

# Capital market performance and economic growth in Nigeria

Friday Ojeaburu (PhD, FCA)<sup>1</sup>  
Eunice Odum (PhD, FCA)<sup>2</sup>

<sup>1,2</sup>Department of Accounting, Ignatius Ajuru University of Education, Port Harcourt. Email: ojeaburuf@gmail.com

Emmanuel Uniamikogbo (PhD)<sup>3</sup>

<sup>3</sup>Department of Accounting, Rhema University Nigeria, Aba.

## ABSTRACT

This study investigated the relationship between capital market performance and the Nigerian economic growth. The ex-post facto research design was adopted in the study to establish the relationship between the dependent and independent variables. Data sourced from the Central Bank of Nigeria (CBN) statistical bulletins and National Bureau of Statistics (NBS) Reports from 1981 to 2022 was employed to achieve the study's objectives. The multiple regression technique was used to analyse the data with the aid of E-view 12 statistical software. The results of the findings revealed that market capitalization and all share index have significant effect on gross domestic products while total value of listed securities is not a significant macroeconomic determinant factor of economic growth in Nigeria for the years under review. The study recommends that for capital market to perform optimally, the environment must be friendly to promote and encourage investments opportunities. Additionally, in order to ensure economic growth affects the Nigerian capital market positively, it is crucial to remove all bottlenecks and allow free flow of business. This will make it easier for investors to access the capital market, thereby, intensifying the ease of doing business.

## ARTICLE INFO

### Keywords:

Capital market; Economic growth; Market capitalization; All-share index, Nigeria.

### Article History:

Received: 21 Mar 2024

Accepted: 20 May 2024

Published: 25 Jul 2024



© 2024 The authors. This is an open access article under the Creative Commons Attribution 4.0 International (CC BY 4.0) License.

## 1. INTRODUCTION

A nation's long-term economic growth and development rely heavily on its capital market, which caters for diverse clients such as government entities, corporations, and individuals (Acha & Akpan, 2019). The capital market's growth is vital to a nation's overall economic advancement (Okoye et al., 2023; Osaze, 2000). While it is crucial to establish a formal link between the financial sector and economic growth, the connection is not relatively simple to comprehend (Gill et al., 2023). The capital market's primary objective is to transfer funds from the surplus sector to the deficit sector of the economy (Acha & Akpan, 2019). Investments in physical, natural and human capital is critical and essential for a nation's economic growth and development (Payab et al., 2023). The capital market thus, expands, strengthens, and enables the efficient allocation of financial resources for investment, thereby increasing the production possibilities frontier (Adamu & Sanni, 2005). An efficient financial sector that pools domestic savings and mobilises foreign capital for productive investments is crucial for economic growth in a modern economy (Okoye et al., 2023). Financial markets are crucial in mobilising financial resources for long-term investment through financial intermediation (Acha & Akpan, 2019; Ezema et al., 2023). Previous researches have raised concerns about the impact of capital markets on economic growth and development. While some studies (Umar, 2022; Tan & Shafi, 2021; Ibrahim & Mohammed, 2020; Owen, 2020; Acha & Akpan, 2019; Ananwude & Osakwe, 2017; Demirgüç-Kunt & Levine, 1996; Levine & Zervos, 1996; Atje & Jovanovic, 1993) found a positive correlation between the two variables, other scholars (Algaed, 2021; Lakshmanasamy, 2021; Derk, 2020; Al-Kandari et al., 2020; Adesina-Uthman, 2020; Agu Bertram, 2018; Nyong, 1997) found a negative relationship between capital market performance and Gross Domestic Product. Conversely, studies (such as Bello et al., 2022; Ogbuji et al., 2020; Donwa & Odia, 2010; Ewah et al., 2009; Ariyo & Adelegan, 2005; Levine & Zervos, 1998; Harris, 1997) failed to find empirical evidence to support this conclusion that capital market performance impact on economic growth. However, Sudharshan and Rakesh (2011) observed that economic growth could affect stock market development.

Therefore, for sustainable economic growth and development to be achieved, countries need access to local and foreign capital through the capital market (Ekundayo, 2002). Unfortunately, the unavailability of funds for investment financing has hindered the growth and development

of many African countries (Endris & Kassegn, 2022), especially developing countries like Nigeria, where capital has become a significant limiting factor to economic development (Daly, 1991). Although, Nigeria's capital market has grown and can offer facilities to both the public and private sectors to raise long-term capital for developmental programs and projects (Okoye et al., 2023), the impact of these reforms on economic growth has yet to be fully explored. This study aims to fill this gap by using regression analysis to examine the causality between Nigeria's stock market performance and economic growth, which differs from the methods used in previous studies with a view to validating extant studies. Following the above, the main aim of this study is to examine the effect of capital market performance on economic growth in Nigeria, with specific emphasis on ascertaining the effect of stock market capitalisation, total listed securities and all-share index respectively on gross domestic product in Nigeria.

## 2. LITERATURE OF RELATED REVIEW

### 2.1 Capital Market Performance

The capital market is a complex system in which individuals and organizations with surplus funds can invest directly or through financial intermediaries to support those needing capital for their businesses (Taiwo et al., 2016). According to Ali and Kukuri (2023a), it is a marketplace and institution that facilitates the issuance and trading of long-term financial instruments. This market is an effective way for governments at all levels to finance public projects and is crucial in stimulating economic growth and development (Zhong et al., 2022; Wolff, 2022). The Securities and Exchange Commission (SEC) and the Nigerian Exchange Group (NGX) regulate the capital market to ensure proper supervision and efficient operations (John et al., 2023). The performance of the capital market is overwhelming, as it has been able to mobilized funds for the private institutions, government and individuals (Okereke, 2000). The capital market has also transformed into having Central Security Clearing System limited (CSCS), which started operations in April 1997; to ensure that market operations are efficient and effective (Omeh, 2022). The market at the NGX has upgraded towards the internationalisation of its operations (Bui & Le, 2023). This system enables the transfers of stock ownership from one shareholder to another and the transfer of sales proceeds from the buying shareholder to the selling shareholder (Nuti, 2023). The transfer of shares is now done on a T+3 (Trading Day + three working days) time frames under the automated Central Securities Clearing System (CSCS),

while transactions are executed on the basis of delivery versus payment (Ali & Kukuri, 2023a).

In spite of all these performances in recent times in the Nigeria capital market, the Nigerian financial market is faced with significant obstacle of lack of highly liquid market where investors can buy and sell securities quickly without significant price fluctuations (Uche & Baghebo, 2021). This is a crucial factor for international investors who consider the liquidity level of a market before investing in it. According to Kolapo and Adaramola (2012), a market that offers easy entry and exit is more attractive to investors. However, weak domestic payment systems have hindered efficient liquidity management, causing the Nigerian financial market to grow slower (Uche & Baghebo, 2021). Additionally, the market's development has been held back by inefficient and costly systems that transfer ownership of securities or funds, which make repurchase transactions difficult (Austen, 2022). Compared to developed economies, the Nigerian financial market needs restructuring to provide more investment opportunities (Briggs, 2015). The Nigerian Exchange Group as of July 2023, has 345 securities listed, including Government stocks, industrial loan (debenture/preference) stocks, and equity/ordinary shares of companies. According to the Nigerian Exchange Group and CBN statistical bulletins, the all-share index and market capitalisation stood at 42,716.44 basis points and N42,052.50 trillion (Nigeria Exchange Group, CBN Bulletins, 2023).

### 2.1.1 Market Capitalisation and Gross Domestic Product

Market capitalisation mainly reflects the initial public offerings of private companies and, in some cases, privatised public enterprises (Abubakar & Kassim, 2021). Market capitalisation refers to the total naira market value of a company's outstanding shares of stock. The investors use this figure to determine a company's size instead of sales or total asset figures. In an acquisition, the market capitalisation is used to determine whether a takeover company represents a good value or not to the acquirer. Several empirical studies have explored the link between stock market development and GDP. Research by Levine and Zervos (1996) discovered that stock market development positively correlates with long-term economic growth. Studies conducted by Maxwell et al. (2018), Akintola and Cole (2020) showed a strong positive connection between market capitalization and gross domestic product. On the contrary, (Algaeed, 2021; Lakshmanasamy, 2021; Derk, 2020; Al-Kandari et al., 2020; Adesina-Uthman, 2020; Agu Bertram, 2018) in their studies found a negative correlation between market capitalisation and GDP. Premised on the above, the first hypothesis is formulated in the null form as follows:

*H<sub>01</sub>: There is no significant relationship between market capitalisation and gross domestic product in Nigeria.*

### 2.1.2 Total Listed Securities and Gross Domestic Product

The total number of securities available for trading in the capital market includes equities (such as Premium board, Main board, Growth board, Alternative Securities Market, Real Estate Investment Trusts, and Close Ended Funds), exchange-traded products, FGN Bonds, corporate bonds, state and municipal bonds, supranational bonds, and memorandum listings (Umar, 2022). According to NGX (2020), this number is counted annually. Lenee and Oki (2017) define listed securities as securities investors can trade in the capital market, which can either have positive or negative effect on the nation's economic growth (Adewoyin, 2004). Maxwell et al. (2018) suggests a strong positive relationship exists between the the number of equities and gross domestic product. Following from the above, we hypothesised the second hypothesis in the null form as follows:

*H<sub>02</sub>: There is no significant relationship between total listed securities and gross domestic product in Nigeria.*

### 2.1.3 All-Share Index and Gross Domestic Products

All Share Index (ASI) is a stock market index that assesses the market's overall direction (Ibrahim & Mohammed, 2020; Odo et al., 2017). It is calculated by adding up the values of stocks and expressing them against a base value during a specified period (Umar, 2022). This index represents the entire market and allows for continuously tracking market changes and performance. Additionally, the index reflects the combined value of market features and can compare different companies and industries (Odo et al., 2017). All share index significantly influences and are negatively linked to economic growth in Nigeria (Aigbovo & Izebor, 2015). However, Maxwell et al. (2018) posits a strong positive connection between all-share index and gross domestic product. Following the above, the third hypothesis is stated in the null form as follows:

*H<sub>03</sub>: There is no significant relationship between all-share index and gross domestic product.*

## 2.2 Economic growth in Nigeria

Economic growth refers to the economy's expansion of production and services during a specific economic cycle (Bello et al., 2022). Gross domestic product (GDP) is used to measure economic growth, with both nominal GDP (measured at current prices) and real GDP (adjusted for inflation) being used. EReal GDP is a measure of the improvement in the GDP (Zulkarnain et al., 2023). Numerous factors impact economic growth, including investment ratios, human capital, research, and development. (Liu et al., 2023; Reza et al., 2018). However, some experts have questioned the effectiveness of using national income indicators, such as GNP, GDP, and NNI, to measure economic growth and development (Haller et al., 2020; Giovannini & d'Ercole, 2007). The computation and parameters used can vary, making them inappropriate in certain situations (Ali & Kukuri, 2023b). However, McKinnon (1973) argues that developing countries might benefit more from a well-functioning financial system rather than state intervention, which can be inefficient and counterproductive. The capital market offers a platform for buying and selling new financial assets or instruments and a marketplace for previously owned securities.

## 2.3 Theoretical Framework

### 2.3.1 Exogenous Growth Model

The exogenous growth model, also called the neo-classical or Solow-Swan model was introduced in 1956 by Robert Solow (Kocherlakota & Yi, 1996; Solow, 1956). The exogenous growth model assumes efficient resource use and diminishing returns to capital (Chirwa & Odhiambo, 2018). The model predicts that economic growth increases with more capital, and countries with less capital per person grow faster (Rahman et al., 2023). It also predicts a "steady state" where no new increase in capital will create economic growth due to diminishing returns (Matutinović et al., 2023). Although the neoclassical growth model has contributed to the expansion of growth, the endogenous growth theory, proposed by Romer (1986) and Rebelo (1991), criticises it and concludes that it fails to consider technology's role in growth (Bello et al., 2022). This study is anchored on this theory because of the growth and return on capital investment of investors in the capital market.

### 2.4 Empirical Literature Review

Bello et al. (2022) evaluated the impact of capital market performance on economic growth in developing countries from 2012 to 2022. The study's findings revealed that recapitalisation of Nigerian banks improved the capital market and economic growth, but recessions caused a decline. Since the analysis of the study showed inconsistent results, the study recommends that companies may need to finance their operations through domestic capital formation and harmonise research approaches for consistent findings. Umar (2022) ascertained the influence of capital market performance on economic growth. He conducted a systematic review of 51 countries from 2012 to 2021 and found that capital market performance significantly influences economic growth of these nations. However, there were differences among nations due to varying levels of capital market development. Imade (2021) conducted a study titled "capital market performance and economic growth in Nigeria and the United States of America" by examining the relationship between these two variables. The study utilized the co-integration econometric method and error correction model for data analysis. The findings revealed that only gross fixed capital formation significantly impacted Nigeria's economic progress in both the short and long term. The study recommends that the government regulate the activities of the capital market and its operators. However, it is essential to note that this study only used time series data collected annually for quantitative analysis, which falls short of the minimum 30 observations required for time series analysis.

Acha and Akpan (2019) investigated Nigeria's economic growth and stock market performance from 1987 to 2014. The study found that the capital market's performance indicators positively and significantly impacted the economy. To improve the Nigerian capital market and economy, financial and monetary authorities should promote information flow to attract more investors and increase new issues. Briggs (2015) examined the impact of Nigeria's capital market on economic growth from 1981 to 2011. The stock market played a significant role in driving economic development, with a positive effect on GDP. The findings suggest a long-term connection between the capital market and economic growth.

Governments should encourage the use of the capital market to fund developmental programs, and regulatory authorities should provide more investment instruments in the market. Algaheed (2021) assessed the impact of Saudi Arabia's capital market development on per capita GDP growth using yearly time series data from 1985 to 2018. Share price index, capitalization, liquidity, number of share transactions, and shares traded were analyzed using ARDL, FMOLS, and Johansen tests. The outcome of the study showed positive effects between share price index, total shares traded, transaction volume and per capita GDP growth. Conversely, market capitalization and liquidity have adverse effect on per capita GDP growth. Taiwo et al. (2016) studied Nigerian capital market and economic growth using an error correction model and Vector Error Correction techniques employing yearly data from 1981 to 2014. The results indicate that the market capitalization rate, total value of listed securities, labour force participation rate, accumulated savings, and capital formation are significant macroeconomic factors contributing to economic growth. It is recommended to improve the capital market's environment to promote investment opportunities for local and international investors, increasing the ease of buying and selling shares. Kolapo and Adaramola (2012) determined the effect of the Nigerian capital market on economic growth between 1990 and 2010 using Johansen co-integration and Granger causality tests. The study's outcome found a long-term connection between Nigeria's capital market (measured by market capitalization, total new issues, value of transactions, total listed equities and government stocks) and economic growth (measured by GDP). The study showed that capital market activities positively impact the Nigerian economy.

**3. METHODOLOGY**

**3.1 Model Specification**

The study adopted the ex post facto research design to evaluate the causality of independent variables on the dependent variable. This study utilized secondary data from the Central Bank of Nigeria (CBN) Statistical Bulletin and National Bureau of Statistics (NBS) Reports from 1985 to 2022 for both the independent and dependent variables. The data collected aimed to provide comprehensive coverage of Nigeria's capital market indicators and economic growth. This study utilized a deductive approach and quantitative studies, building on previous research models from scholars such as Briggs (2015), Acha & Akpan (2019), Ali & Kukuri (2023), Adamu & Sanni (2005), and Taiwo et al. (2016), who have explored similar areas of studies in the past. In contrast to this approach is interpretivism, which aligns with an inductive approach and qualitative studies (Azungah, 2018). Therefore, gross domestic product used as proxy for economic growth is estimated as a function of stock market capitalization, total listed securities and all share index.

$$GDP = f(MCAP, SEL, ASI) \dots\dots\dots (1)$$

Where:

- GDP = Gross Domestic Product at current prices
- MCAP = Stock Market Capitalization
- SEL = Total Listed Securities
- ASI= All Share Index

Given that equation (1) is a non-linear, its logarithmic form is indicated below:

$$GDP) = a_0 + a_1MCAP + a_2SEL + a_3ASI + U_t \dots\dots\dots (2)$$

Where  $a_i$  are the parameters to be estimated ( $i = 0, 1, 2, 3$ )  
 $U_t$  is the error term.

**4. RESULT**

**4.1 Data Analysis Techniques**

Two sets of methods were used for the empirical analysis of this study. The descriptive statistics and the econometric method. The descriptive statistics structure provides the background characteristics of the data, the pattern of qualitative movement in the data within time and as well have more insight into the datasets. The multiple regression analysis was conducted in this study to ensure the variables' authenticity and as well estimate the relationship between the independent variables and the dependent variable.

**4.2 Empirical Analysis and Results**

Data collected from secondary sources were analysed, and the results presented in Table 1. This table displays descriptive statistics for various factors, including GDP (which measures economic growth), MCAP (market capitalisation), SEL (securities listed), and ASA (all-share index). The data appears highly skewed, with a skewness coefficient falling within the range

of less than -1 and greater than 1. Both skewness and Kurtosis are used to check the normal distribution of the data set. The Kurtosis value is more than 2, indicating that the distribution is too peaked. However, the Jarque-Bera values are within the range of normal distribution results, with all values being positive and more significant than the p-value of 0.05.

**Table 1:** Descriptive Statistics

	GDP	MCAP	SEL	ASI
Mean	41031.86	8372.290	268.1842	18136.02
Median	15840.52	1735.900	264.5000	20429.77
Maximum	176075.5	42054.50	345.0000	57990.50
Minimum	187.8300	6.600000	217.0000	127.3000
Std. Dev.	50935.05	11099.71	24.57515	15585.94
Skewness	1.183468	1.398894	0.591623	0.452538
Kurtosis	3.213569	4.401402	4.286534	2.285333
Jarque-Bera	8.942659	15.50327	4.837462	2.105696
Probability	0.011432	0.000430	0.089035	0.348943
Sum	1559211.	318147.0	10191.00	689168.6
Sum Sq. Dev.	9.60E+10	4.56E+09	22345.71	8.99E+09
Observations	38	38	38	38

**Table 2:** Inferential Statistics

Dependent Variable: GDP				
Method: Least Squares				
Date: 07/13/23 Time: 08:16				
Sample: 1 38				
Included observations: 38				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
MCAP	3.735786	0.700939	5.329684	0.0000
SEL	-622.9449	249.3800	-2.497975	0.0175
ASI	0.706395	0.505468	1.397509	0.1713
C	164007.6	63276.23	2.591930	0.0140
R-squared	0.705929	Mean dependent var	41031.86	
Adjusted R-squared	0.679981	S.D. dependent var	50935.05	
S.E. of regression	28814.05	Akaike info criterion	23.47441	
Sum squared resid	2.82E+10	Schwarz criterion	23.64679	
Log likelihood	-442.0139	Hannan-Quinn criter.	23.53575	
F-statistic	27.20608	Durbin-Watson stat	1.027247	
Prob(F-statistic)	0.000000			

Table 2 above present a very strong bearing between stock market capitalization, total listed securities, all share index and gross domestic product in Nigeria. The coefficient of determination ( $R^2$ ) of 0.7059 indicates that 70.59% of the variance in economic growth (dependent variable) can be predicted from the stock market capitalization, total listed securities and all share index (independent variables) while the remainder is accounted for by other extraneous factors not harnessed into the model. Note that this is an overall measure of the strength of association, and does not reflect the extent to which any particular independent variable is associated with the dependent variable. The Durbin-Watson statistics revealed 1.02 below 2, which means a positive autocorrelation in the result. The whole model displays that GDP is positively linked to MCAP and ASI, which is statistically significant for MCAP because the p-value is less than 5% level of significance and not significant for ASI because the p-value is greater than 5% level of significance. Meanwhile, GDP is negatively connected to SEL and statistically significant because of the p-value that is less than 5% significance level.

Specifically, stock market capitalization (MCAP) with coefficient value of 3.7 means that for every one-unit increase in MCAP leads to 3.7 positive increase in GDP at a significance level. Therefore, the null hypothesis is accepted ( $P\text{-Value} < 0.05$ ). Hence, there is significant relationship between stock market capitalization and economic growth in Nigeria. In the case of total listed security (SEL) with negative coefficient value of 622.9, indicating that, for every one-unit increase of the SEL, there is a decrease in the GDP at a significance level. Therefore, the null hypothesis is rejected ( $P\text{-Value} < 0.05$ ). Hence, there is significant

relationship between total listed securities and economic growth in Nigeria. Lastly, the all-share index (ASI) with negative coefficient value of 0.70 indicates that for every one-unit increase of the ASI, the value of GDP increases by 0.7 at an insignificance level. Therefore, the null hypothesis is accepted (P-Value > 0.05). Hence, there is no significant relationship between all share index and economic growth in Nigeria.

#### 4.3 Summary of Findings

**Table 3:** Research findings

Hypothesis	Model specification	Coefficient	T-Stat	P-value	Remarks	Decision
H <sub>01</sub>	$GDP = \beta_0 + \beta_1 MCA$	3.735	5.32	0.000	significant	Reject H <sub>01</sub>
H <sub>02</sub>	$GDP = \beta_0 + \beta_2 SEL$	-622.9	-2.497	0.017	significant	Reject H <sub>02</sub>
H <sub>03</sub>	$GDP = \beta_0 + \beta_3 ASI$	0.70	1.396	0.17	insignificant	Accept H <sub>03</sub>

Table 3 shows the result presented in line with the statistical decision rule that says if p-value is less than alpha level, the H<sub>01</sub> is rejected while the H<sub>01</sub> is accepted when the p-value is greater than the alpha level. Based on the above findings, the hypotheses are restated as follows.

H<sub>01</sub> There is significant relationship between market capitalisation and economic growth in Nigeria

H<sub>02</sub> There is significant relationship between listed securities and economic growth in Nigeria

H<sub>03</sub> There is no significant relationship between all-share index and economic growth in Nigeria

## 5. DISCUSSION OF RESULTS

The study investigated the impact of stock market performance on economic growth in Nigeria, using an annual time series period of 1985 - 2022. To achieve this objective, multiple regressions were used to analyzed the data. The outcome of the study revealed that only market capitalization and total listed securities significantly affected the gross domestic product while all share index does not significantly affected GDP. This studies agree with studies conducted by (Levine & Zervos, 1998; Minier, 2003), Abdullahi, 2005; Liu & Hsu, 2006; Muhammed et al., 2008; Abubakar & Kassim, 2021; Akintola & Cole, 2020; Mawanza, 2020; Nzomoi & Ikikii, 2013; Briggs, 2015; Imade, 2021; Taiwo et al., 2016; Okafor et al., 2021; Acha & Akpan, 2019; Ibrahim & Mohammed, 2020; Okonkwo et al., 2014; Owen, 2020; Kolapo & Adaramola, 2012; Ananwude & Osakwe, 2017; Umar, 2022; Tan & Shafi, 2021) which showed a positive relationship between market capitalization and GDP. On the contrary, scholars (such as Algaheed, 2021; Derk, 2020; Al-Kandari et al., 2020; Lakshmanasamy, 2021; Adesina-Uthman, 2020; Agu Bertram, 2018; Alajekwu & Achugbu, 2012) concluded in their study that there is a negative connection between market capitalization and GDP. In addition, Ogbuji et al. (2020), Bello et al. (2022) and Elhassan and Braima (2020) in their research found mixed connection between market capitalization and GDP.

## 6. CONCLUSION

This study investigated how the performance of Nigeria's capital market from 1985 to 2018 can impact economic growth. The findings suggest that policymakers should prioritize measuring and promoting growth in the stock market to ensure sustained economic growth and success. This is crucial for any economy aiming to accelerate its growth. The outcome of the study signifies that higher stock market capitalization increases the ability of firms to raise capital in order to increase investment spending and expand production of goods and services and this translates to higher growth rate in the long run.

### 6.1 Recommendations

Based on our findings, the study recommends the following:

1. To ensure economic growth positively affects the Nigerian capital market, it is crucial to remove all bottlenecks and allow a free flow of business. This will increase the ease of doing business and make it easier to access the capital market.

2. The value of the total traded securities and equities is not directly related to economic growth. To enhance the security market, companies listed on the Stock Exchange should be required to provide timely electronic information on their operations, such as quarterly and annual financial statements to users. This information should be easily accessible on the go and easy economy planning and integration.

3. It is essential for government of Nigeria to create an enabling environment that promotes and encourages investment opportunities for both local and international investors in the stock exchange market, since the all-share index has significant impact on the economic growth.

## REFERENCES

- Abdullahi, S. A. (2005). Capital market performance and economic development in Nigeria: An empirical analysis. A paper presented at the Department of Business Administration, Bayero University Kano.
- Abu, N. (2009). Does stock market development raise economic growth? Evidence from Nigeria. *Journal of Banking and Finance*, 1(1), 15-26.
- Abubakar, A., & Kassim, S. H. (2021). Influence of Banking Sector and Stock Market Development on Economic Growth in Developing Countries. *UMYU Journal of Accounting and Finance Research*, 1, 1-18
- Acha, I. A., & Akpan, S. O. (2019). Capital market performance and economic growth in Nigeria. *Noble International Journal of Economics and Financial Research*, 4(2), 10-18.
- Adesina-Uthman, G. A. (2020). Capital market development and economic growth in Nigeria: A re-examination. *KIU Journal of Social Sciences*, 6, 49-54
- Adewoyin, K.O. (2004). *The Nigerian Financial System: Money and capital market*. Osun : New deal Publication Limited.
- Agu Bertram, O. (2018). Economic growth and capital market development in Nigeria: An appraisal. *Economic Research*, 2, 27-38. <https://doi.org/10.29226/TR1001.2018>
- Aigbovo, O., & Izeke, A. O. (2015). Stock market development and economic growth in Nigeria: An empirical assessment. *International Journal of Business and Social Science*, 6(9), 1.
- Akintola, A. F., & Cole, A. A. (2020). Capital market and economic growth in Nigeria (1984-2015). *IOSR Journal of Humanities and Social Science*, 25, 38-46
- Alajekwu, U. B., & Achugbu, A. A. (2012). The role of stock market development on economic growth in Nigeria: A time series Analysis. *African Research Review*, 6, 51-70. <https://doi.org/10.4314/afrr.v6i1.5>
- Algaheed, A. H. (2021). Capital market development and economic growth: An ARDL approach for Saudi Arabia, 1985-2018. *Journal of Business Economics and Management*, 22, 388-409. <https://doi.org/10.3846/jbem.2020.13569>
- Ali, M., & Kukuri, S. B. (2023a). Adamu, J. A. and Sanni, I. (2005). Stock market development and Nigerian economic growth. *Journal of Economic and Allied Fields*, 2(2), 116-32
- Ali, M., & Kukuri, S. B. (2023b) Relationship between the capital markets and economic growth in Nigeria.
- Al-Kandari, A. M., Al-Roumi, K., & Al-Roomy, M. (2020). Kuwait stock market development and economic growth. *International Journal of Accounting*, 5, 238-247.
- Ananwude, A. C., & Osakwe, C. I. (2017). Stock market development and economic growth in Nigeria: A Camaraderie Reconnaissance. *Research Journal of Economics*, 1, 1-6.
- Ariyo, A. & Adelegan, O. (2005). Assessing the impact of capital market reforms in Nigeria: An incremental approach. A paper presented at the 46th annual conference of the Nigeria Economic Society in Lagos in August.
- Atje, R. & Jovanovic, B. (1993). Stock market and development. *European Economic Review*, 37, 632-640.
- Atoyebi, K., Ishola, S. A., Kadiri, K. I., Adegunjo, F. O. & Ogundegi, M. O. (2013). Capital market and economic growth in Nigeria. An empirical analysis. *Journal of Humanities and Social Sciences*, 6(6), 60-68.
- Austen, M. (2022). Continued acceleration of the reform of China's Capital Markets still needed. In transition and opportunity: Strategies from Business Leaders on Making the Most of China's Future (pp. 125-138). Singapore: Springer Nature Singapore.
- Azungah, T. (2018). Qualitative research: deductive and inductive approaches to data analysis. *Qualitative research journal*, 18(4), 383-400.

- Bello, U., Zubairu, U. and Ibrahim, U.A.(2022). Impact of capital market performance on economic growth in developing nations: A qualitative approach. *Journal of Service Science and Management*, 15(3), 340-349.
- Briggs, A. P. (2015). Capital market and economic growth of Nigeria. *Research Journal of Finance and Accounting*, 6(9).
- Bui, M. T., & Le, H. L. (2023). Digital capability and creative capability to boost firm performance and formulate differentiated CSR-based strategy. *Heliyon*, 9(3).
- Chirwa, T. G., & Odhiambo, N. M. (2018). Exogenous and endogenous growth models: A critical review. *Comparative Economic Research. Central and Eastern Europe*, 21(4), 63-84.
- Daly, H. (1991). From empty-world economics to full-world economics. *SalahElSerafy*, 29.
- Demirgüç-Kunt, A. & Levine, R. (1996). Stock market development and financial intermediaries: Stylized facts. *The World Bank Economic Review*, 10(2), 241-265.
- Derk, N. (2020). Study of connection between Stock Market and economic performance in Malaysian context. *Finance & Accounting Research Journal*, 2, 82-90. <https://doi.org/10.51594/farj.v2i2.107>
- Donwa, P. & Odia, J. (2010). An empirical analysis of the impact of the Nigerian capital market on her socio-economic development. *Journal of Social Sciences*, 24(2), 135-142.
- Ekundayo, I. K. (2002). Creating a conducive environment for investment in the Nigerian capital market. Paper presented at public enlightenment on opportunities in the Capital Market for Industrial Development, at Lokoja, Kogi State on 29th March to 1st April.
- Elhassan, T., & Braima, B. (2020). Impact of Khartoum Stock Exchange Market performance on economic growth: An Autoregressive Distributed Lag ARDL Bounds Testing Model. *Economies*, 8, Article No. 86. <https://doi.org/10.3390/economies8040086>
- Endris, E., & Kassegn, A. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: a systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1), 20.
- Engle, R. & Granger, C. (1987). Co-integrated and error correction: Representation, estimation and testing. *Econometrica*, 55, 251-276.
- Ewah, S. O. E., Esang, A. E., & Basse, J.U. (2009). Appraisal of capital market efficiency on economic growth in Nigeria. *International Journal of Business and Management*, 219-225.
- Ezema, C. A., Aransi, A. P., Eneh, G. O., Okafor, C. J., Isaac, C. P., & Eze, J. O. (2023). Insurance investment intermediation and capital market dynamics in Nigeria. short and long run estimates (1996-2022). *British International Journal of Applied Economics, Finance and Accounting*, 7(2).
- Gill, A. R., Riaz, R., & Ali, M. (2023). The asymmetric impact of financial development on ecological footprint in Pakistan. *Environmental Science and Pollution Research*, 30(11), 30755-30765.
- Giovannini, E., Hall, J., & d'Ercole, M. M. (2007). Measuring well-being and societal progress. In *Conference Beyond GDP-Measuring progress, true wealth, and the well-being of nations*, European Parliament, Brussels (pp. 19-20).
- Haller, A. P., Ștefăniță, M., Butnaru, G. I., & Butnaru, R. C. (2023). Climate neutrality through economic growth, digitalisation, eco-innovation and renewable energy in European countries. *Kybernetes*.
- Harris, R. D. F. (1997). Stock markets and development: A re-assessment. *European Economic Review*, 1, 136-139.
- Ibrahim, U. A., & Mohammed, Z. (2020). Assessing the Impact of Capital Market Development on Economic Growth: Evidence from Nigeria. *IOSR Journal of Economics and Finance*, 11, 1-15.
- Imade, E. O. (2021). Capital Market Performance and Economic Growth in Nigeria and the United States of America. *Academic Journal of Current Research*, 8, 57-79.
- John, O. N., Okonkwo, V. I., Okaro, C. S. O., Martins, B. O., & Otegunrin, A. O. (2023). Effect of fraud and corruption on capital market performance in Nigeria. *Journal of Economics, Management and Trade*, 29(1), 40-53.
- Kocherlakota, N. R., & Yi, K. M. (1996). A simple time series test of endogenous vs. exogenous growth models: An application to the United States. *The Review of Economics and Statistics*, 126-134.
- Kolapo, F. T. & Adaramola, A. O. (2012). The impact of the Nigerian capital market on economic growth (1990-2010). *International Journal of Developing Societies*, 1(1), 11-19.
- Lakshmanasamy, T. (2021). The causal relationship between capital market performance and economic growth: A Vector Error Correction Model Estimation. *Indian Journal of Applied Business and Economics Research*, 2, 99-119.
- Levine, R. & Zervos, S. (1996). Stock market development and long-run growth. *The World Bank Policy Research Working Paper*, No. 1582.
- Levine, R., & Zervos, S. (1998). Stock markets, banks and economic growth. *American Economic Review*, 88, 537-558.
- Liu, W., & Hsu, C. (2006). The role of financial development in economy: The experiences of Taiwan, Korea and Japan. *Journal of Asian Economies*, 17, 667-690.
- Liu, Y., Chen, L., Lv, L., & Failler, P. (2023). The impact of population aging on economic growth: a case study on China. *AIMS Mathematics*, 8(5), 10468-10485.
- Matutinović, I., Ulanowicz, R. E., & Vlah, D. (2023). Exploring theoretical conditions for a steady-state global economy: A simulation model. *The Anthropocene Review*, 20530196231170369.
- Mawanza, W., Mpofu, N., & Nyoni, S. (2020). The impact of securities markets on economic growth in Zimbabwe. *Journal of Economic Info*, 7, 155-169. <https://doi.org/10.31580/jei.v7i3.1409>
- McKinnon, R. I. (1973). *Money and capital in economic development*. Washington, DC: The Brookings Institution.
- Minier, J. (2003). Are small stock markets different? *Journal of Monetary Economics*, 50, 1593-1602.
- Muhammed, S., Nadeem, A., & Liaquat, A. (2008). Stock market development and economic growth: ARDL causality in Pakistan. *International Research Journal of Finance and Economics*, (14), 183-195
- Nuti, D. M. (2023). Feasible financial innovation under market socialism. *Collected Works of Domenico Mario Nuti, Volume I: Socialist Economic Systems and Transition*, 189-221.
- Nyong, M.O. (1997, December). Capital market development and long run economic growth: Theory, evidence and analysis. *First Bank Review*, 13-38
- Nzomoi, J. N., & Ikikii, S. M. (2013). An analysis of the effects of stock market development on economic growth in Kenya. *International Journal of Economics and Finance*, 5, 145-151. <https://doi.org/10.5539/ijef.v5n1i1p145>
- Odo, S. I., Anoke, C. I., Onyeisi, O. S., & Chukwu, B. C. (2017). Capital market indicators and economic growth in Nigeria: An Autoregressive Distributed Lag (ARDL) Model. *Asian Journal of Economics, Business and Accounting*, 3(2), 1-16. <https://doi.org/10.9734/AJEBA/2017/32549>
- Ogbuji, I. A., Mesagan, E. P., & Alimi, Y. O. (2020). The dynamic linkage between money market, capital market and economic growth in Ghana: New Lessons Relearned. *Econometric Research in Finance*, 5, 59-78. <https://doi.org/10.2478/erfin-2020-0004>
- Okafor, V., Bowale, E., Onabote, A., Afolabi, A., & Ejemeyovwi, J. (2021). Financial deepening and economic growth in Nigeria: A Johansen and Error Correction Model Techniques. *International Journal of Financial Research*, 12, 263-273. <https://doi.org/10.5430/ijfr.v12n2p263>
- Okereke, O. N. (2000). Stock market financing options for public projects in Nigeria. *The Nigerian Stock Exchange Fact Book*, 41 – 49.
- Okonkwo, O. N., Ogwuru, H. O., & Ajudua, E. I. (2014). Stock market performance and economic growth in Nigeria: An empirical appraisal. *European Journal of Business and Management*, 6(26), 33-42.
- Okoye, N. J., Osakwe, C. I., & Ezeala, G. (2023). Fraud and corruption and the market size of Nigeria capital market. *African Banking and Finance Review Journal*, 2(2), 195-213.

- Omeh, G.O. (2022). Thematic examination of the regulatory framework governing foreign investments in Nigeria. *African Journal Of Law And Human Rights*, 6(2).
- Osaze, B. E. (2000). *The Nigeria capital market in the African and global financial system*. Benin City: Bofic Consults Group Limited.
- Owen, M. A. (2020). Stock market development and economic growth: Empirical evidence from an institutional impaired economy. *International Journal of Financial Research*, 11, 496-509. <https://doi.org/10.5430/ijfr.v11n5p496>
- Payab, A. H., Kautish, P., Sharma, R., Siddiqui, A., Mehta, A., & Siddiqui, M. (2023). Does human capital complement sustainable development goals? Evidence from leading carbon emitter countries. *Utilities Policy*, 81, 101509.
- Rahman, A., Andrasari, M., & Sirojuzilam, S. (2023). Economic development and convergence In Sumatra Island, Indonesia. *EcceS (Economics, Social, and Development Studies)*, 10(1), 23-47.
- Rebelo, S. (1991). Long-Run Policy Analysis and Long-Run Growth. *Journal of Political Economy*, 99, 500-521. <https://doi.org/10.1086/261764>
- Reza, S. M., Fan, H., Reza, T., & Wang, B. (2018). The Impact of Foreign Direct Investment Inflows on Economic Growth: Evidence from Bangladesh. *Journal of Business and Retail Management Research*, 12, 212-223
- Romer, P. (1986). Increasing returns and long-run growth. *Journal of Political Economy*, 94, 1002-1037. <https://doi.org/10.1086/261420>
- Solow, R. M. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70, 65-94.
- Sudharshan, R. P., & Rakesh, G. (2011). An empirical analysis of the stock market performance and economic growth: Evidence from India. *International Research Journal of finance and Economics*, 73.
- Taiwo, J.N., Alaka, A., & Afieroho, E. (2016). Capital market and economic growth in Nigeria. *Account and Financial Management Journal*, 1(8), 497-525.
- Tan, Y.-L., & Shafi, R. M. (2021). Capital market and economic growth in Malaysia: The role of sukūk and other sub-components. *ISRA International Journal of Islamic Finance*, 13, 102-117. <https://doi.org/10.1108/IJIF-04-2019-0066>
- Uche, W. J. & Baghebo, M. (2021). Financial market and the real economy in Nigeria. *Journal of Research and Development Studies*, 5(1), 12-28
- Umar, B. (2022). Impact of capital market performance on economic growth in Nigeria: a systematic review. *Journal of Global Economics and Business*, 3(10), 47-67.
- Wolff, P. (2022). The 2030 Agenda and Capital Market Integration in ASEAN. In *Sustainable Development Goals and Pandemic Planning: Role of Efficiency Based Regional Approaches* (pp. 543-565). Singapore: Springer Nature Singapore.
- Zhong, Q., Wen, H., & Lee, C. C. (2022). How does economic growth target affect corporate environmental investment? Evidence from heavy-polluting industries in China. *Environmental Impact Assessment Review*, 95, 106799.
- Zulkarnain, S. H., Nawi, A. S., & Aini, A. M. (2023). The effects of covid-19 on residential property prices in malaysia. *planning MALAYSIA*, 21

**Appendix 1:** Table 1: The table showing the independent variable and dependent variable

Years	MCAP	Securities listed	All share Index	GDP at Current Basic Prices - Annual (N' M)
1985	6.6	220	127.3	187.83
1986	6.8	240	163.8	198.12
1987	8.2	244	190.9	244.68
1988	10	253	233.6	315.62
1998	12.8	267	325.3	414.86
1990	16.3	217	513.8	494.64
1991	23.1	239	783.0	590.06
1992	31.2	251	1,107.6	906.03
1993	47.5	272	1,543.8	1257.17
1994	66.3	276	2,205	1768.79
1995	180.4	276	5,092.2	3100.24
1996	285.8	276	6,992.1	4086.07
1997	281.9	264	6,440.5	4418.71
1998	267.6	264	5,672.7	4805.16
1999	300	269	5,266.7	5482.35
2000	472.3	261	8,111	7062.75
2001	662.5	261	10,963.1	8234.49
2002	764.9	258	12,137.7	11501.45
2003	1359.3	265	20,128.9	13556.97
2004	2112.5	276	23,844.5	18124.06
2005	2900.1	287	24,085.8	23121.88
2006	5121	288	33,189.3	30375.18
2007	13294.6	310	57,990.5	34675.94
2008	9563	299	31,450.8	39954.21
2009	7030.8	266	20,827.17	43461.46
2010	9,918.2	264	24,770.52	55,469.35
2011	10,275.3	250	20,730.63	63,713.36
2012	14800.9	285	28,078.6	72,599.63
2013	19077.4	252	41,329.2	81009.96
2014	16,875.102	253	34,677.52	90136.98
2015	17,003.387	257	27,727.77	95,177.74
2016	16,185.729	247	26,781.93	102,575.42
2017	19,618.252	259	38,041.17	114,899.25
2018	21,128.90	288	26,384.45	129,086.91
2019	21,904.04	291	31,430.50	145,639.14
2020	25,890.22	300	26,842.07	154,252.32
2021	38,589.58	301	40,270.72	176,075.5
2022	42,054.50	345	42,716.44	2,0236.503

**Source:** Nigerian Stock Exchange, CBN Bulletin, 2023