

## **ASSESSING EFFECT OF CAPITAL MARKET DEVELOPMENT ON NIGERIA'S ECONOMIC GROWTH**

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**DOI:** <https://doi.org/10.5281/zenodo.14887971>

**Abstract:** *This study used 38 years of annual time series data (1986-2023) to examine how Nigeria's economic growth was affected by the development of its capital market. The main focus of the investigation was the association between market capitalization (MCAP), all-share index (ASI), and GDP growth rate. The study used the Ordinary Least Squares (OLS) method and discovered that MCAP significantly boosted the GDP growth rate whereas ASI significantly lowered it. These results implied that the Nigerian stock market might not have been effectively channeling investment towards productive sectors. The study urged market participants to diversify their investment portfolios and suggested more investigation into the elements behind the ASI's detrimental effects. This study offered a modern viewpoint on the connection between the stock market and economic growth in Nigeria by using recent data.*

**Keywords:** *Capital, Development, Economic, Growth, Market*

### **1. Introduction**

In any economy, the financial system has a major impact on the promotion of economic growth and development. It effectively distributes cash to different economic actors so they can be put to good use. Since it develops and connects an economy's surplus and deficit units, this function is crucial to economic growth and development. This is essentially provided by the financial system via the operations of the financial market. The capital market, a segment of the financial market, offers a means of effectively directing long-term funds—also known as idle funds—from fund savers to investors. The money market subgroup, on the other hand, acts as a conduit for short-term funds.

A group of financial institutions assembled to provide medium- and long-term loans is known as the capital market. In this market, long-term financial assets given by borrowers are exchanged for long-term capital from lenders (investors). The market is divided into two arms: the primary market, which provides a venue for the long-term private placement of capital through the issuance of new financial securities, and the secondary market, which gives investors the chance to buy and sell pre-existing

securities that have already been traded on the primary market, thus stimulating the financial sector and contributing to economic expansion.

As a result of the aforementioned, economic growth and development are goals shared by all developing economies worldwide. Sub-Saharan Africa's economy is ideally positioned to pursue focused economic expansion. However, several strategies have been implemented to achieve this area's main goal. One of these strategies, along with others, is to establish a functioning capital market to promote the redistribution of income throughout the national and global economy. commodities in addition to trading firms.

Consequently, there has been a notable shift in research efforts toward the capital market and economic development of sub-Saharan Africa's (SSA) emerging economies. The long-term market in Africa has grown significantly since the early 1990s with the upswing of the stock market, commodities, and trading institutions. These institutions' rapid expansion has resulted in a large increase in both the number of listed firms and market capitalisation. Fifty of the 54 African countries had securities exchanges active as of June 2016. The African Securities Exchange Association (ASEA), which was first founded in Kenya in 1993, was made possible by this development (Adoms, *et al.*, 2020). The World Bank believes that as a result, the continent's economy may be ready to pick up speed (World Bank, 2011). It was projected that the economies of African countries will develop at some of the world's quickest rates. For instance, Sub-Saharan Africa's (SSA) real GDP grew by 12.29% in 2013 and by 254.64% in 2017, but in the fourth quarter of 2019 it shrank by 1.4% (World Bank, 2020; Statsza, 2020).

Under the terms of the Lagos Stock Exchange Act 1961, the capital market in Nigeria officially began operations on June 5, 1961. The Nigerian Stock Exchange was renamed as the Nigerian Stock Exchange in December 1977 following an examination of the country's financial system (CBN, 2007). Although the Securities and Exchange Commission (SEC) was created to oversee the capital market in 1979 by the SEC Act of 1979, it didn't start operating until 1980. The 1973-founded Capital Issues Commission lost its regulatory responsibilities to it. Since then, both new and established businesses have issued a variety of financial instruments on the capital market to finance the creation of new products, new initiatives, or general business expansion.

The Nigerian Stock Exchange, Discount Houses, Development and Investment Banks, Building Societies, Stock Brokering Firms, Insurance and Pension Organisations, Quoted Companies, the Government, Individuals, and the Nigerian Stock Exchange Commission (NSEC) are among the participants in the Nigerian capital market. For this reason, the capital market is critical to every economy as it promotes long-term savings that are directed towards actual investments in order to raise capital stock. The key objectives of the establishment of the Nigerian capital market, according to Ewah, *et al.*, (2009), were to widen the ownership base of assets, create a buoyant private sector, provide investors with adequate liquidity, and mobilise savings from various economic units for

economic growth and development. It also served as an alternative source of funding for the government. Creating a built-in efficiency in the financial system's operations and allocation to ensure optimal resource utilisation, encouraging more efficient allocation of new investments through the price mechanism, encouraging more efficient allocation of a given amount of tangible wealth through changes in wealth composition and ownership, and promoting rapid capital formation are some other goals.

Among the frequently used indicators of the Nigerian capital market are All-share index (ASI), Market capitalisation (MCAP), Trading volume and value (TVV), Number of listings (NOL), Initial public offers (IPOBs), Market liquidity (ML), Regulatory effectiveness (RE), Infrastructure and Technology (IT), Investor sentiment (IS), and Economic indicators (EIs). In addition, the NSE-30 index, NSE consumer goods index, NSE industrial index, NSE banking index, and NSE oil and gas index are among the particular indicators used to assess the Nigerian capital market. These benchmarks aid in evaluating the health and progress of Nigerian capital market, pinpointing prospects for expansion as well as areas in need of reform. In light of aforementioned context, this study was conducted to assess how Nigeria's capital market development has affected the country's economic growth from 1986 to 2023.

Prior researchers have examined a wide range of aforementioned capital market development in relation to Nigeria's economic growth. As a result of changes in global economic events, policy reforms, and macroeconomic conditions, the strength of these associations has fluctuated over time. Therefore, the problem of this study was to determine, how between 1986 and 2023, Nigeria's economic growth was swayed by Market capitalisation and All-share index. This study focuses on two key indicators of capital market development - the All-share index and Market capitalization - to delve deeper into their relationship. Extending analysis period to 2023 provides a more contemporary perspective, setting this study apart from previous research.

In line with the research problem, this study aims to understand how the All-Share Index (ASI) and Market Capitalization (MCAP) impact a country's GDP growth rate. To gain a more comprehensive understanding, the study also considers the influence of control variables like inflation and exchange rates.

The following are targeted beneficiaries of this study:

- i. **Academic World:** The academic world will benefit from this study by providing reference material for future research, expanding the limited literature on Nigeria's capital market development, offering new empirical evidence or validating/invalidating existing findings, and providing empirical and methodological insights for researchers, lecturers, and students.
- ii. **Government/Policymakers:** The government and policymakers by informing policy direction and formulation of robust economic policies and programs, address persistent capital market

challenges to improve Nigeria's economy, promoting capital market development as a crucial solution for long-term fundraising.

iii. **Investors/Participants:** Nigeria's capital market development can significantly benefit investors and participants by increasing access to capital, improving liquidity, enhancing investor confidence, diversifying investment opportunities, creating jobs, and increasing financial inclusion. Ultimately, these benefits can contribute to the country's overall economic growth and prosperity.

iv. **General Public:** The general public can benefit from Nigeria's capital market development by gaining increased access to financial services and products, creating wealth through investment, funding public infrastructure projects, supporting small businesses, and generating government revenue.

However, the statistical findings of this study could be unreliable if the secondary datasets (1986-2023), primarily sourced from the CBN Statistical Bulletin, contain biases.

## 2. Review of Related Literature

### Capital Market Development (CMD)

Capital Market Development refers to the process of creating and improving the infrastructure, institutions, and regulations that facilitate the issuance, trading and settlement of securities (IMF, 2005). In other words, capital market development is the process of building and strengthening the institutions, instruments, and infrastructures that enable the efficient allocation of capital (World Bank, 2015). Furthermore, capital market development encompasses the growth and maturation of markets, market infrastructure, and regulatory frameworks (OECD, 2019). To provide greater insights into capital market development requires a comprehensive understanding of its multifaceted nature, encompassing key elements such as market infrastructure (including stock exchanges and clearing and settlement systems), regulatory frameworks (comprising securities laws and regulatory bodies), market participants (encompassing investors, issuers, and intermediaries), market instruments (such as stocks, bonds, and derivatives), and market efficiency (characterized by factors like liquidity, transparency, and pricing). Countries by addressing the challenges and barriers to development are likely to harness the benefits of capital market to promote economic growth, innovation and job creation.

### Benefits of Capital Market Development

According to the World Bank (2015), the International Organization of Securities Commissions (IOSCO, 2017), and the Organization for Economic Co-operation and Development (OECD, 2019), capital market development (paraphrased) offers a range of advantages, including: stimulating economic growth by efficiently channelling savings into productive investments, diversifying funding sources for businesses, enabling effective risk management, promoting transparency and good corporate governance, attracting domestic and foreign investment, creating jobs, optimizing resource allocation, and ultimately contributing to poverty reduction.

## **Challenges and Barriers to Capital Market Development**

According to the Committee on Capital Market Regulation (2018) and the Organization for Economic Co-operation and Development (OECD, 2019), the challenges and barriers to capital market development comprise

A combination of factors, including weak regulation, outdated infrastructure, limited investor participation, high costs, lack of transparency, market volatility, insufficient intermediaries, poor risk management, corruption, and global market fragmentation, can hinder capital market development.

Both the All-share index and Market capitalization are fundamental metrics used to gauge the overall health and performance of the Nigerian stock market, reflecting the collective value and sentiment of listed companies. They are interconnected, with changes in market capitalization influencing the movement of the All-Share Index. The All-share index (ASI) measures the overall performance of all listed stocks on a specific exchange, reflecting the general market trend (<https://ngxgroup.com/exchange/data/indices/>). A rising ASI indicates a bullish market, while a falling ASI suggests a bearish trend. In contrast, Market capitalization (MCAP) measures the total value of a company's outstanding shares, indicating its size and value. While the ASI provides a broader market perspective, MCAP focuses on individual companies. Both metrics are crucial for understanding market dynamics and making informed investment decisions (<https://corporatefinanceinstitute.com/resources/valuation/what-is-market-capitalization/>).

## **The Nigerian Stock Market**

The Nigerian stock market offers a dynamic platform for investors to participate in the growth story of Nigeria. It functions like a marketplace, but instead of trading tangible goods, you buy and sell shares—units of ownership in companies. By investing in shares, you become a part-owner of the company, sharing in its potential success. This can translate into dividends, which are regular payments to shareholders, or capital gains, realized when you sell your shares at a higher price.

The stock market exists in a virtual realm, operating through a network of exchanges. In Nigeria, the Nigerian Exchange Group (NGX) serves as the primary platform, facilitating the buying and selling of shares in listed companies. This dynamic marketplace allows investors to participate in the economy by trading shares based on their perceived value and future potential. Whether you are a novice or a seasoned investor, understanding the intricacies of the Nigerian stock market is essential for making sound investment decisions. This guide will delve into the key components of the Nigerian stock market, empowering you to navigate this dynamic landscape with confidence.

## **A Brief History of the Nigerian Stock Exchange**

On 15<sup>th</sup> September, 1960, the Nigerian Stock Exchange (NGX), originally the Lagos Stock Exchange, was established. Stocks and other securities can be purchased and traded on the NGX. It acts as the main marketplace where investors can purchase stock in businesses that are listed on the exchange.

Important indicators of the condition and trajectory of the Nigerian stock market are market indices such as the Market Capitalization Index (MCAP) and the NGX All-Share Index (ASI). A strong and expanding market, as indicated by an increasing ASI and MCAP, can draw in foreign capital, boost the economy, and advance the growth of the country as a whole. For instance, market capitalization of listed domestic companies in Nigeria was 19.30% of GDP in 2022 (World Bank, 2024). The market capitalization of the stocks that make up the All-share Index (ASI) is directly related to that of the index itself. The aggregate value of the index changes in tandem with the value of individual companies. The performance of the ASI can therefore be significantly impacted by notable shifts in the market capitalization of large corporations. Investors, analysts, and policymakers keep a careful eye on them in order to evaluate market trends, decide which investments to undertake, and create economic policies.

In August 1961, the NGX launched as the first stock exchange in West Africa, with just 19 securities. The exchange grew throughout the years, opening branches in important Nigerian cities. It formally changed its name to the Nigerian Stock Exchange in 1977. By facilitating investments, the NGX now aims to play a key role in propelling Nigeria's economic expansion.

Stocks, often known as shares, are a type of ownership stake in a business. You can share in the company's possible achievements and difficulties by buying stock, which makes you a co-owner. If you own 100 shares, for example, you have a tiny part in the company's future. The possibility for capital growth, consistent dividend payments, the ability to vote on corporate decisions, and the chance to profit from a company's expansion and success are just a few benefits of investing in shares. A good share portfolio requires thorough planning and investigation. Make sure your investment mix is diversified before making an investment, use investment factsheets and regulatory news to thoroughly examine the company's financials, make the most of tax-efficient allowances such as Stocks and Shares ISAs, and, if your ISA allowance is completely used, look at Investment Accounts as a backup plan. Purchasing stock involves a number of dangers, such as the possibility of concentrated investments, the requirement for proactive self-management, and the possibility of capital loss as a result of poor company performance or unfavourable market conditions.

On weekdays, the Nigerian stock market is open from 10 a.m. to 2:30 p.m. Through authorized stockbrokers, investors purchase and sell shares of different companies. Stock prices fluctuate based on supply and demand, allowing investors to potentially profit by timing their purchases and sales by buying low and selling high.

The two main techniques used by investors to evaluate equities are technical analysis and fundamental analysis. In order to ascertain a company's inherent value, fundamental analysis entails assessing its performance, competitive position, and financial health. To forecast future price movements, technical analysis, on the other hand, focuses on examining price patterns and trends.

## **Nigerian Stock Market's Contribution to the Economy**

Nigeria's economy is greatly influenced by the Nigerian Stock Exchange (NGX), which serves as a venue for businesses to raise capital and for investors to buy shares. The NGX is governed by the Securities and Exchange Commission (SEC), which guarantees ethical trading practices and safeguards investor interests. It is essential to comprehend the nuances of the Nigerian stock market in order to make wise investment choices.

## **Advantages and Drawbacks of Investing in Nigerian Stock Market**

Among the many advantages of investing in the Nigerian stock market are the potential for capital appreciation and dividend income generation. You also support the nation's economic growth by purchasing shares. Nevertheless, it is critical to understand the hazards. Not all businesses may perform as anticipated, and market volatility can lead to losses.

Mitigating investment risks requires a strategic approach. By thoroughly researching companies, diversifying your investments, staying updated on market news, and focusing on long-term growth, you can position yourself for success. Do not hesitate to consult with financial experts for additional guidance (<https://crimsonoak.com.ng/understanding-the-nigerian-stock-market>).

## **GDP Growth Rate: A Measure of Economic Growth**

Economic growth is defined as a rise in the production of goods and services during a specific time period. For the measurement to be accurate, inflationary effects must be taken into consideration (Michael & Rufaro, 2020). An increase in an economy's capacity to produce goods and services over time is a second definition of economic growth. Real terms, which are inflated and adjusted, or nominal terms can be used to measure it. Overall economic growth is generally measured using the Gross National Product (GNP) or Gross Domestic Product (GDP), while alternative metrics are occasionally used (Abdullah, et al., 2022). A rise in total productivity is all that constitutes economic growth. Higher average marginal productivity is often, but not always, correlated with increases in overall production. This suggests that, on average, the average worker in a given economy grows more productive.

The gross domestic product seems the best measure of economic growth. This is because it is responsible for the economic output of the entire country. It includes all goods and services produced for export by domestic businesses. Whether they are sold domestically or elsewhere has no bearing. GDP is a way to quantify output. It doesn't include the parts made to make a product. Exports are included as they are produced domestically. Imports are factored into economic growth. Most countries evaluate economic growth every three months. The most accurate measure of growth is real GDP. It gets rid of the effects of inflation. The GDP growth rate is determined using real GDP (Karen & Louise, 2018).

The percentage rise in a nation's Gross Domestic Product (GDP) over a given time period is known as the GDP growth rate (GDPGR), and it is often calculated on an annual or quarterly basis. It is frequently represented as a percentage and serves as a gauge of economic growth (Adepoju, 2017).

Over time, Nigeria's GDP growth rate has fluctuated. Nigeria's economy fell in 2020 as a result of the COVID-19 outbreak and diminishing oil prices. That year, the GDP grew at a rate of -1.92%. It was predicted that Nigeria's real GDP growth will slow by a total of 0.2% points between 2023 and 2028. According to the second estimate, real GDP grew at an annual rate of 1.3% in the first quarter of 2024. The real GDP grew by 3.4% in the fourth quarter of 2023. Infrastructure development, human capital development, financial development, political stability, and the effects of terrorism are some of the factors thought to have an impact on Nigeria's economic growth and development.

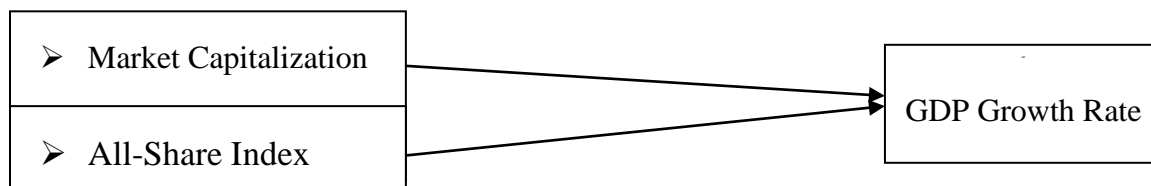
There are not many ways to boost the economy. The first is the discovery of new or better financial resources. For instance, petroleum had a limited economic value prior to the discovery that gasoline could provide energy. Fuel became a better and more valuable economic resource as a result of this finding (Abdullah, et al., 2022). Eventually, trust in economic expansion declines. When people sell more than they purchase, the economy contracts. That phase of the business cycle becomes a recession if it continues. An economic depression is defined as a recession lasting ten years or more. This only happened once, during the Great Depression in 1929 (Kimberly, 2018). GDP serves as a stand-in for economic growth in the purpose of our investigation.

### Conceptual Framework

Capital Market Development

Economic Growth

(Dependent variable)



**Fig. 1:** Interplay of market capitalization, all-share index versus GDP growth rate

**Source:** Author's design (2024)

This conceptual framework could provide a structured approach to analyzing the effect of capital market development on economic growth in Nigeria. By examining the relationships between these variables, the study can contribute to a better understanding of the factors that drive economic growth and the role that capital markets play in this process.

A thriving stock market, characterized by a larger market capitalization and a rising all-share index, can fuel economic growth. A robust capital market can facilitate capital allocation, spur innovation, and improve corporate governance, all of which contribute to economic growth. Additionally, a well-performing stock market can attract foreign investment, boost consumer confidence, and encourage domestic investment. While these factors are interconnected, it is important to recognize that other variables, such as government policies and global economic conditions, also play a significant role in

shaping economic growth. Empirical research is necessary to fully understand the complex dynamics between these variables.

## Theoretical Framework

Theoretically, market capitalization, or market cap (MC), which is the total value of all of a company's shares, has a significant impact on a country's economic growth and the expansion of its capital market. On the other hand, a stock market index that shows the total performance of a certain market or stock exchange is called the all-share index (ASI).

### Marginal Efficiency of Capital (MEC) Hypothesis

John Maynard Keynes is largely responsible for the introduction of the Marginal Efficiency of Capital (MEC) concept in his seminal work, "The General Theory of Employment, Interest, and Money."

According to the Marginal Efficiency of Capital (MEC) theory, an economy's investment level is influenced by the MEC, or rate of return on investment. An investment turns a profit when its present cost is equivalent to the anticipated future profits, discounted at the MEC. According to this theory, the MEC and investment level have an inverse relationship, with lower MECs stimulating investment and higher MECs discouraging it. Interest rates also have an impact on the MEC; when they are below the MEC, lower interest rates encourage investment.

Regarding the connection between economic growth and the development of the capital market, the MEC hypothesis is quite pertinent: First, one of the main factors influencing investment spending, which is a major contributor to economic expansion, is MEC. Investment is stimulated by a high MEC, which boosts economic growth, production, and employment. Second, the interest rate has an impact on MEC. An environment with low interest rates might encourage capital market growth and investment. A high interest rate, on the other hand, can deter investment and impede the growth of the capital market. Third, investor expectations regarding future profitability also affect MEC; a positive outlook for the economy can result in a higher MEC and more investment, while a negative outlook can have the opposite effect. Fourth, a well-developed capital market can help ensure that investment funds are allocated efficiently to projects with the highest expected returns, which can result in a higher MEC and promote economic growth.

### Financial Intermediation Theory

Mostly credited to British economist Edward James Nell, the Financial Intermediation Theory was first presented in his 1975 book "The Theory of General Economic Equilibrium." According to Nell's (1975) financial intermediation theory, effective capital allocation is hampered by high transaction costs and knowledge asymmetry between lenders and borrowers. By decreasing information asymmetry, cutting transaction costs, and diversifying hazardous assets into less risky ones, financial intermediaries help to reduce these problems. This theory emphasizes how crucial financial

intermediaries are to increasing market liquidity, providing risk management products, increasing capital allocation efficiency, and ultimately promoting economic growth and development.

### **Empirical Review**

The researchers reviewed a number of empirical publications in the following chronological order:

Dabo (2015) evaluated how the Nigerian capital market's capitalization affected the country's economic expansion. Data were collected from the CBN Statistical Bulletin, the Annual Report, and the Statements of Accounts of the Nigeria Stock Exchange, using annual time series data from 2001 to 2012. The variables were estimated using multiple regression. The findings demonstrated a unidirectional causal relationship between economic growth and stock market capitalization, with GDP showing the strongest correlation with MCAP at the 5% significance level.

Osakure and Ananwude (2017) conducted a comparative analysis of the evolution of the stock market and economic growth in two growing African economies—South Africa and Nigeria—using time series data from 1981 to 2015. Autoregressive Distributive Lag (ARDL) and the Granger Casualty Analysis model were used to examine the datasets. The results showed a weak but favourable correlation between economic growth and stock market development over both the short and long terms.

Avery and Obah (2018) looked at how the Nigerian economy was affected by the expansion of the capital market between 2000 and 2013. The Central Bank of Nigeria Statistical Bulletin, the Nigerian Stock Exchange Review Reports, and the Security Exchange Commission reports were the sources of the data. The dataset was examined using regression analysis using the Ordinary Least Square (OLS) approach. While market capitalization (MCAP), the number of deals, the All-share index (ALSI), and the total value of transactions (TVT) were used to gauge the development of the capital market, GDP was used to gauge economic growth. The findings showed a robust relationship between independent variables and economic growth.

Nathaniel, et al., (2020) using the Regressive Distributed Lag (RDL) model, analyzed the Nigerian economy from 1980 to 2016. Their findings indicated that stock markets contributed positively to economic growth and innovation, particularly in the short term. While trade openness showed no significant impact in the short run, it proved significant in the long run. However, the study surprisingly revealed a negative association between trade openness and economic growth within the Nigerian context.

Shravani and Sharma (2020) investigated the link between the Indian stock exchange and industrial production from 1996-1997 to 2015-2016. Employing the Autoregressive Distributed Lag estimator and the Vector Error Correction Model, their research established a long-term relationship between the stock market and economic growth in India.

Mawanza, et al., (2020) studied the Zimbabwean stock exchange's impact on the economy from 1980 to 2018, employing the OLS technique for analysis. Their findings revealed a mixed relationship between the stock exchange and economic growth. However, further research confirmed a positive

link between stock market capitalization and foreign direct investment, which positively impacted economic development.

Shoko, et al., (2020) utilizing ARDL analyzed the Zimbabwean economy by incorporating variables such as money supply, interest rates, exchange rates, and GDP. Their findings revealed that only the exchange rate exhibited a significant positive relationship with economic growth in the long term. Inflation showed no significant relationship with economic growth. While GDP, money supply, and interest rates demonstrated insignificant relationships with economic growth, the study observed a bidirectional causality between the stock market and real GDP, and a unidirectional causality from the stock market to interest rates.

Okisa (2022) analyzed impact of stock market capitalization on economic growth in Kenya from 1990 to 2021, guided by neoclassical endogenous growth theory. Utilizing data from the Kenya National Bureau of Statistics and the International Financial Statistics, the study employed a Vector Error Correction Model after conducting unit root tests and Johansen co-integration tests. The findings revealed a significant negative long-run relationship between stock market capitalization and economic growth in Kenya.

Yakubu's 2023 study examined impact of capital market size on Nigeria's economic growth from 1990 to 2021. Employing OLS method, the research found a positive relationship between these factors. This relationship was found to be long-lasting, and the study further revealed that capital market growth significantly influenced economic growth in Nigeria.

Chikwira (2023) using a VAR model, assessed interplay between the stock market, liquidity, and economic growth in Zimbabwe from 2013 to 2022. While the study found a significant positive link between the stock market and economic growth, it revealed that stock market liquidity had a negligible impact on Zimbabwe's economic development during this period.

Olusegun and Ajao (2024) studied the link between capital market development and economic growth in Nigeria from 2003 to 2022. Using market capitalization as a proxy for stock market development and real GDP for economic growth, they employed multiple regression analysis. Their findings indicated a weak but positive relationship between stock market development and economic growth in Nigeria during the study period.

### **Gap in Empirical Literature**

This study addresses several empirical gaps identified in previous research on effect of capital market development and economic growth. Firstly, it focuses specifically on the impact of market capitalization and all-share index dynamics on GDP growth rate. Secondly, the study covers a period from 1986 to 2023, a significant timeframe in Nigerian economic history marked by the implementation of Structural Adjustment Programs. This allows for an analysis of how capital market development has contributed to economic recovery and transformation since this pivotal period. Thirdly, the study employs specific proxies for the dependent and independent variables, using GDP growth rate as the dependent variable and market capitalization and all-share index as independent variables, while controlling for interest and inflation rates. Finally, this study contributes to filling a

geographical gap in the literature by focusing specifically on the Nigerian context, unlike many previous studies conducted in other jurisdictions.

### 3. Methodology

This study employed an *ex-post facto* research design, suitable for analyzing the outcomes of past events. Given its focus on the relationship between capital market development and economic growth in Nigeria from 1986 to 2023 (38 years), an *ex-post facto* approach was appropriate. All variables, both independent and dependent, were annual time series data. The data used in this study were secondary, quantitative, and obtained from the CBN Statistical Bulletin.

#### Model Specification

The work of Yakubu (2023), who used Ordinary Least Square estimator to examine how capital market development variables affected Nigeria's economic growth from 1986 to 2023, served as the model for our investigation. Linear form of the modified multiple regression equation is clearly stated as follows in order to ascertain how these variables affect the GDP growth rate:

$$GDPGR = \beta_0 + \beta_1 \text{LogMCAP}_t + \beta_2 \text{LogASI}_t + \beta_3 \text{INFR}_t + \beta_4 \text{FEXR}_t + \mu_t \quad (3.1)$$

Where, GDPGR =GDP growth rate, represent dependent variable. MCAP =Market capitalization, and ASI =All-share index (independent variables), while INFR = Inflation rate and FEXR = Foreign rate depict control variables.  $\beta_0$  =coefficient of the constant;  $\beta_1 + \beta_2 + \beta_3 + \beta_4$  are the parameters to be measured;  $\mu$  = Error term and t denotes time or scope of the study ranging from 1986–2023. A *prior* expectations of coefficients of the explanatory variables:  $\beta_1 > 0$ ;  $\beta_2 > 0$ ;  $\beta_3 > 0$  and  $\beta_4 > 0$ .

The following are the decision rules, which are predicated on a 5% probability value: If the p-value is less than 0.05, reject the null hypothesis and accept the alternative. If the p-value is greater than 0.05, accept the null hypothesis and reject the alternative.

### 4. Data Presentation and Analysis

#### Data Analysis

##### Normality (Descriptive Statistics) Test

**Table 4.1: Descriptive statistics of the annualized data series**

	<b>GDPGR (%)</b>	<b>ASI (N'BLN)</b>	<b>FEXR (N)</b>	<b>TMCAP (N'BLN)</b>	<b>INFR (%)</b>
Mean	1.170249	5.439524	2.202836	4.367973	18.10278
Median	0.189735	5.493460	2.174898	4.203703	16.92000
Maximum	8.428308	5.818990	2.485835	4.955093	24.77000
Minimum	-1.229144	4.817360	2.048985	4.053378	15.14000
Observations	38	38	38	38	38

**Source:** Researcher's computations, 2024

The descriptive statistics of our time series dataset are shown in Table 4.1, which indicates that the GDP growth rate (GDPGR) averaged 1.17% and peaked at 8.43%. The major indicators reached their highest points between 2003 and 2023 at N8.43, N5.82, N27.4, and N4.95, respectively. The all-share index (ASI), foreign exchange rate (FEXR), total market capitalization (T|MCAP), and inflation rate (INFR) averaged 5.44%, N2.20%, N4.37, and 18.1%, respectively.

**Unit Root (Stationarity) Test**

To determine if the annualized time series variables have a unit root or are stationary, the Augmented Dickey-Fuller (ADF) unit root test was used. The unit root results for the sample data are shown in Table 4.3.

**Table 4.2: Summary of ADF unit root test results**

Variable	T-Stat.	Critical Values @5%	P-value	Order of Integration	Inference
GDPGR	-6.637486	-3.564534	0.0000	I(1)	Stationary
LnASI	-7.180094	-3.645372	0.0000	I(1)	Stationary
FEXR	-6.309863	-3.564534	0.0000	I(1)	Stationary
LnTMCAP	-5.365209	-3.645372	0.0000	I(1)	Stationary
INFR	-5.355422	-3.665463	0.0000	I(1)	Stationary

**Source:** Author’s extract from E-views, 2024

Our variables are stationary at the same orders of integration, according to the stationarity test results in Table 4.2. After first differencing, all of the variables achieved stationarity and have no unit root (i.e., I(1)). It is clear that the computed values (ADF Statistic) for each of the variables under test are below the critical values, demonstrating its stationarity.

**Test of Hypotheses**

The hypotheses modelled in section three were tested in this section. Table 4.3 displays the outcomes of the OLS regression.

**Table 4.3: Regression results for hypotheses one and two**

Dependent Variable: GDPGR

Method: Least Squares

Date: 03/10/24 Time: 17:23

Sample: 1986 2023

Included observations: 38

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.331772	1.065366	5.004637	0.0000
LOG(ASI)	-0.246650	0.092419	-2.668817	0.0127
LOG(MCAP)	0.756482	0.119113	6.350944	0.0000
INFR	-0.026133	0.016607	-1.573595	0.1272
FEXR	0.604317	0.176699	3.420030	0.0020
R-squared	0.981031	Mean dependent var		9.057203
Adjusted R-squared	0.978221	S.D. dependent var		2.014068
S.E. of regression	0.297230	Akaike info criterion		0.553977
Sum squared resid	2.385326	Schwarz criterion		0.782998

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Log likelihood	-3.863630	Hannan-Quinn criter.	0.629891
F-statistic	349.0991	Durbin-Watson stat	1.934155
Prob.(F-statistic)	0.000000		

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Source: Author's computations aided by E views, 2024

$$\text{GDPGR}_t = 5.33 - 0.247 \log \text{ASI} + 0.756 \log \text{MCAP} - 0.026 \text{INFR} + 0.604 \text{FEXR}$$

## Results and Discussion

It is evident from the findings in Table 4.3 that the All-share index significantly influenced Nigeria's GDP growth rate during the review period. The probability value  $0.0127 < 0.05$  explains this. The effect was negative (the ASI coefficient is roughly -0.25). Consequently, the alternative hypothesis is accepted and the null hypothesis is rejected for the All-share index ( $0.0127 < 0.05$ ). The findings also show that during the review period, Nigeria's GDP growth rate was significantly impacted by market capitalization. The probability value  $0.0000 < 0.05$  explains this. The effect was positive (the MCAP coefficient is roughly 0.76). Consequently, the alternative hypothesis is accepted and the null hypothesis is rejected for the MCAP ( $0.0000 < 0.05$ ).

Discussions of the findings derived from the regression results are provided below.

i) Objective One: Examine the impact of all share index on GDP growth rate in Nigeria

The results of the aforementioned objective show that, during the study period, the All-Share Index significantly influenced Nigeria's GDP growth rate. The impact was negative, meaning that the GDP growth rate fell as the All-Share index rose and vice versa. To put it another way, the study indicates that during the review period, Nigeria's economic growth and All-share index were inversely related. These findings imply that the All-Share Index's measurement of stock market performance might not be a reliable indicator of the state of the Nigerian economy as a whole. GDP growth may be more significantly influenced by other factors, such as sector-specific problems, external shocks, or government initiatives. Furthermore, the observed negative link may suggest that other factors have a greater influence on the relationship between these two variables or that the stock market is not a useful tool for promoting economic growth in Nigeria during the review period. Shravani and Sharma (2020) found a long-term relationship between the Indian stock market and industrial production using the ARDL model, aligning with our findings. However, Osakure and Ananwude's (2017) study, which analyzed stock market evolution and economic growth in South Africa and Nigeria, found only a weak correlation between the two, contradicting our results. Their analysis, conducted using ARDL and time series data from 1981 to 2015, revealed a weak but positive association in both the short and long terms.

ii) Objective Two: Assess the impact of market capitalization on GDP growth rate in Nigeria

The market capitalization and GDP growth rate in Nigeria over the review period were shown to be significantly positively correlated by the study. This shows that rising market capitalization was linked to rising economic growth, indicating that the stock market contributed to the nation's economic

growth over the study period. This finding suggests that stock market plays an important role in driving economic growth in Nigeria, as increases in market capitalization are associated with increases in GDP growth. A thriving stock market can contribute to economic growth by facilitating capital mobilization for businesses, encouraging investment and economic activity, and fostering overall economic development. While this finding aligns with Chikwira's 2023 study in Zimbabwe, which also found a positive relationship between stock market development and economic growth, it contradicts the findings of Olusegun and Ajao's 2024 study in Nigeria.

## 5. Conclusion and Recommendations

The results of this study offer important new information about the connection between Nigeria's economic growth and stock market success. Our research shows that during the study period, the All-Share Index had a considerable detrimental effect on the GDP growth rate. According to this, there is an inverse relationship between rising ASI and falling economic growth. On the other hand, market capitalization showed a strong positive correlation with GDP growth, suggesting that higher market capitalization leads to faster rates of economic growth.

These findings have important implications for policymakers. While a robust stock market is generally considered crucial for economic growth, the negative impact of the ASI on GDP growth in this study suggests that the Nigerian stock market may not be effectively channeling investment towards productive sectors that drive economic growth. This warrants further investigation into the factors contributing to the negative relationship between the ASI and GDP growth, such as the composition of the index, investor behaviour, and the overall economic structure of Nigeria.

This study recommends that researchers and analysts delve deeper into the factors contributing to the negative impact of the All-Share Index on GDP growth. Market participants should consider diversifying their investment portfolios to mitigate the potential negative effects of the All-Share Index. Furthermore, policymakers and regulators should acknowledge the varying impacts of different stock market indicators on economic growth and prioritize policies aimed at increasing Total Market Capitalization to stimulate economic growth.

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