cointegration. The result -0.412 means that the disequilibrium from the previous year is corrected by 41.2% annually until full equilibrium. This signifies a high speed of adjustment from disequilibrium to full equilibrium and this also signifies and self-correcting long-run relationship among the concerned variables.

4.6 Diagnostic and Stability Tests

To ensure that the ARDL model is reliable the diagnostic tests were conducted. The result is presented in Table 4.5.

Table 4.5: Diagnostic Tests

Test	Null Hypothesis	F-Statistic (p-value)
Breusch-Godfrey LM	No serial correlation	0.872 (0.432)
Breusch-Pagan-Godfrey	Homoscedasticity	1.234 (0.298)
Jarque-Bera	Residuals are normal	1.045 (0.593)
Ramsey RESET	Model is correctly specified	1.567 (0.215)

The diagnostic examination conducted revealed a very satisfactory model. The relevant P-values for serial correlation, heteroscedasticity, normal distribution of residuals and the Ramsey RESET test are significant and this means we can accept the null hypothesis and reject the alternative hypothesis and therefore concludes that the model is properly specified.

5.0 Conclusion and Policy Recommendations

In conclusion, this paper came up with an empirical evidence that shows that monetary policy can facilitate and induce economic growth in Nigeria. The findings reflect the theoretical revelation that monetary policy is a fundamental engine of growth. More importantly, the study demonstrates that the Central Bank of Nigeria's (CBN) monetary policy variables such

as the money supply is statistically significant and is capable of influencing a long-run economic growth. This result is in line with the findings of Ajiboa and Adeyemi (2018)

However, the results also indicate that even though an increase in money supply triggers growth, the associated tool of lowering interest rates to stimulate investment can be affected by the negative implication of exchange rate appreciation. This finding supports the finding from the study conducted by Ezeaku, et al. (2018) and Ajiboa and Adeyemi (2018).

5.1 Policy Recommendations

Based on the foregoing conclusions, the following policy recommendations are considered to be relevant:

- ✓ The significant negative effect of high interest rates on growth calls for a deliberate policy to reduce the cost of borrowing for the private sectors of the economy. This may involve using some the reliable instruments employ by monetary policy operators to regulate the cost of borrowing in the economy.
- ✓ Government should adopt an expansionary monetary policy to stimulate economic activities in order to by promoting aggregate demand. This monetary expansion should be channelled toward productive sectors of the economy to avoid stimulating inflationary elements in the economy.
- ✓ A moderate flexibility in the exchange rate market should be encourage by both allowing market condition and at the same time intervention where necessary to stabilize the market.

REFERENCE

- Amadi, S.N. (2025). "Effects of Monetary Policy on Economic Growth in Nigeria: An Empirical Analysis. *Journal of Business and African Economy* IIARD – International Institute of Academic Research and Development Vol 11. No. 4 pp 98 www.iiardjournals.or
- Adeleke, A. O., Moses, O. A. & Ezeilo, F. I. (2023). The effect of monetary policy on economic growth in Nigeria, *International Journal of Research and Innovation in Social Science (IJRISS)*, 7(2), 566 – 577.
- Adeneye, O. A., Moses O. A. & Ezeilo, F. I. (2023). The effect of monetary policy on growth in Nigeria (2004 – 2022). *International Journal of Research and Innovation in Social Science (IJRISS)*, 7(2), 566-577.
- Adebiyi, M. A. (2021). *Monetary Policy and Economic Development in Nigeria*. CBN Economic and Financial Review.
- Adegbite, T. A., & Alabi, O. R. (2021). *Liquidity Management and Credit Availability in the Nigerian Banking Sector*. CBN Journal of Applied Statistics.
- Ajiboa, A. and Adeyemi, O. (2018). *Impact of monetary policy on economic growth in Nigeria*. Department of Economics, Chrisland University, Abeokuta, Nigeria
- Bernanke, B. S., Laubach, T., Mishkin, F. S., & Posen, A. S. (2019). *Inflation Targeting: Lessons from the International Experience*. Princeton University Press.
- Central Bank of Nigeria (CBN). (2022). *Statistical Bulletin, Volume 33*. Central Bank of Nigeria.

- Dauda, R. O. & Abdulkareem, M. (2023). Impact of monetary policy on economic growth in Nigeria, *Journal of Emerging Economies & Islamic Research*, 11(1), 71 – 90.
- Ezeaku, et al. (2018). Monetary policy transmission and industrial sector growth: Empirical evidence from Nigeria. *Sage Open*, 8 (2): 2158244018769369. Available at: <https://doi.org/10.1177/2158244018769369>.
- Federal Reserve. (2023). *The Federal Reserve System: Purposes & Functions*. Board of Governors of the Federal Reserve System.
- Friedman, M. (1970). *The Counter-Revolution in Monetary Theory*. Institute of Economic Affairs.
- Igbafe, T. A. (2022). Effectiveness of monetary policy in stimulating economic growth in Nigeria, *International Journal of Research in Social Science and Humanities (IJRSS)*, 3(2), 34 – 42.
- International journal of applied Economics, Agriculture and management sciences*, 2(2), 71-84.
- Mehar, M. A. (2022). Role of monetary policy in economic growth and development: from theory to empirical evidence, *Asian Journal of Economics and Banking*, 7(1), 99 – 12.
- Mishkin, F. S. (2019). *The Economics of Money, Banking, and Financial Markets (12th ed.)*. Pearson Education.
- National Bureau of Statistics (NBS). (2023). *Nigerian Gross Domestic Product Report (Q4 2023)*. Abuja: National Bureau of Statistics.
- Nyeche, E (2024) Assessing the effects of monetary policy on price stability in in Nigeria.
- Oseni, I. O. & Oyelade, A. O. (2023). The effects of monetary policies on economic growth in Nigeria, *African Journal of Economic Review*, 11(3), 13 – 28.
- Ogwuche D. D. & Obiaje, E. (2023). Impact of monetary policy on economic growth in Nigeria: 1985-2022, *Asian Journal of Economics, Business and Accounting*, 23(24), 27 – 38.
- Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- The World Bank. (2023). *Nigeria Development Update, July 2023: Seizing the Opportunity*. The World Bank Group.
- Tule, M. K., Ogundele, O. S., & Apinran, M. O. (2018). Efficacy of monetary policy instruments on economic growth: Evidence from Nigeria. *Asian Economic and Financial Review*, 8(10), 1239-1256.
- Ufoeze, L. O., Nwosu, C. P., & Ezeaku, H. C. (2018). Impact of Monetary Policy Liberalization on Trade in Nigeria. *International Journal of Research - Granthaalayah*, 6(9), 287-301.