



Monetary Policy and Stock Market Capitalization in Nigeria

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Abstract: This study examined the effect of monetary policy on stock market capitalization in Nigeria over the period 1986-2024. The study employed the Autoregressive Distributed Lag (ARDL) technique to analyze both the short-run and long-run dynamics between stock market capitalization and key monetary policy variables, including Monetary Policy Rate (MPR), Broad Money Supply (MS), Liquidity Ratio (LIQ), and Inflation Rate (INF). Preliminary analyses such as descriptive statistics, correlation matrix, and unit root tests were conducted to ensure data suitability and model reliability. The results of the unit root test revealed a mixed order of integration among the variables, justifying the adoption of the ARDL approach. The empirical findings indicate that monetary policy exerts a significant influence on stock market performance in Nigeria, particularly in the long run. The Monetary Policy Rate was found to have a negative and statistically significant effect on stock market capitalization, suggesting that higher interest rates discourage investment in equities and hinder capital market growth. Conversely, money supply and liquidity ratio exhibited positive and significant effects, highlighting the importance of adequate liquidity in stimulating market expansion. Inflation, however, was found to have no significant long-run effect on stock market capitalization. The error correction mechanism confirmed the existence of a long-run equilibrium relationship among the variables, with a stable but slow speed of adjustment to short-run disequilibria. The study concludes that monetary policy is a critical tool for financial market development in Nigeria and recommends that CBN and commercial banks should prioritize policies that enhance liquidity in the financial system, such as effective open market operations and targeted credit facilities.

INTRODUCTION

Financial market development is widely acknowledged as a crucial driver of economic growth and stability, as it plays a vital role in mobilizing savings, allocating capital efficiently, facilitating risk management, and enhancing the performance of both the public and private sectors. Financial market development refers to the process by which financial institutions, instruments, and markets become more efficient, liquid, accessible, and integrated with the broader economy (Al-Obaidi, 2025). It encompasses improvements in the functioning of the financial system, including savings mobilization, investment in productive ventures, asset monitoring, risk diversification, and the exchange of goods and services (Islam et al., 2021). Within this broader framework, the stock market represents a critical component of financial market development, serving as a platform for long-term capital formation and investment. One of the most widely used indicators of stock market development is stock market capitalization, which measures the total value of listed equities and reflects the size, depth, and overall performance of the market. An increase in stock market capitalization indicates improved investor confidence, enhanced liquidity, and greater capacity of firms to raise funds for expansion.

In Nigeria, the growth of stock market capitalization has been influenced by financial sector reforms, privatization policies, and increased participation of both domestic and foreign investors. However, its performance remains sensitive to macroeconomic conditions and policy dynamics, particularly monetary policy actions. Monetary policy is central to the achievement of macroeconomic stability, including price stability and financial system soundness (Blot et al., 2015; Suhendra & Anwar, 2022). The Central Bank influences economic activity through key policy instruments such as interest rates, money supply, and the monetary policy rate. These instruments directly affect financial markets, including the stock market, by influencing liquidity conditions, borrowing costs, and investment decisions. For instance, a tightening monetary policy, characterized by higher interest rates, tends to reduce liquidity and discourage investment in equities, thereby lowering stock market capitalization. Conversely, an expansionary monetary policy can stimulate market activity by increasing liquidity and encouraging investment in financial assets.

Empirical evidence reveals mixed outcomes regarding the relationship between monetary policy and stock market performance. Kumar (2023) argues that restrictive monetary policy dampens credit expansion and suppresses asset prices, while expansionary policy enhances market performance. In the Nigerian context, Olusegun (2021) finds that although monetary policy significantly affects credit to the private sector, its impact on the capital market is relatively weak. Similarly, Maghdid et al. (2024) report that stock market capitalization in Nigeria exhibits a limited response to monetary policy actions, suggesting that structural factors such as investor confidence, institutional quality, and political stability play a moderating role. These dynamics are further complicated by persistent macroeconomic challenges in Nigeria, including inflationary pressures, exchange rate volatility, and liquidity constraints. These factors weaken the transmission mechanism of monetary policy and distort investment decisions, thereby affecting stock market performance and capitalization levels. Although Nigeria's capital market comprising the Nigerian Exchange Limited (NGX), FMDQ Securities Exchange, and the Securities and Exchange Commission (SEC) has experienced significant growth, its depth and efficiency remain below potential. While market capitalization has expanded considerably over the years, reflecting reforms and increased listings, the market continues to face challenges such as low liquidity, weak investor participation, and structural inefficiencies. Despite the importance of stock market capitalization as a key indicator of financial market development, existing studies have largely examined monetary policy and financial market indicators in isolation or with limited scope. Many studies focus on single variables such as interest rates or stock prices without providing a comprehensive analysis of how multiple monetary policy instruments simultaneously influence stock market capitalization over time. This fragmented approach creates a gap in the literature, particularly in understanding the dynamic and long-run relationship between monetary policy and stock market development in Nigeria. Against this backdrop, this study investigates the effect of monetary policy on stock market capitalization in Nigeria over the period 1986 to 2024.

REVIEW OF LITERATURE

Stock Market Capitalization

Stock Market Capitalization refers to the total market value of all listed companies' outstanding shares on the Nigerian Exchange (NGX). It is a measure of the size and depth of

the capital market and reflects investors' valuation of the listed equities. Stock exchange uses market capitalization as one of its performance metrics. Typically, it is used as an indicator of stock market size. Calculated by multiplying the stock's current price with the current number of shares traded (Tueridei & Ogoun, 2023). When it comes to determining the relative size of companies in a certain industry, investors utilize market capitalization data. A stock's potential benefits and risks may be assessed, using this method. One of the most important market indicators is capitalization, which measures the worth of stocks and companies in general (Pavone, 2019).

Monetary Policy

The phrase monetary policy from the CBN discharge on monetary policy concept (2006) is seen as any guiding principle premeditated by the Federal Government through the CBN to manage availability of cost and credit supply. It can also be known as the parameter of monetary supply as well as interest rate by the CBN in a way to regulate inflation and to steady the flow of currency in any given economy. Conversely, in the CBN Series No. 97/03 June 1997, Monetary policy was further described as the blend of actions premeditated to control the worth, supply rate of money within a financial system in line with the projected point of activities within the economy. It means that the surplus supply of money would lead to more requests for goods and services that may result to increase in prices and determination of balance of payment position. Monetary policy is one of the existing instruments of macroeconomic objectives (Ezenduka & Joseph 2020). The principal goals of macroeconomic policy are price stability, external stability and a suitable growth rate.

Theoretical Review

Efficient Market Hypotheses

Fama (1970) defined the efficient market as a market in which prices always fully reflect available information. The EMH relies on three critical arguments: It is assumed that investors are rational and value securities based on maximum expected utility. Secondly, in the case of irrationality of investors, their trades are assumed to exhibit randomness, thus offsetting any impact on prices. Finally, it is assumed that rational arbitragers get rid of any influence that irrational investors have on security prices (Naseer & Bin Tariq, 2015). Supporters of the Efficient Market Hypothesis such as Malkiel (2003), Timmermann and Granger (2004) stated that the EMH suggests that profiting from forecasting stock price or returns pattern is very difficult and unlikely; this is because the primary cause of price changes is the arrival of new information. Critiques of Efficient Market Hypothesis such as Tejvan (2009); Burton (2003) argued that stock return often reflect evidence of irrational exuberance whereby investors get carried away by booms and asset bubbles whereas the proponents of Efficient Market Hypothesis failed to take into consideration the irrationality of human behavior in making economic decision. The efficient market hypothesis finds relevance in the current study which is majorly driven on the need to access the effect of repo rates on stock market capitalization given investment in artificial intelligence. Information on repo rates by CBN tends to filter into financial assets such as market securities. Moreover, the adoption of superior technology by firms which reflects on stock market prices and consequently on market capitalization tends to influence profits and

dividend declaration which provide information on the attractiveness of such securities and the subsequent future preference for such assets which invariably influences stock market capitalization.

Empirical Review

The empirical literature on monetary policy, macroeconomic variables, and stock market performance demonstrates a progressive and interconnected evolution of findings across countries and time. Early evidence by Emmanuel and Vincent (2020) established a foundational link between money supply and stock market performance in Nigeria, South Africa, and Ghana, confirming a long-run relationship and a unidirectional causality from stock market performance to money supply. Building on this macro-financial nexus, Cordelia (2020) expanded the scope by incorporating broader macroeconomic indicators in Nigeria, showing that while exchange rate and inflation exert weak negative effects, interest rate significantly depresses capital market capitalization, whereas GDP enhances it. Similarly, Justin and Ekwughu (2020), using the ARDL framework, refined the analysis by highlighting that lending interest rates positively influence stock market performance, while money supply exhibits a negative short-run relationship, suggesting that monetary transmission channels may produce mixed effects depending on timing and lag structure.

Extending the discourse to inflation dynamics, Awadzie and Garr (2020) provided evidence from Ghana that inflation generally undermines stock market performance, although market turnover responds positively, indicating partial market adaptation. This finding aligns with Mohammad et al. (2021), who introduced nonlinearity by identifying a threshold inflation rate beyond which financial development negatively impacts economic growth, emphasizing the role of macroeconomic stability. Supporting this nonlinear perspective, Xin (2021) argued that low and stable inflation may enhance stock market returns, whereas excessive inflation becomes detrimental. In the Nigerian context, Sulaiman and Abubakar (2021) and Khaled et al. (2021) further confirmed that inflation and interest rates often exert negative effects on economic and financial sector performance, reinforcing the argument that macroeconomic instability weakens financial markets. However, Clement et al. (2021) challenged the effectiveness of monetary policy tools in controlling inflation in Nigeria, revealing weak and insignificant relationships, thereby questioning policy transmission efficiency. Subsequent studies shifted focus toward financial sector performance and institutional channels. Abomaye-Nimenibo (2021) emphasized the importance of sound monetary policy frameworks and institutional independence for achieving financial stability in Nigeria. In a similar vein, Priscilla (2022) found that monetary policy instruments have significant short-run but weak long-run effects on financial sector output, suggesting temporary rather than sustained impacts. Hassan and Oyedele (2022) and Hlongwane and Sheefeni (2022) further linked monetary policy variables to financial performance and market capitalization, respectively, showing that while interest rates often negatively affect performance, inflation and interest rates can sometimes positively influence stock market capitalization under certain conditions. Complementing these findings, Efuntade and Efuntade (2022) validated the financial liberalization theory by demonstrating that deposit and lending rates significantly drive market capitalization in Nigeria, while Okolie and Okolie (2022) established that both money supply and market capitalization positively influence economic growth. However, contrasting evidence from

Okisa (2022) in Kenya revealed a negative long-run relationship between stock market capitalization and economic growth, indicating cross-country heterogeneity.

More recent studies (2023-2025) provide deeper insights into dynamic interactions and policy effectiveness. Sunday (2023) and Ologbenla (2023) reaffirmed the importance of credit and macroeconomic stability, showing that bank credit enhances private sector performance, while inflation negatively affects capital market development. Tueridei et al. (2023) added a micro-level dimension by highlighting the role of domestic investors in driving market capitalization. Advancing the discussion, Opeyemi and Nicholas (2024) introduced threshold effects in monetary variables, showing that repo rates and exchange rates have conditional impacts on stock market capitalization depending on investment levels. Similarly, Boma and Isaac (2024) and Edori et al. (2024) confirmed that monetary policy instruments particularly money supply and treasury bill rates significantly influence stock market performance in Nigeria, consistent with the quantity theory of money. However, Hannah and Terwuah (2024) revealed that monetary policy rate adjustments may be ineffective in controlling inflation and could adversely affect output through credit constraints. Additional evidence from Zhibin and Fenghua (2024) and Elizabeth and Richard (2024) highlighted the broader financial system linkages, showing that monetary policy affects capital flows, bank credit, and market liquidity. Finally, the most 21

METHODOLOGY

Research Design

This study adopted an ex-post facto research design, which is commonly used in economic and financial studies to investigate relationships among variables based on historical data. Ex-post facto design refers to a situation where the variables of interest have already occurred and cannot be manipulated or controlled by the researcher. It enabled the examination of cause-and-effect relationships using observed data without experimental intervention. The design supported the use of econometric tools for time-series analysis, making it suitable for the quantitative nature of this study. This study made use of secondary time-series data. The data spanned the period from 1986 to 2024. The monetary policy indicators were Monetary Policy Rate, money supply aggregates, inflation rate and liquidity ratios while financial market development indicators included Domestic Credit to the Private Sector, Stock Market Capitalization, and Bank Credit to GDP Ratio.

Model Specification

In order to investigate the effect of monetary policy on financial market development in Nigeria, the work of Iwedi and Bakweri (2023) on impact of monetary policy on financial sector development in Nigeria was adapted and modified to suit each of the objectives. Iwedi and Bakweri (2023) model is specified below:

$$FSL_t = f(MPR_t, INF_t, T - BIL_t, EXR_t) \quad (3.1)$$

Where:

- FSL= Financial sector liquidity (proxy for financial sector development)
- MPR = Monetary policy rate in Nigeria

- TBR = Treasury bill rates in Nigeria
- INF = Inflation rates in Nigeria
- EXR = Exchange rates in Nigeria

In our working model, the model were specified as

$$FMD_t = f(MPR_t, MS_t, LIQ_t, INF_t) \quad (3.2)$$

The inclusion of Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), and Inflation Rate (INF) in the adapted model is grounded in both theoretical and empirical relevance. The MPR represents the benchmark interest rate used by the central bank to influence credit conditions and borrowing costs in the economy; hence, it directly impacts the cost of credit extended to the private sector. Money Supply reflects the overall availability of funds in the economy and serves as a key determinant of liquidity and credit expansion. The Liquidity Ratio (LIQ), a regulatory tool, influences banks' ability to convert assets into cash, thereby affecting their willingness and capacity to lend to the private sector. Inflation Rate (INF) account for macroeconomic stability; high inflation can deter credit expansion by eroding the real value of financial assets and increasing uncertainty. Together, these variables provide a comprehensive framework for understanding the monetary determinants of financial market development in Nigeria. The effect of monetary policy on Stock Market Capitalization, in the econometric model, we considered the form of algebraic or linear relationship among the economic variables. The corresponding econometric model is specified in linear form:

$$SMC_t = \beta_0 + \beta_1 MPR_t + \beta_2 MS_t + \beta_3 LIQ_t + \beta_4 INF_t + \mu_t \quad (3.7)$$

Since the variables are in different measurements, regressing this nature of the variables leads to the problem of heteroskedasticity, therefore, in other to avoid the issue of heteroskedasticity, the variables shall be rescale into ratio through logging those them, thus the model was re-specified in a log linear form

$$SMC_t = \beta_0 + \beta_1 MPR_t + \beta_2 \ln MS_t + \beta_3 LIQ_t + \beta_4 INF_t + \mu_t \quad (3.8)$$

Where:

SMC is Stock Market Capitalization, MPR is Monetary Policy Rate, MS is Money Supply, LIQ is Liquidity Ratio, INF is Inflation Rate, ln is Natural logarithm, β_0 is represents the intercept term, which indicates the expected average value of the Stock Market Capitalization when all Monetary Policy Rate, Money Supply, Liquidity Ratio, and Inflation Rate in the model are held constant

$\beta_1, \beta_2, \beta_3, \beta_4$ is represent the parameters of the Monetary Policy Rate, Money Supply, Liquidity Ratio, and Inflation Rate. These coefficients measure the rate of change in the Stock Market Capitalization resulting from a one-unit change in each corresponding independent variable, holding all other variables constant, μ is Stochastic captures all the influences on the Stock Market Capitalization that are unexplained by the Monetary Policy Rate, Money Supply, Liquidity Ratio, and Inflation Rate included in the model, t -is time variant of the observed years.

To examine both the short-run and long-run effect of monetary policy on stock market capitalisation in Nigeria, the unit root observed to indicate a mix stationarity of level and first differences, hence, the study employs the Autoregressive Distributed Lag

(ARDL) approach to cointegration developed by Pesaran, Shin, and Smith (2001). The baseline long-run model is specified as:

$$SMC_t = \beta_0 + \beta_1 MPR_t + \beta_2 \ln MS_t + \beta_3 LIQ_t + \beta_4 INF_t + \mu_t \quad (3.9)$$

The ARDL ($p, q_1, q_2, q_3, q_4, q_5$) specification allows for lagged values of both the dependent and independent variables to capture dynamic short-run adjustments:

$$\begin{aligned} \Delta SMC_t = & \beta_0 + \sum_{t-1}^N \beta_1 SMC_{t-i} + \sum_{t-1}^N \beta_2 \Delta MPR_{t-i} + \sum_{t-1}^N \beta_3 \Delta \ln MS_{t-i} + \sum_{t-1}^N \beta_4 \Delta LIQ_{t-i} \\ & + \sum_{t-1}^N \beta_5 \Delta INF_{t-i} + \rho_1 SMC_{t-1} + \rho_2 MPR_{t-1} + \rho_3 \ln MS_{t-1} + \rho_4 LIQ_{t-1} \\ & + \rho_5 INF_{t-1} + v_t \end{aligned} \quad (3.10)$$

Δ is short-run change in the variables, β_0 represent the intercept. $\beta_1 - \beta_5$ measure the short-run effects of the lagged dependent variable and changes in the explanatory variables, $\rho_1 - \rho_5$ representing long-run effect of the independent variables, v_t is the error term capturing other influences not included in the model.

Measurement of Variables

In this sub-section, the variables used in the study were described, along with their respective measurements and sources. Table 3.2 presents an overview of the variables used

Table 1: Variables, Description, Measurement and Sources

| Variable | Type | Measurement/Proxy | Source |
|-----------------------------|----------------------|---|-------------------------------|
| Monetary Policy Rate (MPR) | Independent | Annual Monetary Policy Rate (%) | Central Bank of Nigeria, 2024 |
| Money Supply (MS) | Independent | Broad Money (M2) as % of GDP | Central Bank of Nigeria, 2024 |
| Liquidity Ratio (LIQ) | Independent | Ratio (%) set by the Central Bank | Central Bank of Nigeria, 2024 |
| Inflation Rate (INF) | Independent Variable | Annual change in Consumer Price Index (CPI) (%) | Central Bank of Nigeria, 2024 |
| Stock Market Capitalization | Dependent | Market Capitalization as % of GDP | Central Bank of Nigeria, 2024 |

Estimation Techniques

This study employed a series of pre-estimation tests in order to apply the appropriate estimation techniques. The process began with unit root tests to assess the stationarity properties of the time series variables, followed by lag length selection using criteria such as the Akaike Information Criterion (AIC) and the Schwarz Bayesian Information Criterion (SBIC). These were necessary to ensure appropriate model specification. After confirming the order of integration of the variables, a co-integration test was conducted to determine the existence of a long-term equilibrium relationship among the variables. The Autoregressive Distributed Lag (ARDL) bounds test was proposed due to its suitability for

analyzing relationships among variables with mixed orders of integration, specifically I(0) and I(1), and its reliability in small sample studies such as this, which is common in economic and finance variables. These tests are discussed briefly below:

DATA ANALYSIS, RESULT AND DISCUSSION OF FINDINGS

Table 2: Descriptive Statistics

| | Mean | Maximum | Minimum | Std. Dev. | Skewness |
|-----|----------|----------|----------|-----------|----------|
| SMC | 13693.71 | 109258.8 | 6.800000 | 22788.71 | 2.594832 |
| MPR | 14.19872 | 27.50000 | 6.000000 | 4.321070 | 1.027762 |
| MS | 12333.78 | 63512.40 | 23.80640 | 16296.08 | 1.353344 |
| LIQ | 48.71795 | 104.2024 | 26.39276 | 14.44748 | 1.631466 |
| INF | 19.91490 | 72.83550 | 5.388008 | 17.02926 | 1.688170 |

Source: Author's Computation (2026); Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), Inflation Rate (INF)

The descriptive statistics indicate considerable variation across all the macroeconomic and financial variables under review. Stock Market Capitalization (SMC) records a mean value of 13,693.71 with a very wide range between a minimum of 6.80 and a maximum of 109,258.8, alongside a high standard deviation of 22,788.71, suggesting extreme volatility in the stock market over the period. Similarly, Money Supply (MS) shows a high mean of 12,333.78 with substantial dispersion (std. dev. = 16,296.08), indicating fluctuations in liquidity conditions within the economy. Inflation Rate (INF) and Liquidity Ratio (LIQ) also display noticeable variability, with relatively high standard deviations compared to their means, reflecting unstable macroeconomic conditions over time. In terms of distributional properties, all the variables are positively skewed, as shown by their skewness coefficients, implying that the data are right-tailed with occasional extreme high values. Stock Market Capitalization exhibits the highest skewness (2.59), indicating the presence of significant outliers or periods of unusually high market performance. Monetary Policy Rate (1.03), Money Supply (1.35), Liquidity Ratio (1.63), and Inflation Rate (1.69) also show moderate to high positive skewness, confirming non-normal distributions across the series. Overall, the results suggest that the Nigerian macroeconomic environment over the study period is characterized by volatility, asymmetric distributions, and episodic spikes, which may have important implications for econometric modelling and policy analysis.

Correlation Matrix

The correlation matrix shows the degree of association among Stock Market Capitalization (SMC) and the selected macroeconomic variables. SMC has a strong positive relationship with Money Supply (MS) (0.8503), suggesting that increases in money supply are closely associated with growth in stock market capitalization. It also shows a moderate positive relationship with Monetary Policy Rate (MPR) (0.3308) and a weak positive relationship with Liquidity Ratio (LIQ) (0.2028), indicating that these variables have a less pronounced but still positive association with stock market performance. However, Inflation Rate (INF) has a very weak and slightly negative relationship with SMC (-0.0298), implying that inflation has little direct linear association with stock market capitalization in the sample period.

Table 3: Correlation Matrix

| | SMC | MPR | MS | LIQ | INF | VIF |
|-----|---------|--------|---------|---------|-----|----------|
| SMC | 1 | | | | | |
| MPR | 0.3308 | 1 | | | | 1.228633 |
| MS | 0.8503 | 0.0771 | 1 | | | 1.255793 |
| LIQ | 0.2028 | 0.0657 | 0.3535 | 1.0000 | | 1.201473 |
| INF | -0.0298 | 0.3886 | -0.1552 | -0.2576 | 1 | 1.391697 |
| | Mean | | | | | 1.2693 |

Source: Author's Computation (2026); Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), Inflation Rate (INF)

The correlation among the independent variables is generally low to moderate, suggesting limited multicollinearity. The highest inter-variable correlation is between Money Supply (MS) and Liquidity Ratio (LIQ) at 0.3535, which is still below the commonly accepted threshold of concern (0.80). The Variance Inflation Factor (VIF) values further confirm the absence of multicollinearity, as all variables have VIFs close to 1 (ranging from 1.20 to 1.39), with a mean VIF of 1.27. This indicates that the explanatory variables are not strongly correlated with each other and are suitable for inclusion in a regression model without causing estimation bias due to multicollinearity.

Table 4: Unit root Test

| | Augmented Dickey-Fuller test | | | Integration |
|-----|------------------------------|-------------|----------|-------------|
| | Level | First Diff. | Critical | |
| SMC | -1.38472 | -4.80278 | -2.9411 | I(1) |
| MPR | -2.3326 | -7.3047 | -2.9411 | I(1) |
| MS | -2.8960 | -3.1432 | -2.9411 | I(1) |
| LIQ | -3.42106 | - | -2.9411 | I(0) |
| INF | -3.54919 | - | -2.9411 | I(0) |

Source: Author's Computation (2026); Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), Inflation Rate (INF)

The Augmented Dickey-Fuller (ADF) unit root test results show a mixed order of integration among the variables, indicating differences in their stationarity properties. Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), and Money Supply (MS) are non-stationary at levels but become stationary after first differencing, as their test statistics at first difference are more negative than the 5% critical value (-2.9411), implying they are integrated of order one, I(1). In contrast, Liquidity Ratio (LIQ) and Inflation Rate (INF) are stationary at levels since their ADF statistics at level are more negative than the critical value, indicating they are integrated of order zero, I(0). Overall, the results suggest a combination of I(0) and I(1) variables in the model, which is important for model specification in time series analysis. This mixed integration order implies that the variables are suitable for econometric techniques such as the Autoregressive Distributed Lag (ARDL) approach, which can accommodate both stationary and first-differenced variables. Consequently, the findings provide a sound statistical basis for further long-run and short-run dynamic analysis among the macroeconomic variables and stock market capitalization.

Table 5: Bound Test Cointegration of monetary policy on stock market capitalization in Nigeria.

| F-Bounds Test | | Null Hypothesis: No levels relationship | | |
|----------------|----------|---|------|------|
| Test Statistic | Value | Signif. | I(0) | I(1) |
| F-statistic | 3.979165 | 10% | 2.2 | 3.09 |
| K | 4 | 5% | 2.56 | 3.49 |
| | | 2.5% | 2.88 | 3.87 |
| | | 1% | 3.29 | 4.37 |

Source: Author's Computation (2026); Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), Inflation Rate (INF)

At the 5% level of significance, the ARDL bounds test result in Table 4.2c confirms the existence of a long-run cointegration relationship between monetary policy variables and Stock Market Capitalization (SMC) in Nigeria. The computed F-statistic of 3.979165 is greater than the upper bound critical value I(1) of 3.49 at the 5% significance level (with K = 4). Since the F-statistic exceeds the upper bound value, the null hypothesis of no levels relationship is rejected. This indicates that monetary policy instruments and stock market capitalization are cointegrated and share a stable long-run equilibrium relationship. Consequently, changes in monetary policy variables such as money supply, monetary policy rate, liquidity ratio, and inflation have a significant long-run effect on stock market capitalization in Nigeria, thereby justifying the estimation of both long-run coefficients and short-run dynamics within the ARDL framework.

Estimated Results

Table 6 presents the ARDL estimates examining the effect of monetary policy on Stock Market Capitalization (SMC) in Nigeria. The error correction term, ECT (-1), has a coefficient of -0.027310 with a probability of 0.0014, indicating that deviations from long-run equilibrium are corrected slowly, at about 2.73% per period. In the short run, changes in MPR (D(MPR)) have an insignificant positive coefficient of 0.004459 (probability = 0.6675), while changes in LMS (D(LMS)) and LIQ (D(LIQ)) are also statistically insignificant with probabilities of 0.1576 and 0.4112, respectively. Similarly, short-run changes in inflation (D(INF)) do not significantly influence stock market capitalization. These results indicated that the short-run dynamics of monetary policy have limited immediate effect on SMC, but the long-run effects are substantial, particularly through policy rate, money supply, and liquidity. In the long run, the Monetary Policy Rate (MPR) has a negative and highly significant effect on SMC, with a coefficient of -0.512971 and a probability of 0.0000. This indicates that a 1% increase in the policy rate reduces stock market capitalization by approximately 0.5130%, reflecting the crowding-out effect of higher borrowing costs on investment and capital market expansion. Broad Money Supply (LMS) has a positive and highly significant long-run coefficient of 1.067709 (probability = 0.0000), implying that a 1% increase in money supply leads to an increase of about 1.0677% in stock market capitalization, which reflects the critical role of liquidity expansion in promoting capital market growth. The liquidity ratio (LIQ) also has a positive and significant coefficient of 0.260979 (probability = 0.0004), depicting that higher banking sector liquidity contributes positively to capital market development. Inflation (INF), however, has an insignificant

positive effect (coefficient = 0.049931, probability = 0.4873), indicating that inflation does not have a statistically meaningful long-run impact on stock market capitalization.

Table 6: Estimated Model evaluating the monetary policy on stock market capitalization in Nigeria.

| Dependent Variable: SMC | | | | |
|----------------------------|------------------|------------|-------------|--------|
| Method: ARDL | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob.* |
| Short Run Equation | | | | |
| D(LSMC(-1)) | 0.110707 | 0.156988 | 0.705195 | 0.4881 |
| D(MPR) | 0.004459 | 0.010240 | 0.435433 | 0.6675 |
| D(LMS) | 0.326181 | 0.222934 | 1.463129 | 0.1576 |
| D(LIQ) | -0.002586 | 0.003088 | -0.837722 | 0.4112 |
| D(INF) | -0.001061 | 0.002743 | -0.386826 | 0.7026 |
| ECT (-1)* | -0.027310 | 0.007452 | 3.664714 | 0.0014 |
| Long Run Equation | | | | |
| MPR | -0.512971 | 0.109699 | -4.676168 | 0.0000 |
| LMS | 1.067709 | 0.215811 | 4.947432 | 0.0000 |
| LIQ | 0.260979 | 0.081488 | 3.202668 | 0.0004 |
| INF | 0.049931 | 0.070941 | 0.703834 | 0.4873 |
| C | -3.143950 | 3.318097 | -0.947516 | 0.3515 |
| MODEL EVALUATION | | | | |
| R-squared | 0.562499 | | | |
| Adjusted R-squared | 0.416665 | | | |
| F-statistics | 10.7686 (0.0000) | | | |
| Diagnostics | | | | |
| Normality Test | 1.6736 (0.4331) | | | |
| Serial Correlation LM Test | 1.4695 (0.2485) | | | |
| Heteroskedasticity Test: | 1.1524 (0.3719) | | | |
| CUSUM | Stability | | | |
| CUSUM square | Stability | | | |

Source: Author's Computation (2026); Stock Market Capitalization (SMC), Monetary Policy Rate (MPR), Money Supply (MS), Liquidity Ratio (LIQ), Inflation Rate (INF)

The model evaluation for the ARDL estimates of monetary policy on Stock Market Capitalization (SMC) indicates a reasonably good fit and satisfactory diagnostic performance. The adjusted R-squared of 0.4167 shows that approximately 41.67% of the variations in SMC are explained by variables in the model. The overall significance of the model is confirmed by the F-statistic of 10.7686 with a probability of 0.0000, indicating that the joint effect of the explanatory variables on stock market capitalization is statistically significant at the 5% level. This demonstrates that monetary policy variables collectively influence SMC. The null hypothesis (H₀₂) that monetary policy has no significant effect on stock market capitalization in Nigeria is rejected. The findings highlight that monetary policy has significant effect on stock market capitalization in Nigeria

Diagnostic tests further confirm the model's reliability. The Normality Test yields a statistic of 1.6736 with a probability of 0.4331, indicating that residuals are normally

distributed. The Serial Correlation LM Test reports a value of 1.4695 with a probability of 0.2485, depicting no evidence of autocorrelation in the residuals. The Heteroskedasticity Test produces a statistic of 1.1524 with a probability of 0.3719, implying that residual variance is constant and there is no heteroskedasticity problem. Additionally, the CUSUM and CUSUM square plots indicate parameter stability over the sample period, confirming that the estimated coefficients remain stable and the model is robust.

DISCUSSION OF FINDINGS

The results reveal that monetary policy significantly affects stock market capitalization (SMC) in Nigeria in the long run. The Monetary Policy Rate (MPR) negatively and significantly impacts SMC, indicating that a 1% increase in policy rate reduces market capitalization by approximately 51.30%, while Broad Money Supply (LMS) and Liquidity Ratio (LIQ) positively and significantly influence SMC, highlighting the importance of liquidity expansion in promoting capital market growth. Inflation (INF) is statistically insignificant, depicting that price level changes do not meaningfully affect stock market capitalization over the long run. In the short run, none of the monetary policy variables show significant effects, although the error correction term indicates a slow adjustment to long-run equilibrium. These findings are consistent with Udeorah et al. (2025) and Edori et al. (2024), who also found that interest rates negatively affect stock market capitalization, while money supply positively drives capital market development in Nigeria, reinforcing the crucial role of monetary policy in shaping long-term stock market performance. Similarly, the positive influence of liquidity ratio aligns with Priscilla (2022) and Hassan and Oyedele (2022), who emphasized that adequate banking sector liquidity supports financial market growth. These studies corroborate the empirical evidence that monetary expansion and sound liquidity management are critical for capital market deepening. However, some studies differ from the current findings. Boma and Isaac (2024) reported that the monetary policy rate had a negative but statistically insignificant effect on stock market capitalization, which contrasts with the significant negative effect observed in this study.

Likewise, Hlongwane and Sheefeni (2022) found that interest rates positively affect stock market capitalization in their sample, a result that is not in tandem with the negative long-run impact of MPR found here. On inflation, the insignificant effect observed in this study differs from Awadzie and Garr (2020) and Ologbenla (2023), who reported significant negative effects of inflation on capital market measures. Overall, the findings confirm that monetary policy, particularly through interest rates, money supply, and banking sector liquidity, plays a key role in driving long-term stock market development in Nigeria, while the short-run effects remain limited.

SUMMARY

This study examined the effect of monetary policy on stock market capitalization in Nigeria over the period 1986-2024 using the Autoregressive Distributed Lag (ARDL) model. The results show that monetary policy plays a significant role in shaping stock market performance in the long run. Specifically, the Monetary Policy Rate (MPR) has a negative and statistically significant effect on stock market capitalization, indicating that increases in interest rates discourage equity investment and reduce the expansion of the capital

market. In contrast, Broad Money Supply (LMS) and Liquidity Ratio (LIQ) exert positive and significant effects on stock market capitalization, suggesting that higher liquidity conditions and increased money supply promote market growth by enhancing investment activities and financial market depth. However, inflation was found to have an insignificant long-run effect on stock market capitalization, implying that price level changes do not directly drive market valuation in the Nigerian context. Overall, the findings suggest that monetary policy affects the stock market mainly through interest rate adjustments and liquidity conditions rather than inflationary pressures. Furthermore, the broader analysis of monetary policy on key financial sector indicators including stock market capitalization, market turnover ratio, and bank credit to GDP ratio reveals a consistent pattern of influence. Tight monetary policy, reflected in higher interest rates, generally constrains financial sector development by reducing investment in equities and limiting credit expansion. Conversely, expansionary monetary conditions, particularly increases in money supply and improved liquidity, stimulate financial market activity, enhance trading volume, and support credit allocation to the real sector.

The study also indicates that inflation has a dampening effect on market turnover, although its influence on other financial indicators remains limited in the long run, highlighting the importance of macroeconomic stability for sustained financial market development. In the short run, changes in money supply have more immediate effects on market turnover and credit allocation than interest rate adjustments.

Overall, the evidence confirms that monetary policy is a crucial determinant of financial sector performance in Nigeria, with its effectiveness largely dependent on the balance between interest rate management, liquidity provision, and macroeconomic stability. Based on the findings of this study, several practical and policy recommendations were made:

1. CBN and commercial banks should prioritize policies that enhance liquidity in the financial system, such as effective open market operations and targeted credit facilities. Expanding the money supply in a controlled manner can encourage investment, trading activity, and credit availability without triggering excessive inflation.
2. The government and the CBN should implement measures to maintain low and stable inflation. Strategies may include improving monetary targeting, strengthening fiscal discipline, and ensuring efficient price monitoring mechanisms to safeguard financial market activity and investor confidence.

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