

International Journal of **Economic Policy** (IJECP)

**Impact of Stock Market Development on Economic Growth in
Nigeria (1986–2025)**



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Impact of Stock Market Development on Economic Growth in Nigeria (1986–2025)



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Accepted: 14th August, 2026, Received in Revised Form: 28th August, 2026, Published: 14th September, 2026

Abstract

Purpose: This study examines the impact of stock market development on economic growth in Nigeria from 1986 to 2025. Specifically, it investigated the effects of the All-Share Index (ASI), Volume of Transactions (VOT), and Market Capitalization (MCAP) on Real Gross Domestic Product (RGDP).

Methodology: Annual time-series data obtained from secondary sources were analysed using the Augmented Dickey-Fuller (ADF) unit root test, Ordinary Least Squares (OLS), Error Correction Model (ECM), and Vector Autoregressive (VAR) techniques.

Findings: The findings revealed that the All-Share Index had a negative impact on economic growth, while the Volume of Transactions also exhibited a negative relationship with RGDP. Conversely, Market Capitalization had a positive and statistically significant effect on economic growth, indicating its important contribution to economic performance in Nigeria. The results suggest that increasing the size and depth of the stock market can stimulate economic growth through enhanced investment opportunities and capital mobilization.

Unique Contribution to Theory, Practice and Policy: Based on the findings, the study recommends that policymakers implement measures to increase market capitalization and strengthen investor confidence in the Nigerian stock market. In addition, listing requirements should be reviewed to encourage greater participation of small and medium-sized enterprises, thereby improving market activity and attracting both domestic and foreign investment.

Keywords: *Economic Growth, Market Capitalization, All Share Index, Volume of Transactions, Nigerian Exchange, VAR.*

Introduction

In recent years, the modelling and forecasting of stock prices have attracted considerable attention from academics, investors, and policymakers due to their implications for investment returns and risk management. Investors are largely influenced by the flow of information, which is closely linked to stock price movements. The stock market contributes positively to economic development by mobilizing and allocating financial resources through its intermediation process for the financing of long-term projects. It serves as an important source of capital for private sector investments in areas such as infrastructure, agriculture, solid minerals, manufacturing, banking, and other financial services (Adamu & Mustafa, 2023). Consequently, without an efficient stock market, an economy may be deprived of the long-term investment funds necessary for sustainable economic growth.

The Nigerian Exchange (NGX) is one of the emerging stock exchanges in the global financial system. Established as the Lagos Stock Exchange on September 15, 1960, it is the oldest stock exchange in West Africa and the second-largest stock market in Africa by market capitalization after the Johannesburg Stock Exchange (JSE). According to World Bank Group (2025), Nigeria's stock market capitalization is estimated at approximately \$63 billion, whereas the JSE has a market capitalization exceeding \$1.36 trillion. This indicates that the JSE is roughly twenty-one times larger than the Nigerian stock market. Furthermore, Nigeria's market capitalization represents only about 15 percent of its Gross Domestic Product (GDP), suggesting that the market remains significantly undervalued (Anudu, 2023). In contrast, the JSE's market capitalization exceeds 325 percent of South Africa's GDP, reflecting a relatively more developed and highly valued market (Ibrahim & Mohammed, 2020). Similarly, the Casablanca Stock Exchange in Morocco has a market capitalization of approximately USD 65.3 billion (Onyango, Mwangi & Karanja, 2023). Given the substantial liquidity held by stock exchanges, numerous studies have established a positive relationship between stock market development and economic growth in their respective countries.

As an emerging market, the Nigerian Exchange is highly vulnerable to both domestic and global economic events, including fluctuations in financial markets, political developments, policy changes, and information shocks. These factors have often undermined the efficient functioning of the Nigerian stock market, creating a volatile and uncertain investment environment. Despite the significant growth recorded in Nigeria's financial sector, the stock market has struggled to effectively perform its primary role of mobilizing long-term capital for productive sectors of the economy. This challenge can be attributed to both structural weaknesses within the market and several exogenous factors, including the COVID-19 pandemic, climate change, political instability, security challenges affecting agricultural production, declining oil output, exchange rate volatility, policy inconsistencies, rising inflation, unemployment, high taxation, and the removal of fuel subsidies in 2023. These developments have discouraged foreign direct investment, increased transportation and production costs, weakened domestic industries, and contributed to recurring economic downturns in the Nigerian economy (Onisanwa & Adaji, 2020).

Given the strategic role of the stock market as a catalyst for economic growth, it becomes imperative to investigate the extent to which stock market development has contributed to Nigeria's economic performance. It is against this backdrop that this study seeks to empirically examine the impact of stock market development on economic growth in Nigeria over the period spanning the Structural Adjustment Programme (SAP) era from 1986 to 2025.

Statement of the Problem

The stock market plays a vital role in mobilizing savings, facilitating capital formation, and promoting economic growth through the efficient allocation of financial resources. In both developed and emerging economies, a well-developed stock market serves as a major source of long-term financing for productive investments. However, despite more than six decades of operation, the Nigerian Exchange (NGX) remains relatively underdeveloped compared to other leading African stock exchanges such as the Johannesburg Stock Exchange (JSE) and the Casablanca Stock Exchange.

Over the years, the Nigerian stock market has been characterized by low market capitalization relative to Gross Domestic Product (GDP), market volatility, weak investor confidence, and vulnerability to domestic and external shocks. Economic challenges such as inflationary pressures, exchange rate instability, insecurity, policy uncertainty, declining oil revenues, the COVID-19 pandemic, and the removal of fuel subsidies have adversely affected market performance and limited its capacity to mobilize long-term investment funds. These challenges have raised concerns regarding the effectiveness of the stock market in stimulating economic growth and supporting sustainable development in Nigeria. Recent studies have shown that while stock market capitalization contributes positively to economic growth, institutional weaknesses, poor governance quality, and market inefficiencies continue to constrain the full developmental potential of the Nigerian capital market.

Although a considerable number of studies have examined the relationship between stock market development and economic growth in Nigeria, their findings remain mixed and inconclusive. For instance, recent empirical evidence suggests that stock market development indicators such as market capitalization, stock liquidity, and value of stocks traded significantly influence economic growth, yet the magnitude and direction of these effects vary across studies and time periods. Furthermore, many existing studies have focused on shorter sample periods and may not adequately capture the long-run dynamics of stock market development across major economic regimes and policy transitions in Nigeria.

Given the ongoing economic reforms, increasing market uncertainties, and the strategic role of the capital market in economic transformation, there is a need for a comprehensive empirical investigation of the impact of stock market development on economic growth in Nigeria. Therefore, this study seeks to fill this gap by examining the relationship between stock market development and economic growth over the period 1986 to 2025, covering the Structural Adjustment Programme (SAP) era and subsequent economic reforms. The findings are expected to provide useful insights for policymakers, investors, and other stakeholders on how

to strengthen the Nigerian capital market and enhance its contribution to sustainable economic growth.

Literature Review

Conceptual Clarification

Stock Market

According to Udenwa and Uwaleke (2016), the stock market consists of a network of participants, instruments, and institutions that facilitate the efficient mobilization and allocation of savings into productive investments for socio-economic development.

The stock market performs a crucial role in capital formation by providing firms with access to long-term financing while offering investors opportunities to earn returns on their investments. Through this process, the stock market serves as an important mechanism for channelling long-term funds to businesses and governments, thereby promoting economic growth and development.

According to Udo, Abner, and Udo (2019), the Nigerian stock market is structured into two major segments: the primary market and the secondary market. The primary market facilitates the issuance of new securities to investors, while the secondary market enables the trading of existing securities among investors.

Despite its importance, the Nigerian stock market faces several challenges, Vincent, Mairafi, and Abdullahi (2021) observe that the market is characterized by low per-capita income, low trading volume, limited market depth, policy inconsistencies, political instability, high inflation, and exchange rate volatility. These factors contribute to market uncertainty and hinder sustainable economic growth. Similarly, Umar, Muhammad, Nawazish, Syed, and Mehreen (2021) identify macroeconomic shocks, inappropriate monetary and exchange rate policies, adverse investor sentiment, and weak industrial productivity as major obstacles to stock market development in Nigeria.

Consequently, although various government policies have been introduced to strengthen the financial sector, significant challenges remain. If these issues are not adequately addressed, they may undermine the effectiveness of the Nigerian stock market in mobilizing long-term capital and supporting the country's economic transformation agenda.

Components of Stock Market.

All Share Index (ASI)

The All-Share Index (ASI) is a major indicator used to measure the overall performance of the Nigerian stock market. It is a market-wide index that tracks the price movements of all listed equities on the Nigerian Exchange (NGX), thereby providing a comprehensive assessment of market trends and investor sentiment. As a benchmark index, the ASI serves as an important tool for investors, policymakers, and researchers in evaluating the performance and direction of the stock market.

According to the Central Bank of Nigeria (CBN, 2021), the Nigerian Exchange All Share Index declined from 61,833.56 index points in the first quarter of 2008 to 20,244.73 index points in the fourth quarter of 2011. This significant decline reflects the adverse effects of the 2008–2009 global financial crisis on the Nigerian stock market and highlights the susceptibility of the market to both domestic and international economic shocks. The fluctuations observed in the ASI indicate changes in market capitalization, stock prices, and investor confidence over time.

From a theoretical perspective, the coefficient of the All-Share Index is expected to be positive, as improvements in stock prices and trading activities generally enhance stock market performance, promote investment, and stimulate economic growth. Therefore, a rising ASI is often interpreted as an indication of increased market efficiency, investor confidence, and overall stock market development.

Volume of Transactions (VOT)

Volume of Transactions (VOT) refers to the total number of shares or securities traded within a specified period, such as a day, month, quarter, or year. It is an important indicator used to measure the level of activity and liquidity in the stock market. Trading volume reflects the extent of buying and selling activities among market participants and provides insight into the depth and efficiency of the market.

According to Adjasi and Yartey (2018), the volume of transactions represents the total quantity of securities exchanged between buyers and sellers over a given period. Every completed transaction contributes to the aggregate trading volume of the market. As a result, a high volume of transactions is generally associated with increased market liquidity, enabling investors to buy or sell securities with minimal impact on market prices.

However, the volume of transactions may be influenced by several factors, including the availability of market information, investor expectations, and transaction costs. Bhattacharya, Bhattacharya, and Jha (2020) note that high transaction costs often discourage trading activities, thereby reducing market liquidity. Consequently, an increase in the volume of transactions is generally expected to contribute positively to stock market development and economic growth by enhancing market efficiency and investor participation.

Market Capitalization (MCAP)

According to Adegbaaju and Olokoyo (2018), capitalization involves increasing the long-term financial resources available to firms through various means, including the issuance of additional shares, debt financing, mergers and acquisitions, and foreign direct investment. They argue that market capitalization serves as an important measure of stock market development because it reflects the ability of the market to mobilize long-term funds for productive investments.

In economic terms, market capitalization is one of the most significant indicators used to assess the size and performance of a stock market. A larger market capitalization generally indicates

a more developed financial market with greater capacity to support economic activities. In Nigeria, market capitalization experienced a significant decline during the economic recession of 2015–2017.

Therefore, market capitalization is expected to have a positive relationship with economic growth, as it reflects the stock market's ability to mobilize savings, attract investment, and facilitate capital formation within the economy.

Economic Growth

The economy of a nation engages in the production, consumption, and exchange of goods and services that contribute to national income and the welfare of its citizens. These activities are supported by the availability of adequate infrastructure and efficient institutions (El-Yaqub, Gana, Musa, & Yahaya, 2024).

According to Kimberly (2019), economic growth is the expansion of an economy's potential output resulting from increases in capital stock, labour force participation, and improvements in the productivity of both labour and capital. It is characterized by a sustained increase in national output or income per capita over a long period. Economic growth occurs when the rate of increase in national output exceeds the rate of population growth, thereby improving the average standard of living.

The most widely used indicator of economic growth is Real Gross Domestic Product (RGDP). RGDP measures the total value of goods and services produced within a country after adjusting for inflation, thereby providing a more accurate measure of economic performance. It captures the overall productive activities of an economy and is commonly used by economists and policymakers to assess changes in economic output over time. Although other indicators such as Gross National Product (GNP) may also be used, Real Gross Domestic Product remains the most reliable and widely accepted measure of economic growth (Mokuolu, 2019).

Empirical Review

El-Yaqub, Gana, Musa, and Ismail (2024) investigated the impact of stock market development on economic growth in Nigeria using annual time-series data covering the period 1990–2022. The study adopted an ex-post facto research design and utilized secondary data obtained from relevant financial and economic sources. The variables employed in the study included Gross Domestic Product (GDP), Market Capitalization (MCAP), All Share Index (ASI), and Total Volume of Transactions (TVT). The findings revealed that the All-Share Index and the number of listed securities exerted a positive and statistically significant impact on economic growth in both the short run and the long run. Based on these findings, it was recommended that the government should formulate and implement policies aimed at enhancing stock market development, ensuring policy consistency, and improving investor confidence in order to promote sustainable economic growth in Nigeria.

Adeneye (2024) examined the impact of stock market development on economic growth in Nigeria over the period 1999 to 2022. The study utilized secondary data obtained from the

Central Bank of Nigeria Statistical Bulletin (2022). The variables employed include Real Gross Domestic Product (RGDP) as the dependent variable, while All Share Index (ASI), transactions at the Nigerian Stock Exchange (TSEX), and Market Capitalization (MCAP) served as explanatory variables. The empirical results revealed that all the explanatory variables had positive and statistically significant effects on RGDP. Furthermore, the findings indicated the existence of both short-run and long-run positive relationships between stock market development indicators and economic growth in Nigeria. Based on the findings, the study recommended that stock market development should be prioritized by all stakeholders, including government authorities, through policies that enhance market efficiency and create a conducive business environment.

Precious and Iwedi (2024) examined the relationship between stock market liquidity and economic growth in Nigeria using annual time-series data spanning 1985 to 2022. The study investigated key variables including Real Gross Domestic Product (RGDP), Number of Deals (NOD), All Share Index (ASI), and Market Capitalization (MCAP) to assess the performance and contribution of the Nigerian stock market to economic growth. The regression results further revealed that both the All-Share Index (ASI) and Market Capitalization (MCAP) exerted a positive and statistically significant impact on economic growth, highlighting the importance of stock market depth and performance in driving economic activity.

Adamu and Mustafa (2023) examined the relationship between stock market development and economic growth in Nigeria over the period 1985 to 2021. The study employed key stock market indicators, including the All-Share Index (ASI), Number of Deals (NOD), and Market Capitalization (MCAP), to assess their impact on economic growth. The empirical findings revealed that the All-Share Index had a negative relationship with economic growth in the long run, while Market Capitalization and the Number of Deals exhibited a positive relationship with economic growth. The results suggest that while stock market activity and depth contribute positively to economic performance, market price movements alone may not necessarily translate into economic growth in Nigeria. The study recommended increased participation of the real sector in the stock market, improved regulatory frameworks, expansion of the production base, enhanced public awareness, and the reduction of entry and listing requirements to promote broader market participation.

Collins, Chikwira, and Mohammed (2023) examined the impact of stock market liquidity on economic development in Zimbabwe. The study employed a Vector Autoregressive (VAR) model using quarterly time-series data covering the period 2013 to 2022. The analysis incorporated five key variables, namely economic growth (GDP per capita), stock market size (market capitalization), market efficiency (turnover ratio), stock market liquidity (stock market turnover), and trade openness (trade as a percentage of GDP). The results revealed a positive and statistically significant relationship between stock market indicators and economic growth. However, the findings also showed that stock market liquidity had no statistically significant impact on Zimbabwe's economic development, suggesting that liquidity alone may not be sufficient to drive economic performance in the country.

Theoretical Framework

Random Walk Theory

The theory underpinning this study is built on the random walk theory developed by a French mathematician, Louis Bachelier (1900). The theory postulated that stock prices are random, like the steps taken by a drunkard, and therefore, unpredictable. It assumes that changes in stock prices have the same distribution and are independent of each other. Therefore, the past movement or trend of a stock price cannot be used to predict its future movement. Theoretically, the random walk model suggests that stock prices move randomly and unpredictably, making it impossible to consistently achieve returns in excess of the market's average. In the context of the Nigerian stock market, this theory has been tested in various studies. Study by Osamwonyi, Ifuero, & Godfrey Osaseri (2020) found that the Nigerian stock market does not follow the random walk pattern, indicating that the market is not efficient. This means that there may be opportunities for investors to achieve returns above the market average by analysing past price movements and other publicly available information. Another study by Collin et al (2023). employed the VAL model to investigate the randomness of stock prices on the Zimbabwe stock market liquidity on economic development and found that the market is efficient in the weak form. This implies that past price movements do not provide useful information for future prices. The Random walk Theory has implications for economic growth in Nigeria, as it suggests that the stock market may not be an effective mechanism for allocating resources and facilitating economic growth. However, if the market is not efficient, there may be opportunities for investors to contribute to economic growth by identifying undervalued or overvalued companies and investing accordingly. Overall, the Random Walk Theory provides valuable insights into the behaviour of the impact on economic growth.

Methodology

Research Design

This study adopts a quantitative research approach based on an ex-post facto research design. It involves the analysis of past events and existing conditions to determine possible relationships between variables after they have occurred. According to Kerlinger, F. N. (1973, the ex-post facto design is appropriate for time series analysis where data cannot be manipulated by the researcher. Secondary data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin, the National Bureau of Statistics (NBS), and the Nigerian Exchange (NGX) reports.

Model for the Study

This study employs a Vector Autoregressive (VAR) model to examine the dynamic relationships and causal interactions among the variables. The VAR framework is appropriate because it treats all variables as endogenous and captures their interdependencies over time. It is also useful for forecasting and understanding the time-dependent behaviour of financial and macroeconomic series (Gujarati, 2009). The variables included in the model are Real Gross

Domestic Product per capita (RGDP), All Share Index (ASI), Market Capitalization (MCAP), and Volume of Transactions (VOT).

In a VAR framework, each variable is expressed as a function of its own lagged values and the lagged values of other variables in the system. The VAR specification for the RGDP equation is expressed as:

$$\ln \text{RGDP}_t = \phi + \sum_{i=1}^k \beta_i \ln \text{RGDP}_{t-i} + \sum_{j=1}^k \lambda_j \ln \text{ASI}_{t-j} + \sum_{m=1}^k \vartheta_m \ln \text{MCAP}_{t-m} + \sum_{r=1}^k \emptyset_r \ln \text{VOT}_{t-r} + \mu_{1t}$$

Where: μ_{1t} is the stochastic error term (shock), k is the optimal lag length, β_i , intercept λ_r , and ϑ_m represent the short-run dynamic coefficients.

Model Specification

In examining the impact of stock market development on economic growth in Nigeria, this study adopts and modifies the empirical framework of Collins et al. (2023), which investigated the relationship between stock market indicators, liquidity, and economic growth. The functional relationship between the variables is specified as follows:

$$\text{RGDP} = f(\text{ASI}, \text{VOT}, \text{MCAP})$$

Where: RGDP = Real Gross Domestic Product (proxy for economic growth)

ASI = All Share Index

VOT = Volume of Transactions

MCAP = Market Capitalization

The model implies that economic growth is a function of stock market performance indicators, including market price movements (ASI), trading activity (VOT), and market size (MCAP).

A Priori Expectation

The a priori expectations of the model specify the anticipated signs of the coefficients of the explanatory variables based on economic theory. In this study, it is expected that stock market development indicators will have a positive relationship with economic growth in Nigeria. Specifically, the coefficients of All Share Index (ASI), Market Capitalization (MCAP), and Volume of Transactions (VOT) are expected to be positive. This implies that an increase in any of these stock market indicators is expected to lead to an increase in Real Gross Domestic Product (RGDP), ceteris paribus.

Mathematically, the expected signs are stated as: $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$

Where:

β_1 represents the coefficient of ASI

β_2 represents the coefficient of MCAP

β_3 represents the coefficient of VOT

In line with economic theory, a well-developed stock market is expected to enhance capital formation, improve liquidity, and facilitate efficient allocation of resources, thereby contributing positively to economic growth.

Methods of Data Analysis

The data collected for this study were first analysed using descriptive statistics in order to summarize their basic characteristics and provide an overview of the dataset. The study is empirical in nature and therefore employs quantitative econometric techniques for estimation, interpretation, and inference. The primary analytical technique adopted is the Vector Autoregressive (VAR) model. This choice is motivated by the dynamic and interdependent relationships expected among the variables under investigation.

Furthermore, to avoid the problem of spurious regression, all variables are subjected to preliminary diagnostic tests, particularly the Augmented Dickey-Fuller (ADF) unit root test, to determine their stationarity properties. This ensures that the time-series data are suitable for econometric analysis and yield valid policy interpretations.

Descriptive Statistics Analysis

Descriptive statistics are used to summarize the basic features of the dataset employed in this study and to provide an overall understanding of the variables. The study is based on 39 observations. The mean, maximum, minimum, and standard deviation values are used to describe the central tendency and dispersion of the variables, while skewness, kurtosis, and the Jarque-Bera test are used to assess the normality of the data.

Table 1: Summary of Descriptive Statistics Results

	RGDP	ASI	VOT	MCAP
Mean	40808.50	18821.67	826697.9	9199.992
Median	34531.27	20429.79	729488.0	1735.900
Maximum	74639.47	57990.20	3535631.	51188.87
Minimum	16997.52	127.3000	20525.00	6.600000
Std. Dev.	20702.64	16461.41	917293.8	12984.68
Skewness	0.388140	0.480140	1.336290	1.643896
Kurtosis	1.513542	2.201441	4.328884	5.166477
Jarque-Bera	4.452598	2.469736	14.10531	24.54673
Probability	0.107927	0.290873	0.000865	0.000005
Sum	1550723.	715223.6	31414520	349599.7
Sum Sq. Dev.	1.59E+10	1.00E+10	3.11E+13	6.24E+09
Observations	39	39	39	39

Sources: Author's Computation from E-views 12, 2025

The results indicate that RGDP (0.388140) and ASI (0.480140) are mildly positively skewed, suggesting near symmetry. In contrast, VOT (1.336290) and MCAP (1.643896) exhibit strong positive skewness, indicating long right tails and a higher concentration of lower values with occasional large spikes. Kurtosis measures the peakedness or flatness of a distribution. A normal distribution has a kurtosis value of 3. The results show that RGDP (1.513542) and ASI

(2.201441) are less than 3, indicating platykurtic distributions with flatter peaks. On the other hand, VOT (4.328884) and MCAP (5.166477) are greater than 3, indicating leptokurtic distributions characterized by sharper peaks and heavier tails.

The Jarque-Bera (JB) statistics are 4.452598 (RGDP), 2.469736 (ASI), 14.10531 (VOT), and 24.54673 (MCAP), with corresponding probability values. At the 5% significance level, the null hypothesis of normality is accepted for RGDP and ASI, as their probability values (0.107927 and 0.290873, respectively) are greater than 0.05.

However, for VOT and MCAP, the null hypothesis of normality is rejected due to their statistically significant probability values, indicating that these variables are not normally distributed. Overall, the results suggest that while RGDP and ASI approximate normal distribution, VOT and MCAP exhibit non-normal characteristics, which is also consistent with their skewness and kurtosis results.

Data Analysis

Unit Root Test (Augmented Dickey-Fuller Test)

Table 2: Summary Augmented Dickey-Fuller (ADF) Unit Root Test Results

Variables	ADF Statistics	5% Critical Value	Conclusion
RGDP	-3.287387	-2.945842	1(1)
ASI	-6.079503	-2.948404	1(1)
VOT	-6.420325	-2.945842	1(1)
MCAP	-4.144069	-2.945842	1(1)

Source: Author's Computation from E-views 12, 2025

The table above shows the Augmented Dickey-Fuller (ADF) Unit Root stationarity test results for the three stock market variables used. From the result, three of the stock market variables were stationary at first difference 1(1). That is all share index (ASI) 1(1) in Nigeria, Volume of transaction (VOT) 1(1) in Nigeria, market capitalization (MCAP) in Nigeria 1(1) and real gross domestic product (RGDP) in Nigeria 1(1) as indicated on the table above. This implies that the hypothesis of non-stationarity was rejected for all the variables at their first difference form. The result has therefore justified the need to test for co-integration. Given the unit - root properties of the variables, we proceed to conduct the Johansen Co-integration Test to ascertain the co-integration among the stock market variables used in the study.

Johansen Co-integration

Before estimating the model using VAR, the study checked for long term equilibrium relationship using the Johansen co-integration test below.

Table 3: Johansen Co-integration E-views

Date: 01/10/25 Time: 16:24

Sample (adjusted): 1988 -2025

Included observations: 37 after adjustments

Trend assumption: Linear deterministic trend

Series: RGDP VOT MCAP

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.497630	55.01674	47.85613	0.0092
At most 1 *	0.425371	30.23365	29.79707	0.0445
At most 2	0.244880	10.28855	15.49471	0.2592
At most 3	0.004903	0.176930	3.841465	0.0040

Sources: Author's Computation from E-views 12, 2025

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

As presented by Johansson co integration test of TRACE value, it indicates 2 co integration variables which implies that there is a long-run relationship among the variables used in the model, this denotes the rejection of the null hypothesis of no long-run relationship among the variables in the model. The result of the long run relationship as revealed by Johansen test, implies that the variables modelled have a long run effect in explaining the impact of stock market and economic growth in Nigeria over the period under study.

Table 4: VAR Estimation Result

Vector Autoregression Estimates

Date: 01/10/25 Time: 10:18

Sample (adjusted): 1988 2025

Included observations: 39 after adjustments

Standard errors in () & t-statistics in []

	RGDP	VOT	MCAP	ASI
RGDP(-1)	-2.85E-17 (5.1E-14) [-0.00056]	36.45393 (20.4377) [1.78366]	-0.000262 (0.11755) [-0.0092]	0.677282 (0.34518) [1.96210]
VOT(-1)	-0.007821 (0.00367) [-2.13308]	0.067660 (0.21708) [0.31169]	-0.003161 (0.00125) [-2.53166]	3.61E-18 (5.4E-16) [0.00666]
MCAP(-1)	0.000439 (0.96205) [0.07634]	61.13237 (56.9613) [1.07323]	1.256719 (0.32761) [3.83601]	5.47E-17 (1.4E-13) [0.00038]
ASI(-1)	-0.799783 (1.93973) [-0.41232]	-49.28452 (114.848) [-0.42913]	0.354518 (0.66054) [0.53671]	-7.89E-16 (2.9E-13) [-0.00275]
RGDP	2.024527 (1.23171) [1.64368]	89.97082 (72.9275) [1.23370]	0.299013 (0.41944) [0.71289]	1.000000 (1.8E-13) [5.5e+12]
C	-8264.744 (5385.04) [-1.53476]	-346631.8 (318840.) [-1.08716]	-2119.239 (1833.80) [-1.15566]	6.08E-12 (8.0E-10) [0.00763]
R-squared	0.836765	0.821478	0.970981	1.000000
Adj. R-squared	0.780261	0.759683	0.960936	1.000000
Sum sq. resids	1.52E+09	5.32E+12	1.76E+08	3.32E-17
S.E. equation	7637.014	452176.0	2600.673	1.13E-09
F-statistic	14.80887	13.29341	96.66256	1.28E+27
Log likelihood	-367.0916	-514.0099	-328.3111	696.4096
Akaike AIC	20.94953	29.11166	18.79506	-38.13387
Schwarz SC	21.38940	29.55153	19.23493	-37.69400
Mean dependent	19859.24	871200.9	9710.731	42131.05
S.D. dependent	16291.83	922390.6	13158.21	20467.23
Determinant resid covariance (dof adj.)		22733286		
Determinant resid covariance		6185084.		
Log likelihood		-485.8049		
Akaike information criterion		29.21138		
Schwarz criterion		30.97085		
Number of coefficients		40		

Source: Author's Computation from E-views 12, 2025

Effect on Economic Growth (RGDP Equation): The results indicate that lagged values of the explanatory variables exhibit varying degrees of influence on economic growth. Specifically, Volume of Transactions (VOT(-1)) shows a negative and statistically significant effect on RGDP, as indicated by its coefficient (-0.007821) and t-statistic (-2.13308). This suggests that past increases in trading activity do not translate into immediate economic growth and may reflect speculative or short-term market behavior rather than productive investment.

Market Capitalization (MCAP(-1)) shows a positive relationship with RGDP, although the effect is not statistically significant in the RGDP equation. This implies that increases in market size may support economic growth, but the effect is not strong enough in the short run.

Similarly, the All Share Index (ASI(-1)) has a negative but statistically insignificant effect on RGDP, suggesting that stock price movements alone do not significantly drive economic growth in Nigeria. The lagged dependent variable RGDP(-1) is also statistically insignificant, indicating weak persistence in economic growth within the VAR framework.

Causality and Dynamic Interactions

The VAR results further show evidence of dynamic interactions among the variables. Market Capitalization exhibits a strong positive and statistically significant effect on its own lag structure and also shows a significant influence on other variables in the system, suggesting its central role in stock market dynamics. Volume of Transactions also shows feedback effects within the system, particularly influencing Market Capitalization negatively in lagged form, indicating that increases in trading volume do not always translate into increased market value.

The VAR results suggest that while stock market indicators are important in explaining economic dynamics, their effects on economic growth in Nigeria are mixed in the short run. Market Capitalization appears to be the most stable contributor to economic performance, while Volume of Transactions and All Share Index exhibit weaker and sometimes negative short-run effects. This reinforces the view that stock market development in Nigeria may not yet be fully efficient in translating market activity into real economic growth. The overall model fit is strong, as indicated by a high R-squared value (0.836765) for the RGDP equation, suggesting that the model explains a substantial proportion of variations in economic growth.

Error Correction Model (ECM) Results and Interpretation**Table 5: Error Correction Model (ECM) Regression Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RGDP(-1))	0.235007	0.150544	1.167303	0.0061
D(ASI)	0.000003	0.000001	0.851697	0.2180
D(ASI(-1))	0.000004	0.000004	1.856164	0.0240
D(ASI(-2))	0.000000	0.000004	0.144060	0.0025
D(VOT)	0.435084	0.182705	2.023281	0.066 8
D(VOT(-1))	0.038000	0.1202817	1.656230	0.1247
D(VOT(-2))	0.000268	0.000057	3.256120	0.2137
D(MCAP)	0.039831	0.051523	1.616653	0.0043
D(MCAP(-1))	0.000074	0.000054	1.226968	0.0035
D(MCAP(-2))	0.000236	0.000046	5.492762	0.0043
ECM(-1)	-0.675418	0.065735	-3.642108	0.0026

Source: Output from E-views 12, 2025

The results show both short-run effects of stock market indicators and the adjustment mechanism toward long-run equilibrium.

Post-Estimation Diagnostic Tests

To ensure the reliability and robustness of the estimated VAR model, several post-estimation diagnostic tests were conducted. These include the Ramsey RESET specification test, heteroskedasticity test, Jarque-Bera normality test, and stability tests (CUSUM). These tests are used to evaluate model adequacy, detect specification errors, and confirm the stability of the estimated parameters over time.

Ramsey RESET Specification Test

The Ramsey Regression Equation Specification Error Test (RESET) was employed to detect possible model misspecification, such as omitted variables or incorrect functional form.

TABLE 6 Omitted Variables: Squares of fitted values

Specification: RGDP ASI VOT MCAP

	Value	Df	Probability
t-statistic	7.063571	39	0.0000
F-statistic	49.89404	(1, 39)	0.0000
Likelihood ratio	34.32137	1	0.0000

Source: Author's Computation from E-views 12, 2025.

The null hypothesis of the RESET test states that the model is correctly specified. The results show that the t-statistic (7.063571), F-statistic (49.89404), and likelihood ratio (34.32137) are all statistically significant with probability values of 0.0000, which are less than the 0.05 significance level. Therefore, the null hypothesis is rejected.

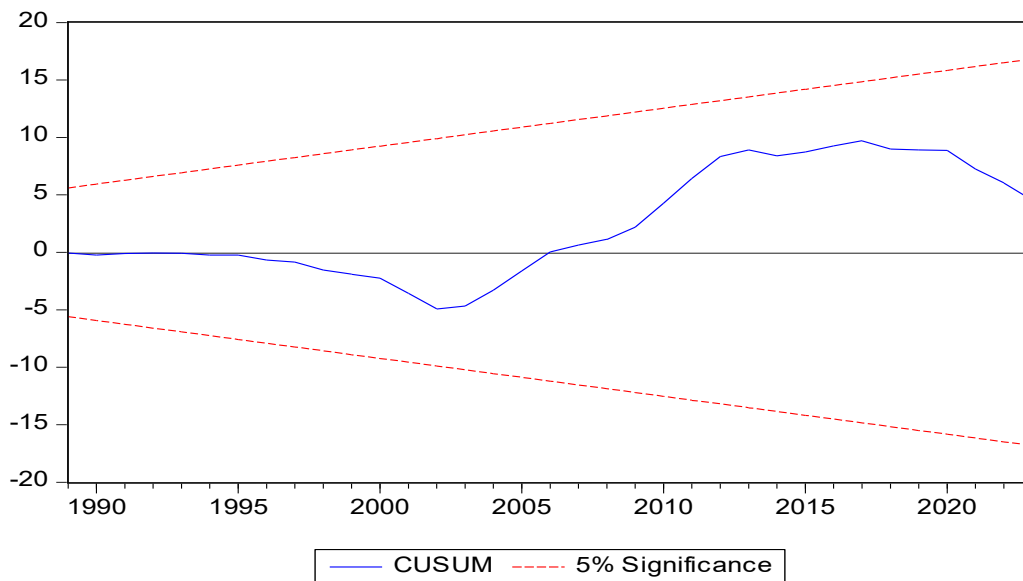


Figure 1: The Cumulative Sum of Recursive CUSUM Test of Stability

Source: Generated by the Author E-view 12 (2025).

From the CUSUM test result presented in the figure, the cumulative sum of recursive residuals remains within the 5% critical boundaries throughout the sample period. This indicates that there is no evidence of structural instability in the model.

Discussion of Findings

The coefficients of the VAR estimate showed that all share index (ASI) had an unfavourable impact on economic growth. Therefore, we also accept the first null hypothesis which states that All share index (ASI) has no significant impact on economic growth in Nigeria. The findings were consistent with the findings of the research projects carried out by Adamu and Mustafa (2023), examined the relationship between stock market and economic growth in Nigeria; Hariyanto (2020) examined the effect of trading volume, market capitalization, and firm size on return on shares in Indonesia. However, contrary to the findings of Vazakidis and Adamopoulos (2020) and Mishkin et al (2020) who examined the impact of stock market efficiency on economic growth of India, Ellis (2020), and Umar (2020), who investigated the impact of stock market development on real economic growth in Nigeria.

The volume of transaction (VOT) had an adverse statistical relationship on economic growth. Therefore, we also accept the second null hypothesis which states that Volume of transactions (VOT) has no significant impact on economic growth in Nigeria. This unfavourable correlation coefficient coincided with the research findings discovered by Hariyanto (2020) examined the effect of trading volume, market capitalization, and firm size on return on shares in Indonesia, and Adamu and Mustafa (2023), examined the relationship between stock market and economic growth in Nigeria.

The coefficients of the VAR estimate showed that market capitalization (MCAP) displayed a positive and significant impact on economic growth. Therefore, we reject the third null

hypothesis which states that Market Capitalization (MCAP) has no significant impact on economic growth in Nigeria. This implies that larger stock market enhances the possibility for firms to quickly and cheaply raise capital. This means that firms can fund innovative, long-term high returns projects that increase overall performance and finally promote economic. This study is consistent with the findings of the research projects carried out by Esian and Ebipre (2020) who investigated the impact of the stock market on economic growth in Nigeria; and Borteye and Peprah (2022) who examined the impact of the of the stock market on economic growth in Ghana. However, contrary to the findings of Olusegun, & Ajao (2024) who investigated, the relationship between stock market development and economic growth in Nigeria; and Algaeed (2021), analysed the effect of stock market on the GDP per capita growth of Saudi Arabia

Conclusion

The examination of stock market in Nigeria and its impacts on the economic growth in Nigeria cannot be over-emphasized. Both the empirical examination and the literature review show that the stock market indicators all-share index in Nigeria (ASI), volume of transactions in Nigeria (VOT), market capitalization in Nigeria (MCAP), have a positive and significant impact on economic growth in Nigeria. The Error Correction Model after examining the short-run impact of the independent variables in a model on the impact of stock market on economic growth in Nigeria. From the result, the Error Correction Model (ECM) parameters were negative (-) and significant which are given -0.68. Also, all share index (ASI) in Nigeria has a positive impact on economic growth in Nigeria, based on the probability value of the results the ASI in Nigeria, was statistically significant in explaining the variation in the economic growth in Nigeria. Similarly, volume of transactions in Nigeria has a positive effect on economic growth in Nigeria, based on the probability value of the results the (VOT_t) in Nigeria, was statistically significant in explaining the variation economic growth in Nigeria. On the other hand, the market capitalization in Nigeria has a positive impact on economic growth in Nigeria, based on the probability results the value of the market capitalization (MCAP_t) in Nigeria, was statistically significant in explaining the variation on economic growth in Nigeria. Similarly, the ECM results show all the stock market indicators have a positive impact on economic growth in Nigeria that is all share index (ASI), volume of transactions (VOT), market capitalization (MCAP) were all statistically significant in explaining the variation in economic growth in Nigeria.

Finally, it was found that despite all the stock market indicators that is All share index (ASI), volume of transactions (VOT), market capitalization (MCAP), were all statistically significant in explaining the variation in economic growth in Nigeria, especially in the long run but our economic growth in Nigeria has been consistently remain ranked among the underperformed economy in the World. In general, the Nigerian economy has suffered so many problems like inadequate power supply, inadequate physical structure and modern equipment, poor road network, economic recession, ill-trained management, on the other hand, the stock market has

not been free from challenges which range from financial constraints and inadequate cash flow from the household savings, high interest rate, high-level political interference, poor resource allocation, lack of effective regulation to affect both the private and public sectors. The Nigerian stock market has the potential to drive economic growth, but its full potential remains untapped due to the country's current economic situation. Stock market capitalization and the all-share index are crucial indicators of market efficiency, which in turn boosts economic growth. Therefore, this study with its findings suggested few policy recommendations to reduce the problems facing stock market in Nigeria and if the following policy recommendations are well implemented by all the stakeholders in Nigeria.

Recommendations

i. Strengthening Market Capitalization: Government, through the Central Bank of Nigeria and relevant financial regulatory authorities, should implement policies aimed at increasing the size and depth of market capitalization in the Nigerian stock market. A larger market capitalization will enhance the availability of long-term investible funds, thereby improving productive investment and stimulating economic growth in Nigeria.

ii. Enhancing Investor Participation in the Stock Market: Given the positive contribution of lagged All Share Index (ASI) to economic growth, policies should be designed to attract more domestic and foreign investors into the stock market. This can be achieved by simplifying listing requirements, reducing bureaucratic bottlenecks, and improving transparency in market operations. A more inclusive and accessible market will encourage wider participation and improve market efficiency.

iii. Increasing Volume of Transactions and Market Liquidity: There is a need for policies that promote higher trading activity and improve liquidity in the stock market. Regulatory reforms should aim at removing barriers that discourage potential investors from participating in the market. In addition, reducing interest rates would encourage investment in equities rather than fixed-income instruments, thereby increasing the volume of transactions and contributing positively to economic growth in Nigeria.

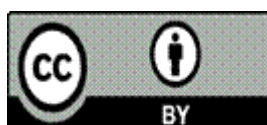
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