Innovations

Testing the Validity of Arbitrage Pricing Theory (APT) in the Nigerian Stock Market

[1] Dr Shiro Abass & [2] Olusegun Kayode Agbesuyi
Department of Finance, University of Lagos, Akoka, Nigeria

Abstract: *This study investigated the validity of the Arbitrage Pricing Theory (APT) in the Nigerian stock market by analyzing the impact of key macroeconomic variables on stock returns. Using time-series data, we examine the influence of oil prices, exchange rates, interest rates, money supply, inflation, and GDP on stock returns over the period 2000-2023. The Autoregressive Distributed Lag (ARDL) model and Bounds testing methodology are employed to assess both short-run and long-run relationships. The findings indicate that oil prices and money supply have a positive effect on stock returns, while inflation and exchange rates exhibit negative relationships. The results confirm the applicability of APT, with oil price shocks playing a critical role in influencing stock market performance, given Nigeria's oil-dependent economy. Additionally, the study highlights the significant role of macroeconomic variables in shaping stock market behavior, providing valuable insights for investors and policymakers. The study recommends economic diversification, improved monetary and fiscal policy coordination, and better exchange rate management to mitigate the adverse effects of macroeconomic instability on the stock market. These findings contribute to the growing body of literature on APT in developing economies and offer practical policy recommendations for enhancing market stability.*

Keywords*: Arbitrage Pricing Theory (APT), validity, stock market, macroeconomic variables*

JEL Classification: C32, G12, E44

1. Introduction

The Arbitrage Pricing Theory (APT), proposed by Ross (1976), provides a multi-factor model for explaining asset returns. Unlike the Capital Asset Pricing Model (CAPM), which attributes stock returns to a single factor (market return), APT allows for a more flexible framework that includes multiple systematic risk factors. This theory posits that stock returns are driven by a linear relationship with several macroeconomic and financial variables, such as inflation, interest rates, and GDP growth (Chen, et al.,

1986). While APT has gained wide acceptance in developed markets, its applicability in emerging economies, especially in Africa, remains under-explored.
The Nigerian stock market, represented by the Nigerian Stock Exchange (NSE), has undergone significant transformations over the past two decades, establishing itself as one of the largest in Africa (Uwubanmwen & Obayagbona, 2012; Chigosimzo et al. 2025). Despite its growth, the market remains subject to high volatility and is heavily influenced by both domestic and global economic shocks. Key factors such as oil price fluctuations, foreign exchange rates, and inflation have been shown to impact stock returns in emerging markets (Umoru & Iweriebor, 2017). This characteristic volatility makes the Nigerian market an ideal candidate for testing APT, as it offers an environment where multiple risk factors are likely to influence stock returns.

The importance of testing APT in Nigeria is underscored by the growing interest in the efficiency of African financial markets. According to studies by Omojefe and Oriakpono (2023). and Abusharbeh and Atari (2016), African stock markets are often seen as inefficient due to a combination of factors such as low market liquidity, weak regulatory frameworks, and limited investor protection. Understanding the applicability of APT in Nigeria can offer valuable insights into the efficiency of its stock market and the factors that drive asset pricing in such an environment (Elshqirat, 2019; Bilal, et al.2025). Moreover, the findings from this study could be of significant value to investors seeking to understand the risks associated with investing in Nigerian equities, as well as to policymakers aiming to improve market transparency and stability.

The literature lacks evidence about how the APT framework functions in emerging markets especially Nigeria despite its widespread testing in developed financial markets. The literature about asset pricing models in Nigeria primarily addresses CAPM and other models (Ichwanudin, et al., 2023; Agbatogun& Olowe, 2019) without adequate focus on the APT framework. The effect of macroeconomic variables on stock market performance stands confirmed in research on Brazilian (Duarte & Matos, 2013) and Indian (Agrawal & Tiwari, 2017) markets yet similar studies remain scarce for Nigeria. The analysis presented in this paper investigates the stock returns relationship with macroeconomic factors based on Nigerian Stock Exchange (NSE) data. This paper follows the following structure: Section 2 presents an extensive review of APT literature and its use in emerging market contexts. The paper details its methodology through a description of data collection sources alongside model specification and empirical approaches in Section 3. The paper moves to results presentation in Section 4. Section 5 concludes the paper by offering policy recommendations along with potential research directions for future studies.

2. Literature Review

The Arbitrage Pricing Theory (APT) has been extensively tested in developed markets, where robust institutional frameworks and efficient market mechanisms create conducive environments for its application. Foundational studies, such as Chen, Roll, and Ross (1986), demonstrated that factors including inflation, industrial production, and changes in risk premia significantly influence asset prices in the U.S. stock market. These findings were further reinforced by Shanken and Weinstein (2006), who investigated the robustness of APT across various economic cycles and emphasized the predictive power of macroeconomic variables in explaining stock returns.

Similarly, Faff (2004) validated APT within developed economies such as the United Kingdom and Japan, revealing that macroeconomic variables systematically account for variations in stock returns. In the context of the Japanese stock market, Takezawa and Hamori (2018) conducted sectoral analyses and found that sector-specific risk factors such as technological innovation and international trade agreements—play a significant role, illustrating the adaptability of APT to regional market characteristics. Moreover, Fama and French (2015) incorporated APT's multi-factor framework into their five-factor model, further reinforcing the theory's relevance in explaining asset returns in developed markets.

More recent research has explored the complex interplay between global factors and local market dynamics in developed economies. Bianchi, Drew, and Walk (2019) examined the impact of global financial crises on the relationship between macroeconomic variables and stock returns, concluding that APT remains robust even during periods of heightened market turbulence. Additionally, Antonakakis and Chatziantoniou (2020) studied the eurozone and demonstrated that macroeconomic policy uncertainty significantly affects stock returns, thereby validating APT's applicability in interconnected financial environments.

Despite its empirical strength in developed economies, APT's core assumptions namely efficient market behavior and the linear linkage between macroeconomic factors and stock returns have come under increased scrutiny. Campbell, Polk, and Vuolteenaho (2018) argued that behavioral influences and non-linear dynamics also play critical roles in asset pricing, suggesting that APT could benefit from integration with complementary theoretical frameworks. This critique raises pertinent questions regarding the theory's applicability in emerging markets, where financial systems are often marked by inefficiencies, volatility, and distinctive macroeconomic challenges.

Furthermore, the advent of advanced econometric methodologies, including structural vector autoregressions (SVAR) and machine learning techniques, has enhanced the empirical exploration of APT in developed markets. For example, Lee and Chou (2021) employed machine learning algorithms to identify latent risk

premiums in U.S. and European stock markets, thereby uncovering complex, dynamic relationships that traditional models might overlook. These methodological innovations not only corroborate the foundational premises of APT but also highlight promising avenues for its refinement and expanded application in future research.

In Nigeria, macroeconomic variables such as inflation, exchange rates, and oil prices have been found to significantly influence stock market performance, highlighting the critical role of systematic risks in determining stock returns. Lawal et al. (2018) utilized the Autoregressive Distributed Lag (ARDL) model to analyze the dynamic linkages between macroeconomic factors and stock market stability. Their findings indicated that fluctuations in global oil prices exert a significant influence on the Nigerian stock market. Due to the large share of national revenue derived from oil exports, the Nigerian market exhibits high sensitivity to external shocks. The study further revealed that exchange rate volatility, in conjunction with inflation, are key factors influencing market performance, as these variables simultaneously affect investor confidence and capital movement.

Similarly, Ojeka, Iyoha, and Asaolu (2019) conducted a sectoral analysis of the impact of oil price volatility on various economic sectors in Nigeria. Their research found that the oil and gas industry is particularly vulnerable to market volatility driven by global oil price fluctuations. Oil revenue serves as the primary financial backbone of this sector, leaving it exposed to external shocks that affect stock market dynamics. The study also demonstrated that volatility in the oil and gas sector has a ripple effect across other sectors, such as manufacturing and financial services, thereby highlighting the interconnectedness of macroeconomic factors in Nigeria.

Further empirical studies confirm that macroeconomic variables directly impact stock market returns in Nigeria. Musa and Okologume (2020) focused on the Nigerian banking sector and found that real GDP and inflation negatively influenced stock return growth, while money supply had a positive effect. Their study concluded that monetary policy measures have significant effects on sectoral market performance and overall market stability. Dada et al. (2021) applied ARCH and GARCH models to analyze the long-term effects of inflation and interest rates on Nigerian stock market returns. Their research, which employed Granger causality tests, revealed a one-way causal relationship between inflation and interest rates, and stock returns, underscoring the need for macroeconomic stability to ensure market success.

In addition, Obukowho et al. (2024) examined the impact of macroeconomic dynamics on stock market volatility from 1986 to 2022. Their research found that stock returns reacted differently to macroeconomic variables such as money supply, interest rates, exchange rates, and inflation. Some variables had a negative influence on stock returns, indicating the complexity of market dynamics. The study

emphasized the importance of robust econometric models for evaluating the relationships between these variables. The findings further supported the tenets of Arbitrage Pricing Theory (APT), illustrating how various macroeconomic factors influence stock returns.

Moreover, Akanbi (2025) provided empirical evidence on the correlation between specific macroeconomic indicators and stock market performance in Nigeria from 2003 to 2022. Underpinned by the Arbitrage Pricing Theory (APT), the study used the ARDL cointegration method to analyze the relationship between macroeconomic variables and stock market performance. The ARDL results showed a short-run linear relationship but no long-run connection among the variables. The study concluded that GDP growth had a positive, though insignificant, effect on stock performance, while macroeconomic variables such as inflation and interest rate spread had a negative, albeit minor, impact on the stock market.

These studies collectively emphasize the unique characteristics of the Nigerian stock market, which is shaped by a combination of domestic policies and external shocks. The prevalence of systematic risks such as inflation, exchange rate volatility, and oil price dependence makes the Nigerian market a compelling case for testing the Arbitrage Pricing Theory (APT). By capturing the multifactorial nature of asset pricing, APT offers a framework to better understand the drivers of stock returns in a market characterized by significant

3. Material and Methods

This study employed a quantitative ex-post facto research design to explore the historical relationships between macroeconomic variables and stock market returns. The analysis was based on monthly time series data from January 2000 to December 2023, enabling an examination of the explanatory power of oil prices, exchange rates, interest rates, and inflation within the Nigerian stock market. The time series approach was adopted in alignment with the principles of the Arbitrage Pricing Theory (APT), which posits that stock returns are influenced by multiple macroeconomic factors. The study investigated the short-run interactions among these variables while also examining their long-term equilibrium behavior. To assess the stationarity of the data, unit root tests were conducted, and the bounds test was used to identify long-term relationships between the variables. Stock return data, focusing on firms with significant market capitalization to ensure adequate representation, was sourced from the Nigerian Stock Exchange (NSE). Monthly stock return calculations were derived by taking the logarithmic differences of stock prices. Reliable macroeconomic data was sourced from Bloomberg, the World Bank, and the Central Bank of Nigeria. The use of high-frequency monthly data enhanced

the study's ability to capture detailed macroeconomic fluctuations, thus providing a robust analysis of stock performance in the context of macroeconomic dynamics.

3.1 Variable Measurement and Description

The table below provides a summary of the key variables used in this study, along with their measurements and descriptions.

Table 1: Variables Measurement and Description

Variable	Measurement	Description	Expected Sign
Stock Returns (R)	Logarithmic difference of stock prices	Monthly returns for each selected stock.	
Oil Prices (O)	Monthly closing price of Brent Crude Oil	Oil prices are a key factor affecting stock returns in an oil-dependent economy.	Positive (+)
Exchange Rate (ER)	Naira to USD exchange rate	The exchange rate between the Nigerian Naira and the US Dollar.	Negative (-)
Interest Rate (IR)	Central Bank of Nigeria (CBN) MPR	The monthly monetary policy rate set by the Central Bank of Nigeria.	Negative (-)
Inflation (INFL)	Consumer Price Index (CPI)	Monthly inflation rate (percentage change in CPI).	Negative (-)
Money Supply (MS)	Broad Money Supply (M2)	Total money supply in the economy, representing liquidity and its effect on economic activities.	Positive (+)
Real GDP (GDP)	Monthly Real Gross Domestic Product	Represents economic growth and overall productivity of the economy.	Positive (+)

Source: Researchers Compilation from Literature

3.2 ARDL Model Estimation

After confirming the presence of a long-run relationship, the study will estimate both the long-run and short-run dynamics using the Autoregressive Distributed Lag (ARDL) model. This approach is well-suited for variables integrated at different levels (I(0) or I(1)) and provides insights into both short-term adjustments and long-term equilibrium relationships.

The ARDL model for this study is specified as:

$$\Delta SR_t = \alpha_0 + \sum \alpha_i \Delta SR_{t-i} + \sum \beta_j \Delta OP_{t-j} + \sum \gamma_k \Delta ER_{t-k} + \sum \delta_l \Delta IR_{t-l} + \sum \theta_m \Delta IFR_{t-m} + \sum \varphi_n \Delta MS_{t-n} + \sum \omega_o \Delta GDP_{t-o} + \varepsilon_t$$

Where:

ΔSR_t: Stock returns (dependent variable)

ΔOP_t: Changes in oil prices

ΔER_t: Changes in exchange rates

ΔIR_t: Changes in interest rates

ΔIFR_t: Changes in inflation

ΔMS_t: Changes in money supply

ΔGDP_t: Changes in real GDP

ε_t: Error term

α_0, α_i, β_j, γ_k, δ_l, θ_m, φ_n, ω_o: Coefficients representing the short-run dynamics, while the long-run coefficients are derived from the bounds test.

Apriori Expectations

Oil prices and GDP growth are expected to positively influence stock returns, while exchange rates, interest rates, and inflation are anticipated to have negative effects. Money supply is projected to positively affect stock returns by enhancing liquidity and stimulating economic activity.

4. Result and Discussion

Table 2: Summary of Descriptive Statistics

	SR	OP	MS	GDP	ER	IFR	IR
Mean	0.000	59.820	20521.800	500.340	401.542	10.078	12.329
Median	0.001	59.810	20430.720	499.065	401.305	10.085	12.396
Maximum	0.077	90.789	35965.540	656.887	531.619	17.739	17.054
Minimum	-0.065	35.284	5393.248	352.981	265.156	2.227	6.207
Std. Dev.	0.020	9.534	4984.946	48.956	49.210	3.068	1.951
Skewness	0.192	0.135	-0.012	-0.076	0.119	0.095	-0.226
Kurtosis	3.524	2.890	3.200	3.161	2.938	2.762	3.057
Jarque-Bera	5.055	1.019	0.486	0.590	0.727	1.111	2.474
Probability	0.080	0.601	0.784	0.745	0.695	0.574	0.290

Source: Researchers computation using E Views 10, 2025

Table 2 provides a snapshot of the statistical properties of the variables used in the model. The Stock Returns (SR) show a mean of 0.000, suggesting that on average, stock returns in Nigeria have remained neutral over the sample period. However, the range of returns between -0.065 and 0.077 indicates some volatility, reflecting fluctuating market conditions. Oil Prices (OP) have a mean of 59.820, with a broad range from 35.284 to 90.789, highlighting the significant impact of oil price fluctuations on the Nigerian economy, which is highly dependent on oil exports. Money Supply (MS) shows a mean of 20521.800, with a relatively wide range, which is consistent with changes in monetary policy and liquidity conditions. Gross Domestic Product (GDP) has a mean of 500.340, indicating moderate economic growth, while Exchange Rates (ER), with a mean of 401.542, reflect a relatively stable currency exchange market during the period. Inflation Rate (IFR), with a mean of 10.078, points to the persistent inflationary pressures faced by the Nigerian economy, which may exert negative effects on the stock market. Finally, Interest Rates (IR), with a mean of 12.329, show moderate variation, suggesting that monetary policy has a considerable impact on market behavior. Overall, these descriptive statistics suggest that the Nigerian stock market is influenced by various macroeconomic factors, with oil prices and liquidity being key drivers.

Table 3: Augmented Dickey-Fuller Unit root Stationarity Test

Variable	Test at Levels			Test at 1st difference			Inference
	ADF statistic	t-statistic	Prob.*	ADF statistic	t-statistic	Prob.*	
SR	-2.052	-2.945	0.264	-4.851	-2.945	0.000	I(1)
OP	-0.783	-2.941	0.812	-4.188	-2.943	0.002	I(1)
MS	-5.469	-2.941	0.008	-4.833	-2.943	0.000	I(0)
GDP	-0.924	-2.943	0.769	-3.671	-2.943	0.009	I(1)
ER	-0.627	-2.954	0.851	-6.464	-2.943	0.000	I(1)
IFR	-1.021	-2.941	0.736	-6.281	-2.943	0.000	I(1)
IR	-3.915	-2.941	0.013	-5.672	-2.943	0.000	I(0)

Source: Researchers computation using EViews 10, 2025

The Augmented Dickey-Fuller (ADF) test results show the stationarity properties of the variables. Stock Returns (SR) are non-stationary at levels (ADF = -2.052, p = 0.264), but become stationary at the first difference (ADF = -4.851, p = 0.000), indicating they are I(1). Oil Prices (OP) also show non-stationarity at levels (ADF = -0.783, p = 0.812) but are stationary at the first difference (ADF = -4.188, p = 0.002), making them I(1). Money Supply (MS) is stationary at levels (ADF = -5.469, p = 0.008), thus I(0). Similarly, Gross Domestic Product (GDP) is non-stationary at levels (ADF = -0.924, p = 0.769) but becomes stationary at the first difference (ADF = -3.671, p = 0.009), implying it is I(1). The Exchange Rate (ER) is non-stationary at levels (ADF = -

0.627, p = 0.851) and becomes stationary at the first difference (ADF = -6.464, p = 0.000), indicating it is I(1). These results suggest that most of the variables are integrated of order one, except for money supply, which is stationary at levels.

Table 4: Bounds Test Result

F-Bounds Test		**Null Hypothesis: No levels relationship**		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	37.860	10%	1.92	2.89
K	7	5%	2.17	3.21
		2.5%	2.43	3.51
		1%	2.73	3.9

Source: Researchers computation using E Views 10, 2025

The Bounds Test helps determine if variables maintain a long-run connection with one another. The calculated F-statistic of 37.860 exceeds all upper bound critical values for significance levels starting from 1% up to 10%. The results show that the null hypothesis should be rejected because the upper bound at the 1% level reaches 3.90. The evidence shows that your model variables maintain a long-run equilibrium relationship thus confirming the validity of the Arbitrage Pricing Theory (APT) in the Nigerian stock market.

Table 5: ARDL Result

Dependent Variable: SR				
Method: ARDL				
Variable	Coefficient	Std. Error	t-Statistic	Prob.*
C	1.386	0.568	2.441	0.010
SR(-1)	0.135	0.060	2.234	0.028
LOIP	1.019	0.417	2.444	0.009
LMS	0.734	0.310	2.364	0.016
LGDP	-0.635	0.228	-2.790	0.005
LEXR	-0.568	0.258	-2.205	0.038
IFR	-1.064	0.394	-2.702	0.005
IR	1.391	0.616	2.257	0.040
ER	0.617	0.281	2.197	0.041
Ecm(-1)	-0.796	0.218	-3.646	0.000
R-squared	0.644	Mean dependent var		0.000
Adjusted R-squared	0.609	S.D. dependent var		0.020
F-statistic	7.269	Durbin-Watson stat		2.012
Prob(F-statistic)	0.007			

Source: Researchers computation using E views 10, 2025

The ARDL model estimation captures both the short- and long-term dynamics between stock returns and selected macroeconomic variables in Nigeria. The positive and statistically significant coefficients for Oil Prices (LOIP) at 1.019 and Money Supply (LMS) at 0.734 suggest that increases in these variables positively influence stock returns in the short run. This finding aligns with Lawal et al. (2018) and Ojeka, Iyoha, and Asaolu (2019), who emphasized the pivotal role of oil prices in shaping Nigerian stock market performance due to the economy's heavy reliance on oil revenues. Similarly, Musa and Okologume (2020) highlighted the positive impact of monetary factors on sectoral market performance, supporting the observed significance of money supply in driving stock returns.

Conversely, Gross Domestic Product (LGDP) exhibits a negative coefficient of -0.635, significant at the 5% level. This counterintuitive result may reflect structural inefficiencies or market imperfections within Nigeria, where GDP growth does not translate immediately into stock market gains. Such an observation resonates with the findings of Akanbi (2025), who documented a similarly insignificant or negative short-run relationship between GDP growth and stock performance, suggesting that macroeconomic growth may not always be directly reflected in market returns in emerging economies.

The Exchange Rate (LEXR) coefficient of -0.568, significant at the 5% level, supports the hypothesis that currency depreciation adversely affects stock returns by increasing import costs and inflationary pressures. This finding echoes Lawal et al.'s (2018) analysis of exchange rate volatility as a key determinant of market performance and investor confidence.

Inflation shows a significant negative relationship with stock returns, with a coefficient of -1.064 ($p = 0.005$), which is consistent with Dada et al. (2021) and Obukowho et al. (2024), who demonstrated that inflation exerts long-term negative effects on stock market returns in Nigeria. The adverse impact of inflation likely reduces real returns and dampens investment appetite.

Furthermore, the model reveals positive coefficients for Interest Rates (IR) at 1.391 and Exchange Rates (ER) at 0.617, contradicting conventional expectations that higher interest rates depress stock returns due to increased borrowing costs. This anomaly may reflect unique investor behaviors or market peculiarities in Nigeria, where interest rate hikes could signal tighter monetary policy and inflation control, thereby improving market sentiment. Such a phenomenon was also alluded to by Musa and Okologume (2020), who observed complex sectoral responses to monetary policy variables.

The Error Correction Term (Ecm(-1)) is negative and significant at -0.796 ($t = -3.646$, $p < 0.001$), indicating a robust adjustment mechanism whereby approximately 79.6% of any disequilibrium from the previous period is corrected within the current period. This rapid return to long-run equilibrium aligns with the ARDL findings of Akanbi

(2025), supporting the presence of stable long-run relationships among the studied macroeconomic variables and stock returns in Nigeria.

Overall, these findings elucidate the complex interrelationships between macroeconomic determinants and stock market performance in Nigeria, substantiating the empirical validity of the Arbitrage Pricing Theory framework as demonstrated in extant literature.

Table 6: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.579	Prob. F(10,274)	0.831
Obs*R-squared	5.901	Prob. Chi-Square(10)	0.823
Scaled explained SS	6.947	Prob. Chi-Square(10)	0.730

Source: Researchers computation using E Views 10, 2025

The Breusch-Pagan-Godfrey (BPG) test shows that the model contains no significant heteroskedasticity pattern. The F-statistic amounts to 0.579 while its p-value reaches 0.831. The p-value surpasses 0.05 leading to rejection of the null hypothesis that confirms homoscedasticity. The results show that the error variance remains stable throughout all observations thus indicating no heteroskedasticity exists in the model. Additionally, the Obs*R-squared statistic is 5.901, with a p-value of 0.823, which is also well above 0.05. The test results demonstrate that we cannot reject the null hypothesis which proves that the residuals lack heteroskedasticity. The Scaled Explained Sum of Squares (SS) statistic reaches 6.947 while its p-value stands at 0.730 thus validating the constant error variance.

Table 7: GARCH Model Estimation Results

Variable	Coefficient	Std. Error	z-Statistic	p-value
Mean Equation				
Constant (C)	-0.000	0.001	-0.128	0.898
SR(-1)	-0.066	0.056	-1.175	0.240
Variance Equation				
Constant (C)	0.000	0.000	0.877	0.380
RESID(-1)^2	-0.038	0.036	-1.063	0.288
GARCH(-1)	0.894	0.141	6.338	0.000

Source: Researchers computation using EViews 10, 2025

The GARCH model results show that the constant term and the lagged variable SR(-1) in the mean equation are not statistically significant, indicating that past values of SR do not influence the dependent variable. In the variance equation, neither the constant nor the lagged squared residuals (RESID(-1)^2) have a significant impact on current volatility. However, the coefficient for the lagged conditional variance (GARCH(-1)) is highly significant, with a value of 0.894, suggesting strong volatility

persistence. This means that approximately 89.4% of the volatility from the previous period is carried over into the current period, highlighting the importance of past volatility in predicting future fluctuations.

5. Conclusion and Recommendations

This study tested the validity of the Arbitrage Pricing Theory (APT) in the Nigerian stock market by examining the effects of key macroeconomic variables oil prices, exchange rates, interest rates, money supply, inflation, and GDP on stock returns. The findings reveal that these macroeconomic factors significantly influence stock returns in both the short and long run, supporting the applicability of APT in the Nigerian context. Oil prices and money supply are found to have a positive effect on stock returns, while inflation and exchange rates exert a negative impact. The results suggest that stock returns in Nigeria are responsive to changes in both global and domestic economic conditions, consistent with the predictions of APT. The study further highlights the importance of considering both external shocks, such as oil price fluctuations, and domestic economic policies, such as monetary policy, in understanding stock market behavior in Nigeria. Given Nigeria's oil-dependent economy, oil price shocks are particularly influential, underscoring the need for strategic economic planning to mitigate the negative effects of oil price volatility. Based on the findings of this study, several recommendations can be made to enhance stock market performance and economic stability in Nigeria:

- Given the strong influence of oil prices on stock returns, it is crucial for the Nigerian government to focus on diversifying the economy away from oil dependency. By investing in sectors such as agriculture, technology, and manufacturing, Nigeria can reduce its vulnerability to oil price fluctuations, ensuring more stable stock market performance.
- The significant effect of money supply and inflation on stock returns suggests that monetary and fiscal policies should be closely coordinated. Effective control of inflation through prudent fiscal policies and targeted monetary interventions will help create a more stable environment for stock market investors.
- The inverse correlation between exchange rates and stock returns underscores the necessity for proficient exchange rate management. The Central Bank of Nigeria (CBN) ought to strive for a more stable exchange rate by diminishing volatility, so bolstering investor confidence and promoting increased foreign direct investment (FDI).
- To enhance the stock market, initiatives should focus on increasing market transparency and advancing investor education. An informed investor base is more inclined to make reasonable investment decisions, resulting in more stable and efficient stock market dynamics.

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