

CAPITAL MARKET DEVELOPMENT AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This study investigated the capital market development and economic growth in Nigeria from 1982 to 2024 by determining the effect of market capitalization, total value of transactions and all shares index on real gross domestic product. The researchers adopted the ex post facto research design, utilizing secondary data sourced from the Central Bank of Nigeria Statistical Bulletin and macrotrend website form (1982-2024). The study data was analysed using descriptive statistics, unit root, bounds cointegration tests, Auto-regressive Distributed Lag Models (ARDL) and Heteroskedasticity Diagnostic Test such as Breusch-Godfrey LM Test, Breusch-Pagan-Godfrey Heteroskedasticity test, Ramsey RESET Test. The study findings revealed that, while there is insignificant effect of market capitalization and total value of transaction on real gross domestic product in Nigeria in the both long run and short run, there is a significant effect of all-share index on real gross domestic product in Nigeria in the short run but has an insignificant effect on real gross domestic product in Nigeria in the long run. The study concluded that there is no significant effect of capital market development on economic growth in Nigeria for both short-run and long-run under the period study base on the ARDL model analysis. It was suggested amongst others that as market capitalization has been shown to positively affect economic growth in term of real gross domestic product, every effort should be made by policy makers in Nigeria to encourage the growth of the capital market and enhancing market capitalization of companies in the process for short term.

Keyword: Capital Market Development, Total Value of Transaction and Real Gross Domestic Product in Nigeria.

INTRODUCTION

For there to be adequate capital formation and economic growth in any economy, it is necessary to have an efficient capital market. The capital market exist primarily to facilitate the movement of capital to be used more profitability and productively to boost the national income and economic growth. The capital market provides a platform of exchange where funds transfer can take place among stakeholders of the economy, being government, individual investors or firms. It is a specialized financial market that stimulates economic growth because of its capacity to muster savings and investment (Akkutay, 2024). With the advent of globalization capital is able to moves around the world with ease, especially from the developed countries to developing countries. Private capital flows to emerging markets have risen from \$25 billion in 1990 to \$3,776 billion by 2024. Part of this expansion in financial flows has been brought about by the growth of equity funds dedicated to investing in publicly and privately listed securities in developing countries. The revitalization of the capital markets has also been motivated by the growing need to promote the role of the private sector in stimulating growth (Khambata, 2022; Friday & Odum, 2024). The capital market, being a more robust and all-encompassing market that hardly experience adverse selection and moral hazard problems to the same extent as debt finance does, in the presence of asymmetric information, needs to complement the credit markets. The existence of equity markets would thus enhance capital allocation and diversify investment risk (Anyanwaokoro, 2022; Łukasz & Rafał, 2023). According to Binuyo et al (2019), the capital market is very important in the economy

because capital is a very important factor of production without which economic transactions cannot take place. Asemota (2023) stated that, the financial market is made up of procedures, instruments and institutions through which funds from the surplus economic units (suppliers of funds/savings) and the efficient economic units (borrowers, e.g companies, governments, etc) are brought together to transact business with each other. Miftahu (2020) opined that the capital market is a market where lenders provide long term funds to borrowers or where holders of outstanding negotiable debt instruments trade them. The ability of a nation to mobilize savings and convert such savings into investment is dependent on the type of capital market that exists at a given time.

Several authors have attempted to link capital market development and economic growth. The relationship between capital market development and economic growth has frequently sparked heated debate among analysts studying developed and emerging markets, according to Agu (2018), the effectiveness with which the capital market performs its allocative functions determines an economy's growth. Okpoto (2015) also argued that, in addition to the social and institutional factors impeding Nigeria's economic growth, the bottleneck caused by scarcity in the economy is a major setback, thus evaluating the Nigerian capital market to determine its impact on the country's economic growth. Friday and Odum (2024) opined 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. Khairunnisa et al (2024) stated that to improve capital market development, the government should ensure the stock market is well-regulated and transparent, boost investor confidence, and increase market investment. Encouraging trade openness and exports can also help increase exchange rates and boost ringgit's demand. Chowdhury and Ahmed (2024) recommended that market organizations and regulations be structured to attract a substantial number of both domestic and foreign investors, encouraging substantial listings, investments, and trading. Such measures are crucial to achieving the central objective of optimally allocating economic resources for the sustained and resilient growth of the nation. Olawale (2024) concluded that market capitalization and all share index significantly influenced the economic growth of Nigeria in the long run, although some findings diverged from a priori expectations. Policy recommendations were proposed to address these discrepancies and enhance the positive impact of capital market development on Nigeria's economic growth.

Since the establishment of the Nigerian capital market, various challenges have been discovered, including but not limited to poor economic development that hinders conducive investment environment to sustain vibrant capital market and the challenges of buy-and-hold strategy, that is, stocks are being held for a long period of time. According to Idris (2020), given the decline in economic performance exacerbated by the Covid-19 pandemic, individuals and businesses require more long-term capital to sustain their business growth; thus, the capital market is expected to intervene and mobilize their required capital as a government intervention fund. Given the market's low absorptive capitalization, low market capitalization, misappropriation of funds, and illiquidity, timely intervention and support may be difficult to provide. According to Binuyo et al. (2019), studies on the capital market have received a lot of attention in the finance and economics literature because of its important role in providing long-term, non-debt financial capital that helps companies avoid over-reliance on debt financing, thus improving corporate debt-to-equity ratio and mobilizing resources for economic growth and development. Idris (2020) argued that, aside from a lack of financing for the productive sectors of the economy, the impact of the capital market in Nigeria has not been thoroughly investigated, and that, while the correlation between the capital market and economic growth in Nigeria may be beneficial to policy-analysis, there is still a lack of sufficient studies to explore this research domain.

From review of relevant literature, it was noticed that some studies have been carried out in the areas of capital market development and economic growth or economic development (Friday & Odum, 2024; Akkutay, 2024; Khairunnisa et al., 2024; Chowdhury & Ahmed, 2024; Olusegun & Ajao, 2024; Oluwagbenga, 2024; Eniekezimene, & Opuofoni, 2024; Łukasz & Rafał, 2023; Akmil&Alpon, 2023; Dinipre, 2023; Sulaiman et al., 2023; Anyanwu & Chukwu, 2023; Yakubu, 2023; Adamu & Mustafa, 2023; Sunday & Osimen, 2023; Asemota, 2023; Rockson & Ugo, 2022; Okekwa et al. 2022; Abayomi, & Yakubu, 2022). Furthermore, very few studies were done in the area of capital market development and economic growth in Nigeria with inappropriate methodology. These inadequacies in literature with contradiction in methodology and result in studies on this topic made it necessary to carry out further examination so as to gain more knowledge on this field. Hence, the need to explore the effect of capital market development on economic growth in Nigeria. Specifically, this research aimed to investigate the effect of capital market development on economic growth in Nigeria by examining the effect of market capitalization on real gross domestic product (RGDP) in Nigeria; determining empirically the effect of total value of transactions on real gross domestic product (RGDP) in Nigeria; and ascertaining the effect of all-share index on real gross domestic product (RGDP) in Nigeria. Consequently, the study examined the following null hypotheses:

H0₁: Market capitalization has no significant effect on real gross domestic product in Nigeria

H0₂: Total value of transactions has no significant effect on real gross domestic product in Nigeria

H0₃: All-shares index has no significant effect on real gross domestic product in Nigeria

LITERATURE REVIEW

Conceptual Review

Capital Market Development

Oluwagbenga (2024) viewed the capital market as an in-built stabilizer of any nation's growth since capital formation via long-term loans is vital for economic growth. Likewise, Yakubu (2023) opined that a nation needs many local and foreign investments to achieve sustainable economic growth and development. The capital market is a mechanism or place where various financial instruments, such as stocks, bonds, mutual funds, and other derivatives, are traded between investors and companies or governments that issue these instruments. The capital market serves as a means for mobilizing funds from the public or investors to parties who need capital, as well as providing opportunities for investors to earn profits from their investments (Yakubu, 2023). It consists of the primary market, where new securities are issued and sold to the public, and the secondary market, where securities that have been issued are traded among investors (Be, 2023). As such, capital markets play an important role in supporting economic growth, allocating resources efficiently, and providing a platform for business development. Drawing from this assertion, the security market offers several means through which this is achievable and this essential role is important in determining the aggregate growth of the economy. Major actors or players in the Nigerian capital market comprise the NSE, development banks, discount houses, individuals, government, investment banks, stock broking firms, Securities and Exchange Commission (the regulatory body), pension and insurance houses, and quoting companies.

Capital market development affects economic growth in form of increases in investment returns, reductions in transaction costs and increased savings (Babantunde, 2019). Changa and Yuqi (2024), Bello et al (2022), all constructed theoretical models wherein efficient financial markets improved the quality of investments and enhanced economic growth. Also, a number of studies investigated the links between capital market development and growth empirically. Sulaiman et al (2023) carried out a study on capital market development and economic growth in Nigeria and concluded that market indicators are robustly correlated with economic growth.

Market Capitalization

Market capitalization (also known as market value) is the share price times the number of share outstanding. This is a measure of capital market size and is used to ascertain the level of capital market development relative to the growth of the economy. According to Osaze (2022) market capitalization is the total value of all equities listed on a Capital exchange. Similarly, it is the function of the prevailing market price of quoted equities and the size of the issued and paid up capital. Market capitalization is very crucial in the measurement and assessment of the financial market and its influence on Economic growth. Al- Faki (2022) posits that total market capitalization rose from N10 Billion in 1988 to N2.9 Trillion in 2005, indicating such tremendous increase in market capitalization has enormous effect on the Nigeria economy proxied with Gross Domestic Product (GDP).

Total Value of Transaction

The value of transaction refers to value of shares traded in the stock market. Stock markets and the trading of stocks have a major influence on the economy. The total value of the transaction complements the market capitalization ratio (Popoola et al., 2017). The value of a transaction is the total value of transactions traded on the capital market exchange divided by the gross domestic product. It measures the organized trading of firm equity as a share of national output and should reflect liquidity on an economic basis. The total value of the transaction complements the market capitalization ratio (Popoola et al., 2021). The total value of transaction is the total value of shares traded on the Capital market exchange. It is also the total value traded ratio measures the organized trading of firm equity as a share of national output. The total value traded ratio complements the market capitalization ratio: although a market may be large, there may be little trading. A discussion on value of transaction in relation and economic growth could be based on economic variable such as Gross Domestic Product and capital market activities.

All Shares Index (ASI)

All shares index is a tool used by investors and financial managers to describe the market and to compare the return on specific investment. 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).

Economic Growth

Economic growth is defined as a rise in GDP or gross national income that increases an economy's real per capita income (Omar & Nazatal, 2018). Economic growth involves a positive change in all aspects of an economy, from profits to taxes and wages, to such things as production rates (Alqadib & Ismail, 2019). Economic growth is the process of increasing a country's production capacity as reflected in periodic increases in gross domestic product (GDP). This growth includes an increase in the output of goods and services, technological advances, and an increase in the number and quality of labor (Ritschel, 2023). As a leading indicator of economic performance, economic growth is usually measured by the percentage change in GDP from year to year. A solid economic performance not only indicates that the country is able to produce more goods and services, but it is also often associated with an increase in living standards, a decrease in poverty rates, and a general improvement in people's welfare (Purnama, 2023; Purnama, 2023).

Real Gross Domestic Product (RGDP)

Ofurum et al. (2019) defined Real gross domestic product is a monetary measure of the market value of all final goods and services produced in a period. Coyle (2014) states that real gross domestic product measures the monetary value of final goods and services, that is, those that are bought by the final user, produced in a country in a given period of time. Gross domestic product is considered the world's most powerful statistical indicator of national development and progress. The most satisfactory proportion of financial development is the Real Gross Domestic Product (RGDP) which is considered as the broadest marker of monetary yield and development. It is intended to gauge the worth of the creation of those exercises which fall inside the limit of the public bookkeeping framework.

Theoretical Review**Efficient Market Theory**

The efficient market theory was postulated by Fama (1965) as a framework to be used for examining the efficiency of capital markets; financial market prices are supposed to mirror all identified information and hence, unbiased so that collective beliefs of investors are represented (Osakwe et al., 2020; Akintola et al., 2020). This available information about current stock prices and the value of the firm should not permit investors to receive excess profits above the overall market and this has implications for financial managers and investors, a test of efficiency is if current prices have integrated all available information as at that time (Abina et. al., 2019; Akintola et al., 2020).

This naturally leads to more efficient investment activities in the capital market which leads to economic growth; hence, efficient market theory is among the theories that assess the relationship that occurs concerning the capital market and the general growth of the economy (Abina et al., 2019). The key assumptions of efficient market theory are that; markets function efficiently, stock prices cannot be manipulated by investors because stock values are already based on fair value, Investors cannot beat the market to earn more, and investments in riskier stocks are the only way an investor can achieve a superior position. Fama (1970) segregated market proficiency into the weak form, semi-strong form, and strong form. Efficient market theory in its weak form is when rates completely suggest information based on a historic sequence of previous prices while the semi-strong form is when values show all freely available information; the strong form emphasises information available to market participants and insiders are reflected on stock prices (Akintola et al., 2020). The critique of efficient market theory was a result of empirical studies that invalidated some of its assertions and observed that; Investors are rational and mindful in making investment decisions and cannot be accurately predicted, although, predictions could be made using other tools (Oluwagbenga 2024).

Empirical Review

Olusegun and Ajao(2024) investigated capital market development and economic growth in Nigeria from 2003 to 2022. The market capitalization rate was used as a proxy for stock market development, along with interest rates, and the RGDP as a measure of economic growth. In order to determine whether there is a substantial and positive association between Nigeria's stock market development and economic growth, the study used the multiple regression analysis test. The empirical finding indicates that while the stock market has a negligible impact on economic growth in Nigeria, it is positively correlated with it. It is advised that market regulators for the capital markets, such as the Securities and Exchange Commission (SEC), should be more adaptable and receptive to new ideas without endangering investor interests, protection, or the effectiveness of the market. The regulatory agencies should sensitize Nigerian investors to engage in dynamic and speculative stock marketing activities rather than perpetually holding onto their investments. The network for communication and information should be improved. Finally, the government should increase its investment in infrastructure development and by extension improvements to the nation's growth pattern.

Oluwagbenga (2024) examined the analysis of capital market development and economic growth in Nigeria between 1986 and 2022. As a result, the real gross domestic product was used as the dependent variable while independent variables in the study included market capitalisation, all share index, value of transactions, total number of new issues and exchange rate. The Auto-Regressive Distributed Lag Modelling (ARDL) technique as well as the Engle Granger causality test was used to analyse the data obtained from the CBN statistical bulletin. The results emanating from the analysis reported that the total number of new issues had a positive impact on economic growth while other variables had insignificant effects on economic growth. Furthermore, the causality results revealed that all the stock market variables had a uni-directional causality running from each of them to economic growth. Therefore, it is recommended that new issues in the capital market should be seriously regulated as they can affect economic growth in a significant manner.

Eniekezimene et al. (2024) studied the influence of the capital market on economic growth in Nigeria between 1981 and 2022, using vector autoregressive (VAR) analysis. The variables used included: real gross domestic product (RGDP), market capitalization (MCAP), total value of securities traded (TVST), and gross fixed capital formation (GFCF). The study results showed that while RGDP and MCAP influenced their outcome as well as the outcome of other variables positively in both the short and long run, TVST and GFCF influenced their outcome as well as the outcome of other variables negatively in both the short and long run, using the VAR system tools of impulse response function and forecast error variance decomposition. Based on the findings of the study, we recommended among others the urgent need to boost the perception of local firms listed in the Nigerian stock exchange both locally and internationally in terms of the total value of their corporate assets and performance measured by price-to-earnings, price

Olawale (2024) investigated the impact of capital market performance on economic growth in Nigeria through the development of a multiple regression model. Utilizing data from 1981 to 2019 sourced from the Nigerian Stock Exchange, Securities and Exchange Commission, and Central Bank of Nigeria, the research examined the relationship between four explanatory variables—market capitalization, all share index, value of transactions, and number of listed securities—and the dependent variable, real Gross Domestic Product (GDP). Grounded in the neoclassical growth model, endogenous growth model, efficient market hypothesis, arbitrage pricing theory, modern portfolio theory, and capital asset pricing theory, the study employed the ordinary least squares technique for estimation. The methodology included rigorous statistical tests such as the Augmented Dickey-Fuller test for stationarity, Breusch-Pagan-Godfrey test for heteroskedasticity, and Cusum test for stability. Results indicated that real GDP could be explained by the selected capital market indicators. Market capitalization and the All-share index were identified as significant predictors of economic growth in the long run. The adjusted R-squared confirmed the model's robustness. The study concluded that market capitalization and all share index significantly influenced the economic growth of Nigeria in the long run, although some findings diverged from a priori expectations. Policy recommendations were proposed to address these discrepancies and enhance the positive impact of capital market development on Nigeria's economic growth.

Asemota (2023) ascertained the true nature of the relationship between stock market development and economic growth in Nigeria using annual time series data spanning from 1981 to 2021. The study employed the Autoregressive distributed Lag (ARDL)-error correction modelling technique. Stock market development was captured using market capitalization and all shares index as proxies. Other related explanatory control variables theoretically acclaimed to be drivers of growth such as investment and Bank credit to the private sector were added to prevent omitted variable bias. From the result, market capitalization was not significant while All-share Index (ASI) was significant. Bank credit to the private sector was also significant, suggesting that banks are more active drivers of growth. The study recommended among others that effective policy frameworks towards the

development of the Nigerian stock market should be a policy focus to substantially enhance the size, depth and liquidity of the Nigerian stock market.

Akmil and Alpon (2023) analyzed the effect of financial development on economic growth highincome countries. To support the results of this study, the variables used are financial development from the institutional and market side, as well savings and investment. Through the panel data method using the fixed effects model (FEM) approach. The results of study showed that financial development has an effect on economic growth high income countries. The study emphasizes that financial development can encourage economic growth for countries that focus on building a strong financial sector by mobilizing capital, which is a necessity for economic activity. Especially from the perspective of financial institutions and markets, financial development must become the basis for formulating policies so that it will have an impact on the absorption and distribution of financial resources and become an important factor in driving economic growth. In addition, savings and investment are channels to meet the needs of financial resources and must be maintained so that they can contribute to economic growth. With these results, the governments of high-income countries can strengthen policy in the financial sector so that it becomes the foundation for economic growth.

METHODOLOGY

This study investigates the effect of capital market development on economic growth in Nigeria using data from 1982 to 2024. Since the data sets were already created and could not be altered further, an ex-post facto research design was chosen. The time series nature of the data, as well as the fact that the data relate to past, verifiable historical data regarding variables relating to capital market development indices and economic growth variable despite the fact that such data are not currently subject to manipulation make ex-post facto research design particularly appropriate for this study. The study utilised annual time series covering the sample period of 1982 to 2024 that are sourced from the official publications of the statistical bulletin of the Central Bank of Nigeria (CBN).

Measurement of Variable

Table 1: Operationalization of Target Variables alongside A priori expectation

Variable/Abbreviation	Natural of Variable	Mathematical expression	Apriori Expectation	Sources
Real Grossdomestic product (RGDP)	Dependent	Natural log of RGDP	Positive	Major and Collins (2021) and Omesi and Appah (2020)
Market Capitalization (MCAP)	Independent	Natural log MCAP	Positive	Friday and Odum (2024), Łukasz and Rafał (2023), Yakubu (2023)
Total Value of Transactions (TVT)	Independent	Natural log TVT	Negative	Irejah et al (2024), Olarinre et al (2023), Sunday and Osimen (2023)
All Shares Index (ASI)	Independent	Natural log ASI	Positive/ Negative	Friday and Odum (2024), Olawale (2024), Yaqub et al (2024), Asemota (2023)

Method of Data Analysis

The statistical tools used for the study includes; Descriptive Statistics, Augmented Dickey Fuller (ADF), Unit Roots Tests, Co-Integration, Autoregressive Distributed Lag (ARDL) modelandResidual Diagnostic Tests. The method shall be used for the estimation of parameters of the model specified

earlier on. This estimation technique is relevant to the objectives of this study because it will be used in the study of a range of economics relationship with satisfactory result.

Model Specification

In the model of this study, economic growth is proxied with Real Gross Domestic Product (RGDP) serves as the dependent variable, while Capital market indicators including Market Capitalization (MCAP), Total Value of Transactions (TVT) and All Shares Index (ASI) represent the independent variables. The model is express in functional form and explicit in terms of Ghana and Nigeria, relationship.

RGDP Model

$$RGDP = f(MCAP, TVT, ASI) \dots\dots\dots(1)$$

The econometrics model for the study is set explicitly as:

$$RGDP = \beta_0 + \beta_1 MCAP_t + \beta_2 TVT_t + \beta_3 ASI_t + \mu \dots\dots\dots (2)$$

Where;

RGDP = Real Gross Domestic Products

M.CAP = Market Capitalization

TVT = Total Value of Transaction on Capital Exchange

ASI = All Shares Index

μ = Stochastic disturbance

DATA ANALYSIS AND DISCUSSION OF FINDINGS

Descriptive Statistics

The descriptive statistics of the variables of the study is presented in Tables 2. The statistics include the mean (average), median, maximum, minimum values, Jarque-Bera statistics, amongst others.

Table 2 Descriptive Statistics of the Variables

	RGDP	MCAP	TVT	ASI
Mean	4.537194	2.840718	4.364432	3.617410
Median	4.492261	2.883605	4.773835	4.303821
Maximum	4.891739	4.876235	6.371230	5.844608
Minimum	4.209823	0.698970	2.332438	0.000000
Std. Dev.	0.239365	1.419670	1.410114	1.327081
Skewness	0.187104	-0.231487	-0.162375	-1.382913
Kurtosis	1.434979	1.553437	1.498343	4.522524
Jarque-Bera	4.639204	4.133174	4.229112	17.85910
Probability	0.098313	0.126617	0.120687	0.000132
Sum	195.0993	122.1509	187.6706	155.5486
Sum Sq. Dev.	2.406416	84.64942	83.51376	73.96803
Observation				
s	43	43	43	43

Source: Computed result from E-Views version 10.0 (2025)

Real Gross Domestic Product (RGDP) averaged 4.537194 billion for Nigeria from 1982 to 2024. The value for Nigeria RGDP ranged between 4.209823 billion and 4.891739 within the period under consideration. The coefficient of Skewness, Kurtosis and the Jarque-Bera statistic with a P-value (0.098313) is greater than 0.05 indicates that RGDP is normally distributed. Mean (Average) market capitalization for Nigeria within the period was 2.840718 billion for Nigeria from 1982 to 2024. The

value for Nigeria MCAP ranged 0.698970 billion and 4.876235 within the period under consideration. The p-value of Jarque-Bera statistic value of 0.126617 (which is greater than 0.05) suggests that the series follows a normal distribution. Mean (Average) Total value of transaction (TVT) for Nigeria within the period was 4.364432 billion for Nigeria from 1982 to 2024. The value for Nigeria TVT ranged 2.332438 billion and 6.371230 within the period under consideration. The p-value of Jarque-Bera statistic value of 0.120687 (which is greater than 0.05) suggests that the series follows a normal distribution. Mean (Average) All share index (ASI) for Nigeria within the period was 3.617410 billion for Nigeria from 1982 to 2024. The value for Nigeria ASI ranged 0.00000 billion and 5.844608 within the period under consideration. The p-value of Jarque-Bera statistic value of 0.000132 (which is lesser than 0.05) suggests that the series did not follows a normal distribution.

Unit Root Tests

Prior to estimating the specified models, the variables were tested for unit root to determine their stationarity or time series properties. An essence of this test was *inter alia* to determine an appropriate method for the analysis. The results of the test are presented in Table 3.

Table 3: Unit Root Test

Variables	Level	Critical value (5%)	Remark	First Difference			Order of integration
	t-stat			t-stat	Critical value (5%)	Remark	
RGDP	-0.930751	0.7680	NS	-4.092343	0.007	S	1(1)
MCAP	0.479215	0.8852	NS	-5.022974	0.0002	S	1(1)
ASI	-3.373874	0.013	S				1(0)
TVT	-1.315448	0.6136	NS	-5.875843	0.000	S	1(1)

Source: Computed result from E-Views version 10.0 (2025)

Table 3 shows the summary of the unit root test using augmented dickey fuller (ADF). The result in the table reveals that RGDP and MCAP are stationary at first difference 1 (1) whereas ASI are stationary at level 1(0).

Co-integration Test

In view of the observation that the variables are integrated of different order (0, 1), the appropriate method to test for long run relationship (or cointegration) between the variables is the ARDL approach to cointegration, also referred to as the bounds testing approach.

Table 4: Johansen Co-integration Rank Test (Trace Statistics)

Date: 09/16/25 Time: 12:17

Sample (adjusted): 3 43

Included observations: 35 after adjustments

Trend assumption: Linear deterministic trend

Series: RGDP MCAP TVT ASI

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 *	0.633041	116.3049	95.75366	0.0009
At most 1 *	0.557662	81.21723	69.81889	0.0047

At most 2 *	0.481636	52.66841	47.85613	0.0165
At most 3	0.402191	29.67072	29.79707	0.0517
At most 4	0.164032	11.66377	15.49471	0.1738

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

Source: Computed result from E-Views version 10.0 (2025)

The Johansen co-integration test for the Model trace test indicates that there are 3 co-integrating equations at 5% level of significance which reveals an existence of long-run relationship between Real Gross Domestic Product (RGDP), Market Capitalization (MCAP), Total Value of Transactions (TVT) and All Shares Index (ASI).

Table 5 Cointegration Test (ARDL Bounds Test) Results (RGDP)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
Asymptotic: n=1000				
F-statistic	11.93426	10%	2.37	3.2
K	3	5%	2.79	3.67
		2.5%	3.15	4.08
		1%	3.65	4.66

Source: Computed result from E-Views version 10.0 (2025)

The co-integration test result shows that long run relationship exists between the dependent variable and the explanatory variables. This is indicated by the computed F-statistic of 11.93426 which is greater than the upper bounds critical values (2.79 and 3.67) at the conventional (5%) level of statistical significance for Nigeria. According to the Granger Representation Theorem, existence of long run relationship between variables imply that the short run (dynamic) relationship between them can be represented with an error correction model.

Table 6 ARDL Model Result

ARDL Long Run Form and Bounds Test

Dependent Variable: D(RGDP)

Selected Model: ARDL(1, 0, 0, 0)

Case 2: Restricted Constant and No Trend

Date: 09/16/25 Time: 22:27

Sample: 1 43

Included observations: 43

ARDL Short Run

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.172160	0.209363	0.822304	0.4162
RGDP(-1)*	-0.049428	0.049612	-0.996279	0.3256
MCAP**	-0.002600	0.012538	-0.207336	0.8369
TVT**	0.007507	0.004616	1.626212	0.1124

ASI**	0.010881	0.004884	2.228108	0.0320
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* p-value incompatible with t-Bounds distribution.

** Variable interpreted as $Z = Z(-1) + D(Z)$.

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MCAP	-0.052595	0.302959	-0.173603	0.8631
TVT	0.151871	0.201033	0.755454	0.4548
ASI	0.220148	0.294775	0.746834	0.4599
C	3.483077	0.766367	4.544923	0.0001

EC = RGDP - (-0.0526*MCAP + 0.1519*TVT + 0.2201*ASI + 3.4831)

Source: Computed result from E-Views version 10.0 (2025)

Test of Hypotheses

H0₁: Market capitalization has no significant effect on real gross domestic product of Nigeria

The coefficient of MCAP which is -0.02600 and -0.052595 in table 6 suggests that market capitalization has a negative effect on real gross domestic product (RGDP) in Nigeria for both short run and long run. It was statistically insignificant at 5% level of significance having a P-value of 0.8369 and 0.8631 which shows that market capitalization has a insignificant effect on real gross domestic product (RGDP) in Nigeria for both short run and long run. This means that market capitalization cannot be used as a genuine instrument to increase the rate of economic growth of a country like Nigeria in the short run and long run. The study concludes that market capitalization has insignificant effect real gross domestic product of Nigeria in the short run. This finding is in line with the study conducted by Olusegun and Ajao (2024) that investigated capital market development and economic growth in Nigeria from 2003 to 2022. The empirical finding indicates that while the stock market has a negligible impact on economic growth in Nigeria. Asemota (2023) ascertained the true nature of the relationship between stock market development and economic growth in Nigeria. From the result, market capitalization was not significant on economic growth in Nigeria. However, the findings disagreed with the following; Yakubu (2023), who carried out a study on the nexus between capital market capitalization and economic growth in Nigeria. The results indicated that there is a positive and significant relationship between capital market capitalization and economic growth. Friday and Odum (2024) investigated the relationship between capital market performance and the Nigerian economic growth. The results of the findings revealed that market capitalization have significant effect on gross domestic products in Nigeria for the years under review. Dinipre (2023) examined the effect of capital market development on the economic growth of Nigeria. The result showed that market capitalization at the Nigeria stock market has a positive significant effect on GDP in Nigeria. Araoye (2021) examined the effect of capital market development on the foreign portfolio investment in Nigeria. The findings revealed that market capitalization has positive and significant impact on foreign portfolio investment in Nigeria.

H0₂: Total value of transactions has no significant effect real gross domestic product of Nigeria

The coefficients of TVT which is 0.007507 and 0.151871 in table 6 suggests that total value of transactions has a positive effect on real gross domestic product (RGDP) in Nigeria for both short run and long run. It was statistically insignificant at 5% level of significance having a P-value of 0.1124 and 0.4548 which shows that total value of transactions has insignificant effect on real gross domestic product (RGDP) in Nigeria for both short run and long run. This means that total value of transactions cannot be used as a genuine instrument to increase the rate of economic growth of a

country like Nigeria for both short run and long run. The null hypothesis is therefore accepted and the alternative hypothesis rejected. The study concludes that total value of transactions has insignificant effect on real gross domestic product of Nigeria for both short run and long run. This finding is in line with the following studies, Sunday and Osimen (2023) examined stock market indicators and economic growth in Nigeria. The study showed that Total value of transaction traded in the stock markets (TVT) did not significantly improve economic growth directly, but the impact is indirect through the investment rate in the longrun in Nigeria. Adamu, et al., (2023) examined the relationship between capital market and economic growth in Nigeria from 1985 to 2021. Findings revealed that total value of transactions had a negative impact on economic growth in Nigeria. However, the findings disagreed with the following; Irejeh et al (2024) examined the effect of capital market on industrial development in Nigeria for the period of 33 years spanning from 1990-2022. The study concluded that Total volume of transaction have significant relationship with INDOPT both on the short & long run respectively. Olarinre et al (2023) assessed how the capital market affected Nigeria's economic expansion. The study showed that TVTs exerts a significant positive effect on the economic growth of Nigeria.

H0₃: All-shares index has no significant effect on real gross domestic product of Nigeria

The coefficients of TVT which is 0.010881 and 0.220148 in table 6 suggests that All-shares index has a positive effect on real gross domestic product (RGDP) in Nigeria for both short run and long run. It was statistically significant at 5% level of significance having a P-value of 0.0320 which shows that All-shares index has significant effect on real gross domestic product (RGDP) in Nigeria for short run. This means that All-shares index can be used as a genuine instrument to increase the rate of economic growth of a country like Nigeria for short run. The null hypothesis is therefore rejected and the alternative hypothesis accepted. The study concludes that All-shares index has significant effect on real gross domestic product of Nigeria for short run. However, in term of long run, All-shares index cannot be used as a genuine instrument to increase the rate of economic growth of a country like Nigeria for long run. The null hypothesis is therefore accepted and the alternative hypothesis rejected. The study concludes that All-shares index has insignificant effect on real gross domestic product of Nigeria for long run. Friday and Odum (2024) finding revealed that all share index have significant effect on gross domestic products in Nigeria for the years under review. Olawale (2024) result indicated that all share index were identified as significant predictors of economic growth in the long run. El-Yaqub et al (2024) findings of the study indicated that All Share Index maintained a significant impact on economic growth in Nigeria both in the short and long runs. Asemota (2023) the result indicated that All-share Index (ASI) was significant on economic growth in Nigeria. Sunday and Osimen (2023) showed that All-shares index (ASI) had a significant and positive impact on economic growth in Nigeria. Udo et al (2021) finding of the study indicated that, All Share Index maintained a significant relationship with economic growth in Nigeria both in the short and long runs.

Diagnostics Tests

Serial Correlation Test(RGDP)

This test was conducted to ascertain whether the residuals of the underlying ARDL model are correlated or not. The problem of autocorrelation introduces some bias into the coefficients of the estimated parameters, thus rendering them unreliable.

Table 7 Breusch-Godfrey Serial Correlation LM Test (RGDP)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	2.881485	Prob. F(2,35)	0.0694
Obs*R-squared	5.937858	Prob. Chi-Square(2)	0.0514

Source: Computed result from E-Views version 10.0 (2025)

Prior to estimating the models, residuals of the variables were ascertained to check for the presence of serial correlation. This was done using the serial correlation LM test. The serial correlation LM test in Table 4.6 details that there is no element of serial correlation in the models owing to the fact that the p-values of the f-statistics are insignificant at 5% level of significance.

Table 8 Heteroskedasticity Test: Breusch-Pagan-Godfrey

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.220315	Prob. F(4,37)	0.3188
Obs*R-squared	4.895099	Prob. Chi-Square(4)	0.2982
Scaled explained SS	5.236623	Prob. Chi-Square(4)	0.2639

Source: Computed result from E-Views version 10.0 (2025)

The situation in which the variability of a variable is unequal across the range of values of a second variable that predicts it leads to problem of heteroskedasticity. To ensure that there is homoscedasticity in the model estimation, the heteroskedasticity test via the Breusch-PaganGodfrey was performed. With the result there is no problem of heteroskedasticity in the models as the P-values of the f-statistics are insignificant at 5% significance level.

Table 9 Ramsey RESET Test

Ramsey RESET Test

Equation: UNTITLED

Specification: RGDP RGDP(-1) MCAP TVT ASI C

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.052867	36	0.9581
F-statistic	0.002795	(1, 36)	0.9581

Source: Computed result from E-Views version 10.0 (2025)

Table 9 indicates that the model is homoskendastic since the probability values of two parameters are greater than 0.05 level of significance. Ramsey test result reveals that our model is correctly specified and is stable for ARDL analysis.

CONCLUSION AND RECOMMENDATIONS

This study investigated the effect of capital market development on economic growth in Nigeria. Based on the data analysis above, the study generally concludes that there is no significant effect of capital market development on economic growth in Nigeria for both short run and long run under the period study base on the ARDL model analysis. Specifically, the sub-variables conclude as follows;

1. Market capitalization no significant effect on real gross domestic product of Nigeria for both short run and long run.
2. Total value of transactions has no significant effect on real gross domestic product of Nigeria for both short run and long run.
3. All-shares index has significant effect on real gross domestic product of Nigeria in the short run but it has no significant effect on real gross domestic product of Nigeria in the long run.

In light of the empirical evidence of the study, the following recommendations are made:

- i. As market capitalization has been shown to negatively affect economic growth in term of real gross domestic product, every effort should be made by policy makers in Nigeria to encourage the growth of the capital market and enhancing market capitalization of companies in the process for short term.

- ii. The total value of transactions reflects how active the market is and as such all efforts should be put in place to ensure that all obstacles are removed to pave way for the smooth running of the market. This will enhance the value of transactions in the market.
- iii. 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.

These recommendations can be achieved through sound regulatory reforms, building investors' confidence and education, enhanced market development through diversification of market instruments, technological advancement, and stable economic policies and low inflation to attract foreign investors.

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