Journal of Economic Studies (JES)
Department of Economics,
Nnamdi Azikiwe University, Awka,
Anambra State, Nigeria.
Web: www.nauecojournals.com
ISSN 1119-2259

THE LINK BETWEEN MONEY SUPPLY AND INFLATION: THE EXPERIENCE OF NIGERIA'S ECONOMY

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Abstract
This study investigates the relationship between money supply and inflation in Nigeria from 2004 to 2023, using OLS regression and Granger causality tests with key variables (Money Supply (M2), Consumer Price index (CPI), Gross domestic Product (GDP), Real Effective Exchange Rate (EXR), and Monetary Policy rate (MPR). Results show that money supply significantly raises inflation, while GDP and MPR dampen it, and exchange rate volatility intensifies it. The Granger causality result reveals that inflation drives money supply rather than the reverse, implying monetary expansion in Nigeria is reactive to inflationary pressures. The study concludes that effective inflation control requires proactive monetary policy supported by structural reforms to foster sustainable economic growth.

Keywords: Money Supply, Inflation, Monetary Policy, Exchange Rate, Nigeria, Granger Causality
JEL Classification Codes: E31, E51, E52, C32, O55

1.0 Introduction

The core mandate of the Central Bank of Nigeria (CBN), the monetary policy formulation and implementation arm of the government, is to facilitate the attainment of price stability and to support the overall economic policy of the Federal Government (Section 1, Subsection 1, CBN Act 2007 as amended). However, the major economic policy objective of the government remains the promotion of economic growth and development. Money supply is a fundamental macroeconomic tool used to influence growth in an economy by providing liquidity to ensure active economic activities in both the public and private sectors (Ekpenyong, 2020).

The CBN is often caught in a conundrum of regulating the money in circulation subject to the absorptive capacity of the economy. Maintaining monetary stability has, therefore, remained a major challenge for the monetary policy authority (Doan Van, 2020). Despite the Central Bank of Nigeria's mandate to maintain

price stability through effective regulation of money supply, inflation has remained persistent and volatile in the country. Even during periods of strict monetary policy, inflationary pressures continue to undermine economic stability and erode purchasing power.

In Nigeria, inflation-defined as the persistent increase in general price level- has been a recurrent issue, with periods of hyperinflation, stagflation, and price instability reflecting various factors, including changes in money supply (Salami et al., 2013). One of the key drivers of inflation is money supply, which refers to the total amount of monetary aggregates present in an economy at a specific time (Adeoye, 2011). The composition of monetary aggregates also plays a role. According to the CBN, M1 refers to money in circulation with both the private and public sectors, including demand deposits with banks and non-bank financial intermediaries. M2, the broader measure, includes M1 plus time and fixed deposits with banks and other financial institutions (Ogwuma, 1996).

The paradox of sustained inflation despite monetary interventions raises concerns about the effectiveness of money supply management as a tool for inflation control. Furthermore, the debate among scholars remains unsettled. While some attribute inflation in Nigeria primarily to excessive monetary expansion, others emphasize structural and external factors such as exchange rate volatility, fiscal deficits, and supply shocks. (Adeoye 2017, Osuji 2021)

This lack of consensus has created a policy dilemma for the CBN, which is caught between providing adequate liquidity to stimulate growth and withdrawing liquidity to control inflation. Therefore, the unresolved question of the extent to which money supply drives inflation in Nigeria constitutes the central problem that necessitates this study

This study, therefore, seeks to explore the relationship between money supply and inflation in Nigeria, drawing on theoretical insights and empirical data. Specifically, it examines whether increases in Nigeria's money supply have significantly contributed to inflation and how other factors, such as fiscal policy, exchange rates, and structural economic conditions, have moderated or exacerbated this relationship.

2.1 Theoretical Framework

2.1.1 The Quantity Theory of Money

The Quantity Theory of Money (QTM), attributed to economists like Milton Friedman, provides a foundational framework for understanding the relationship between money supply and inflation. According to this theory, inflation occurs when the money supply grows faster than the real output of the economy. The equation of exchange, expressed as MV = PQ, where M is the money supply, V is the velocity of money, P is the price level, and Q is the real

output, illustrates this relationship. If the velocity of money (V) and real output (Q) remain constant, an increase in the money supply (M) leads to a proportional increase in the price level (P). (Friedman 1983).

In Nigeria, where the velocity of money and economic output can fluctuate due to various factors such as political instability, oil price shocks, and exchange rate volatility, the QTM may not hold in its strictest form (salami 2013). However, it provides a useful starting point for understanding the inflationary pressures linked to monetary expansion.

2.1.2 Monetarist View on Inflation

Monetarists, led by Milton Friedman, argue that inflation is always a monetary phenomenon, resulting from an excessive increase in the money supply relative to the demand for money. Friedman's famous assertion that *"inflation is always and everywhere a monetary phenomenon"* underscores the belief that persistent inflation arises when the growth rate of money supply exceeds the growth rate of real output. According to this view, while short-term fluctuations in prices may be influenced by structural or demand-side shocks, sustained inflation can only be explained by excessive monetary expansion.

Monetarists maintain that when money supply grows faster than the economy's capacity to produce goods and services, excess liquidity fuels aggregate demand, leading to upward pressure on prices. Conversely, when money supply is properly aligned with real economic growth, inflationary pressures are minimized. Thus, the key to achieving price stability lies in controlling the growth of monetary aggregates.

In developing economies such as Nigeria, the monetarist framework remains highly relevant. Excessive expansion of money supply—often driven by deficit financing, credit to government, and weak institutional controls—has been identified as a major driver of inflation (Amassoma, 2018). The monetarist perspective is directly relevant in Nigeria's context. This is because excessive expansion of money supply—often driven by deficit financing, credit to government, and weak institutional controls—has been identified as a major driver of inflation (Ekpenyong, 2020). it provides a theoretical basis for investigating whether Nigeria's inflationary trends are primarily the result of excessive monetary expansion. By testing the link between monetary aggregates (M1, M2) and inflation, the study can assess whether the CBN's management of money supply has been effective in controlling inflation, or whether persistent inflation reflects lapses in monetary discipline.

2.1.3 Structuralist View on Inflation

In contrast to the monetarist perspective, the structuralist school of thought emphasizes the role of supply-side and institutional factors in driving inflation in developing economies. Structuralists argue that inflation in countries

like Nigeria is often caused by structural bottlenecks such as inadequate infrastructure, heavy dependence on oil exports, exchange rate volatility, and weak productive capacity, which exacerbate inflationary pressures even when money supply is controlled.

According to this view, increasing the money supply may not necessarily lead to inflation if structural reforms are in place to enhance productive capacity. For instance, if investments in agriculture and manufacturing increase output, an expanded money supply could stimulate growth without necessarily fuelling inflation. Conversely, in the absence of structural reforms, even moderate increases in money supply can trigger inflation as demand outpaces supply.

The structuralist perspective is applicable in the Nigeria's context, because it highlights why inflation in Nigeria may persist even when the growth of money supply is regulated. Nigeria's inflationary experience cannot be fully explained by monetary factors alone; structural weaknesses such as exchange rate instability, import dependence, and infrastructural bottlenecks also play major roles. Thus, by incorporating structuralist insights, this study acknowledges that inflation in Nigeria may be multi-causal, requiring not just monetary tightening but also deep structural reforms to achieve long-term price stability.

2.1.4 Empirical analysis of Trends in Money Supply, Inflation and Economic Growth in Nigeria

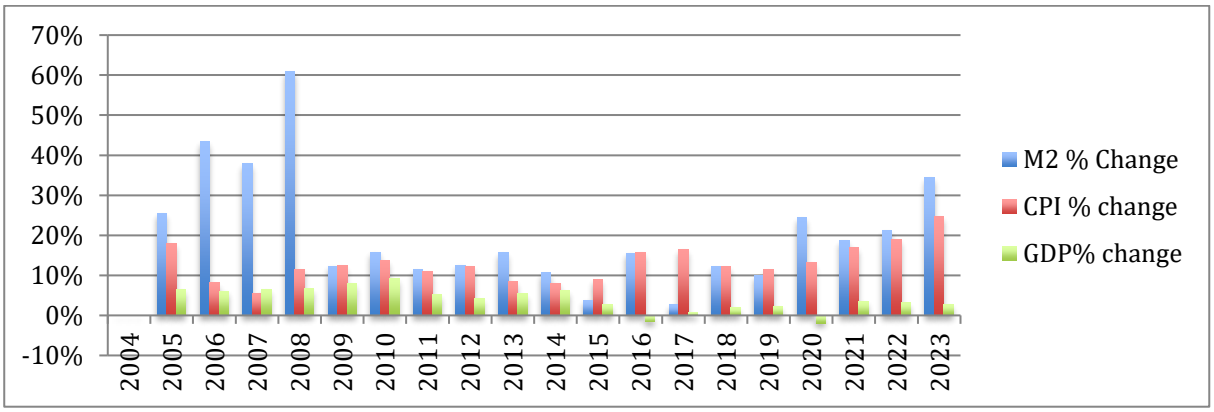

Figure 2.1: Trends in Money Supply, Inflation, and Economic Growth in Nigeria (2002-2023)
Source: CBN statistical Bulletin 2023, Author's Compilation

Figure 2.1 illustrates the trends in money supply (M2), inflation (CPI), and economic growth (GDP) in Nigeria between 2004 and 2023. The choice of 2004 as the base year is significant, as it marked the beginning of major financial sector reforms by the Central Bank of Nigeria (CBN). Notably, the 2004 banking consolidation required all banks to raise their minimum paid-

up capital to ₦25 billion by December 2005 (Donwa & Odia, 2010). In 2006, the CBN also introduced the Monetary Policy Rate (MPR) as a nominal anchor for inflation expectations. Despite these reforms, inflationary pressures persisted, driven by structural constraints such as exchange rate depreciation, fuel price hikes, and recurrent food supply shocks.

As a result of the reforms, money supply expanded markedly, rising from about ₦8 trillion in 2004 to nearly ₦15 trillion in 2006. The sharpest increase occurred between 2007 and 2008, when money supply grew by almost 60%, the highest single-year expansion in Nigeria's monetary history. Figure 2.1 shows that both M2 and inflation trended upward between 2005 and 2023, while real GDP growth exhibited fluctuations, with sharp declines in 2016 (during the recession) and 2020 (COVID-19 pandemic), before stabilizing in later years.

The trend analysis reveals that in most years, money supply growth outpaced inflation, except in 2009, 2015, 2017, and 2019. This pattern indicate that money supply significantly drives short-run inflationary pressures in Nigeria. At the same time, the decoupling of money supply from inflation in some periods reflects the influence of structural factors such as exchange rate volatility and fiscal imbalances on inflation dynamics, in line with the Structuralist view. Thus, while rapid monetary expansion exerts upward pressure on prices in the short run, long-run inflation outcomes in Nigeria appear to be shaped by broader structural and institutional conditions.

2.2 Empirical Literature Review

Empirical studies on the relationship between money supply, inflation and economic growth have produced mixed results. Although there is a convergence of opinion in empirical literature that money supply is a determinant of economic growth in the short-run. However, opinions differ on the short and long run effect of money supply on inflation. While a strand of literature opined that these relationships are significant in the short-run growth, some scholars believe this relationship is prevalent in the long-run.

Osuji (2021) investigated the determinants of money supply in Nigeria between the period 1981-2019. They used Autoregressive Distributed Lag Approach to ascertain the relationship between money supply, inflation rate, GDP growth, monetary base and monetary policy rate. They found that inflation rate, and monetary base are major determinants of money supply both in short and long run.

Ekpenyong (2020) studied the relationship between money supply, inflation and economic growth in Nigeria between 1970-2018. The author used Ordinary Least Square Regression to study the link between real GDP, broad money supply, inflation rate, labour input and interest rate and found that money supply has a direct impact on economic growth, but its effect on inflation is minimal.

Ikezam (2018) investigated the extent to which Money Supply affect Inflation rate in Nigeria. The author used ordinary least square method of Co-integration and Granger causality with a disaggregated time series data of inflation and money supply and found that no long run relationship exists between money supply and inflation, and no granger causal relationship between the variables. Also, money supply has significant relationship with inflation rate in Nigeria in the short-run.

Amassoma, et al., (2018) studied the influence of money supply on inflation in Nigeria between 1970-2016. They used ordinary least square method of Co-integration and Granger causality to investigate the relationship between the variables inflation rate, money supply, exchange rate and Real GDP. Their results showed that money supply does not considerably influence inflation both in the long and short run possibly because the country is in recession. The Granger causality outcome demonstrates that, there is no causality between money supply and inflation in Nigeria within the study period and vice-versa.

Adeoye (2017) investigated Monetary Policy Transmission Mechanism and Macroeconomic Aggregates in Nigeria between 1985-2015. The study applied the Structural Model estimates using the vector Error Correction (VEC) technique to investigate the link between real GDP, Broad Money supply, Inflation rate, real interest rate, Investment and Exchange rate. The study criticized the use of Vector autoregressive Model to investigate the monetary transmission mechanism as lacking policy direction and not a dynamic model. Using VEC, the study found that Money supply and inflation rate are crucial for economic growth. However, a trade-off exists between money supply and inflation rate due to exchange rate shock. A 10% increase in money supply increase real GDP by 13.42%.

Salami (2013) tried to investigate the efficacy of the quantity theory of money that Is inflation always and Everywhere a Monetary Phenomenon in Nigeria? between 1970-2011. They used Autoregressive distributed Lag (ARDL) to study the effect of change in broad money supply, change in real GDP and change in velocity of money on inflation rate. They found that Money supply growth does not influence inflation rate in the long run. Inflation is not always and everywhere a monetary phenomenon.

Doan Van, (2020) investigated the impact of money supply and inflation on economic growth in China and Vietnam between 2012-2016. They used Ordinary Least Square Method of regression and found that Money supply growth has a short run effect on inflation but does not cause inflation in the long run. Money supply causes inflation in developed countries but does not cause inflation in developed countries. Money supply directly affects economic growth in both developed and developing countries.

Masnan et al., (2013) studied the relationship among money supply, economic growth and inflation in Malaysia, Indonesia and Singapore between 1980-2010. They used Regression co-integration test and Granger causality to ascertain the relationship between inflation rate, broad money and Real GDP. They found that there is a long run relationship between money supply, inflation rate and economic growth in the three countries. Using Granger causality, money supply does not cause economic growth in Malaysia. Economic growth causes inflation in the three countries. money supply causes inflation in Malaysia and Singapore but not in Indonesia.

3.0 Methodology

This study relies on secondary data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and the National Bureau of Statistics (NBS) for the period 2004–2023. The variables considered include Money Supply (M2), Inflation Rate (measured by the Consumer Price Index, CPI), Gross Domestic Product (GDP), Real Effective Exchange Rate (REER), and the Monetary Policy Rate (MPR).

Two econometric techniques are employed in the analysis:

1. **Ordinary Least Squares (OLS) Regression**: OLS is used to estimate the relationship between money supply and inflation in Nigeria. The technique is suitable because it provides the Best Linear Unbiased Estimates (BLUE) of the parameters under the classical regression assumptions, thereby allowing the study to measure both the direction and magnitude of the impact of money supply on inflation while controlling for other macroeconomic variables.

2. **Granger Causality Test**: The Granger causality framework is applied to determine the direction of causality between money supply and inflation. This test helps to establish whether changes in money supply precede and cause changes in inflation, or whether inflation itself exerts feedback effects on money supply, thereby clarifying the dynamic interaction between the two variables.

3.1 Regression Model:

The regression model is specified as follows:

$$\text{CPI}_t = \beta_0 + \beta_1 (MS)_t + \beta_2 (GDP)_t + \beta_3 (MPR)_t + \beta_4 (EXR)_t + \varepsilon \qquad (3.1)$$

Where:

CPI= Consumer Price Index

MS = money supply (M2)

GDP = gross domestic product

MPR= Monetary Policy Rate

EXR= Real Effective Exchange Rate

β_0 = constant term

$\beta_1, \beta_2, \beta_3, \beta_4$ = coefficients

ε = error term

Going forward, in order to produce the most appropriate coefficient for the CPI with respect to the independent variable, equation (3.1) was log-linearized. This reduced the problem of multicollinearity and heteroscedasticity while achieving a good fit, which in turn facilitates elasticity estimation and makes the variable appear more symmetric (Gujarati & Porter, 2009).

$$\ln \mathrm{CPI}_t = \beta_0 + \ln \beta_1 (MS)_t + \ln \beta_2 (GDP)_t + \beta_3 (MPR)_t + \beta_4 (EXR)_t + \varepsilon \quad (3.2)$$

Furthermore, this study used Granger causality test to ascertain the direction of causality between money supply and inflation in Nigeria. The reason for this is to test the postulation of the quantity theory that inflation is everywhere a monetary postulation. Critics presumes this causal relationship between money supply and inflation is one sided. Hence, the need to establish the exact direction of these variables as it relates to Nigeria. This will assist policy makers to figure out areas of influence and outcomes after implementation of monetary policies. The granger causality is expressed as follows

$$\ln \mathrm{CPI}_t = \sum_{i=1}^{p} \propto 1_i \ln ms_{t-i} + \sum_{t=1}^{p} \beta_{1_i} \ln cpi_{t-1} + \sum_{t=1}^{p} \Phi 1_i \ln gdp_{t-i} + \mu_{1t} \quad (3.3)$$

$$\ln ms_t = \sum_{i=1}^{p} \propto 1_i \ln ms_{t-i} + \sum_{t=1}^{p} \beta_{1_i} \ln cpi_{t-1} + \sum_{t=1}^{p} \Phi 1_i \ln gdp_{t-i} + \mu_{1t} \quad (3.4)$$

where 'ln' denotes natural logarithm, p is the maximum time length, μ_{1t} is the stochastic error terms (Normally distributed with zero mean and constant variance).

4.0 Result Presentation and Analysis

4.1 Result Presentation

4.1.1 Regression Analysis

The regression results show a significant positive relationship between money supply and inflation (Table 4.1).

$$\ln \mathrm{CPI}_t = 6.659793 + \ln \beta_1 0.905217 - \ln \beta_2 0.852282 + \beta_3 0.052949 + \beta_4 0.002807 + \varepsilon$$

Table 4.1 Regression Result

Variable	Coefficient	Std. Error	t-Statistic	**Prob.**
lnGDP	-0.852282	0.570248	-1.49458	**0.1558**
lnM2	0.905217***	0.16279	5.560629	**0.0001**
MPR	0.052949***	0.012812	4.132898	**0.0009**
EXR	-0.002807	0.002294	-1.22389	**0.2399**
C	6.659793	4.639472	1.435463	**0.1717**
R-squared	0.966903	Mean dependent var		**7.569581**

Adjusted R-squared	0.958077	S.D. dependent var	**0.67929**
S.E. of regression	0.139085	Sum squared resid	**0.29017**
F-statistic	109.5534	Durbin-Watson stat	**1.333165**
Prob(F-statistic)	**0.0000**		

Level of significance* 5%**

Source: Author's Computation (2025)

Evidence from the regression results in Table 4.1 provides insightful details on the determinants of inflation rate in Nigeria. it shows that the overall model fit is statistically significant with the F-test (0.000). The overall performance of the model is relatively high with the adjusted R-square (0.958) implying that 95.6% of the inflation in Nigeria is explained by Money supply, GDP, Real Effective Exchange rate and Monetary Policy.

The result revealed that Money supply (M2) has a positive and significant impact on inflation. This finding aligns with the monetarist view as propounded by Friedman (1963) that "inflation is always and everywhere a monetary phenomenon". It implies that excessive liquidity in the economy fuels demand pressures, thereby causing general price level to increase. Thus, monetary expansion without a corresponding growth in productive capacity translate into higher inflationary pressure.

The monetary policy rate (MPR) also shows a positive and significant effect on inflation. This is in contradiction to the orthodox monetary theory that suggests that higher interest rate should dampen inflation by reducing aggregate demand. However, in the Nigerian context, this positive relationship may be explained by structural rigidities, cost-push factors, and weak monetary transmission mechanisms. Increases in the MPR may raise the cost of borrowing for businesses, leading to higher production costs that are passed on to consumers in the form of higher prices.

The coefficient of real GDP is negative, though statistically insignificant. This suggests that output growth is associated with lower inflation, consistent with supply-side theories that link higher production with reduced price pressures. However, the insignificance of the result may reflect Nigeria's growth pattern, which is often driven by the oil sector and may not translate into broad-based productivity gains capable of moderating inflation.

Similarly, the exchange rate exerts a negative but insignificant effect on inflation. While exchange rate depreciation is generally expected to be inflationary through imported inflation channels, the insignificance in this model may reflect the influence of exchange rate

management policies, multiple exchange rate regimes, or the dominance of domestic structural factors in explaining inflation dynamics in Nigeria.

The Durbin-Watson statistic (1.33) suggests some degree of positive serial correlation, which indicates that inflation persistence remains an issue. This reinforces the view that inflation in Nigeria is not only driven by monetary factors but also by structural and institutional weaknesses.

4.1.2 Granger Causality test

The Granger causality test results in Table 4.2 indicate that money supply Granger-causes inflation

Table 4.2 Granger Causality test

Null Hypothesis:	Obs	F-Statistic	Prob.
lnM2 does not Granger Cause lnCPI	18	1.66930	**0.2263**
lnCPI does not Granger Cause LNM2		6.34113***	**0.012**
lnGDP does not Granger Cause EXR	18	1.64789	**0.2302**
EXR does not Granger Cause lnGDP		0.33662	**0.7202**
lnM2 does not Granger Cause EXR	18	3.69385**	**0.0537**
EXR does not Granger Cause lnM2		0.25883	**0.7758**
MPR does not Granger Cause EXR	18	2.04797	**0.1686**
EXR does not Granger Cause MPR		1.81338	**0.202**
lnGDP does not Granger Cause lnCPI	18	0.27690	**0.7625**
lnCPI does not Granger Cause LNGDP		0.21081	**0.8126**
MPR does not Granger Cause lnCPI	18	1.80211	**0.2038**
lnCPI does not Granger Cause MPR		**4.77279****	**0.0279**

Level of significance 1%* Level of Significance 5%****

Source: Authors Computation (2024)

The direction of causality between money supply and inflation has been widely debated in the literature (Masnan et al., 2013; Amassoma, 2018). To empirically test this relationship in Nigeria, the Granger causality framework was applied. The results in Table 4.2, however, show that we fail to reject the null hypothesis that money supply does not Granger cause inflation. Instead, the reverse causality is established, where inflation Granger causes money supply at the 5% significance level. This suggests that in the Nigerian context, monetary expansion appears to be more of a response to inflationary pressures rather than the primary driver of inflation.

Similarly, the results indicate that inflation Granger causes both the exchange rate and the monetary policy rate, implying that these policy variables are reactive to inflation dynamics. This

finding highlights the predominance of inflation as a leading indicator in Nigeria's macroeconomic environment, shaping both monetary aggregates and policy responses.

4.1.3 Robustness Check

Table 4.3 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey				
F-statistic	0.516018	Prob. F(4,15)		0.7252
Obs*R-squared	2.419201	Prob. Chi-Square(4)		0.6592
Scaled explained SS	**0.965848**	**Prob. Chi-Square(4)**		**0.9149**

As shown in Table 4.3, the Breusch–Pagan–Godfrey test for heteroskedasticity returned an insignificant p-value across all test statistics (F-statistic = 0.516, Prob. = 0.7252; Obs*R^2 = 2.419, Prob. = 0.6592). This indicates that the null hypothesis of homoskedasticity could not be rejected, implying that the residuals are of constant variance. Hence, the OLS estimates are efficient and the reported standard errors are reliable. In the context of this study, the absence of heteroskedasticity strengthens the validity of the regression results, suggesting that the observed relationship between money supply and inflation in Nigeria is not distorted by unequal error variance

Table 4.4 Ramsey RESET Test

Ramsey RESET Test			
Omitted Variables: Squares of fitted values			
	Value	Df	**Probability**
t-statistic	4.486742	14	**0.0005**
F-statistic	20.13085	(1, 14)	**0.0005**
Likelihood ratio	**17.82289**	**1**	**0**

Table 4.4 presents the Ramsey Reset test results, which show significant values for the t-statistic (4.4867, p = 0.0005), F-statistic (p = 0.0005), and likelihood ratio (17.8229, p = 0.0000). These results indicate that the model is mis-specified, likely due to omitted variables, nonlinearities, or missing interaction terms.

4.2 Discussion of Findings

The findings of this study indicate that money supply has a significant short-run impact on inflation in Nigeria, whereas the long-run relationship appears weak or insignificant. This suggests that inflationary pressures in the Nigerian economy are largely driven by short-term changes in monetary aggregates, while in the long run, structural and institutional factors assume a more dominant role in determining price stability.

This outcome is consistent with the results of Ikezam (2018), who found that money supply

significantly affects inflation in the short run but has no long-run impact. Similarly, Amassoma et al. (2018) reported that money supply does not significantly influence inflation in either the short or long run, particularly during recessionary periods, suggesting that structural rigidities may weaken the transmission mechanism of monetary expansion into prices. In contrast, the result diverges from Osuji (2021) and Ekpenyong (2020), who established that money supply and inflation are strongly linked in both the short and long run. This divergence may be attributed to differences in methodological approaches, sample coverage, and the evolving structure of Nigeria's economy- especially in the post-2015 period, which has been characterized by exchange rate volatility and oil price shocks.

Furthermore, the Granger causality test results reveal evidence of unidirectional causality between money supply and inflation in Nigeria. This finding corroborates the works of Masnan et al. (2013) and Doan Van (2020), who documented causality in other developing countries but contrasts with Ikezam (2018) and Amassoma et al. (2018), who also reported no causal relationship. These differences suggest that the money–inflation nexus is not uniform across countries but is instead shaped by domestic economic structures, institutional quality, and policy credibility.

The diagnostic tests provide additional insights. The absence of heteroskedasticity supports the Monetarist view that money supply systematically influences inflation, consistent with Friedman's assertion that inflation is "always and everywhere a monetary phenomenon." However, the Ramsey RESET test indicates possible model mis-specification, aligning with the Structuralist argument that inflation in Nigeria is also shaped by structural factors such as exchange rate misalignments, fiscal imbalances, supply-side shocks, and dependence on oil revenues. Together, these findings suggest that while money supply matters, effective inflation control in Nigeria requires both sound monetary policy and complementary structural reforms.

Overall, the findings demonstrate that monetary expansion contributes to inflationary pressures in the short run, but Nigeria's long-run inflation dynamics are more likely driven by structural constraints such as exchange rate fluctuations, fiscal deficits, and supply-side bottlenecks. This underscores the need for a policy mix that combines prudent monetary management with fiscal discipline, institutional strengthening, and structural reforms that address the underlying drivers of inflation.

5.0 Conclusions and Policy Implication Recommendation

5.1 Conclusion

This study examined the relationship between money supply and inflation in Nigeria using annual data from 2004 to 2023. Employing Ordinary Least Squares (OLS) regression and

the Granger causality test, the findings reveal that money supply (M2) significantly contributes to inflation in the short run, consistent with the Monetarist view that excessive monetary expansion fuels price instability. However, the Granger causality results show that inflation Granger-causes money supply, suggesting that in Nigeria, monetary expansion has largely been reactive to inflationary pressures rather than proactive.

Other macroeconomic variables also played important roles. GDP and the monetary policy rate were found to exert a moderating effect on inflation, while exchange rate volatility significantly amplified inflationary pressures. These outcomes lend support to the Structuralist perspective, which emphasizes that inflation in developing economies such as Nigeria is shaped not only by monetary aggregates but also by structural rigidities, institutional weaknesses, and external shocks.

The study concludes that while money supply matters for inflation dynamics in Nigeria, effective inflation control requires a broader policy approach.

5.2 Recommendations

Based on the findings, the study recommends that the Central Bank of Nigeria strengthen proactive liquidity management and enhance policy credibility. Additionally, government should pursue complementary structural reforms aimed at stabilizing the exchange rate, reducing energy and food supply bottlenecks, and maintaining fiscal discipline. Such a coordinated policy mix will ensure sustained price stability and support Nigeria's long-term economic growth.

5.3 Recommendations for Future Research

The following issues are hereby recommended for further research

1. Investigate the impact of other macroeconomic variables on inflation.
2. Examine the effectiveness of monetary policy instruments in controlling inflation.
3. Conduct a comparative study of inflation experiences in other developing countries.

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