Impact of Cash Reserve Ratio (CRR) On Economic Growth in Nigeria

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I. INTRODUCTION

1.1. Background to the Study

Understanding the major factors, causes and effects of monetary policy on economy growth cannot be overemphasized more especially in Sub-Sahara region of Africa (Bello, Okaro & Okonkwo, 2024). Central banks across the globe monitor and analyze how effective the transmission mechanisms of monetary policy in their respective economies works. This, according to Nadani and Isah (2024), helps the central banks make informed decisions on how to adjust interest rates and liquidity levels to ensure financial stability in the economy. According to Abuka, Alinda, Minoiu and Presbitero (2019), the timing and magnitude of these adjustments are crucial, as they determine how quickly and effectively the central bank's actions will impact the economy. Thus, a deep understanding of the transmission process allows central banks to anticipate and mitigate any potential negative effects or unintended consequences of their policy decisions. In addition, study of this nature becomes important as several arguments have been raised in the literature questioning the effectiveness of monetary policy transmission channels in Nigeria. In fact, studies show that the interest rate channel of the Central Bank of Nigeria (CBN) has been weak over time (Yusuf, Afiemo & Isah, 2022). This prompts other effective channels such as the use of cash reserve ratio (CRR) to be intensified.

Moreover, there is broad agreement on the use of short-term interest rates to impact monetary policy in developed countries with more advanced financial systems. A number of empirical studies indicate that developed countries find that the short-term interest rate works well as a tool for affecting growth and reining in inflation (Egea &Hierro, 2019; Dale, & Haldane, 1995; Boivin, et al., 2010; Bernanke, & Blinder, 1992; Boivin, et al., 2008). In contrast, developing countries which are subject to poor regulatory systems and weak financial markets in the transmission of monetary policy (Davoodi, et al., 2013), often use the interest rate and the macroprudential measure of cash reserve requirement to curb credit growth and anchor the stability of the financial sector (Primus, 2018). For instance, in Nigeria, the monetary policy rate (MPR) and the CRR and are two significant monetary policy tools used by the CBN. The CRR in particular is considered as an alternative tool for transmitting monetary policy and has been established to be essential for effectively managing the Nigerian economy (Yusuf, et al., 2022). In addition, its ability to complement the MPR, directly impact banking sector liquidity, stabilize financial markets, allow targeted interventions, mitigate external shocks, and enhance monetary policy transmission makes it a valuable instrument for the CBN. By incorporating the CRR into the broader monetary policy framework, the CBN can achieve a more balanced and effective approach to maintaining economic stability and promoting sustainable growth (Nadani & Isah, 2024).

By increasing the cash reserve ratio, the Central bank reduces the amount of available money in banks for lending, which in turn reduces the amount of money in circulation thereby curbing inflation. Invariably, lowering credit reserve ratio can encourage lending and stimulate economic growth.

The high cash reserve ratio in Nigeria rating 50% for deposit money banks and 16% for merchant banks has been a subject of debate, with some experts arguing that it contributes to high interest rates and hinders economic growth by reducing the amount of money available for lending (Adekunle, Fasusi & Oke, 2024).

However, the CBN maintains the current level to manage inflation and maintain financial stability.
Following so many policy trends of the CBN, from 2013 till date, there has been changes on the rates of CRR, MS and MPR. From 12%, 30% and 12% in 2013 to 50% CRR, 30% MS and 27.5% MPR as of May 2025 (CBN, 2025).

1.2 Statement of Problem
Monetary policy is typically the first line of defense against a number of internal and external shocks that these economies are exposed to, so it is important to get it right. However, Emerging African Economies face a number of difficult challenges in designing monetary policy frameworks that work well in terms of promoting monetary and financial stability (Nweke, 2023).

In as much as the performance of CBN in using CRR in Nigeria to sustain economic growth has been encouraging, yet, Nigeria continues to wallow in high inflation and high economic instability. As a result, it seems difficult to really assess the effect of CRR on the Nigeria economy. A number of researches and studies have been done on various aspects of the instruments of the money market in Nigeria but not much have been done on how the use of CRR improves economic growth in Nigeria.

Furthermore, despite the raise in CRR from CBN to banks due to impressive state of the banking sector in Nigeria, there is still crises over surplus liquidity in circulation and high rate of inflation pushing the economy into turmoil as citizens keep complaining of high rise in prices, high unemployment rate and low per capita income. Thus, Nigeria economy is seen as performing below expectation. This research is therefore challenged to a critical study of how CRR can help the Nigerian economy achieve sustainable growth and development.

1.3 Research Objectives
The major objective of this study is to examine the impact of Cash Reserve Ratio (CRR) on economic growth in Nigeria. The specific objectives include to;
1. Examine the effect of Statutory Bank Reserve on economic growth in Nigeria
2. Determine the relationship between Monetary Policy Rate and economic growth in Nigeria
3. Investigate the impact of Money Supply on economic growth in Nigeria

1.4 Research Questions
The following research questions are to guide the study.
1. What is the effect of Statutory Bank Reserve on economic growth in Nigeria?
2. What is the relationship between Monetary Policy Rate and economic growth in Nigeria?
3. Is there any significant impact of Money Supply on economic growth in Nigeria?

1.5 Research Hypotheses
The following research hypotheses are being proposed to guide the study.
H_{01}: There is no significant effect of Statutory Bank Reserve on economic growth in Nigeria
H_{02}: Monetary Policy Rate has no significant relationship with economic growth in Nigeria
H_{03}: Money Supply has no significant impact on economic growth in Nigeria

II. LITERATURE REVIEW

2.1 Conceptual Literature
2.1.1 Concept of Cash Reserve Ratio
Cash reserve ratio is a percentage of a bank's total deposit liabilities that they must keep as a non-interest-bearing deposit with the central bank. The cash reserve ratio is a contractionary monetary policy tool used by the Central bank to manage and control money supply to and influence credit situations in the economy (CBN, 2023).

2.1.2 Concept of Monetary Policy Rate
The Monetary Policy Rate (MPR) is the interest rate at which the Central Bank of Nigeria (CBN) lends to commercial banks. It serves as a guide for commercial banks to determine their interest rates for deposits and loans to their customers or clients (Ishaku & Magaji, 2024).

2.1.3 Concept of Money Supply
According to Mishkin (2019), money supply is "the total quantity of money available in the economy, which plays a central role in influencing inflation, interest rates, and overall economic activity." Central banks, such as the Central Bank of Nigeria (CBN), regulate the money supply using monetary policy

instruments like the cash reserve ratio (CRR), open market operations (OMO), and the monetary policy rate (MPR). Money supply according to the Central bank is separated into broad money supply and narrow money supply.

Broad money supply (M2) is defined by Mishkin (2020) as the total amount of money in an economy that includes cash, demand deposits, and near-money assets that are easily convertible into cash, such as savings deposits and time deposits while narrow money (M1) is defined according to James Chen (2025) is a category of money supply that includes all physical money such as coins and currency, demand deposits and other liquid assets held by a central bank.

2.1.4 Concept of Economic Growth

Growth of the economy is described as the progression of growing the sizes of countries' economy, macroeconomic indicators particularly GDP per capita, systematically and that results to a positive effect on the social-economic sector (Banton, 2020). It's also defined as the increment in country's production which it finally leads to the addition of the income generated nationally. It entails increase in levels of national output which reduces the levels of unemployment and in turn improving the living standards of the residents in a country (Ufoeze, Odimgbe, Ezeabalisi & Alajekwu, 2019).

2.2 Theoretical Literature

2.2.1 Liquidity Preference Theory

According to the liquidity preference theory, the interest rate is one factor that influences the amount of money people decide to keep. The interest rate represents the opportunity cost of saving money, or what you give up by keeping cash or liquid assets, which are not subject to interest rates. As per Keynes' the liquidity preference theory, the equilibrium between the supply and demand of money determines the interest rate which is written as:

$M_d = M_s$ …… (1)

Keynes stated that the money was demanded for three reasons: (i) the transaction, (ii) the precautionary motive (iii) the speculative drive. Consequently, the triple categorization of motivations has been a cornerstone of monetary economics. The following equation represents the demand for money: $M_d = \alpha_1(Y)+\alpha_2(i)$ ……(2)

where M_d represents the money demand. α_1 (Y), which represents transactions and precautionary motives and both of which rise as income increases. The second factor influencing demand for money is $\alpha_2(i)$, which stands for speculative demand. This demand is a decreasing function of interest rate (i); that is, as interest rate (i) rises, the speculative demand for money decreases. Thus, the rate of interest determines the speculative demand for money. Keynes believed that the monetary authority would exogenously determine the money supply (M), ensuring:

$M_s = M'$ ……..…… (3)

Where Ms is the money supply and M′ is given by the central bank. The money market is in equilibrium when: $M_d = M_s$ which is $\alpha_1(Y)+\alpha_2(i)=Ms$……..(4)

2.2.2 Quantity Theory of Money

The Quantity Theory of Money (QTM) is a classical theory with roots in the works of David Hume (18th century), Jean-Baptiste Say, and later formalized by Irving Fisher in the early 20th century. Fisher's equation of exchange is the most commonly cited in modern economics. The theory emphasizes a direct relationship between the money supply in an economy and the price level of goods and services.

Fisher's Equation: $MV = PT$

Where: M = Money supply

V = Velocity of money (the number of times money changes hands)

P = Price level

T = Volume of transactions (often replaced with real output Y, hence MV = PY)

If V and Y are constant, any change in M (money supply) will lead to a proportional change in P (price level), i.e., inflation. The theory assumes that in the long run, the velocity of money and output are stable, so the money supply is the main driver of price changes. This implies that Changes in Cash Reserve Ratio (CRR) directly affect money supply. When the CRR is increased, banks have to hold more reserves, reducing the money supply, and possibly lowering

inflation but also slowing growth. In contrast, lowering CRR increases money supply, potentially spurring economic activity but risking inflation.

2.3 Empirical Literature

Nadani and Isah (2024) investigated the effectiveness of the Monetary Policy Rate (MPR) and Cash Reserve Ratio (CRR) as policy instruments in Nigeria. A structural VAR model is employed to simulate two distinct models measuring shocks from the MPR and the CRR using monthly data from January 2006 to December 2023. Findings show that contractionary monetary policy impulses using MPR and the CRR contract output and credit to the private sector, inflation remains largely positive in the two models, known as the "price puzzle", but the puzzle is more persistent in the MPR equation. Moreover, shock to MPR strongly influences short-term interest rates (treasury bill rate) only within 3 months. This is similar to the impact of CRR on banks' reserves which remains positive for the latter part of the horizon. Thus, the study concludes that the MPR exhibits a rapid wide-ranging impact on the selected variables, offering a balanced method for controlling credit growth, interest rates, and liquidity. Finally, the study recommends improved focus on supply-side limitations, clear communication between expectations and policy measures, deeper financial markets and alternate funding sources. The study recommended that monetary authorities should reduce reserve ratio so as to reduce interest rates on loan, improve money supply and stabilize the rate of exchange to facilitate enhanced economic activities and economic growth in Nigeria.

Ibrahim, Okaro and Okonkwo (2024) examined the effect of monetary policy on economic growth in Nigeria; evidence from Nigeria, Egypt, South-Africa and Kenya economies. The objective of this study is to investigate the effect of monetary policy in monetary policy rate (MPR), Broad Money Supply (M2), Level of Credit (LOC), Exchange Rate (EXCHR) and Cash Reserve Ratio (CRR) on Economic Growth proxies by Gross Domestic Product (GDP). The study utilizes annual time series data from the World Bank Group statistical reports and the Central Bank statistical bulletin of respective selected countries for the period spanning from (2000 – 2022). The results of unit root test indicated that all the variables in the model are stationary at d (2) second difference which necessitate co-integration test in order to find out if there are long-term relationship between the variables. The Regression results show that Monetary Policy Rate (MPR) has a positive insignificant effect on economic growth of selected emerging African economies. Broad Money Supply (M2) has positive and statistically significant effect on economic growth of selected emerging African economies.

Didigu, et al., (2022) used autoregressive distributed lag (ARDL) and quarterly data covering the period 2007Q1 to 2021Q4 to examine the effect of monetary policy rate on the stability of the Nigerian banking industry. The findings indicate that monetary policy rate in Nigeria and the stability of the banking industry are related over the long term. Moreover, it is discovered that the cash reserve ratio, liquidity ratio, and monetary policy rate all improve the stability of the banking industry.

Utilising sign restriction and monthly data from 2007 to 2020, Yusuf et al., (2022) used a structural vector autoregressive (SVAR) model to examine the effectiveness of the monetary policy rate in the transmission of monetary policy in Nigeria. The MPR's failure to stimulate output or stabilise prices is made clear by the impulse response functions. As per the study's findings, external sector shocks tend to reduce the efficacy of the policy rate in maintaining price stability.

2.4 Literature Gap

Premised on different findings, it is plausible to conclude that the relationship cash reserve ratio and economic growth is mixed and inconclusive, thereby establishing a gap in knowledge. In an attempt to closing the gap in knowledge, this study considered the developing economy of Nigeria for time series of thirty-seven (37) years, spanning from 1986-2023, which prior studies are yet to consider, thereby closing currency/financial period gap.

III. RESEARCH METHODOLOGY

3.1 Research Design

The research designed adopted in this study is Ex-post facto research design. This is ideal for conducting

social research when is not possible or acceptable to manipulate the characteristics of human participant.

3.2 Model Specification

The specification of an appropriate econometric model borders on the prevailing economic circumstance(s) and the availability of economic data relating to the variable(s) being examined (Koutsuoyiannis, 1997). The model for this present study explored cash reserve ratio and its effect on economic growth in Nigeria. The study model is specified as follows

3.2.1

Gross Domestic Product = F (Statutory Bank Reserve, Monetary Policy Rate, Money Supply) ……..(3.1) borrowing the model from Ibrahim and Okaro(2024) which used monetary policy rate, broad money supply M2, level of credit (LOC), exchange rate (EXCHR) and cash reserve ratio (CRR) on GDP.

The above model is modified into the form below for easy estimation

$$GDP_t = \alpha_0 + \alpha_1 SBR_t + \alpha_2 MPR_t + \alpha_3 MS_t + \mu_t \ldots\ldots (3.2)$$

Where:

GDP = Gross Domestic Product

SBR = Statutory Bank Reserve as a proxy for CRR

MPR = Monetary Policy Rate

MS = Money Supply

$\alpha_0 - \alpha_3$= coefficients of independent variables and

μ_t = error term.

Further, the work set out to present an Autoregressive Distributed Lag (ARDL) model of the relationship between selected components of population growth rate and unemployment in Nigeria. The ARDL (p, q)

model is stated as:

$$\Delta GDP_t = \sum_{i=1}^{p} \alpha_i \Delta GDP_{t\text{-}i} + \sum_{i=0}^{q} \alpha_i \Delta SBR_{t-i} + \sum_{i=0}^{q} \alpha_i MPR_{t-i} + \sum_{i=0}^{q} \alpha_i \Delta MS_{t-i} + \sum_{i=1}^{p} \beta_i GDP_{t\text{-}i} + \sum_{i=0}^{q} \beta_i SBR_{t-i} \sum_{i=0}^{q} \alpha_i MPR_{t-i} + \sum_{i=0}^{q} \beta_i MS_{t-i} + \varphi ECT + \varepsilon_t \ldots\ldots (3.4)$$

Where

$$ECT_t = Y_t - \alpha_0 - \sum_{i=1}^{p} \gamma_1 \Delta Y_{t-i} - \sum_{i=0}^{p} \beta_i \Delta X_{t-i} \text{ and}$$

$$\phi = 1 - \sum_{i=1}^{p} \gamma_1 \Delta Y_{t-i} \ldots\ldots (3.5)$$

The Bound test procedure used equations 3.3 and 3.4 into 3.6 as:

$$\Delta Y_t = -\sum_{i=1}^{p-1} \gamma_1 Y * \Delta Y_{t-i} + \sum_{i=0}^{p} \beta_i \Delta X_{t-i} - \rho Y_{t-1} - \alpha - \sum_{i=0}^{p} \delta X_{t-i} + \mu_{it} \ldots\ldots (3.6)$$

Then we test the existence of level relationship as ρ = 0 and $\delta_1 = \delta_2 = \ldots = \delta_k = 0$

where Δ = difference operator, α = the short term coefficient, β = the long run coefficients μ = white noise error term.

3.2.1 Pre-estimation

3.2.1.1 Unit Root Test

To fully explore the data generating process, we first examined the time series properties of model variables using the Augmented Dickey- Fuller test.

The ADF test regression equations with constant are:

$$\Delta Y_T = \alpha_0 + \alpha_1 Y_{T-1} + \sum_{j=1}^{k} a_j \Delta Y_{T-1} + \varepsilon_T \ldots$$

where Δ is the first difference operator ε_T is random error term that is iid k = no of lagged differences Y = the variable. The unit root test is then carried out under the null hypothesis α = 0 against the alternative hypothesis of α < 0. Once a value for the test statistics

$$ADF_\tau = \frac{\hat{\alpha}}{SE(\alpha)} \ldots\ldots (3.8)$$

is computed we shall compare it with the relevant critical value for the Dickey-Fuller Test. If the test statistic is greater (in absolute value) than the critical value at 5% or 1% level of significance, then the null hypothesis of α = 0 is rejected and no unit root is present. If the variables are non-stationary at level form and integrated of the same order, this implies evidence of co-integration in the model.

3.3 Justification of the Model

The use of ARDL test approach is predicated on its several advantages over other cointegration tests such as Engle-Granger and Johansen's cointegration method. Firstly, the ARDL efficiently determines the cointegrating relation in small sample cases (Ghatak & Siddiki, 2001; Tang, 2003), whereas Johansen's method requires large sample for validity. Secondly, other methods requires that the variables must be integrated of the same order before the cointegration

test is carried out, while the ARDL approach can be applied irrespective of whether the regressors are *I(1) and I(0) or mutually* cointegrated, in which the dependent variable must be *I(1).*

3.3.1 Test of Significance

The significance test were tested at 5% level of significance using the coefficients of the independent variables and following the Rule: Reject the Null hypothesis if the t-prob is less than 0.05, otherwise accept the Null hypothesis when t-prob is greater than 0.05 i.e. Reject if t-prob <0.05, Accept if t-prob > 0.05

3.3.2 Test of Hypothesis

The Hypotheses were tested using the probability of f-statistics: Reject the Null hypothesis if the probability of f-statistics is less than the critical value (0.05), otherwise accept the Null hypothesis when critical value (0.05) exceeds probability of f-statistics.

3.4 Source of Data

The data for this study was sourced from the Central Bank of Nigeria Annual Statistical Bulletin (2023) for the period of 1986 to 2023

IV. DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Data Presentation

The data used in this study are; Gross Domestic Product (GDP), Statutory Bank Reserve (SBR), Monetary Policy Rate and Money Supply (MS).

4.1.1 Unit Root Test

Table 4.1: Summary of ADF test results at 5% critical value

VARIABLE	ADF TEST STATISTICS	CRITICAL VALUE 5%	ORDER OF INTEGRATION	DECISION RULE
GDPGR	-4.36110	-2.9434	I (0)	Reject Ho
SBR	-5.44838	-2.9458	I (1)	Reject Ho
MPR	-7.18500	-2.9458	I (1)	Reject Ho
MSGR	-3.27854	-2.9434	I (0)	Reject Ho

Source: Authors computation 2025

From table 4.1 above, Gross Domestic Product Growth Rate (GDPGR), and Money Supply Growth Rate (MSGR), were integrated of order zero (I ~ (0)) as they were stationary at level form. While Statutory Bank Reserve (SBR) and Monetary Policy Rate (MPR) were not stationary at level form, but became stationary after first difference which implies that the variables (SBR) and (MPR) were integrated of order one (I ~ (1)). The decision is based on the fact the ADF statistics that is greater than the ADF critical values at 5%, we reject H_0 and conclude that the variables are stationary. Since the variables are integrated of order one and zero and none of the variables is integrated of order two. We therefore, apply the ARDL bound co-integration test.

4.1.2 ARDL Bound Co-integration Test

A necessary condition for testing for ARDL bound co-integrating test is that each of the variables be integrated of either of order one or zero or both (Pesaran, Shin and Smith, 2001). Since all the variables are integrated of order one and zero, we proceeded to estimate the ARDL bound test. The null hypothesis of ARDL bound co-integration is that the variables are not cointegrated as against the alternative that they are cointegrated. The decision rule is to reject the null hypothesis if the F-statistics is greater than the upper bound critical values at chosen level of significance.

Table 4.2: ARDL Bound Co-integration (5% critical value) Test Result for the models

Model	F-Statistics	K	Significance level	Critical Bound Value	
				10 (Low	11 (Upp
	1.564951	3	5%	2.79	3.67

Source: Author's Computation 2025

From table 4.2 the F-statistics for the model is 1.564951 and is lesser than the upper (I1) bound of 3.67 at 5% level of significance. Thus, we accept the null hypothesis and conclude that there is no long run relationship between cash reserve ratio and economic growth in Nigeria. We procced to estimate the short run and long run ARDL analysis.

4.1.3 Test for Short Run Relationship

Having ascertained that there exists no co-integrating relationship between cash reserve ratio and economic growth in Nigeria, the short run relationship needs to be ascertained.

Table 4.3: Summary of Parsimonious Short Run Relationship Result between cash reserve ratio and economic growth in Nigeria

Summary of Parsimonious Short Run

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDPGR(-1))	-0.119198	0.195295	-0.610347	0.5514
D(GDPGR(-2))	-0.002714	0.184757	-0.014692	0.9885
D(GDPGR(-3))	-0.260232	0.152369	-1.707907	0.1097
D(SBR)	-0.396774	0.261403	-1.517862	0.1513
D(SBR(-1))	-0.303057	0.236127	-1.283451	0.2202
D(SBR(-2))	-0.487011	0.235426	-2.068634	0.0576
D(SBR(-3))	0.707600	0.279746	2.529436	0.0241
D(MPR)	0.285294	0.162931	1.751012	0.1018
D(MPR(-1))	0.429266	0.170732	2.514270	0.0248
D(MPR(-2))	0.732152	0.193985	3.774272	0.0021
D(MPR(-3))	0.400963	0.183297	2.187507	0.0462
D(MSGR)	21.53322	7.119070	3.024724	0.0091
D(MSGR(-1))	-26.11884	7.526607	-3.470200	0.0038
D(MSGR(-2))	-25.82794	8.578736	-3.010693	0.0094
D(MSGR(-3))	-28.68846	6.238348	-4.598727	0.0004
CointEq(-1)*	-0.487713	0.153765	-3.171813	0.0068

Source: Author's Computation 2025

From table 4.3 above; the coefficient of the error correction term (cointEQ) is statistically significant and carries the expected negative sign at 5% level of significant; revealing that a short run relationship exists between cash reserve ratio and economic growth in Nigeria. The speed of adjustment is -0.4877 that is 48.7% of the adjustment to equilibrium of the economic growth is expected to occur in short run.

4.1.4 Test for Long Run Relationship

It's imperative to ascertain the long run relationship that exists between cash reserve ratio and economic growth in Nigeria.

Table 4.4: Summary of Long Run Relationship between cash reserve ratio and economic growth in Nigeria Result

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SBR	0.710670	0.692449	1.026313	0.3222
MPR	-1.166738	0.669257	-1.743333	0.1032
MSGR	86.53491	68.98716	1.254363	0.2302
C	-7.841443	17.99237	-0.435821	0.6696

Source: Author's Computation 2025

4.1.5 Interpretation of Long Run ARDL Result

GDPGR = -7.841443 + 0.710670SBR - 1.166738MPR+ 86.53491MSGR

The long run coefficient from table 4.4 above shows that the joint impact of all exogenous variables (SBR, MPR and MSGR) on the endogenous variable will amount to -7.84 percent; this is on the basis that they are all held at constant. In other word if all the exogenous variables are held at constant it will amount to a negative 7.84% contribution to economic growth in Nigeria.

Statutory Bank Reserve (SBR) possessed a positive relationship with economic growth in Nigeria with

coefficient value of 0.7106 percent; this entailing that on the long run, as Statutory Bank Reserve (SBR) increases by one percent, it causes 0.71 percent increase in economic growth in Nigeria.

Monetary Polic Rate (MPR) possessed a negative relationship with economic growth in Nigeria with coefficient value of -1.1667 percent; this entailing that on the long run, as Monetary Policy (MPR) increases by one percent, it causes a -1.166 percent decrease in economic growth in Nigeria.

Money Supply Growth Rate (SBR) possessed a positive significant relationship with economic growth in Nigeria with coefficient value of 86.534 percent; this entailing that on the long run, as Money Supply Growth Rate (SBR) increases by one percent, it causes 86.534 percent increase in economic growth in Nigeria.

4.2 Test of Hypotheses

The individual test was carried out to test for joint significance of the independent variables on the dependent variable at 5% level using t-probability and t-statistic shown in table 4.5 and 4.6. The rule applied was: If t-probability is greater than the prescribed level of 5% or 0.05, accept the null hypothesis, otherwise reject the null hypothesis when f-probability is less than 0.05.

Ho_1: There is no significant effect of Statutory Bank Reserve on economic growth in Nigeria

Conclusion

From table 4.4 above, the probability of t-stat of SBR was 0.3222, and greater than 0.05 critical values. Thus, we accept the null hypothesis and conclude that Statutory Bank Reserve (CRR) have no statistically effect on Economic Growth in Nigeria

Ho_2: Monetary Policy Rate has no significant relationship with economic growth in Nigeria

Conclusion

From table 4.4 above, the probability of t-stat of MPR was 0.1032, and greater than 0.05 critical values. Thus, we accept the null hypothesis and conclude that Monetary Policy Rate has no significant relationship with economic growth in Nigeria

Ho_3: Money Supply has no significant impact on economic growth in Nigeria

Conclusion

From table 4.4 above, the probability of t-stat of MSGR was 0.2302, and greater than 0.05 critical values. Thus, we accept the null hypothesis and conclude that Money Supply has no significant impact on economic growth in Nigeria

4.3 Discussion of Findings

This study examined the effect of cash reserve ratio on economic growth in Nigeria from 1986 to 2023. However, from the analysis it was discovered that while cash reserve ratio had a relationship with economic growth in the short run, it did not have any significant relationship with economic growth in Nigeria in the long run. This result is consistent in both the ARDL test for long run relationship and the co-integrating bounds test. The study also discovered that Cash reserve ratio had a positive but statistically insignificant impact on economic growth. This conforms to an extent the results of Ibrahim, Okaro and Okonkwo (2024) who examined the effect of monetary policy on economic growth in Nigeria; evidence from Nigeria, Egypt, South-Africa and Kenya economies. However, in the study of Ibrahim, Okaro and Okonkwo (2024), Cash reserve ratio was negative. The finding did not conform to the results of Didigu, et al., (2022) who used autoregressive distributed lag (ARDL) and quarterly data covering the period 2007Q1 to 2021Q4 to examine the effect of monetary policy rate on the stability of the Nigerian banking industry and Nadani and Isah (2024) who investigated the effectiveness of the Monetary Policy Rate (MPR) and Cash Reserve Ratio (CRR) as policy instruments in Nigeria. The findings of the two studies reflect CRR having a positive and significant impact.

V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The following summarizes the result of the research work;

1. Cash Reserve Ratio have a positive and insignificant impact on economic growth in Nigeria.
2. Monetary Policy Rate possessed a negative and insignificant relationship with economic growth in Nigeria
3. Money Supply Growth Rate has a negative and insignificant effect on economic growth in Nigeria

5.2 Conclusion

This study examined the effect of cash reserve ratio on economic growth in Nigeria from 1986-2023. The data used in this study were obtained from Central Bank Annual Statistical Bulletin (2023). These comprises of annual data of the following variables Gross Domestic Product Growth Rate serves as the dependent variables in the model while Statutory Bank Reserve (SBR), Monetary Policy Rate (MPR), and Money Supply Growth Rate serves as the independent variables. The test statistics used in the analysis was; Auto Regressive Distributed Lag (ARDL). The results showed that; Cash Reserve Ratio have a positive and insignificant impact on economic growth in Nigeria; Monetary Policy Rate possessed a negative and insignificant relationship with economic growth; Money Supply Growth Rate has a negative and insignificant effect on economic growth in Nigeria. The study concluded that changes in the Cash Reserve Ratio, Monetary Policy Rate, and Money Supply Growth Rate have not been effective in significantly influencing economic growth in Nigeria from 1986 to 2023, indicating a weak transmission mechanism of monetary policy to the real sector.

5.3 Recommendations

The following recommendations were made from the findings of this research;

1. Strengthen the Monetary Policy Transmission Mechanism

The Central Bank of Nigeria should enhance the effectiveness of monetary policy instruments by addressing structural bottlenecks in the financial system that weaken the transmission of policy changes—such as limited access to credit, poor financial inclusion, and rigid interest rate structures.

2. Adopt a Complementary Fiscal-Monetary Policy Mix

Given the insignificant impact of monetary policy tools alone, the government should coordinate fiscal policy with monetary policy to stimulate investment, infrastructure development, and aggregate demand, thereby improving their joint impact on economic growth.

3. Reassess and Optimize the CRR Policy Framework

Policymakers should review the current implementation of the Cash Reserve Ratio, ensuring that it does not unnecessarily constrain bank lending to productive sectors while still maintaining macroeconomic stability and price control.

4. Promote Financial Sector Reforms to Deepen Credit Access

Reforms aimed at improving credit delivery mechanisms, reducing non-performing loans, and incentivizing lending to the private sector—especially SMEs—will help translate monetary policy adjustments into tangible growth outcomes.

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