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Effects of Monetary Policies on Stock Market Performance in Nigeria: Further Investigation

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Abstract- ***This study examines the effects of monetary policy instruments on stock market performance in Nigeria over the period 1990–2024. Using the All Share Index (ASI) as a measure of stock market performance, the study employs the Autoregressive Distributed Lag (ARDL) modeling framework to analyze both short-run dynamics and long-run relationships between monetary policy variables and stock market outcomes. The monetary policy variables considered include the monetary policy rate, broad money supply, inflation rate, exchange rate, treasury bill rate, and cash reserve ratio. Unit root test results indicate that the variables are integrated of mixed orders, thereby justifying the application of the ARDL approach. The ARDL bounds test reveals the absence of a stable long-run equilibrium relationship among the variables, suggesting that Nigeria's stock market is more responsive to short-term monetary policy shocks than to long-term policy trends. Short-run results show that changes in money supply, inflation, and interest-related variables significantly influence stock market performance. Diagnostic and stability tests confirm the adequacy and robustness of the estimated model. The study concludes that monetary policy actions in Nigeria primarily affect the stock market through short-run transmission channels, reflecting the market's sensitivity to macroeconomic instability.***

Keywords: Monetary Policy, Stock Market Performance, ARDL, All Share Index, Nigeria.

I. INTRODUCTION

The Stock market is an indicator of an economy financial health. It indicates the mood of investors in a country. As such, stock market development is an important ingredient for growth which plays a crucial role in the economic development of any country by facilitating capital formation, resource allocation, and investment opportunities. A developed stock market provides a lower cost of equity capital for firms and allow individuals to effectively price and hedge risk (Aduda, Masila, & Onsongo, 2012). In Nigeria, the Nigerian Exchange Group (NGX) serves as the main platform for mobilizing long-term funds and reflecting investors' confidence in the economy. The performance of the market is commonly measured using indicators such as the All Share Index (ASI), which tracks aggregate price movements of listed securities over time. However, fluctuations in the ASI often mirror macroeconomic conditions and are highly sensitive to changes in monetary policy (Lawal, Somoye, Babajide, & Nwanji, 2018).

Monetary policy is the major tool used by the Central Bank of Nigeria (CBN) to influence money supply, interest rates, credit availability, and overall economic stability. Its key instruments include the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), Treasury Bill Rate (TBR), Broad Money Supply (M2), Inflation Rate(INF) and Exchange Rate (EXR). These instruments affect the liquidity and profitability of firms and, in turn, influence investors' expectations and stock prices (IIARD, 2024). Theoretically, expansionary monetary policy characterized by increased money supply and lower interest rates tends to boost stock prices, while contractionary policy can dampen investment and reduce market returns (EPRA IJRD, 2019). Consequently, the growing importance of stock market around the world has reinforced the belief that finance is an important ingredient of economic growth and development (Nowbutsing and Odit, 2009).

Empirical evidence from Nigeria, however, presents mixed outcomes. Lawal et al. (2018) found that monetary and fiscal policies significantly influenced the volatility of the Nigerian stock market, with monetary shocks showing asymmetric effects. Similarly, Orekoya (2020) reported that the interaction between government policies and stock market performance depends largely on the coordination of

fiscal and monetary tools. On the other hand, Babangida and Khan (2021) discovered a nonlinear relationship between monetary policy and the stock market using a Smooth Transition Autoregressive (STAR) model, suggesting that the effect of monetary variables on stock performance varies depending on the policy regime. These findings imply that the Nigerian stock market may not react uniformly to changes in policy direction, challenging the assumptions of linear and efficient market behavior.

Despite the growing body of literature, recent evidence indicates that the transmission of monetary policy to stock market performance remains imperfect due to structural weaknesses, policy inconsistency, and limited investor confidence (IIARD, 2024). The Efficient Market Hypothesis (EMH), as discussed by the EPRA IJRD (2019), assumes that asset prices fully reflect available information, but Nigeria's market inefficiencies and information asymmetries often distort this relationship. Thus, monetary policies aimed at prices stabilization or credit expansion may not yield expected outcomes in the capital market.

Given these contradictions, there is a need for further investigation into how monetary policy instruments affect stock market performance in Nigeria, especially through the lens of the All Share Index (ASI), which serves as a comprehensive measure of market activity. This study therefore seeks to empirically examine the *effects of monetary policy variables MPR, M2, INF, EXR, TBR, and CRR on the Nigerian stock market performance (ASI)* using recent data and robust econometric techniques. The study aims to provide updated insights for policymakers, investors, and financial analysts on how monetary adjustments translate into stock market outcomes in the Nigerian context.

The rest of this paper is structured as follows: Section Two reviews relevant theoretical and empirical literature. Section Three discusses the methodology, including model specification and data sources. Section Four presents the results and discussion, while Section Five concludes with policy implications and recommendations.

II. LITERATURE REVIEW

This chapter reviews conceptual, theoretical, and empirical literature relevant to the study on the *Interaction Between Monetary Policies and Stock Market Development in Nigeria* using the All-Share Index (ASI) model. The review focuses on the major channels through which monetary policy instruments influence stock market performance, the theoretical foundations underlying these linkages, and empirical evidence from Nigeria and other economies. The chapter concludes with a synthesis of gaps in existing studies that justify the present research.

2.1 Conceptual Review

The stock market serves as a vital component of any modern economy by providing a platform for mobilizing long-term funds and facilitating efficient capital allocation (IIARD, 2024). The Nigerian Exchange Group (NGX) represents this role in Nigeria, where the All-Share Index (ASI) measures aggregate price movement of listed equities and reflects market-wide performance. Stock market development is often assessed through indicators such as market capitalization ratio, liquidity, and turnover, but the ASI remains the most direct measure of market sentiment and overall performance (Nwakoby & Alajekwu, 2016; EPRA IJRD, 2019).

Monetary policy refers to the deliberate actions by a country's central bank aimed at regulating the supply of money and credit conditions to achieve macroeconomic stability (Mishkin, 2016). In Nigeria, the Central Bank of Nigeria (CBN) deploys several instruments, including the Monetary Policy Rate (MPR), Cash Reserve Ratio (CRR), Treasury Bill Rate (TBR), Broad Money Supply (M2), Inflation Rate (INF), and Exchange Rate (EXR). These instruments influence cost of credit, liquidity, and investment decisions factors that affect stock market valuation through changes in firms' profitability and investors' expectations (Lawal et al., 2018; Babangida & Khan, 2021).

In essence, stock prices and market indices like the ASI adjust to reflect new information about interest rates, liquidity, and macroeconomic conditions. Monetary tightening (higher interest or reserve

requirements) generally suppresses stock prices by increasing discount rates and reducing liquidity, while easing policies (lower rates or higher M2 growth) stimulate equity demand (Orekoya, 2020; IIARD, 2024).

2.2 Theoretical Review

2.2.1 Monetary Policy Transmission Channels and Stock Market Behavior

The literature identifies multiple transmission mechanisms through which monetary policy influences stock prices and the ASI (Mishkin, 2016; Bernanke & Kuttner, 2005; Lawal et al., 2018):

1. Interest Rate (Discount Rate) Channel: Policy rate adjustments affect lending and deposit rates. Higher interest rates increase the cost of capital and discount factors applied to expected corporate cash flows, leading to lower stock valuations and ASI. Conversely, lower rates stimulate equity demand (Patelis, 1997; Thorbecke, 1997).
2. Credit Channel: Tight monetary policy restricts bank lending and worsens credit access for firm's dependent on external finance, reducing output and profitability. The resulting contraction in investment lowers stock market activity (Bernanke & Gertler, 1995; Lawal et al., 2018).
3. Wealth and Tobin's q Channel: Rising asset prices under monetary easing increase household and firm wealth, encouraging further investment and boosting the stock market (Tobin, 1969). Monetary tightening does the opposite by discouraging equity demand.
4. Exchange Rate Channel: Policy-induced exchange rate fluctuations affect firm revenues and competitiveness. Depreciation can benefit exporters but hurt import-dependent firms, influencing ASI differently across sectors (Lawal et al., 2018).
5. Money Supply Channel: Expansionary monetary policy (increasing M2) enhances liquidity and portfolio rebalancing toward equities, thereby raising ASI. Restrictive policy reduces liquidity and dampens investor activity (IIARD, 2024).

2.2.2 Fiscal–Monetary Policy Interaction

The interaction between fiscal and monetary policies has become an essential area of stock market analysis. According to Lawal et al. (2018) and Chatziantoniou et al. (2013), these two policies jointly influence market dynamics through aggregate demand, inflation, and interest rate channels. Excessive fiscal deficits may prompt monetary financing, increase inflation expectations, and undermine the impact of monetary tightening, thereby affecting stock valuations. Similarly, coordinated fiscal–monetary policy can stabilize expectations and reduce uncertainty, which supports capital market performance (Van Aarle et al., 2003).

2.2.3 Asset Pricing and Market Efficiency Theories

The Discounted Cash Flow (DCF) Model and Efficient Market Hypothesis (EMH) underpin the theoretical linkage between monetary variables and stock prices. The DCF model argues that stock price equals the present value of expected future dividends discounted by the required rate of return; hence, changes in interest rates or inflation expectations directly influence equity prices (Mishkin, 2016). The EMH posits that markets instantly incorporate new information, including policy decisions, into stock prices. However, due to informational inefficiencies in developing markets like Nigeria, these effects may be delayed or amplified (EPRA IJRD, 2019).

2.3 Empirical Review

2.3.1 Evidence from Nigeria

Empirical studies on Nigeria generally reveal that monetary policy significantly affects stock market performance, though results differ across variables and methodologies. Lawal et al. (2018) used an ARDL and EGARCH framework covering 1985–2015 and found that both fiscal and monetary policy shocks significantly impact stock market behavior, with monetary volatility influencing stock return volatility. Babangida and Khan (2021) employed a Smooth Transition Autoregressive (STAR) model and confirmed that the effect of monetary policy on ASI is nonlinear, varying between bullish and bearish regimes. Similarly, Nwakoby and Alajekwu (2016) found a long-run co-integrating relationship between monetary policy indicators and ASI, with feedback causality from the ASI to policy variables, suggesting bidirectional linkage.

Studies by Adekunle et al. (2016), Onyeke (2016), and Echekoba et al. (2018) reported mixed results some showing negative effects of MPR or TBR on ASI,

others finding insignificant relationships. IIARD (2024) concluded that while money supply positively influences ASI, excessive inflation and exchange rate instability have adverse effects. Orekoya (2020) found that fiscal tightening and monetary contraction jointly reduce ASI performance, reinforcing the importance of policy coordination.

2.3.2 International and Comparative Evidence

Evidence from developed and emerging economies shows similar but context-dependent results. Thorbecke (1997) and Bernanke and Kuttner (2005) found that unexpected U.S. monetary policy tightening causes negative stock returns. Bjørnland and Leitemo (2009) observed that in inflation-targeting countries, contractionary shocks reduce stock prices significantly.

For emerging markets, Barakat et al. (2016) and Bissoon et al. (2016) documented strong monetary influences on equity returns, but noted that institutional quality and exchange rate regimes modify the strength of transmission. Altintas and Yacouba (2018) and Gacener et al. (2018) emphasized nonlinear responses similar to those found in Nigeria.

2.3.3 Methodological Insights

The reviewed studies used diverse econometric approaches including OLS, VAR/VECM, ARDL, FMOLS, GARCH/EGARCH, STAR, and Markov-switching models. Nonlinearity and volatility modeling have proven critical for capturing asymmetric responses of ASI to policy shocks (Babangida & Khan, 2021). However, most studies fail to simultaneously include all key monetary policy instruments, and few explore joint fiscal monetary dynamics, indicating a methodological gap that the present study addresses.

2.4 Identified Gaps in the Literature

1. Incomplete Variable Coverage: Many Nigerian studies exclude one or more policy instruments (e.g., CRR, TBR), limiting comprehensive analysis of monetary policy impact on ASI.
2. Neglect of Nonlinearity: Linear models often overlook asymmetric behavior of ASI during bull and bear regimes.
3. Lack of Joint Policy Modeling: Limited studies examine fiscal–monetary interactions in explaining stock market fluctuations.
4. Outdated Data Windows: Several works rely on pre-2015 data, excluding recent policy shifts and economic shocks.
5. Feedback Causality Issues: Few studies correct for endogeneity between stock market and monetary policy actions.

2.5 Summary

The reviewed literature shows that monetary policy substantially influences stock market development in Nigeria, but the direction and magnitude of effects vary across instruments and time horizons. Evidence supports the inclusion of multiple policy variables MPR, M2, INF, EXR, TBR, and CRR in modeling ASI. Moreover, nonlinear and volatility dynamics, as well as fiscal–monetary interactions, remain critical yet underexplored. These gaps provide the basis for the present study's econometric framework.

III. RESEARCH METHODOLOGY

3.1 Research Design and Data Description

This study adopts an ex post facto research design, relying on secondary annual time series data to examine the effect of monetary policy on stock market performance in Nigeria. The design is appropriate because it investigates existing relationships among macroeconomic variables without direct manipulation.

The data span 1985–2023 and consist of the All Share Index (ASI), serving as the proxy for stock market performance, and key monetary policy indicators: Monetary Policy Rate (MPR), Broad Money Supply (M2), Inflation Rate (INF), Exchange Rate (EXR), Treasury Bill Rate (TBR), and Cash Reserve Ratio (CRR).

Data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and the Nigerian Exchange Group (NGX) database. Specifically, ASI data were extracted from the *Financial Statistics* section, while monetary variables were sourced from *Monetary Policy Targets and Outcomes* and *Money Market Interest Rates*. The variables were selected in line with

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previous empirical works such as Lawal et al. (2018) and Babangida and Khan (2021).

3.2 Model Specification

The model follows Lawal et al. (2018) and Babangida and Khan (2021), modified for annual data. The functional relationship is specified as:

ASI = f (MPR, M2, INF, EXR, TBR, CRR)

This can be represented in the form of a regression equation:

$\ln(ASI) = \alpha_0 + \beta_1(MPR) + \beta_2(M2) + \beta_3(INF) + \beta_4 \ln(EXR) + \beta_5(TBR) + \beta_6(CRR) + \mu$

where all variables are as defined in Table 3.1. The logarithmic transformation ensures linearity, mitigates heteroscedasticity, and allows elasticity interpretation of coefficients.

Table 3.1: Summary of Variables, Definitions, and Data Sources

Variable	Symbol	Definition/Measurement	Expected Sign	Data Source
All Share Index	ASI	Indicator of stock market performance; measures overall market value of listed equities	Dependent	CBN Statistical Bulletin; NGX
Monetary Policy Rate	MPR	Benchmark interest rate at which CBN lends to commercial banks	–	CBN Statistical Bulletin
Broad Money Supply	M2	Total money supply (currency + demand + quasi-money); expressed in ₦ billions	+	CBN Statistical Bulletin
Inflation Rate	INF	Annual percentage change in the Consumer Price Index (CPI)	±	CBN Statistical Bulletin
Exchange Rate	EXR	Annual average ₦/US$ exchange rate	+	CBN Statistical Bulletin
Treasury Bill Rate	TBR	Interest rate on short-term government securities	–	CBN Statistical Bulletin
Cash Reserve Ratio	CRR	Ratio of bank deposits kept as reserves with the CBN	–	CBN Statistical Bulletin

3.3 Estimation Technique

Given that macroeconomic time series often exhibit mixed orders of integration, the study employs the Autoregressive Distributed Lag (ARDL) Bounds Testing Approach by Pesaran, Shin, and Smith (2001). The ARDL approach accommodates variables integrated of order I(0) and I(1), and provides both short-run and long-run estimates within a single framework. It also provides efficient and unbiased estimates even in small sample studies typical of annual macroeconomic data.

The ARDL model is preferred for this study for three major reasons. First, it allows for the estimation of short-run dynamics and long-run equilibrium relationships within a single equation framework. Second, it automatically corrects for endogeneity through the inclusion of appropriate lags of both dependent and independent variables. Third, it provides flexibility in lag-length selection using model-selection criteria such as the Akaike Information Criterion (AIC), ensuring that the model captures relevant dynamics without over-parameterization.

The existence of a long-run relationship among the variables is tested using the Bounds Test for Cointegration. If the computed F-statistic exceeds the upper bound critical value, the null hypothesis of no long-run relationship is rejected, implying that monetary policy variables and stock market performance move together in the long run.

After confirming cointegration, the study estimates the Error Correction Model (ECM) form of the ARDL to determine the short-run dynamics and the speed of adjustment toward long-run equilibrium.

To ensure the reliability and validity of the ARDL model, several diagnostic and stability tests are

conducted. These include the Breusch–Pagan–Godfrey Heteroskedasticity Test to verify homoskedasticity, the CUSUM and CUSUMSQ tests to assess the stability of the estimated coefficients over time. The model is considered statistically adequate if residuals are well-behaved and stability plots remain within the 5% significance bounds.

3.4 Unit Root Test

Before estimating the long-run and short-run relationships among the study variables, it was necessary to examine their time-series properties to avoid spurious regression results. The Augmented Dickey–Fuller (ADF) unit root test was employed to determine the level of stationarity of each variable. This test evaluates the null hypothesis that a series has a unit root against the alternative that it is stationary. The ADF test was conducted for all variables both in their levels and first differences, with appropriate deterministic components (constant or trend and constant) selected based on the variable's characteristics and visual inspection of the data.

Table 3.2: Unit Root Test Results (ADF Test)

Variable	ADF t-Statistic (Level)	p-Value	ADF t-Statistic (1st Diff.)	p-Value	Order of Integration
LOG_ASI	–2.1656	0.4926	–5.7261	0.0002	I(1)
MPR	–2.3023	0.1778	–4.4154	0.0015	I(1)
M2	–3.1705	0.1088	–6.4050	0.0000	I(1)
INF	–2.1287	0.2352	–4.6572	0.0007	I(1)
LOG_EXR	–2.1092	0.5225	–4.4541	0.0063	I(1)
TBR	–2.7398	0.0786	–6.4136	0.0000	I(1)
CRR	0.1466	0.9646	–5.2777	0.0001	I(1)

Source: Author's computation using EViews (2025).

The results presented in Table 3.2 indicate that none of the variables were stationary at their level form since the absolute ADF t-statistics were smaller than their corresponding critical values and the p-values exceeded the 5 percent significance level. However, after first differencing, all variables became stationary at the 1 percent level, signifying integration of order one I(1). Specifically, the All-Share Index (LOG_ASI), Monetary Policy Rate (MPR), Broad Money Supply (M2), Inflation Rate (INF), Exchange Rate (LOG_EXR), Treasury Bill Rate (TBR), and Cash Reserve Ratio (CRR) each rejected the null hypothesis of a unit root after first differencing.

The mixture of I(0) and I(1) variables (with none I(2)) satisfies the pre-conditions for employing the Autoregressive Distributed Lag (ARDL) bounds testing approach to cointegration. Hence, the ARDL technique was adopted to examine both the long-run equilibrium relationship and the short-run dynamic adjustments between monetary policy instruments and stock-market performance in Nigeria.

3.5 Bounds Test for Cointegration

The study employed the ARDL bounds testing approach developed by Pesaran, Shin, and Smith (2001) to examine whether a long-run relationship exists between stock market development (LOG_ASI) and selected monetary policy indicators (MPR, M2, INF, LOG_EXR, TBR, and CRR). The result of the bounds test is presented in Table 3.3.

Table 3.3: Bounds Test for Cointegration

Test Statistic	Value	Significance	I(0) Bound	I(1) Bound
F-statistic	2.494614	10%	1.99	2.94
		5%	2.27	3.28
		1%	2.88	3.99

Source: Author's computation using EViews 12 (2025).

Interpretation: The computed F-statistic (2.49) lies between the lower and upper bounds at both the 5% and 10% significance levels, indicating an inconclusive result. Consequently, the null hypothesis of *no cointegration* cannot be rejected. This implies that there is no strong evidence of a long-run equilibrium relationship between monetary policy variables and stock market development in Nigeria during the study period.

However, this result does not invalidate the model; rather, it suggests that the impact of monetary policy instruments on the stock market is predominantly short-run in nature. In other words, while changes in monetary policy variables such as the monetary policy rate, broad money supply, and inflation rate significantly influence stock market movements, these effects tend to be temporary rather than persistent.

This finding aligns with Nigeria's economic reality, where the stock market is often more responsive to short-term policy shocks including fluctuations in interest rates, liquidity changes, and inflation than to long-term monetary trends. Such behavior reflects the volatile and policy-sensitive nature of Nigeria's financial system, driven by macroeconomic uncertainty and investors' short-term reactions to policy adjustments.

Therefore, subsequent analyses in this study focus on the short-run dynamics captured by the ARDL model, emphasizing how monetary policy variables influence stock market performance over shorter time horizons. Diagnostic and stability tests (reported in Appendix A) confirm that the model satisfies the standard econometric assumptions of homoskedasticity, stability, and correct specification, indicating that the estimated ARDL model is statistically reliable for further analysis.

IV. ANALYSIS AND EMPIRICAL RESULTS

4.1 Introduction

This chapter presents the analysis of the data and the empirical results of the study, which investigates the impact of monetary policy on the performance of the Nigerian stock market, represented by the All Share Index (ASI). The chapter is structured into descriptive statistics, ARDL model estimation results, discussion of key findings and summary.

4.2 Summary of Descriptive Statistics

Descriptive statistics provide insight into the characteristics and distribution of the variables used in this study. Table 4.1 shows the central tendency, dispersion, skewness, kurtosis, and normality of the variables.

Table 4.1: Descriptive Statistics of Variables

	LOG_ASI	MPR	M2	INF	LOG_EXR	TBR	CRR
Mean	3.601513	3.070614	17.83145	18.08467	1.969322	11.84354	11.04545
Median	3.376449	5.685580	15.90000	12.87658	2.111338	12.00000	9.500000
Maximum	4.763355	18.18000	27.38000	72.83550	2.629388	26.90000	32.50000
Minimum	2.535294	-31.45300	0.000000	5.388008	0.905163	3.170000	1.000000
Std. Dev.	0.918788	10.14023	6.826193	16.10793	0.489721	4.976546	8.351051
Skewness	0.006343	-1.368940	-0.394326	2.198991	-0.716906	0.703606	0.748095
Kurtosis	1.116560	5.549466	2.383144	6.826438	2.322402	4.130825	2.549022
Jarque-Bera	4.877822	19.21265	1.378414	46.72782	3.458453	4.481138	3.357706
Probability	0.087256	0.000067	0.501974	0.000000	0.177422	0.106398	0.186588
Sum	118.8499	101.3303	588.4380	596.7940	64.98762	390.8367	364.5000

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Sum Sq. Dev.	27.013 51	32 90. 375	14 91. 101	83 02. 893	7.6 744 67	79 2.5 125	22 31. 682
Obs ervat ions	33	33	33	33	33	33	33

Source: Author's computation using EViews 12 (2025).

Interpretation: The summary shows that LOG_ASI is nearly symmetric, while MPR and INF display skewness and kurtosis, indicating volatility and extreme values. Most variables deviate from normality, except M2.

4.3 ARDL Model Estimation Results

The Autoregressive Distributed Lag (ARDL) approach was used to estimate both short- and long-run effects of monetary policy instruments on stock market performance. The ARDL (1,1,0,0,2,0,0) model was selected based on the Akaike Information Criterion (AIC).

Table 4.2: ARDL Estimation Results

Dependent Variable: LOG_ASI
Method: ARDL
Date: 11/06/25 Time: 16:10
Sample (adjusted): 1992 2022
Included observations: 31 after adjustments
Maximum dependent lags: 1 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): MPR M2 INF LOG_EXR
TBR CRR
Fixed regressors: C
Number of models evalulated: 729
Selected Model: ARDL(1, 1, 0, 0, 2, 0, 0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LOG_ASI(-1)	0.336763	0.197590	1.704350	0.1038
MPR	-0.019300	0.010169	-1.897990	0.0722
MPR(-1)	-0.010127	0.006072	-1.667841	0.1109
M2	0.087681	0.029136	3.009387	0.0069
INF	-0.018125	0.007671	-2.362876	0.0284
LOG_EXR	-0.334334	0.487586	-0.685693	0.5008
LOG_EXR(-1)	-0.422355	0.543733	-0.776769	0.4464
LOG_EXR(-2)	0.886023	0.455210	1.946405	0.0658
TBR	-0.007273	0.012888	-0.564301	0.5788
CRR	-0.006976	0.007864	-0.887096	0.3856
C	1.221850	0.635228	1.923484	0.0688

R-squared	0.955753	Mean dependent var	3.670046
Adjusted R-squared	0.933629	S.D. dependent var	0.905742
S.E. of regression	0.233342	Akaike info criterion	0.198802
Sum squared resid	1.088973	Schwarz criterion	0.707637
Log likelihood	7.918563	Hannan-Quinn criter.	0.364670
F-statistic	43.20049	Durbin-Watson stat	2.431273
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model selection.

Model Diagnostics: R-squared = 0.956, Adjusted R-squared = 0.934, F-statistic = 43.20 ($p < 0.001$), Durbin-Watson = 2.431

Interpretation: The results indicate that broad money supply positively and significantly affects stock market performance, while inflation has a significant negative effect. MPR, LOG_EXR, TBR, and CRR are not significant in the short run. Diagnostic and stability tests (Appendix A) confirm model validity.

4.4 Discussion of Key Findings

The analysis shows that stock market performance responds strongly to changes in broad money supply and inflation. The positive effect of M2 suggests that liquidity expansion encourages investment and trading. Inflation negatively affects returns, reflecting increased uncertainty and reduced purchasing power. Other monetary policy instruments, including MPR,

TBR, and CRR, do not show significant short-run effects, implying that their influence may be more pronounced over the long term. Overall, the ARDL model explains the variation in stock market performance effectively, with high R^2 and robust diagnostic statistics confirming model stability and correct specification. These findings are consistent with expectations in emerging markets, where liquidity and price stability are key determinants of market activity.

4.5 Summary

The empirical analysis shows that broad money supply (M2) has a positive and statistically significant effect on stock market performance ($p = 0.0069$), while inflation (INF) has a negative and significant effect ($p = 0.0284$). The monetary policy rate (MPR), exchange rate (LOG_EXR), Treasury bill rate (TBR), and cash reserve ratio (CRR) are not statistically significant in the short run. The ARDL model explains 95.6% of the variation in LOG_ASI (Adjusted $R^2 = 0.934$), with an F-statistic of 43.20 ($p < 0.001$) and a Durbin-Watson statistic of 2.431, indicating no evidence of autocorrelation. Diagnostic and stability tests, presented in Appendix A, confirm that the model satisfies standard econometric assumptions.

V. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, draws conclusions based on the empirical findings, and provides policy recommendations. Additionally, it outlines suggestions for further research. The chapter synthesizes the insights obtained from the analysis of the effects of monetary policy instruments on stock market performance in Nigeria, as proxied by the All Share Index (ASI).

5.2 Summary of Findings

The study examined the influence of key monetary policy instruments Monetary Policy Rate (MPR), Broad Money Supply (M2), Inflation Rate (INF), Exchange Rate (LOG_EXR), Treasury Bill Rate (TBR), and Cash Reserve Ratio (CRR) on the Nigerian stock market using annual data from 1985 to 2023. The analysis employed the ARDL bounds testing approach to investigate both short-run dynamics and long-run relationships. Key findings include:

1. Descriptive Analysis: LOG_ASI displayed near-symmetric distribution, while MPR and INF exhibited skewness and kurtosis, indicating volatility and extreme values. Most variables deviated from normality, except M2.
2. ARDL Estimation Results: Broad Money Supply (M2) positively and significantly influenced stock market performance ($p = 0.0069$), suggesting liquidity expansion promotes investment and trading. Inflation (INF) negatively and significantly affected stock market returns ($p = 0.0284$), indicating that higher inflation reduces purchasing power and increases uncertainty. Other monetary policy instruments (MPR, LOG_EXR, TBR, CRR) were not statistically significant in the short run.
3. Model Diagnostics: The ARDL model explained 95.6% of the variation in LOG_ASI (Adjusted $R^2 = 0.934$). The F-statistic (43.20, $p < 0.001$) confirmed overall model significance. Diagnostic and stability tests confirmed the model satisfies standard econometric assumptions of homoskedasticity, stability, and correct specification.
4. Bounds Test for Cointegration: The F-statistic fell between the lower and upper bounds, suggesting the absence of a strong long-run relationship. This implies that the effect of monetary policy on stock market performance in Nigeria is predominantly short-run in nature.

Overall, the findings indicate that liquidity and price stability are the key determinants of stock market activity in Nigeria, consistent with emerging market dynamics.

5.3 Conclusion

The study concludes that monetary policy instruments exert differential impacts on the Nigerian stock market. Broad Money Supply acts as a key driver of market performance, while inflation serves as a significant constraining factor. Other instruments, including MPR, Exchange Rate, TBR, and CRR, do not significantly affect stock market returns in the short run, suggesting that their effects may manifest over longer horizons or through indirect channels.

The ARDL model results demonstrate that short-run dynamics are critical in understanding stock market responses to monetary policy in Nigeria. Given the absence of strong long-run equilibrium, policymakers should recognize the stock market's sensitivity to short-term liquidity changes and inflationary pressures rather than relying solely on long-term adjustments.

5.4 Policy Recommendations

Based on the empirical evidence, the study offers the following recommendations for policymakers, investors, and market regulators:

1. Monetary Authority Actions: The Central Bank of Nigeria should prioritize policies that ensure adequate liquidity in the financial system, as expansion in Broad Money Supply promotes market activity. Inflation control remains crucial, as high inflation negatively affects stock returns and investor confidence.
2. Investor Guidance: Investors should monitor monetary indicators, particularly money supply and inflation trends, to make informed portfolio decisions. Short-term adjustments in monetary policy may present trading opportunities in the Nigerian stock market.
3. Market Regulation: Regulatory agencies should enhance information dissemination to reduce asymmetries and improve market efficiency. Initiatives to stabilize short-term interest rates and improve transparency can support market confidence.

5.5 Contributions of the Study

The study contributes to the literature and policy discourse in several ways:

1. Provides updated empirical evidence on the short-run effects of multiple monetary policy instruments on the Nigerian stock market.
2. Demonstrates the dominant role of liquidity and inflation in influencing market performance.
3. Bridges gaps in previous studies by incorporating a comprehensive set of monetary indicators (MPR, M2, INF, EXR, TBR, CRR) in a single econometric framework.
4. Offers actionable insights for policymakers, investors, and financial analysts to enhance decision-making in emerging market contexts.

5.6 Suggestion for Further Research

Future studies could build on this work in the following ways:

1. Higher-Frequency Data: Examine monthly or quarterly data to capture short-term dynamics and market reactions more precisely.
2. Sectoral Analysis: Investigate the impact of monetary policy on sectoral indices to identify heterogeneous responses across industries.
3. Nonlinear Models: Apply nonlinear econometric approaches (e.g., Threshold VAR, STAR, Markov-switching models) to capture asymmetric effects of policy shocks.
4. Extended Policy Variables: Explore the combined influence of fiscal and monetary policies or include additional macro-financial variables.
5. Comparative Studies: Conduct cross-country analyses with similar emerging markets to benchmark Nigeria's stock market responses to monetary policy.

These suggestions are intended to expand the understanding of monetary policy transmission mechanisms while complementing the findings of the present study.

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