International Journal of Multidisciplinary Research and Growth Evaluation.

Macroeconomic Drivers of Share Price Dynamics: Evidence from the Nigerian Exchange Group (1989–2023)

UGOH T Timothy [1*], HARISON, Vincent [2], ODEH, Bartholomew Ejembi [3]
[1] Faculty of Management, University of New Brunswick, Saint John, Canada
[2] Faculty of Administration, Nasarawa State University, Keffi, Nigeria

* Corresponding Author: **UGOH T Timothy**

Article Info

ISSN (online): 2582-7138
Volume: 06
Issue: 04
July - August 2025
Received: 03-06-2025
Accepted: 02-07-2025
Published: 20-07-2025
Page No: 877-884

Abstract
The primary objective of this study is to examine the effect of macroeconomic variables on share prices in Nigeria. The All-Share Index (ASI) was employed as the dependent variable, while exchange rate, interest rate, and inflation served as indicators of macroeconomic performance. The study adopted an ex post facto research design, using secondary data sourced from the National Bureau of Statistics, World Bank Data Catalogue, and the Nigerian Exchange Group for the period 1989–2023. To satisfy time series and regression assumptions, diagnostic tests including unit root, heteroscedasticity, and Johansen co-integration were conducted to examine normality, stability, homoscedasticity, and long-run relationships among variables. Ordinary Least Squares (OLS) regression was applied to test the hypotheses. The findings indicate that exchange rate and interest rate exert significant effects on the All-Share Index, whereas inflation has a negative but statistically insignificant influence. The study concludes that macroeconomic variables are viable and sensitive economic indicators for predicting share price behavior in the Nigerian economy. Based on these findings, it is recommended that the government implement targeted intervention policies aimed at enhancing broad-based stock market performance, supported by monetary policy instruments facilitated through financial institutions.

Keywords: Macroeconomic variables, All Share Index, Exchange rate, Inflation, Interest rate

1. Introduction

The fluctuations and volatility of share prices observed globally introduce significant risks to investors and create uncertainty that can undermine market efficiency and returns. Persistent price swings erode investor confidence, dampen trading activity, and pose challenges not only to investors but also to policymakers due to their implications for financial stability and economic performance (Alagidede & Panagiotidis, 2022; Hsieh *et al*., 2021) [5, 31]. In theory, efficient markets should fully assimilate all available information into prices; however, persistent volatility suggests that markets, especially in emerging economies, may be only semi-strong or weak-form efficient (Fama, 1970; Uyaebo *et al*., 2015) [21, 54]. This underscores the importance of investigating whether Nigerian stock prices exhibit volatility and, if so, identifying the macroeconomic forces that drive it.

The Nigerian stock market, as a component of an emerging economy, operates under conditions of structural reform, evolving regulation, and macroeconomic instability. Macroeconomic fundamentals such as exchange rates, interest rates, and inflation, exhibit high variability in developing countries, with each influencing market performance through trade competitiveness, borrowing costs, and purchasing power (Ezeaku *et al*., 2022; Yaya *et al*., 2020) [49, 57]. These dynamics significantly affect capital flows, portfolio allocation, and overall market behavior. Historically, the Nigerian stock market has shown both periods of rapid expansion and sharp contractions. For example, the All-Share Index (ASI) rose from 100.00 in 1984 to 57,990.22 in 2007 before plummeting by 64.1% to 20,827.17 in 2009 due to the global financial crisis (CBN, 2007). Market capitalization surged tenfold during this period but remained only 28% of GDP far below levels in comparable emerging economies such as South Africa (167%), Zimbabwe (50%), and Malaysia (130%) (World Bank, 2023).

This performance gap reflects the underdeveloped state of the Nigerian market and highlights its vulnerability to domestic and global shocks.

Macroeconomic theory provides multiple explanations for these linkages. Fama (1981) [20] argues that stock prices are influenced by variables such as inflation, interest rates, exchange rates, and GDP growth. Exchange rate fluctuations, for instance, influence export competitiveness and earnings for listed firms, with appreciation generally depressing export-oriented equities and depreciation potentially boosting them (Muthike & Sakwa, 2012; Mechri *et al*., 2019) [48, 45]. Similarly, interest rates affect equity prices through the cost of capital and discount rate channels as higher rates raise borrowing costs and reduce firm profitability, prompting investors to shift capital toward fixed-income assets (Issahaku *et al*., 2013; Winful *et al*., 2016) [35, 55].

Inflation, meanwhile, has an ambiguous effect on equity markets. The Fisher Effect (Fisher, 1930) [22] suggests that nominal returns should adjust to expected inflation, leaving real returns unchanged. However, in emerging markets, unexpected inflation often erodes purchasing power and diverts capital from investment to consumption, depressing equity valuations (Talla, 2013; Bouri *et al*., 2022) [53, 13]. Anticipated inflation, in contrast, may enhance firm earnings and dividends, leading to higher equity valuations (Alshogeathri, 2011; Yaya *et al*., 2020) [6, 57].

These dynamics emphasize the sensitivity of stock markets to macroeconomic volatility. In Nigeria, where institutional frameworks are evolving and investor protection is relatively weak, such volatility may be amplified. Existing literature on the Nigerian context offers mixed findings on the relationship between macroeconomic variables and stock market performance (Atoi, 2014; Okonkwo *et al*., 2023; Ezeaku *et al*., 2022) [9, 49, 54]. This lack of consensus underscores the need for robust empirical research that incorporates current data and advanced econometric modeling to capture both the short- and long-run effects of macroeconomic variables on share price volatility.

The primary objective of this study is, therefore, to examine the causal relationship between key macroeconomic indicators such as exchange rate, interest rate, and inflation and share prices in Nigeria, as represented by the All-Share Index, using time series data from 1988 to 2022. This research contributes to the literature by applying rigorous econometric diagnostics to ensure the robustness of findings, thereby offering valuable insights for policymakers, investors, and market regulators.

Grounded in theoretical and empirical evidence, this study is guided by the following hypotheses:

H_{01}: Exchange rate has no significant effect on share prices in the Nigerian Exchange Group.

H_{02}: Interest rate has no significant effect on share prices in the Nigerian Exchange Group.

H_{03}: Inflation rate has no significant effect on share prices in the Nigerian Exchange Group.

2. Literature Review

2.1 Conceptual Framework

2.1.1 Exchange Rate and Share Prices

Exchange rate movements significantly influence stock market returns due to their impact on investor expectations and corporate earnings. Currency appreciation can weaken export competitiveness, making export-oriented firms less attractive to investors, which depresses stock prices (Muthike & Sakwa, 2012; Mechri *et al*., 2019) [48, 45]. Conversely, currency depreciation may enhance the export sector's profitability, supporting equity valuations, though the impact depends on trade structure and investor confidence (Adjasi *et al*., 2020) [2]. An exchange rate reflects the relative price of one currency against another, directly influencing the cost of imports and exports, balance of payments, and inflationary pressures (Aslam & Lebbe, 2015; Yaya *et al*., 2020) [8, 57]. In emerging markets like Nigeria, exchange rate volatility often transmits into equity price volatility due to heavy import dependence, weak hedging markets, and speculative trading. Empirical findings are mixed: while Agyapong *et al*. (2023) [3] report a significant negative link between exchange rate instability and stock performance in African markets, Ezeaku *et al*. (2022) [54] observe only short-term effects.

2.1.2 Interest Rate and Share Prices

Interest rates are a primary transmission mechanism between monetary policy and capital markets. Classical finance theory predicts an inverse relationship between interest rates and stock prices: higher rates increase the cost of capital and discount rates, lowering the present value of future earnings (Fisher, 1930; Abdullah & Hayworth, 1993) [22]. In practical terms, when deposit money banks raise interest rates, investors often reallocate capital from equities to fixed-income securities for more predictable returns, reducing stock market activity (Winful *et al*., 2016; Issahaku *et al*., 2013) [35, 55]. Empirical research supports this view. Kyereboah-Coleman and Agyire-Tettey (2008) [43] find that increases in policy rates reduce equity valuations through lower earnings and dividends. More recent studies, such as Okonkwo *et al*. (2023) [49], note that in Nigeria, interest rate shocks create immediate volatility, with prolonged effects in less liquid markets. Thus, interest rate management remains critical for sustaining investor confidence and equity market stability.

2.1.3 Inflation Rate and Share Prices

Inflation influences stock prices through its impact on purchasing power, cost structures, and investor expectations. Higher inflation reallocates resources from investment to consumption, reducing equity demand (Gurioveleen & Bhatai, 2015; Talla, 2013) [53]. While the Fisher Effect (Fisher, 1930) [22] posits that nominal returns adjust proportionally to expected inflation, maintaining real returns, emerging market evidence often shows inflation as destabilizing equity prices due to policy uncertainty and weak inflation targeting (Bouri *et al*., 2022; Yaya *et al*., 2020) [57, 13]. Keynesian theory argues that inflationary pressure is driven by demand-pull dynamics, requiring policy intervention to stabilize markets (Keynes, 1936). In contrast, Monetarist theory (Friedman & Schwartz, 1963) attributes inflation to money supply expansion, emphasizing its persistent impact on real returns and investor sentiment. In Nigeria, where inflation is often supply-side driven and compounded by currency instability, its relationship with equity prices remains mixed. Ezeaku *et al*. (2022) [54] find that unanticipated inflation shocks have negative effects on stock market performance, while anticipated inflation effects vary with sector sensitivity.

2.2 Empirical Review

Table 1: Summary of Empirical Review

Study & Year	Country / Context	Period Covered	Methodology	Key Variables	Main Findings
Ordue *et al*. (2024) [50]	Nigeria	1986–2022	ARDL & ECM	GDP, Inflation, Interest Rate, Equity, Stock Market Returns (SMR)	Long-run: GDP & inflation positive, interest rate & equity negative. Short-run: Lagged SMR & inflation boost returns.
Akanbi *et al*. (2024) [4]	Nigeria	1985–2023	ARDL Bounds Test	GDP, Inflation, Exchange Rate, Interest Rate, Money Supply	GDP has positive significant effect; inflation negative; exchange rate positive in long-run; short-run effects weaker.
Ayinuola (2023) [10]	Nigeria (sector panel)	Up to 2023	GARCH & Panel Models	Inflation, Money Supply, Exchange Rate, Interest Rate	Inflation negative short & long run; money supply positive short run, negative long run; exchange rate positive; interest rate negative in short run.
Pole and Cavusoglu (2021) [51]	Nigeria	1998–2019	ARDL	Money Supply, Aggregate Industrial Production, Exchange Rate, Inflation	Money supply & industrial production positive; exchange & inflation negative; macro factors significant short & long run.
Sanya and Isaac (2020) [52]	Nigeria	1985–2018	ARDL Co-integration	Inflation, Interest Rate, World Oil Price, Real Effective Exchange Rate	Inflation negative; interest rate, oil price, and REER significant drivers of stock market performance.
Hussainey and Ngoc (2020) [33]	Vietnam	2001–2018	Nasseh, Strauss & Canova Methodology	Interest Rate, Industrial Production, US Macro Fundamentals	Domestic production & money market variables significantly influence stock prices; US macro fundamentals also significant.
Josiah and Akpoveta (2019) [38]	Nigeria	–	Co-integration, ECM, Granger Causality	Money Supply, Exchange Rate, Output, Financial Openness	Money supply, exchange rate stability, output & openness stimulate market returns.

Researcher's Compilation, 2025

The reviewed empirical evidence consistently demonstrates that macroeconomic variables exert significant influence on stock market performance across various economies, with the Nigerian market exhibiting recurring sensitivity to inflation, interest rates, and exchange rate fluctuations. The most recent studies (Ordue *et al*., 2024; Akanbi *et al*., 2024; Ayinuola, 2023) [50, 4, 10] confirm and expand earlier conclusions by employing advanced econometric techniques such as ARDL, ECM, and GARCH models, validating the long-run positive role of GDP and exchange rate stability on market returns, while inflation remains a persistent negative determinant in both short and long horizons.

Older studies (Pole & Cavusoglu, 2021; Sanya & Isaac, 2020; Josiah & Akpoveta, 2019) [51, 52, 38] reinforce these findings by establishing that both endogenous variables (money supply, output growth) and exogenous shocks (global oil prices, foreign macroeconomic fundamentals) shape the Nigerian stock market trajectory. Cross-country investigations, such as those by Hussainey and Ngoc (2020) [33] on Vietnam, and Megaravalli and Sampagnaro (2018) [46] on Asian economies, reveal similar dynamics, confirming the universality of inflation's dampening effect and the supportive role of exchange rate appreciation.

The collective evidence shows that while GDP growth, monetary expansion, and exchange rate stability generally support market performance, inflation and rising interest rates consistently undermine returns. Furthermore, the volatility modelling approaches (Ayinuola, 2023) [10] highlight those short-run shocks particularly from money supply and global oil price movements tend to exert stronger immediate effects, whereas long-run equilibrium adjustments occur through GDP growth, exchange rate realignments, and controlled inflation.

2.3 Theoretical Framework

2.3.1 Efficient Market Hypothesis (EMH)

The Efficient Market Hypothesis (EMH), developed by Fama (1965), asserts that all relevant information is immediately and fully reflected in the market price of securities. In other words, at any point in time, prices incorporate all available information, making it impossible to consistently identify undervalued or overvalued securities through the analysis of past or current data. Applied to the securities market, the EMH implies that no trading mechanism or investment strategy can consistently outperform the market on a risk-adjusted basis. According to the EMH, financial markets are efficient because asset prices embody the collective beliefs and knowledge of all market participants about future prospects. Consequently, prices are considered unbiased estimators of intrinsic value. Empirical tests of the EMH, particularly in emerging markets, have sometimes relied on long-range dependence due to market narrowness and immature regulatory and institutional structures (Lo, 1991; Nyong, 2003; Nagayasu, 2003).

The Efficient Market Hypothesis (EMH) is generally categorized into three forms based on the degree of information reflected in prices. The weak form efficiency asserts that prices incorporate all historical price and volume information. The semi-strong form efficiency states that prices reflect all publicly available information, including financial statements, news releases, and macroeconomic indicators. The strong form efficiency maintains that prices reflect all information, both public and private, including insider information. For a capital market to be considered efficient, certain assumptions are made: a large number of rational, profit-maximizing investors act independently in analyzing and valuing securities; the release of new information regarding securities occurs in a random and independent manner; and investors rapidly adjust prices to reflect the impact of new information.

2.3.2 Arbitrage Pricing Theory (APT)

The Arbitrage Pricing Theory (APT), developed by Ross (1976), offers a general theory of asset pricing that models the expected return of a financial asset as a linear function of multiple macroeconomic risk factors. Each factor's influence is measured by a factor-specific beta coefficient, which

captures the asset's sensitivity to changes in that factor. APT predicts a securities market line linking the variance of expected returns to multiple sources of systematic risk, thereby providing a multi-factor alternative to the single-factor Capital Asset Pricing Model (CAPM).

The Arbitrage Pricing Theory (APT) rests on three key propositions: stock returns can be explained by a multifactor risk model; there are sufficient securities in the market to diversify away unsystematic risk; and in a well-functioning market, arbitrage opportunities cannot persist. Unlike the Capital Asset Pricing Model (CAPM), which is limited to a single systematic risk factor (market beta), the APT allows for multiple sources of systematic risk, often represented by macroeconomic variables such as inflation, interest rates, exchange rates, and GDP growth (Eita, 2011). This flexibility makes APT more adaptable for empirical application in diverse markets.

APT assumes that investors will exploit arbitrage opportunities if mispricing occurs, driving asset prices toward equilibrium. In equilibrium, asset returns are linearly related to their exposure to the identified macroeconomic risk factors. Empirical studies (Ouma & Muriu, 2014; Etale & Eze, 2019) support the APT proposition that in the absence of arbitrage opportunities, expected returns can be predicted from factor sensitivities (factor betas).

Together, EMH and APT justify the empirical investigation: EMH frames the expectation that in an efficient market macroeconomic information should be quickly priced in, while APT provides the analytical mechanism to test how specific macroeconomic factors contribute to variations in stock returns. The integration of these theories strengthens the theoretical basis for assessing whether the Nigerian stock market reflects economic fundamentals efficiently, or whether inefficiencies persist that create exploitable opportunities for investors.

3. Research Methodology

This study adopts an ex-post facto research design, which is appropriate for exploring causal relationships in which the researcher has no control over the independent variables. This design is suitable because the study examines the effects of macroeconomic variables on stock market performance in Nigeria using historical data. The independent variables for this study are exchange rate (EXCHR), interest rate (INTR), and inflation rate (INFL), while the dependent variable is the All-Share Price Index (ASPI), which serves as a proxy for stock market performance. The study period spans from 1989 to 2023, providing an extensive time series dataset that allows for long-term analysis of the variables.

The study relies exclusively on secondary annual time series data obtained from credible and authoritative sources. Data for the All-Share Price Index were extracted from the Nigerian Stock Exchange Factbook, while data on exchange rate, interest rate, and inflation rate were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin. Additional verification and cross-checking of macroeconomic indicators were conducted using the World Bank Annual Reports and the Global Economic Index to ensure consistency and reliability across the study period.

The research is anchored on the Arbitrage Pricing Theory (APT), which posits that stock returns are influenced by multiple macroeconomic risk factors in a linear relationship. Following the APT framework, the functional model for this study is specified as: Stock prices = f (EXCHR, INT, INFL).

For the purpose of this study, the econometric form of this model is expressed as follows:

$ASPI = \beta 0 + \beta 1(EXCHRt) + \beta 2(INTt) + \beta 3(INFLt) + \mu t$

ASPI = All Share Price Index, EXCHR = Exchange rate, INT= Interest rate, INFL= Inflation Rate, t = Signify time series data, β0 = Constant, B1-β3 = Regression coefficients

4. Results and Discussions

4.1 Descriptive Analysis

Table 2: Descriptive Statistics

	ASPI	EXCHR	INTR	INFL
Mean	80.85486	115.0366	18.73971	19.55286
Median	26.84000	120.5800	17.80000	12.56000
Maximum	783.0000	358.8100	31.65000	72.84000
Minimum	1.110000	1.760000	9.960000	5.390000
Std. Dev.	161.9064	99.77796	3.923955	17.81209
Skewness	3.096218	0.762474	0.953853	1.706401
Kurtosis	12.4709	2.858349	5.165234	4.554097
Jarque-Bera	186.7311	3.420564	12.14439	20.50772
Probability	0.0000	0.180815	0.002306	0.000035
Sum	2829.92	4026.28	655.89	684.35
Sum Sq. Dev.	891265.6	338491.8	523.5123	10787.19
Observations	35	35	35	35

***Source*:** Author's Computation from E-view 12, 2024

Table 2 presents the descriptive statistics for the All-Share Price Index (ASPI), exchange rate (EXCHR), interest rate (INTR), and inflation rate (INFL) over the period 1988–2023. The mean values for ASPI, EXCHR, INTR, and INFL are 80.85, 115.04, 18.74, and 19.55 respectively, indicating the average performance of the variables over the study period. The median values, which represent the midpoint of the data when arranged in ascending order, are 26.84, 120.58, 17.80, and 12.56 respectively. The wide gap between the mean and median for ASPI suggests the presence of extreme values or outliers in stock market performance over the years.

The maximum values recorded for ASPI, EXCHR, INTR, and INFL are 783.00, 358.81, 31.65, and 72.84 respectively, while the minimum values are 1.11, 1.76, 9.96, and 5.39 respectively, indicating substantial variability within the series. The standard deviations for ASPI, EXCHR, INTR, and INFL are 161.91, 99.78, 3.92, and 17.81 respectively, showing that ASPI exhibits the highest volatility over the study period, followed by the exchange rate.

The skewness values indicate that all the variables are positively skewed, implying a longer right tail in their distributions. ASPI (3.09) shows the highest skewness, consistent with the presence of extreme positive changes in stock prices during certain years. Kurtosis results indicate that ASPI (12.47) is leptokurtic, suggesting a sharper peak and heavier tails compared to a normal distribution, while EXCHR, INTR, and INFL are also above 3, indicating non-normal distributions. The Jarque–Bera statistics confirm that ASPI, INTR, and INFL reject the null hypothesis of normality at the 5% level, while EXCHR does not.

Overall, the descriptive statistics suggest high volatility in the stock market index, moderate volatility in exchange rates and inflation, and relatively stable interest rates. These patterns highlight the importance of further econometric testing to capture the dynamic relationships between macroeconomic variables and stock market performance.

4.2 Unit Root Test

Table 3: Unit Root Summary Result

Variables	Prob	Order of Integration
ASPI	0.0002	I(1)
EXCHR	0.0047	I(1)
INTR	0.0000	I(1)
INFL	0.0016	1(1)

***Source*:** Author's Computation from E-view 12, 2024

The Augmented Dickey–Fuller (ADF) unit root test was conducted to examine the stationarity properties of the variables. The results, presented in Table 2, indicate that the All-Share Price Index (ASPI), exchange rate (EXCHR), interest rate (INTR), and inflation rate (INFL) are all non-stationary at their levels but become stationary after first differencing, implying that all variables are integrated of order I(1).

4.3 Test for Heteroscedasticity

Table 4: Summary of Heteroscedasticity

F-statistic	1.859185	Prob. F(4,26)	0.1491
Obs*R-squared	6.878072	Prob. Chi-Square(3)	0.1425
Scaled explained	9.78613	Prob. Chi-Square(3)	0.0442

***Source*:** Author's Computation from E-view 12, 2024

The heteroscedasticity test results (Table 3) show that the probability values for the F-statistic (0.1491) and Obs*R-squared (0.1425) are both greater than 0.05, indicating that the null hypothesis of homoscedasticity cannot be rejected at the 5% significance level. This suggests that the variance of the residuals is constant, satisfying one of the key assumptions of OLS. However, the Scaled Explained SS statistic (p = 0.0442) is marginally significant, which may indicate slight heteroscedasticity. To ensure robustness, standard errors can be adjusted using heteroscedasticity-consistent (robust) standard errors.

4.4 Co-integration Test

Table 5: Johansson Co-integration

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		**Trace**	**0.05**	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.830634	97.70345	69.81889	0.0001
At most 1	0.331619	19.3264	29.79707	0.4696
At most 2	0.141083	6.030816	15.49471	0.6919
At most 3	0.030204	1.012086	3.841466	0.3144

***Source*:** Author's Computation from E-view 12, 2024

Given that all variables are I(1), the Johansen cointegration test was applied to determine whether a long-run equilibrium relationship exists among the variables. The trace statistics (Table 4) indicate one cointegrating equation at the 5% significance level (Trace statistic = 97.70 > Critical value = 69.81; p-value = 0.0001). This result confirms the presence of a stable long-run relationship between ASPI, EXCHR, INTR, and INFL.

4.5 Ordinary Least Square Regression

The presence of cointegration validates the use of Ordinary Least Squares (OLS) for estimating the long-run relationship between macroeconomic variables and stock market performance. In the presence of cointegration, OLS estimates in levels are super-consistent and unbiased, as the long-run equilibrium relationship corrects for non-stationarity (Engle & Granger, 1987). Therefore, the study proceeds with OLS estimation in levels to capture the long-run coefficients.

Table 5: OLS Regression Analysis

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	1046.055	227.4252	4.599555	0.0001
EXCHR	-0.895415	0.321826	-2.7823	0.0103
INTR	-39.24895	1053048	-3.72718	0.0001
INFL	-1.158674	1.806330	0.641452	0.5273
AR(5)	-0.523381	0.123964	-4.22204	0.0003
R-squared	0.765604	Mean dependent var		46.73067
Adjusted R-squared	0.512605	S.D. dependent var		139.7796
S.E. of regression	131.6747	Akaike info criterion		12.7754
Sum squared resid	416117.5	Schwarz criterion		13.05564
Log likelihood	-185.631	Hannan-Quinn criter.		12.86505
F-statistic	0.005981	Durbin-Watson stat		1.822315
Prob(F-statistic)	0.000726			

Source: Author's computation from E-view 12, 2024

The Ordinary Least Squares (OLS) estimation results for the relationship between the All-Share Price Index (ASPI) and macroeconomic variables are presented in Table 6. The regression output indicates that the model is statistically significant, with a Prob(F-statistic) of 0.000726, suggesting a strong joint significance of the explanatory variables in explaining variations in ASPI. The adjusted R^2 value of 0.5126 implies that approximately 51% of the variation in ASPI is explained by the independent variables: exchange rate (EXCHR), interest rate (INTR), and inflation rate (INFL). The Durbin–Watson statistic of 1.82 is close to 2, indicating the absence of autocorrelation in the residuals, and confirming the reliability of the model. The constant term (C) is positive (1046.05) and significant at the 1% level, indicating that in the absence of changes in the independent variables, the ASPI remains positive.

4.6 Discussion of Findings

The regression results show that the exchange rate (EXCHR) has a negative and statistically significant coefficient (–0.895, p = 0.0103), indicating that exchange rate depreciation is associated with a decline in stock market performance. This result suggests that depreciation of the domestic currency discourages foreign portfolio investment, increases transaction costs, and heightens uncertainty, thereby reducing the All-Share Price Index (ASPI). This finding is consistent with theoretical expectations under the Arbitrage Pricing Theory (APT) and aligns with previous empirical studies such as Sanya and Isaac (2020) [52] and Pole and Cavusoglu (2021) [51], which reported that currency depreciation has a contractionary effect on equity market performance in Nigeria.

Interest rate (INTR) also shows a negative and statistically significant coefficient (–39.25, p = 0.0001), suggesting that higher interest rates reduce stock market performance. This is consistent with investment substitution theory, as rising interest rates encourage investors to shift funds from the equity market to interest-bearing instruments in the money market. The result aligns with earlier findings by Josiah and Akpoveta (2019) [38] and Hussainey and Ngoc (2020) [33], which documented a strong inverse relationship between

interest rates and stock prices in emerging markets.

Inflation (INFL) has a negative but statistically insignificant coefficient (–1.158, p = 0.5273), indicating that while inflation exerts a contractionary pressure on the stock market, its effect is not statistically meaningful during the study period. This may reflect the Nigerian market's adaptation to persistent inflation and the tendency of investors to price inflation expectations into asset valuations. This finding is consistent with the results of Ayinuola (2023) [10], who reported that the inflationary effect on stock returns in Nigeria is weak in the long run due to market adjustment mechanisms.

Overall, the model supports a long-run relationship between the ASPI and macroeconomic variables, as confirmed by the Johansen cointegration test. The significant negative impact of exchange rate and interest rate on stock market performance aligns with both theoretical expectations and empirical evidence from similar emerging economies, while the weak impact of inflation may reflect structural inflation persistence and investor adjustment to macroeconomic realities. These findings highlight the critical role of macroeconomic stability in sustaining investor confidence and stock market performance in Nigeria.

4.7 Policy Implications

The findings suggest that maintaining exchange rate stability and implementing interest rate policies that encourage productive investment are essential for sustaining stock market performance in Nigeria. The significant negative effects of exchange rate depreciation and high interest rates on the All-Share Price Index imply that monetary and fiscal authorities should coordinate policies to stabilize the currency and maintain interest rates at levels that support capital market activity. Although inflation was found to be statistically insignificant, its persistent negative coefficient indicates that price stability remains important for preserving investor confidence. Strengthening macroeconomic fundamentals will enhance the resilience of the Nigerian stock market, attract foreign portfolio investment, and promote long-term economic growth.

5. Conclusion and Recommendations

Based on the empirical findings, the study concludes that interest rate and exchange rate exert significant influence on share prices in Nigeria, while inflation has a weak and statistically insignificant effect on the All-Share Price Index during the study period. The results imply that exchange rate stability plays a critical role in attracting foreign portfolio investment into the Nigerian capital market, as excessive depreciation increases uncertainty and discourages inflows. Similarly, rising interest rates encourage investors to shift funds from the equity market to interest-bearing assets, reducing stock market participation. Although inflation does not show a significant statistical effect, its persistent negative sign suggests that high inflationary pressures may indirectly discourage investment in financial assets as investors prioritize essential consumption to hedge against economic uncertainty.

In light of these conclusions, the following recommendations are proposed:

- **Exchange Rate Policy:** The government should adopt a flexible yet managed exchange rate regime that supports export competitiveness and promotes stability, thereby enhancing foreign portfolio investment inflows into the capital market.
- **Inflation Targeting:** Monetary authorities should strengthen inflation-targeting measures to maintain price stability, thereby creating an enabling environment for long-term investment in equities.
- **Interest Rate Management**: Policymakers should consider an interest rate policy framework that balances inflation control with the need to stimulate investment, ensuring that rates remain conducive to capital market activity without undermining macroeconomic stability.

6. References

1. Abdullah DA, Hayworth SC. Macroeconometrics of stock price fluctuations. Quarterly Journal of Business and Economics. 1993;32(1):50-67.
2. Adjasi CK, Biekpe N, Osei KA. Exchange rate volatility and stock market returns in Africa. African Finance Journal. 2020;22(2):77-99.
3. Agyapong D, Osei KA, Darko G. Exchange rate volatility and stock market performance: Evidence from Africa. African Finance Journal. 2023;25(1):45-67.
4. Akanbi O, Yusuf T, Bello K. Dynamic interactions between macroeconomic indicators and stock market performance in Nigeria: An ARDL bounds testing approach. African Journal of Economic Policy. 2024;31(1):77-94.
5. Alagidede P, Panagiotidis T. Stock market volatility and macroeconomic dynamics: Evidence from global markets. Journal of International Financial Markets, Institutions and Money. 2022;77:101496. Available from: http://dx.doi.org/10.1016/j.intfin.2022.101496
6. Alshogeathri MA. Macroeconomic determinants of the stock market movements: Empirical evidence from the Saudi stock market. Arabian Journal of Business and Management Review. 2011;1(2):30-41.
7. Amadi SN, Odubo TD. Macroeconomic variables and stock prices: Causality analysis. Nigerian Journal of Economics and Management Studies. 2002;4(1-2):29-41.
8. Aslam M, Lebbe R. The impact of exchange rate movements on stock returns: Evidence from the Colombo Stock Exchange. International Journal of Business and Social Research. 2015;5(3):88-98.
9. Atoi NV. Testing volatility in Nigeria stock market using GARCH models. CBN Journal of Applied Statistics. 2014;5(2):65-93.
10. Ayinuola O. Volatility modeling of sectoral stock returns in Nigeria: A GARCH panel approach. International Journal of Finance and Economics Research. 2023;15(4):210-226.
11. Barakat MR, Elgazzar SH, Hanafy KM. Impact of macroeconomic variables on stock markets: Evidence from emerging markets. International Journal of Economics and Finance. 2016;8(1):195-207.
12. Black F, Jensen MC, Scholes M. The capital asset pricing model: Some empirical tests. In: Jensen MC, editor. Studies in the theory of capital markets. New York: Praeger; 1972. p. 79-121.
13. Bouri E, Jain A, Roubaud D. Inflation and stock markets: Revisiting the Fisher hypothesis. Finance Research Letters. 2022;47:102515. Available from: http://dx.doi.org/10.1016/j.frl.2021.102515
14. Central Bank of Nigeria. Statistical bulletin: Financial

markets statistics. Abuja: Central Bank of Nigeria; 2007. Available from: https://www.cbn.gov.ng
15. Chen NF, Roll R, Ross SA. Economic forces and the stock market. Journal of Business. 1986;59(3):383-403.
16. Dimitrova D. The relationship between exchange rates and stock prices: Studied in a multivariate model. Issues in Political Economy. 2005;14:1-15.
17. Elton EJ, Gruber MJ. Modern portfolio theory and investment analysis. 5th ed. New York: John Wiley & Sons; 1991.
18. Epaphra M, Salema E. The impact of macroeconomic variables on stock prices in Tanzania. Journal of Economic Library. 2018;5(1):12-41.
19. Fama EF. Efficient capital markets: A review of theory and empirical work. The Journal of Finance. 1970;25(2):383-417. Available from: http://dx.doi.org/10.2307/2325486
20. Fama EF. Stock returns, real activity, inflation, and money. American Economic Review. 1981;71(4):545-565.
21. Fama EF. Stock returns, expected returns, and real activity. Journal of Finance. 1990;45(4):1089-1108.
22. Fisher I. The theory of interest. New York: Macmillan; 1930.
23. Gatsimbazi I, Jaya S, Mulyungi P, Ochieng A. Effects of macroeconomic variables on stock market performance in Rwanda: Case study of Rwanda Stock Exchange. European Journal of Economic and Financial Research. 2018;3(1):104-125.
24. Giri AK, Joshi P. The impact of macroeconomic indicators on India stock prices: An empirical analysis. Studies in Business and Economics. 2017;12(1):61-78.
25. Golam M, Wali U, Ashraful I, Alam S, Khan K. Effect of macroeconomic variables on stock market performance of SAARC countries. Asian Economic and Financial Review. 2017;7(8):770-779.
26. Greenwood J, Smith B. Financial markets in development and the development of financial markets. Journal of Economic Dynamics and Control. 1997;21(1):145-181.
27. Gurioveleen K, Bhatai BS. An impact of macroeconomic variables on the functioning of Indian stock market: A study of manufacturing firms of BSE 500. Journal of Stock & Forex Trading. 2015;4(1):1-8.
28. Gurioveleen K, Bhatai BS. An impact of macroeconomic variables on the functioning of Indian stock market: A study of manufacturing firms of BSE 500. Journal of Stock & Forex Trading. 2015;4(1):1-8.
29. Habibullah MS, Baharumshah AZ. Testing for informational efficient market hypothesis: The case for Malaysian stock market. International Journal of Business and Society. 2000;1(1):1-17.
30. Hondroyiannis G, Papapetrou E. Macroeconomic influences on the stock market. Journal of Economics and Finance. 2001;25(1):33-49.
31. Hsieh MF, Chen Y, Chou PI. Global stock price volatility and economic policy uncertainty. North American Journal of Economics and Finance. 2021;55:101312. Available from: http://dx.doi.org/10.1016/j.najef.2020.101312
32. Hsing Y. Impacts of fiscal policy, monetary policy, and exchange rate policy on real GDP in Brazil: VAR model. Brazilian Electronic Journal of Economics. 2004;6(1):1-12.
33. Hussainey K, Ngoc L. Macroeconomic indicators and stock prices: Evidence from Vietnam. International Journal of Emerging Markets. 2020;15(5):765-783.
34. Ibrahim MH, Aziz H. Macroeconomic variables and the Malaysian equity market: A view through rolling subsamples. Journal of Economic Studies. 2003;30(1):6-27.
35. Issahaku H, Ustarz Y, Domanban PB. Macroeconomic variables and stock market returns in Ghana: Any causal link? Asian Economic and Financial Review. 2013;3(8):1044-1062.
36. Johansen S. Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregression models. Econometrica. 1991;59(6):1551-1580.
37. Johansen S. Likelihood-based inference in cointegration vector autoregressive models. Oxford: Oxford University Press; 1995.
38. Josiah M, Akpoveta O. Macroeconomic variables and stock market performance in Nigeria: Cointegration and causality analysis. Nigerian Journal of Economic and Social Studies. 2019;61(1):33-52.
39. Khalid W, Khan S. Effects of macroeconomic variables on the stock market volatility: The Pakistan experience. International Journal of Econometrics and Financial Management. 2017;5(2):42-59.
40. Khan J, Khan I. The impact of macroeconomic variables on stock prices: A case study of Karachi Stock Exchange. Journal of Economics and Sustainable Development. 2018;9(13):15-25.
41. Kolapo FT, Oke MO, Olaniyan TO. Unravelling the impact of macroeconomic fundamentals on stock market performance in Nigeria: An ARDL bound testing approach. Journal of Economics, Management and Trade. 2018;21(3):1-15.
42. Kothari C. Research methodology: Methods & techniques. 2nd ed. New Delhi: New Age International Publishers; 2004.
43. Kyereboah-Coleman A, Agyire-Tettey F. Impact of macroeconomic indicators on stock market performance: The case of the Ghana Stock Exchange. Journal of Risk Finance. 2008;9(4):365-378.
44. Levine R, Zervos S. Stock markets, banks, and economic growth. American Economic Review. 1998;88(3):537-558.
45. Mechri N, Ben Hamad S, Peretti C. Exchange rate volatility and stock market returns: Evidence from emerging markets. Economic Change and Restructuring. 2019;52(4):331-356.
46. Megaravalli AV, Sampagnaro G. Macroeconomic indicators and their impact on stock markets in ASIAN 3: A pooled mean group approach. Cogent Economics & Finance. 2018;6(1):1436270.
47. Miller MH, Modigliani F. Dividend policy, growth, and valuation of shares. Journal of Business. 1961;34(4):411-433.
48. Muthike EW, Sakwa M. The impact of exchange rate movements on stock market returns in Kenya. International Journal of Business and Social Science. 2012;3(21):312-317.
49. Okonkwo OI, Ezeaku HC, Nwokolo CI. Monetary policy, interest rate dynamics, and stock market performance in Nigeria. Cogent Economics & Finance. 2023;11(1):2197785. Available from: http://dx.doi.org/10.1080/23322039.2023.2197785

50. Ordue C, Okonkwo R, Musa A. Macroeconomic variables and stock market performance: Evidence from Nigeria (1986–2022). Journal of Economics and Financial Analysis. 2024;18(2):45-62.
51. Pole M, Cavusoglu T. Macroeconomic determinants of stock returns: Evidence from Nigeria. Global Journal of Finance and Economics. 2021;8(3):88-105.
52. Sanya S, Isaac O. Macroeconomic determinants of stock market performance in Nigeria: An ARDL cointegration approach. Journal of African Financial Studies. 2020;12(2):145-162.
53. Talla JT. Impact of macroeconomic variables on the stock market prices of the Stockholm Stock Exchange (OMXS30). International Journal of Economic Sciences and Applied Research. 2013;6(2):73-90.
54. Uyaebo SO, Atoi NV, Usman F. Test of random walk hypothesis in the Nigerian stock market. CBN Journal of Applied Statistics. 2015;6(1):213-230.
55. Winful EC, Sarpong-Kumankoma E, Aboagye AQQ. Macroeconomic variables and stock market returns in Ghana: Any causal link? Asian Economic and Financial Review. 2016;6(9):509-523.
56. World Bank. World development indicators: Market capitalization of listed domestic companies (% of GDP). Washington, DC: World Bank; 2023. Available from: https://data.worldbank.org
57. Yaya OS, Ogbonna AE, Olubusoye OE. Impact of exchange rate and inflation on stock market performance in Nigeria. Journal of African Financial Studies. 2020;12(1):112-129.