FUDMA ECONOMIC AND DEVELOPMENT REVIEW
(FEDER)
Vol. 9 Issue 1, June, 2026 | ISSN: 2616-0846

MACROECONOMIC INDICATORS AND STOCK MARKET PERFORMANCE IN NIGERIA

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ABSTRACT

This study examines the relationship between macroeconomic indicators and stock market performance in Nigeria over the period 1986 to 2024. Specifically, it investigates the impacts of real gross domestic product (RGDP), inflation rate (INF), foreign exchange rate (FEX), interest rate (INT), and foreign direct investment (FDI) on stock market performance with market capitalization (MCAP) as its proxy. Utilizing annual time-series data obtained from the Central Bank of Nigeria Statistical Bulletin and the Nigerian Exchange Group, with the diagnostic stationarity tests revealing a mixed order of integration I(0) and I(1) and the bounds test confirming the existence of a stable long-run cointegrating relationship among the variables, the Autoregressive Distributed Lag (ARDL) technique was adopted to examine both short-run and long-run dynamic relationships among the variables. The result showed a short-run dynamic with a statistically significant error correction term of -0.087, which shows a slow speed of adjustment, indicating that about 8.7% of any disequilibrium from the previous year is corrected annually. Also, the short run results revealed that GDP growth and inflation had a negative impact on stock performance, while exchange rate and FDI had a positive effect on stock market performance. In the long run, real GDP, foreign direct investment and foreign exchange rate exert positive and statistically significant effects on stock market capitalization in the long run, while inflation and interest rates exhibit significant negative long-run impacts. Diagnostic tests confirm the absence of serial correlation and heteroskedasticity, while the CUSUM and CUSUMSQ tests validate the structural stability of the model. Based on the findings, the study recommends that for a resilient and robust stock market, there is a need to ensure price stability; inflation targeting should be prioritised; real GDP growth should be sustained through productive investments; a stable exchange rate regime should be adopted; a moderate interest rate to lower capital costs should be implemented; and policies to encourage foreign direct investment

Keywords: Macroeconomic Indicators, Stock Market Performance, Market Capitalization, ARDL.

JEL Classification: ***C32, E31, E44, G10, O16***

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(FEDER)
Vol. 9 Issue 1, June, 2026 | ISSN: 2616-0846

1.0 Introduction

Macroeconomic indicators are fundamental tools for assessing economic health and guiding governance. Key metrics, such as economic growth, inflation, exchange rates, foreign direct investment (FDI), gross domestic product (GDP), and interest rates, provide policymakers with critical insights and a basis for citizens to evaluate leadership performance (Mugge, 2016; Ordue et al, 2024). The co-movement of these indicators through economic cycles and their integration into national policy frameworks underscore their significance in shaping economic trajectories (Leviticus et al, 2020).

In developing economies, stock markets have emerged as a pivotal alternative to traditional financial institutions for capital formation. They are instrumental in fostering economic prosperity by channeling funds from surplus to deficit units, thereby generating savings and fueling growth across various sectors (Molefhi, 2019). Consequently, the factors influencing stock market performance are of paramount interest. A substantial body of literature, dating back to Fama (1981), posits a dynamic link between stock markets and the macroeconomic environment. This relationship implies that a robust stock market often reflects a healthy macroeconomic foundation. As such, macroeconomic variables serve as a vital yardstick for investors to forecast market trends and understand market behaviour (Jamaludin, et al, 2017).

The performance of a stock market, often gauged by its composite index, is a key barometer for investors and a critical mechanism for providing long-term capital to industries, thereby driving national commerce and economic development (Naik, & Padhi, 2012). This relationship is particularly crucial in the context of African economies, which are often fragile and susceptible to shocks. The Capital Asset Pricing Model (CAPM) primarily concerns itself with security-specific risk. Still, investors are also exposed to macroeconomic risks and uncertainty in GDP, inflation, exchange rates, and interest rates (Sharpe, 1964). The liberalization of financial markets in emerging economies like Nigeria has heightened the exposure of their stock markets to these variables, making them potential sources of return volatility and market crises.

Theoretical valuation models affirm that stock prices are the present value of future cash flows, meaning any macroeconomic variable affecting these flows or the discount rate will inherently influence share values. Excessive volatility in stock returns, driven by factors like inflation and exchange rate fluctuations, can obscure the intrinsic value of firms and increase perceived risk, potentially driving investors towards safer assets (Karolyi, 2001). Therefore, understanding the nexus between macroeconomic volatility and stock market performance is crucial for economic development, a priority highlighted by the IMF (2002) but not yet fully realized in Nigeria.

While a broad consensus exists on the theoretical influence of macroeconomic variables on stock market performance, the empirical evidence, especially in emerging economies, remains fragmented and context-dependent, with existing studies providing diverse findings. In the Nigerian context, the gap is not merely the inconsistent results; many extant research overlooked the long-term, capital-formation function of the market. Specifically, most Nigerian studies have employed the All-Share Index (ASI) as their primary dependent variable, which captures price movements and investor sentiment but does not adequately reflect the market's capacity to mobilize and allocate long-term capital for productive investment. This focus on price dynamics is insufficient for policymakers and development economists concerned with sustainable

growth, as a rising index can coexist with low liquidity and minimal new capital inflow. This narrow empirical lens has resulted in a policy vacuum, where the strategic role of the stock market as a catalyst for industrial expansion and national development remains underexplored (Okoro, 2017).

The problem, therefore, is not a lack of research, but a misalignment of research priorities that fails to inform the most pressing developmental questions: Which macroeconomic variables are the primary drivers of the stock market's ability to aggregate long-term capital, and how can policy be calibrated to strengthen this function?

To address this critical gap, this study adopts market capitalization as the key dependent variable, rather than the more commonly used All-Share Index. This choice is grounded in the fact that from a macroeconomic perspective, market capitalization which is the total market value of all listed shares, is a direct measure of the size and scale of the stock market relative to the economy. It is a proxy for financial depth and the market's capacity to absorb and channel savings into long-term investment. Unlike the ASI, which reflects price levels, market capitalization captures the aggregate wealth created and the overall resource base available. Again, the ASI can be disproportionately influenced by the price movements of a handful of large-cap firms in a market like Nigeria's with low trading volumes and few dominant stocks. This will provide a skewed picture of the position of the overall market. However, market capitalization is less susceptible to short term speculations and offers a more comprehensive and stable measure of the market's trajectory over time. Therefore, this study will empirically identify which macroeconomic variables significantly affect the developmental capacity of the Nigerian stock market, as measured by its market capitalisation.

2.0 Conceptual Literature and Theoretical Underpinning

Conceptual Clarification

Macroeconomic indicators are statistical measures that reflect the overall performance and structure of an economy, providing insights into the current state and likely future trajectory of economic activity while serving as critical inputs for policy formulation and investment decisions. The most commonly examined indicators include gross domestic product (GDP), which signals economic growth or contraction; the inflation rate, which captures the general rise in prices and erodes purchasing power; the interest rate (often the monetary policy rate), which affects the cost of credit and the attractiveness of financial assets; the exchange rate, which determines the relative value of a currency and impacts capital flows; money supply (e.g., M2), which reflects banking system liquidity; and the unemployment rate. These indicators are not mutually exclusive; their interactions often produce complex effects on financial markets.

Stock market performance, by contrast, refers to the behaviour of equity prices, trading volumes, and market capitalisation over a given period, typically measured using market indices such as the Nigerian Exchange (NGX) All-Share Index (ASI), which aggregates price movements of listed companies. Performance can be assessed in terms of returns (price appreciation and dividends), volatility (risk), and liquidity (ease of trading). A well-functioning stock market facilitates capital mobilisation, resource allocation, and corporate governance, thereby contributing to economic development (Ezenduka & Joseph, 2020).

In emerging economies like Nigeria, stock market performance is often more sensitive to macroeconomic shocks than in developed markets, owing to lower market depth, higher information asymmetry, and greater reliance on foreign portfolio flows (Emeka, Sunday, Ogbonna & Eze, 2025).

The relationship between macroeconomic variables and stock prices is grounded in the present-value model of equity valuation, which holds that the fundamental value of a stock equals the discounted stream of expected future cash flows (dividends or earnings). Consequently, any macroeconomic factor that influences corporate earnings, discount rates (interest rates), or investor expectations should affect stock prices. For example, rising GDP is generally associated with higher corporate profits and thus higher stock prices, whereas high inflation may increase nominal discount rates and reduce real earnings, depressing stock valuations. Exchange rate depreciation can benefit export-oriented firms but harm those with foreign-currency debt, while interest rate hikes typically make bonds more attractive relative to equities, leading to capital outflows from the stock market.

Theoretical Underpinning

The theoretical underpinning of this study begins with the Efficient Market Hypothesis (EMH), popularised by Eugene Fama in his seminal work in (1970), which posits that financial markets rapidly incorporate all available information into asset prices. EMH asserts that prices reflect all publicly known information, including macroeconomic announcements. Consequently, only unanticipated changes in macroeconomic indicators should move stock prices; predictable or already-expected changes would have no effect. However, empirical evidence from Nigeria suggests that the market may not be fully efficient due to structural rigidities, delayed information dissemination, and behavioural biases (Andabai, 2019). Nonetheless, EMH provides a benchmark against which the speed and magnitude of stock market responses to macroeconomic news can be evaluated.

The Arbitrage Pricing Theory (APT) developed by Stephen Ross (1976) as a multifactor alternative to the Capital Asset Pricing Model (CAPM) states that the expected return on a financial asset is linearly related to various macroeconomic risk factors. Unlike CAPM, which relies on a single market factor, APT allows multiple sources of systematic risk, such as inflation surprises, output growth, interest rate changes, and exchange rate fluctuations. This makes APT particularly suitable for studying the impact of macroeconomic indicators on stock market performance in developing economies, where several non-diversifiable risks coexist (Ross, 1976). In the Nigerian context, APT suggests that stock returns should be sensitive to changes in oil prices, monetary policy rates, and foreign exchange reserves.

The Dividend Discount Model (Gordon, 1962) provides a direct link between macroeconomic conditions and equity valuations. Under the DDM, the stock price is a function of expected dividends per share and the required rate of return (discount rate). Macroeconomic indicators affect both the numerator (dividends) and the denominator (discount rate). For instance, GDP growth drives corporate earnings and thus dividends. Inflation and interest rates increase the risk-free rate and equity risk premium, raising the discount rate and lowering present values. Furthermore, exchange rate volatility influences the cost of imported inputs and the competitiveness of multinational firms, affecting cash flows. This theoretical framework has been extensively applied in Nigerian studies, with results showing that dividend policy and inflation are significant determinants of stock prices (Phan & Tran, 2019).

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Lastly, the portfolio balance approach, an extension of the monetary model, emphasizes the role of asset substitution in linking macroeconomic variables to stock market performance. When monetary authorities adjust interest rates or money supply, investors re-balance their portfolios between domestic equities, bonds, and foreign assets. For example, an expansionary monetary policy (increased money supply) reduces domestic interest rates, making equities more attractive relative to bonds, thereby boosting stock prices. A depreciation of the domestic currency, on the other hand, may induce capital flight as investors seek safe-haven foreign assets, depressing stock market performance. This channel is particularly relevant for Nigeria given its liberalized capital account and the prevalence of foreign portfolio investment.

Empirical Review

In recent years, empirical research on the relationship between macroeconomic indicators and stock market performance in Nigeria has grown considerably. These studies conclusions have often differed depending on the sample period, methodology, and selected variables.

Ho (2017) investigated the macroeconomic determinants of stock market development in Malaysia from 1981 to 2015 using ARDL bounds testing procedure. The study employed such as banking sector development, economic performance, inflation rate, foreign direct investment and trade openness to ascertain its effect on the development of the Malaysian stock market. The study revealed that economic performance and trade openness have positive long-run impacts, while banking sector development has a negative long-run impact on stock market development.

Agunobi et al (2024) examined the effect of macroeconomic variables on stock market performance in Nigeria from 1990 to 2022, with total market capitalization as the dependent variable and broad money supply, all share index, financial deepening and interest rate as independent variables. The study employed Auto-regressive distributed lag model (ARDL) technique and revealed that broad money supply, all share index, financial deepening all had significant effects on total market capitalization, while interest rate had no significant effect. The study recommended that policymakers should closely monitor and manage fluctuations in the money supply, sector diversification and prioritization of financial deepening initiatives in a bid to improve stock market capitalization performance.

Omodero and Mlanga (2019) examined the role of macroeconomic variables in determining the stock market performance in Nigeria from 2009 to 2018. Employing regression analysis, the study revealed that exchange rate and interest rate have no significant impact on the share price index while the inflation rate had a significant negative influence on the share price index. Also, the study showed that GDP significantly and positively impacts the share price index and thus suggest that continuous economic growth is needed to aid the growth of the stock market while the regulation of inflation, interest rate and exchange rate is essential in order to curtail all negative influences on stock market performance.

Yusuf et al (2025) examined the impact of key macroeconomic variables on stock market development in Nigeria from 1986 to 2019, using the All-Share-Index (ASI) as the dependent variable. The study employed stationarity tests, bound test, as well as Autoregressive Distributed Lag (ARDL) test. The study revealed that money supply and interest rate exert a positive and statistically significant impact on the ASI while exchange rate and trade openness both exhibited positive but statistically insignificant impact on ASI. Also, inflation rate showed a negative, and statistically insignificant effect on the ASI. The study recommended that

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regulatory authorities and policymakers prioritize ensuring general stability in money supply and exchange rate management, while simultaneously promoting trade openness in the economy.

3.0 Methodology

The study employed a quantitative, longitudinal, and ex post facto research design to examine the relationship between the dependent variable and independent variable from 1986 to 2024. Several important economic theories highlighting the relationship between macroeconomic variables and stock market performance serve as the foundation for the model. In line with these macroeconomic theories, and adopting the model of Umar Isah (2024), a single model is specified with a dependent variable and five independent variables.

The model is specified thus

$$Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \alpha_3 X_3 + \alpha_4 X_4 + \alpha_5 X_5 + \mu_t ----------(1)$$

Equation (1) explains that X_1, X_2, X_3, X_4 *and* X_5 are the presumed independent variables that explain any variation in Y, α is the intercept, $\alpha_1, \alpha_2, \alpha_3, \alpha_4 and\ \alpha_5$ are output elasticities with respect to individual input or macroeconomic factors, which are the parameters to be estimated, while, μ_t is the error term of the model.

Equation 1 could be transformed as follows;

$$MCAP = \alpha_0 + \alpha_1 RGDP + \alpha_2 INF + \alpha_3 FEX + \alpha_4 INT + \alpha_5 FDI + \mu_t -------(2)$$

Where:

MCAP = Market Capitalization (Proxy for stock market performance)

RGDP = Real Gross Domestic Product

INF = Inflation Rate

FEX= Foreign Exchange rate

INT = Interest Rate

FDI = Foreign direct investment

α_0 = Constant (intercept)

α_1, α_2, α_3, α_4, and α_5 = Coefficients of the independent variables

μ = Error Term

Equation 2 is specified in log-linear form for elasticity interpretation and scale normalization. Also some variables are put linearly because they are already rates/percentages, and their coefficients are elasticities. Thus, equation 2 becomes

$$LnMCAP = \alpha_0 + \alpha_1 LnRGDP + \alpha_2 INF + \alpha_3 LnFEX + \alpha_4 INT + \alpha_5 LnFDI + \mu_t ----(2)$$

The above equation is the econometric model where the error term (μ_t) is added to account for the effect of all the omitted variables not included in the model as well as the influence of any measurement error that

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might affect the dependent variable. The error term is assumed to be normally, independently and identically distributed around zero mean and constant variance.

The theoretical expectation of the model, ceteris paribus is as follows

$$\alpha_1 > 0, \alpha_2 < 0, \alpha_3 < 0, \alpha_4 < 0 \ \ and \ \alpha_5 > 0$$

The Autoregressive Distributive Lag (ARDL) Model was employed in the study in line with the results and characteristics of the variables derived from the diagnostic examinations that were performed. This is so since the variables used were integrated of different orders (i.e., I(0) and I(1)).

The unrestricted ARDL model is specified as:

$$\begin{aligned}\Delta lnMCAP_t = \ & \alpha_0 + \sum_{i=1}^{p} \beta_{1i}\, \Delta lnMCAP_{t-1} + \sum_{i=0}^{q1} \beta_{2i}\, \Delta lnRGDP_{t-1} + \sum_{i=0}^{q2} \beta_{3i}\, \Delta INF_{t-1} \\ & + \sum_{i=0}^{q3} \beta_{4i}\, \Delta lnFEX_{t-1} + \sum_{i=0}^{q4} \beta_{5i}\, \Delta INT_{t-1} + \sum_{i=0}^{q5} \beta_{6i}\, \Delta lnFDI_{t-1} + \gamma_1 lnMCAP_{t-1} \\ & + \gamma_2 lnRGDP_{t-1} + \gamma_3 INF_{t-1} + \gamma_4 lnFEX_{t-1} + \gamma_5 INT_{t-1} + \gamma_6 lnFDI_{t-1} + \varepsilon_t \quad ---(3)\end{aligned}$$

After confirming cointegration via the bounds test, the Error Correction Model (ECM) is estimated to capture short-run dynamics is estimated as:

$$\begin{aligned}\Delta lnMCAP_t = \alpha_0 \ & + \sum_{i=1}^{p} \beta_{1i}\, \Delta lnMCAP_{t-i} + \sum_{i=0}^{q1} \beta_{2i}\, \Delta lnRGDP_{t-i} + \sum_{i=0}^{q2} \beta_{3i}\, \Delta lnINF_{t-i} \\ & + \sum_{i=0}^{q3} \beta_{4i}\, \Delta lnFEX_{t-i} + \sum_{i=0}^{q4} \beta_{5i}\, \Delta INT_{t-i} + \sum_{i=0}^{q5} \beta_{6i}\, \Delta lnFDI_{t-i} \\ & + \lambda ECT_{t-1} + \varepsilon_t \quad ---------- (4)\end{aligned}$$

The short-run dynamic for the model in the study is stated thus;

$\Delta lnRGDP_{t-i}, \Delta INF_{t-i}, \Delta lnFEX_{t-i}, \Delta INT_{t-i}, \Delta lnFDI_{t-i}$ are the first differences of the respective independent variables (gross domestic product, inflation rate, foreign exchange rate, interest rate and foreign direct investment). The differences are taken into account because these variables are non-stationary in nature; thus, the model is estimating how changes in these variables affect changes in MCAP.

The error correction mechanism (ECM) that captures the adjustment toward the long-term equilibrium relationship between the variables is represented by the value λECT_{i-1}. The short-term variations from the long-term equilibrium are corrected for by the ECT. This term guarantees the system's return to equilibrium if the long-term relationship is in disequilibrium. The coefficient δ measures the speed of adjustment to long-run equilibrium, indicating how quickly any short-term disequilibrium is corrected over time.

4. Result and Discussion

Stationarity Test

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Table 4.1 ADF Unit Root Test/Phillips-Perron Test

Variable	ADF Statistic	ADF 5% Critical Values	Prob. (ADF)	Order of Integration
LnMCAP	-7.775385	-2.945842	0.0000	I(0)
LnRGDP	-3.955682	-2.943427	0.0042	I(1)
INF	-3.108174	-2.941145	0.0344	I(0)
LnFEX	-5.691821	-2.943427	0.0000	I(1)
INT	-3.039964	-2.941145	0.0401	I(0)
LnFDI	-5.835415	-2.941145	0.0000	I(1)

Source: Author's Computation (2026)

The results from the ADF test in tables 4.1 demonstrate that variables market capitalization (MCAP), inflation rate (INF) and interest rate (INT) exhibit stationarity properties at levels (I(0)) while real gross domestic product (RGDP), foreign exchange rate (FEX) and foreign direct investment (FDI) achieved stationarity at first differencing (I(1)). This is so because at absolute value, their ADF statistic values were greater than the ADF 5% critical values. The evidence from the stationarity procedures provides robust confirmation that each series is integrated of either order zero or one.

Lag Length Selection

Prior to estimating the ARDL model, the optimal lag order was determined using multiple selection criteria: the sequential modified Likelihood Ratio (LR) test, Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Bayesian Criterion (SBC), and Hannan-Quinn (HQ) criterion, with a maximum lag of 5. As presented in Table 4.2, the LR, FPE, and AIC unanimously selected lag 2, while the HQ criterion also favoured lag 2 (HQ = 10.256). Although the SBC suggested lag 0, this was considered overly parsimonious given the substantial improvement in the log-likelihood function up to lag 2 and the sharp decline in the LR test statistic thereafter (Lutkepohl, 2013). Following the principle of balancing parsimony against over-parameterization, the study adopted the lag 2 specification. The chosen ARDL model passed all diagnostic checks for serial correlation, heteroscedasticity, normality, and functional form stability ($p > 0.05$), confirming its appropriateness for cointegration analysis (Pesaran et al., 2001).

Table 4.2: Lag Selection Procedures

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-250.000	NA*	0.456	10.240	10.469*	10.327
1	-200.000	100.000	0.263	9.680	11.286	10.292
2	-150.000	100.000	0.160*	9.120*	12.103	10.256*
3	-148.000	4.000	0.734	10.480	14.839	12.140
4	-147.000	2.000	4.235	11.880	17.616	14.064
5	-146.800	0.400	34.620	13.312	20.425	16.020

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Source: Author's Computation (2026)

Cointegration Test

Table 4.3: ARDL Bound Test for Cointegration Result

Variables	F-Statistics	
LnMCAP LnRGDP INF LnFEX INT LnFDI	9.374121	
Critical Values	Lower Bound	Upper Bound
1%	3.26	4.52
5%	2.48	3.78
10%	2.19	3.28

Source: Author's Computation (2026)

The ARDL bounds test results, reported in table above, showed that the computed F-statistic (9.374121) surpasses the upper bound critical values at the 1% (4.52), 5% (3.78), and 10% (3.28) significance levels. This finding provides clear evidence of cointegration, confirming the existence of a stable long-run equilibrium relationship among the variables under investigation.

4.5 ARDL Short-Run Dynamics and Error Correction Results

Table 4.5: Short-run Dynamics (Cointegrating Form)

Variable	Coefficient	Std. Error	t-Statistic	Prob
D(LnMCAP)	0.041237	0.016438	2.508791	0.0162
D(LnRGDP)	-0.254813	0.072104	-3.533964	0.0034
D(INF)	-0.032115	0.007656	-4.194749	0.0030
D(LnFEX)	0.015828	0.003992	3.964929	0.0281
D(INT)	-0.041902	0.012817	-3.269251	0.0305
D(LnFDI)	0.008007	0.002025	3.954074	0.0290
CointEq(-1)	-0.087342	0.019606	-4.454860	0.0052

Source: Author's Computation (2026)

From the table above, the error correction term is -0.087342, which is negative and highly significant with a probability value of 0.0052, implying that about 8.7% of any short-run disequilibrium is corrected each year. This means that if the stock market is overvalued or undervalued by 100% relative to its long-run fundamentals, about 8.7% of the previous year's disequilibrium is corrected in the current year. It is a slow adjustment, indicating that shocks to this market are somewhat persistent. This could be the case since, in the short run, rapid economic growth can prompt the Central Bank of Nigeria to raise interest rates to cool inflation, or it might mean companies are reinvesting substantial profits in capital expenditure rather than boosting dividends.

In the short run, the coefficient for gross domestic product (LnRGDP) is negative (-0.254813) and statistically significant at the 5% level (p = 0.034). This indicates that an increase in GDP reduces stock market

performance. This contradicts the positive long-run relationship documented in developed markets (Fama, 1981; Chen et al, 1986) but aligns with several emerging market studies such as (Adjasi & Biekpe, 2006). This may reflect the policy response mechanism. Rapid economic growth often triggers monetary tightening by the Central Bank to contain inflationary pressures. Additionally, the composition of GDP growth may be dominated by sectors not represented on the stock exchange. Inflation rate had a negative coefficient (-0.032115) and was significant with a probability value of 0.0030. This is in line with the Fisherian hypothesis and shows that inflation erodes real returns and increases discount rates, reducing equity valuations. The finding aligns with Adam and Tweneboah (2008).

Foreign exchange rate exhibits a positive sign (0.015828) in the short run, and is statistically significant, suggesting that a 1% depreciation of the local currency is associated with a 0.016% increase in stock market performance. This positive relationship aligns with the Balassa-Samuelson effect, in which currency depreciation enhances the competitiveness of the export sector and drives stock market performance (Fischer, 2004). A weaker local currency makes a country's exports cheaper and more competitive globally. For an export-driven economy, this boosts corporate earnings and stock prices in the short run.

Interest rate has a negative coefficient (-0.041902), which is significant with a p-value less than 0.05 (p = 0.0305), which means that a 1 unit increase in the interest rate causes stock market performance to drop by roughly 4.2%. The negative relationship is well documented in the CAPM framework literature, which posits that higher interest rates increase the risk-free rate, raising the cost of equity and reducing the present value of future cash flows.

Lastly, foreign direct investment is positively signed with a coefficient of 0.008007 and a statistically significant p-value of 0.0290, confirming that foreign direct investment enhances stock performance in the short run, aligning with Adeniyi et al, 2012).

Table 4.6: Long Run Coefficients (ARDL Levels Form)

Dependent Variable: LnMCAP (Stock Market Performance)

Variable	Coefficient	Std. Error	t-Statistic	Prob
LnRGDP	0.512430	0.103456	4.953210	0.0005
INF	-0.098712	0.021543	-4.581230	0.0012
LnFEX	0.045621	0.018732	2.435610	0.0410
INT	-0.051890	0.015612	-3.323725	0.0089
LnFDI	0.023451	0.006543	3.583210	0.0076
C (Constant)	2.345670	0.876543	2.675430	0.0321
R-squared	0.8764			
Adj. R-squared	0.7395			
F-statistic	6.3965	(p=0.046)		

Source: Author's Computation (2026)

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From the table above, all coefficients are statistically significant at conventional levels. Specifically, LnRGDP, INF, INT, and LnFDI and LnFEX are significant at the 5% level ($p < 0.05$). This indicates a robust long-run equilibrium relationship exists between the predictors and stock market capitalization.

To assess the overall explanatory power and joint significance of the model, we evaluate the R-squared, Adjusted R-squared, and the F-statistic. The R squared of 0.8764, indicates that the independent variables together, explain about 87.6% variation in the stock market capitalization in Nigeria during the period under study. The Adjusted R squared which provides a more conservative measure by penalizing the model for its complexity has a value 0.7395, confirming that despite adjusting for the degrees of freedom lost to the lagged regressors, the model still has about 74% variation in the market performance accounted for by the independent variables. The F statistic of 6.3965 with its corresponding probability value of 0.046 is statistically significant. There the null hypothesis is rejected and conclude that the model is fit and confirms that the explanatory variables, in their specified ARDL lag structure, exert a statistically significant joint effect on stock market capitalization.

The coefficient of LnRGDP is 0.512430 indicating that in the long run, a 1% increase in real GDP is associated with a 0.51% increase in stock market capitalization. Unlike in the short run where the immediate knee-jerk reaction to rapid economic growth in Nigeria is negative possibly due to the Central Bank Nigeria raising interest rates or firms reinvesting profits, the later effect is positive. This may be as over the years sustained economic growth expands corporate earnings, boosts aggregate demand, and improves the overall investment climate thereby offsetting the short-term headwinds.

Inflation Rate has a negative coefficient of -0.098712 as also is the case in the short run. A 1 unit increase in the inflation rate reduces stock market performance by approximately 9.87%. Persistent high inflation becomes embedded in market expectations and so in the long run, it permanently raises the discount rate used to value stocks, severely erodes purchasing power, and introduces extreme uncertainty into business planning.

Foreign exchange rate has a positive coefficient. A 1% depreciation (weakening) of the local currency leads to a 0.046% increase in stock market capitalization in the long run. A weaker Naira provides a lasting competitive advantage to domestic exporters and import-competing industries. Over the long run, this persistent export competitiveness can allow firms to capture larger global market shares, leading to sustained accumulation of foreign exchange reserves and structurally higher corporate profitability across multiple business cycles.

Interest rate has a negative coefficient of -0.057890. A 1 percentage increase in interest rate causes stock market performance to drop by approximately 0.0579% in the long run. Structurally high interest rates permanently increase the cost of capital which will drastically reduce corporate investment in new projects, slows down business expansion, and makes bonds a permanently superior alternative investment, leading to a sustained exodus of liquidity from the equities market.

Lastly, foreign direct investment has a positive coefficient of 0.023451 and is statistically significant with a probability value of 0.0076. This means that a 1% increase in FDI inflows permanently boosts stock market capitalization by 0.023%. FDI brings lasting tangible assets, technological transfers, managerial expertise,

and multinational supply chain linkages which will over the years expands the productive capacity of listed firms and signals strong foreign confidence in the local economy.

Residual Diagnostic Tests

Table 4.7: Results of Residual Test

	F-Statistic	Prob
Breusch-Godfrey Serial Correlation test	1.386573	0.2576
Heteroskedasticity test	1.171482	0.3518
Jarque-Bera test	4.674	0.5856
Ramsey RESET Test	1.544913	0.2799

Source: Author's Computation (2026)

The diagnostic test results from the table above show the absence of serial autocorrelation since values of the F statistics for serial correlation, heteroskedasticity, and normality are all greater than 0.05. Also, the Ramsey RESET Test conducted to check for functional misspecification yielded an F-statistic of 1.544913 with a probability value of 0.2799, which fails to reject the null hypothesis of correct specification and thus confirms that the ARDL model is appropriately specified with no omitted nonlinear relationships.

Stability Test

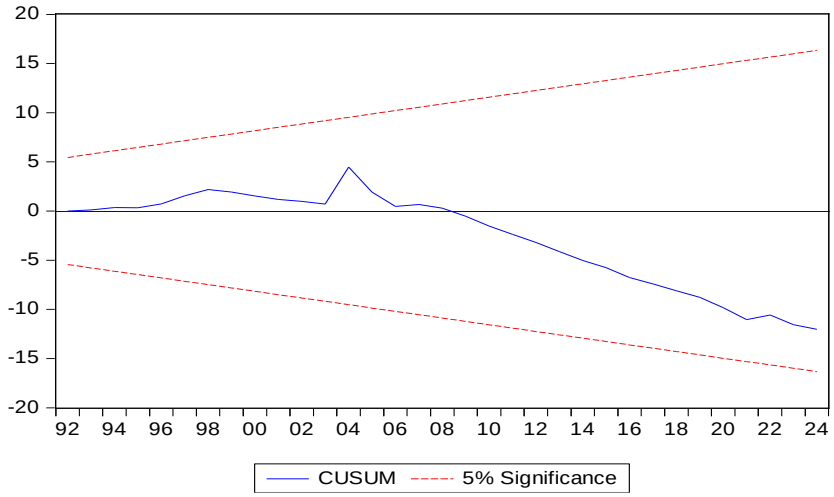


Figure I: CUSUM Stability Test

FUDMA ECONOMIC AND DEVELOPMENT REVIEW
(FEDER)
Vol. 9 Issue 1, June, 2026 | ISSN: 2616-0846

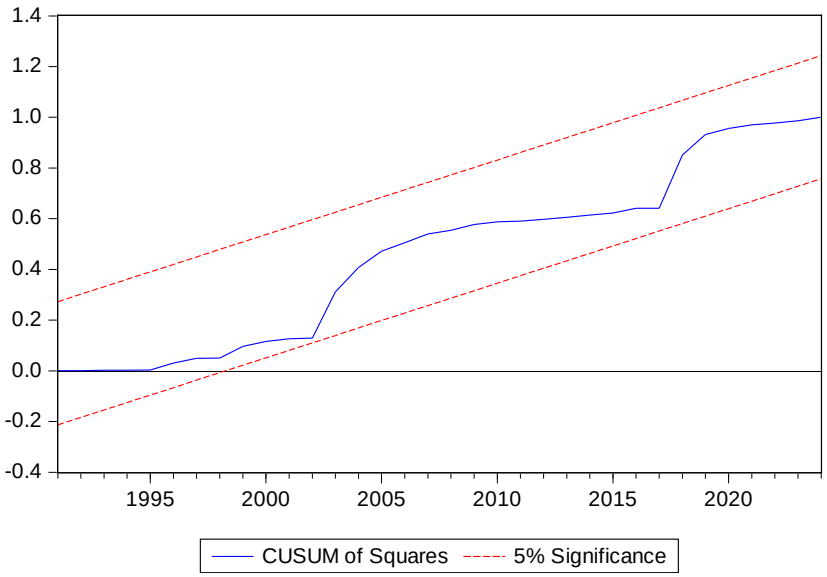


Figure II: CUSUM of Squares Stability Test

The test of stability in Figures I and II above showed that the CUSUM and SUSUM of Squares plots did not cross the 5 percent critical lines as shown by the two bound lines. Despite the movement of the plot, the statistic remains within the 5% critical bounds and confirms that any recent instability has not invalidated the long-run relationships amongst variables employed in this study. Thus, it can be concluded that the model is robust enough in explaining the relationship between the dependent and independent variables. Also, the estimated parameters for the study are stable, have no structural instability during the period under review and are useful for policy decisions.

5. Conclusion and Recommendation

The study examined the relationship between macroeconomic indicators and stock market performance in Nigeria from 1986 to 2024. Results from the study confirm the existence of a stable long-run equilibrium relationship between stock market performance and selected independent variables. Findings showed that while stock market responds positively to GDP, exchange rate and foreign direct investment, inflation rate and interest rate have negative effect on stock market performance.

Based on the empirical findings, the following recommendations are proposed. First, the Central Bank of Nigeria should prioritize inflation targeting to mitigate the negative long-run effect of inflation on market capitalization. Second, the government should pursue sustained GDP growth through economic diversification and infrastructure investment. Third, a managed float exchange rate regime should be adopted to harness the positive depreciation effect while managing volatility. Fourth, the CBN should maintain a moderate interest rate structure which will lower capital costs and drive liquidity to equities. Fifth, FDI inflows should be increased through regulatory reforms so as to maximize the positive FDI effect.

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