IMPACT OF CAPITAL MARKET DEVELOPMENT ON ECONOMIC GROWTH IN NIGERIA

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DOI: https://doi.org/10.64633/wissj.v9i7.20

Keywords

capital market development; economic growth; Nigeria; autoregressive distributed lag model (ARDL)

Abstract

This study examines the impact of capital market development on economic growth in Nigeria. The data for the study range from 1990 to 2024 and were sourced from the World Development Indicator database. We used the autoregressive distributed lag (ARDL) estimator for the analysis. These findings do suggest that capital market development indicators are actively related to the economic growth in Nigeria where long-term and short-term relationships are found to be statistically meaningful. The study concludes that capital market development has a significant impact on economic growth. The study therefore recommends that Central Bank of Nigeria should consider maintaining price stability by adopting a sound monetary policy. Inflation control is a key to the establishment of a stable macroeconomic environment that will lead to investment and sustainable growth.

Introduction

The development of the capital market in Nigeria is an endogenous key to economic growth which mobilizes the long-term capital and efficiently allocates savings to profitable investment options. A well-functioning capital market can increase liquidity levels, promote risk diversification and maintain high-scale investment which is particularly important in areas of the economy that are critical like manufacturing, infrastructure, and energy. Empirical research shows that the capitalization of the stock market, liquidity of the stock markets, and the amount of securities being traded contribute significantly and positively to Nigeria in terms of growth of the real GDP because it increases the amount of people willing to invest and enhances the effectiveness of capital allocation (Adekunle et al., 2025; Ishioro & Tarurhor, 2022; Ubesie et al., 2020).

The Nigerian capital market is also critical towards the promotion of the growth of the private-sector-based growth as it helps to offer alternative methods of finance other than the traditional banking system. By using tools like equities, corporate bonds, and government securities, companies are able to finance their capital in the long term at relatively low cost hence making it easy to expand, innovate and employ. It has been shown that, the higher the percentage of stock market turnover, the higher the value of trade, the higher the volume of new issues, the greater the gross fixed capital formation and output of the sector, all of which reflect the ability of the market to stimulate productive investment in Nigeria (Rogers-Banigo & James, 2025; Prince et al., 2020; Ajibola, 2018).

Capital market development has even enhanced contribution of capital market

development to economic growth due to institutional reforms and enhancement of regulations. The efforts by the policy makers such as the Securities and Exchange Commission (SEC) and the Nigerian Exchange Group including more disclosure rules, advanced trading systems and investor-protective regulations have increased market transparency and trust. Policies indicate that these reforms increase market participation and foreign portfolio inflow as well as stabilize capital inflows, which encourages macro-economic growth and financial resilience (Nnakee et al., 2024; Oluwaleye et al., 2023).

The ability of the capital market to improve the growth based on market depth, efficiency, and stability is an issue that determines the future of the capital market. Liquid and diversified capital market minimizes the cost of transaction as well as the asymmetry of information that will then stimulate investors both domestic and foreign to invest in the long run. On the contrary, the investor confidence can be affected by market volatility, poor governance at the company, and lack of product diversification, and limits the favorable effect of capital market operations on growth. The evidence suggests that economic growth in Nigeria is often slow during the times of instability and volatility of the market because of a slower inflow of investments and capital flight (Ojeaburu et al., 2024; Olusegun et al., 2024).

The capital market of Nigeria still has its potential to grow fully but this cannot be achieved due to the existence of structural gaps. Inadequate financial literacy, limited involvement of small and medium-sized businesses, limited bond markets and over-growth in reliance on government securities limits market inclusion and depth. The transmission mechanisms between capital market development and economic growth are further undermined by high transaction costs and macro-economic riskiness to very small macro-economic shocks which include inflation and exchange-rate volatility (Anderu, 2020; Samuel, 2025; Rogers-Banigo & James, 2025).

The recent empirical studies fill these gaps with the compound capital market development indices and the advanced econometric models developed to see the dynamics of the capital market indicators on the economic growth in the short and the long-run in Nigeria. The data of these multidimensional methods shows the two-way causality or at least one-way causality in the variables of the capital market (market capitalization, value traded, turnover ratio, number of listed securities) towards the economic growth, supporting the fact that capital market development contributes to the economic growth, and long-lasting economic growth will facilitate market growth and sophistication (Chukwuebuka et al., 2025; Adekunle et al., 2025; Olawale, 2024; This validates the opinion that bolstering the capital market of Nigeria is not only a goal of the financial sector, but a strategic need to grow and develop economically in the long-term.

Theoretical Review

Financial Development Theory

The Financial Development Theory, especially the hypothesis of the supply creation, is the development which supposes that the evolution of the financial institutions and markets is one of the main preconditions of economic growth mobilizing savings, increasing the efficiency of capital distribution, and investment. Empirical data on the Nigerian setting demonstrates that the capital market development in terms of such indicators as market capitalization, liquidity in the stock market, value of the shares traded, and the ratio of cumulative turnover have a positive impact on the economic sphere and the creation of capital (Chukwuebuka et al., 2025; Nnakee et al., 2024). As an example, Chukwuebuka et al. (2025) identified that an increase in market

capitalization, all-share index, government development stock and aggregate value of transactions have a strong positive impact on the real GDP in Nigeria, and the market capitalization has a rather strong effect.

The second fundamental transmission mechanism that has been found in the literature is the capacity of a well-developed capital market to lessen information asymmetry, and transaction expenses so as to acquire stronger power to improv as an element among surplus and deficit economic entities. The capital market facilitates that the firms are allowed to make large-scale and long-gestation investments that the short-term and high-volume bank credit is not always suitable to fund (Ajibola, 2018; Gwaison et al., 2021). Empirical evidence additionally shows that lack of depth of the market, investor confidence and market volatility may limit investment choices and undermine the growth promoting capacity of the capital market in Nigeria (Anderu, 2020; Ishioro, and Tarurhor, 2022). On the other hand, more deeper and liquid markets are linked to better allocation of resources, greater involvement of the privates and prolonged economic growth (Eniekezimene and Opuofoni, 2024; Rogers Banigo and James, 2025).

The role of regulatory reforms and capital market institutional support in Nigeria capital markets such as the creation of better disclosure systems along with investor protection system further supports the assumptions of the Financial Development Theory. These actions enhance the confidence of the market and encourage local and foreign investments and facilitate an increase in capital formation, thus contributing to the economic growth in the long run (Olusegun et al., 2024; Chukwuebuka et al., 2025).

Endogenous Growth Theory

The Endogenous Growth Theory argues that the source of economic growth is within an economy and is driven by internal factors which include accumulation of capital, technological progression, innovation and the growth through human capital. In this analysis model, the capital market is conceptualised as a central channel, to which the financial resources are channelled to productive investments, which provide the economy with sustained, long-run economic growth. Empirical studies in Nigeria prove that the capital market measures such as depth of the stock market, depth of liquidity, and bond or equity market development significantly promote economic growth by funding activities that are innovation-driven and ones that lead to increased productivity (Ayodeji and Ajala, 2018; Dada, 2021; Ogundunmade, 2024).

One of the salient processes that the theory brings into limelight is the contribution of the capital market towards supporting innovation and entrepreneurship in terms of providing long-term funding and through risk sharing. Well functioning capital markets encourage corporations to invest in research and innovations, embrace new technologies and increase productive capacity, which boosts total factor productivity (Onisanwa & Adaji, 2020). The empirical data of Nigeria shows that an increase in the activity of a stock market, along with such indicators as the capitalisation of a market, its value of transactions, or the number of listed securities, enhances gross fixed capital formation and output as some of the factors leading to endogenous growth (Ajibola, 2018; Idris, 2021).

The reforms in reforms in the Nigerian capital markets: digitising of the market, financial instruments diversification, and better corporate governance are all in agreement with the assumptions of the Endogenous Growth Theory. This leads to increased investor confidence and better liquidity and encourages further reinvestment in the economy. In turn, the continuous development of the capital market does not only prompt a short-term

economic growth but also creates a self-feeding growth mechanism that pushes thanks to the development of innovations, productivity, and efficient management of available resources (Ejibe & Iyore, 2021; Ogundunmade, 2024).

Empirical Review

In Empirical Determinants of the Relationships between Capital Market Development and Economic Growth (2025), Czupryn and Majchrowska-Szewczyk have reviewed a secondary data of empirical country studies using various econometric models (timeseries and panel models) in both advanced and developing economies. Their overview involved quantitative research that did not include a questionnaire or interview and was obtained in different localities. The authors discovered that the depth of the stock markets, capitalisation and liquidity tend to favour growth but the magnitude and sign of this is variable, dependent on indicators and different choices of measurements, as well as the structure of a banking-stock market, that the different effect of an aspect is more or less reliable and, therefore, that the effect is largely dependent on an institutional context and methodological decisions.

In the article by Pandey (2025) Nexus Between Capital Market Development and Economic Growth: Evidence of Nepal, the authors used annual secondary data (capital market development, capital mobilisation of primary markets, CPI, remittance, real GDP) between the years 1994 and 2019 and employed the ARDL bounds testing, error-correction modelling, and the Granger causality test. No primary data and survey tools were used; the research was based on the Nepalese macro time-series based on official databases. The results showed that there is low long-run cointegration of primary market mobilisation and growth without a long-run effect of market capitalisation but a significant short-run effect and bidirectional causation of capital market mobilisation to GDP but not vice versa, thus suggesting that capital market plays a mixed though a broadly supportive role in the growth, especially by the primary market.

In the article, The Effect of Financial Market Capitalisation on Economic Growth and Unemployment in South Africa, Ngcobo, Zhou, and Pillay (2025) modelled a finance-enhanced Solow model that utilised secondary time-series data on market capitalisation and net acquisition of financial assets, FDI, unemployment and GDP. The methods used were the vector error -correction (VECM) that did not involve the collection of primary survey or interview data. By applying South African macroeconomic series, the authors discovered that financial market capitalisation and FDI have a very positive impact on growth whilst unemployment has a negative impact on growth hence inference was made that deep capital markets were critical to South Africa economic growth and employment under the condition of widespread structural reforms.

In the article Analysis of Factors Affecting the Growth of Capital Markets: A Case of the Lusaka Securities Exchange, Kapusana and Mwanginga (2025) integrated their work using both secondary quantitative (1995 2023, LuSE liquidity and market capitalisation, FDI) and primary qualitative (questionnaire) data of Zambian participants of the market. The quantitative part used VAR model in STATA, the qualitative part used structured questionnaires as opposed to interviews. The paper found no substantial short-run impact of stock market liquidity on market capitalisation, but significant positive and significant impact of lagged FDI on market growth, and the surveys gave rankings showing poor investor education and regulatory rigidity as one of the main limitations and inspected the primacy of FDI and institutional quality in the growth of the capital-market-based expansion of Zambia.

In the article, Adekunle, Akinrinola, and Salaudeen (2025) used secondary annual data

(CBN, World Bank and NBS) on 19902023 on GDP growth and stock market variables, such as market capitalisation, all-share index, listed securities, and value traded. Testing took the form of ARDL bounds, descriptive statistics, and Engle-Granger causality and there were no questionnaires and interviews. Focusing on the case of Nigeria, the authors have found a long-term linear relationship whereby a market capitalisation and value traded have a significant and positive relationship with the economic growth though a number of the variables are insignificant (e.g., all-share index) but the causality is always going one way towards the economic growth, such as strengthening the stock market in Nigeria makes a significant contribution to the growth.

In in Impact of Capital Market on Economic Growth in Nigeria, 200020, Chukwuebuka, Opata, and Valentine used ARDL and unit-root tests to determine the impact of capital market on economic growth using ex post facto design with secondary macro data regarding market capitalisation, government development stock, all-share index, and total value of transactions. Data were obtained in the form of governmental statistical more agencies in Nigeria; there were no primary questionnaires and interviews taken. Findings also showed that the four variables of the capital market have positive and significant impacts on the GDP in Nigeria hence concluding that the increased capitalisation, trading activities and issuance of government securities in the capital market will help in the increased growth of the economy.

In his article, Multi-Perspective Research on the Mechanism of Venture Capital in Driving Innovation Development, Wu (2025) examined the panel secondary data of the venture capital indicators and the innovation indicators (TFP, industrial upgrading, technological progress) through a PVAR model. The research had no questionnaires/interview in it and utilized regional/national panel datasets (probably China). The results showed that the size of venture capital has a positive association with industrial upgrading but not with TFP or technological advancement, and the proportion of venture capital to total financing also significantly facilitates technological advancement to make a conclusion that organizational changes towards direct and market-based finance mechanisms are the key to innovation-driven growth.

Chang and Li (2024) investigated the effect of capital-market volatility on economic growth in China by incorporating a Heston stochastic volatility model by using secondary macro-financial information. There were no main survey tools that were used. The empirical part involved time- series modeling of the market segments and macro-economic variables. The authors found that there were unequal effects on various market constituents and structural imbalance within the system of capital-market structure in China. As such, they inferred that volatility and structural composition of capital markets are very critical determinants of the growth results.

Knio and Houmani (2024) have examined the correlation between the development of stock-market and economic growth and Saudi Arabia through the secondary panel data of Tadawul indicators and macro-economic variables, which they focused on the oil industry. They essentially used panel-econometric techniques in a basis of a growth-theoretical model and omitting the application of questionnaires or interviews, which determined that there was a substantial positive correlation between Tadawul development and national growth and within the oil sector. The authors concluded that Saudi stock market is a key tool in promoting expansion of an economically endowed economy.

Olusegun and Ajao (2024) examined the nexus between the capital fund development and the gross domestic products of Nigeria using a secondary annual data of 2003-2022. The dependent variable was considered the real

GDP and market capitalization and the interest rate were the main regressors. Multi-regression paradigm was embraced, which made use of macro-financial sources and does not involve primary interviews or questionnaires. The findings showed that capital-market development has statistically significant positive impacts on GDP, but the nominal interest rates do not seem to have any significant impacts. In line with that, the authors concluded that expansion of the Nigerian capital market stimulates the growth but interest-rate policy is not enough.

Based on cross-national secondary data synthesis, Yao (2024) implemented evaluating the impact of developing the stock-market on economic growth to estimate income-stratified econometric models. No primary research tools were used, and all the analysis was based on international datasets. The results showed a positive but weak general correlation between variables in stock-market and growth, though stronger positive correlation in high-income economies. The channels mentioned in the study include capital productivity, funding innovation and portfolio diversification, and the conclusion made is that stock markets are important in enhancing growth; their role depends on the situations on the ground and can convey instability.

To question the role of capital-market performance in driving growth in developing countries, Bello (2022) has performed a qualitative systematic literature review of the empirical studies that have been published between 2012 and 2022. The review was an analysis of the already existing quantitative studies, and hence, new primary data was not collected. There were no questionnaires and interviews. The authors focused on such countries like Nigeria and Malaysia and summarized the results into triads of positive, negative, and mixed linkages between market capitalization and real GDP. Only about thirty percent of the reviewed findings were counter to a priori forecasts prompting the author to find that different model specifications and disparate time-series methods yield heterogeneous results and endorsed that a unified approach to the research methodology is essential.

Bello (2022) also carried out a methodological quantitative evaluation of 51 empirical articles in the context of the Nigerian and international settings between 2012 and 2021 using a technique SQAT (Systematic Quantitative Assessment Technique). No questionnaires or interviews were involved in the study as all the secondary material was published. By using an article characteristics coding and thematic analysis, the author determined that there was a significance majority of studies that found a positive and significant relation between capital market performance and GDP in both short and long-runs although isolated instances reported insignificant and negative impacts. It was stated in the conclusion that the performance of the capital-markets before growth is usually anchored, but cross country inconsistency is linked to the market development levels.

To study the relationship between Capital-market development and economic growth in Nepal through secondary annual data on total market capitalization and volume of all public issues (as indices of primary-market) and GDP during 1994-2019, Pokharel (2020) analyzed the two variables. The primary questionnaires or interviews had been left out using the study because of the use of the Negative Q of the test and using a causality framework of Johansen cointegration and a vector errorcorrection model (VECM). Findings supported the existence of a long-run relationship, and direction of capital-market development to economic growth, the author claimed that the capital market is the driver of growth, and it needs to be expanded to the SMEs and small investors.

Kuna, Hassan and Ibrahim (2019) examined the connection between the performance of the capital-market and the development in Nigeria using the secondary time-series data on; capitalization of the stock-market, indexes, trade-share, and the ratio of savings index. Numerous-regression model with F-tests and diagnostics was implemented without the instrument of questionnaires or interviews. The results showed that market indices had a positive and significant influence on the economic growth in Nigeria, which is why the authors came to a conclusion that improvement of capital-market performance is an essential condition to increase the level of GDP growth and suggest policy changes that can lead to a higher confidence level of investors and their participation in the work of the market.

Model Specification

Based on the theoretical framework involving the different interrelations between capital market development and economic growth, this paper outlines its model in the assessment of the various capital market indicators in determining the economic growth in Nigeria. The specification of the model is as follows:

RGDPt = (MCRt, fSTRt, fASIt, fINFt, fEXRt) ..... (1)

The model can then be stated explicitly in the following way:Explicitly, the model can be re-stated as follows:

$RGDPt = \beta_0 + \beta_1 MCRt + \beta_2 STRt + \beta_3 ASIt + \beta_4 INFt + \beta_5 EXRt + \varepsilon t$ ..... (2)

The equation given above is log-linearised to reduce instances of heteroscedasticity as well as to transform the research data which took the form of a rate, and an absolute value, into a single numeric framework:

$\ln(RGDPt) = \beta_0 + \beta_1 \ln(MCRt) + \beta_2 \ln(STRt) + \beta_3 \ln(ASIt) + \beta_4 \ln(INFt) + \beta_5 \ln(EXRt) + \varepsilon t$ ..... (3)

Where:

GDPGR = GDP Growth Rate (proxy for economic growth)

MCR = Market Capitalization Ratio (Market Capitalization as % of GDP)

STR = Stock Turnover Ratio (Value of shares traded as % of market capitalization)

INF = Inflation Rate

EXR = Exchange Rate

ln = Natural Logarithm

t = time or year

εt = Error terms or stochastic terms

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = coefficients or parameters

It is expected that: $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$, $\beta_4 < 0$, $\beta_5 < 0$

Estimation Techniques

In the current study, the Autoregressive Distributed Lag (ARDL) model has been used to examine both the long-run and the short-run relevance of the capital-market development and the economic growth in Nigeria. The ARDL model is selected due to its appropriateness regardless of the order of integration of the variables, as long as none of the variables are integrated at order two, and its ability to perform better than the simple regression model when the sample size is small thus allowing the short- and long-term estimations to be simultaneously estimated. All of the secondary sources were World Bank Development Indicators, but only the data on Nigeria are considered, between 1990 and 2024. Nigeria was chosen as the study location because as the biggest and most advanced stock exchange market in West Africa it is over 70

percent of the total market capitalisation of ECOWAS country. Moreover, since 1990, the capital market of Nigeria has experienced significant structural reforms and developments such as market liberalisation, the introduction of electronic trading platforms as well as the demutualisation exercise in 2021 which will offer a full background to analyse the capital - market -growth nexus over the past 3 and one half decades.

Empirical Outcomes and Deliberations

Descriptive Statistics

Table 1 shows the descriptive data of the variables used in the study. The average of the GDPGR, MC, STR, INF and EXR are 4.081118, 8.401462, 5.697387, 18.70559, and 198.8671 respectively and the standard deviations of the above variables are as a result of 4.151732, 6.454499, 6.945086, 15.8693 and 263. The maximum value of GDPGR is 15.32916 and the minimum one is - 6.3689, which shows that there were instances of both economic drain and healthy growth over the time frame. The lowest and highest values of MC are 0 and 30.50899 respectively, according to the changing degree of market capitalization with time. The minimum and maximum values of STR are the 0 and 34.7853 respectively expressing a drastic variation in stock market dealings. The maximum and minimum values of INF are 5.388008 and 72.8355 correspondingly, which proves the fact of significant volatility of the inflation rate during the number of years of analysis. Last but not least, EXR has a lower limit of 8.038285 up to an upper limit of 1478.965 indicating that the exchange rate in the period experienced significant fluctuations. The wide range of disparities between minimum and maximum values of all variables indicates that there is a great degree of variability in capital market indicators and macroeconomic conditions across the years of research, therefore, the necessity to examine the effect of the capital market development on the economic growth in Nigeria.

The summary data for the variables are presented in Table 1.

Variables	N	Mean	Median	Maximum	Minimum	Std. Dev.
GDPGR	35	4.081118	4.230061	15.32916	-6.3689	4.151732
MC	35	8.401462	8.902701	30.50899	0	6.454499
STR	35	5.697387	3.830479	34.7853	0	6.945086
INF	35	18.70559	13.00697	72.8355	5.388008	15.8693
EXR	35	198.8671	131.2743	1478.965	8.038285	263.6575

Source: Author's Compilation (2025)

Multicollinearity Test Results

The multicollinearity issue is a fundamental problem of regression analysis. A variance inflation factor and correlation table were applied for analysis in the research to check for multicollinearity. Table, 2, indicated that, in the correlation matrix, the variables do not have strong correlations with themselves; the value of all the pairwise coefficients is less than 0.80 (Grewal, Cote, & Baumgartner 2004).

Table 2. Correlation Matrix of Time-Series Variables

Variables	GDPGR	MC	STR	INF	EXR
GDPGR	1				

MC	0.1000	1			
STR	0.1726	0.5834	1		
INF	-0.3735	-0.2079	-0.2937	1	
EXR	-0.1047	0.4298	-0.0288	0.0204	1

Source: Author's Compilation (2025)

The correlation analysis shows that there are ambivalent connections between the variables of the capital markets and economic growth. Market capitalization (MC) correlates with GDP growth rate (0.1000) and this indicates a low correlation which implies that there is a Succinate relationship between the size of the capital market and the economic growth in Nigeria. This implies that the increase in the stock market can have a small positive impact on the economic growth though the correlation is not very strong. In the same manner, stock turnover ratio (STR) shows a weak positive relationship with the GDP growth rate (0.1726) meaning that, a higher liquidity level and trading in capital market might be marginally increasing the level of economic growth.

Correlation analysis demonstrates that there are certain negative worrying results. There is a moderate negative relationship of inflation (INF) with the rate of growth of the GDP (-0.3735) which relates well with the economic theory that high inflation costs may hamper economic growth challenging the purchasing power and injecting uncertainty. There is a weak negative relationship between the rate of exchange rate (EXR) and GDP growth rate (-0.1047) indicating that the dampening factor on the economic growth by the exchange rate depreciation or volatility can be only a slight factor.

The indicators of capital market development have a positive correlation of market capitalization and stock turnover ratio (0.5834), showing their complementary nature as a measure of capital market development. This is an indication of bigger markets to be more liquid and actively traded. Also, the capitalization of markets has middle-level positive correlations with exchange rate (0.4298), although inflation has negative correlations with market capitalization (-0.2079) and stock turnover ratio (-0.2937), which suggests that inflationary movements might inhibit the growth of the capital market by reducing the desire to invest and participate in the market.

Table 3. Regression results of economic growth (ECG) model.

Cointegrating Form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(MC)	0.084019	0.147112	0.571124	0.5725
D(STR)	0.008723	0.124909	0.069834	0.9448
D(INF)	-0.043821	0.045504	-0.963014	0.3438
D(EXR)	-0.001040	0.002916	-0.356671	0.7240
CointEq(-1)	-0.650001	0.168834	-3.849945	0.0006
Cointeq = GDPGR - (0.1293*MC + 0.0134*STR -0.0674*INF -0.0016q *EXR + 4.1468)				
Long Run Coefficients				

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MC	0.129260	0.229129	0.564138	0.5772
STR	0.013420	0.191877	0.069940	0.9447
INF	-0.067417	0.066108	-1.019809	0.3166
EXR	-0.001600	0.004456	-0.359162	0.7222
C	4.146773	2.378197	1.743663	0.0922

Source: Author's Compilation (2025)

In the perspective of capital market growth, the most prominent factor that can determine economic growth in Nigeria is market capitalization; however, the impact of market capitalization is statistically insignificant. The sensitivity of the economic growth to a unit growth in market capitalization is 0.129, which shows that a stronger capital market has a positive (but weak and statistically insignificant) effect on the Nigerian economy (p 0.5772). The coefficient of the inflation as affecting the economic growth is negative (= -0.067) and this implies that one unit increase in inflation has a negative effect of affecting the GDP growth by a factor of 0.067. Besides, the economic growth is positively affected by stock traded ratio with a slightly positive but insignificant effect. Its coefficient is 0.013 with a statistically insignificant p (0.9447) indicating that an increase of one unit in the liquidity of stock market increases the economic growth by 0.013 units. This weak connection can be explained by the fact that the Nigerian stock market is not yet developed and is not involved. Economic growth has a negative relationship with the exchange rate as the relationship between these two variables was found to be negative with the coefficient standing at -0.002 showing that the economy is more or less limited by the depreciation of the currency, though this is not a significant correlation.

The error-correction factor has a value of -0.650 and is found to be significant at 1 per cent level (p= 0.0006) which means that economic growth is convergent to the long-run equilibrium at a rate of 65 per cent per period and thereby adjusts short-run disequilibrium caused due to shocks to market capitalization, stock traded ratio, inflation and exchange rates.

Under short-run dynamics, all the capital-market variables do not have a statistically significant effect on the growth of the economy. The capitalization of the market produces a positive but insignificant value of the coefficient (0.084, p= 0.5725), and the stock-traded ratio is also positive but insignificant (0.009, p= 0.9448). There is also a negative correlation with inflation (-0.044, p= 0.3438) and the exchange rate also shows a negative correlation (-0.001, p= 0.7240). The market capitalization (MC), stock-traded ratio (STR), inflation (INF), and exchange rate (EXR) are taken as the independent variables, whereas the GDP growth rate has been taken as the dependent variable in the model. Market capitalization and stock-traded ratio still have a positive relationship with economic growth, but not the rest of the variables in the long-run estimation including inflation and exchange rate, though none of them are statistically significant.

Diagnostic Test

These diagnostic test requirements assess the validity and reliability of the economic growth model testing for the interplay between capital market development and economic growth in Nigeria.

Table 4. Diagnostic Test Result

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	1.09084	Prob. F(2,26)	0.3508
Obs*R-squared	2.63211	Prob. Chi-Square(2)	0.2682

Source: Author's Compilation (2025)

This is done by using the Breusch- Godfrey Serial Correlation LM Test that helps in establishing the fact that the error terms in the observations are either correlated or not, or satisfy the assumption that the error terms is not autocorrelated. The t-test value of 1.09084 and the probability of 0.3508 showed that the null hypothesis that there is no serial correlation cannot be rejected. Similarly, ObsxR 2 Graph of 2.63211 at probability level of 0.2682 indicates the non-autocorrelation of this model. This establishes the fact that the error terms are randomly distributed more so that they do not have systematic behaviour as time progresses. This is an attribute of an error term that is required to use statistical inference correctly since the standard errors of regression model and the hypothesis test in the regression are true and are not affected by the presence of a serial correlation.

Table 5. Diagnostic Test Result

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.52538	Prob. F(5,28)	0.755
Obs*R-squared	2.91621	Prob. Chi-Square(5)	0.7129
Scaled explained SS	5.02452	Prob. Chi-Square(5)	0.4129

Source: Author's Compilation (2025)

The favourable statistical features of the model which measures the capital market development and economic growth in Nigeria are confirmed with the help of diagnostic tests. The test of heteroscedasticity Breusch-Pagan-Godfrey shows good results, where F-statistic of 0.52538 (p=0.755) is obtained, the observed R-square of 2.91621 (p=0.7129) and the scaled explained SS of 5.02452 (p=0.4129). Such p-values are extremely high compared to the standard levels of significance and therefore, they rebuff the assumption of heteroscedasticity. As a result, the estimated correlations between the two variables of the capital market development and economic growth, and the effects of other macroeconomic factors are considered as dependable and objective. Such diagnostic results give the model coefficients more credibility and the model recommendations based on the model more validity since the model meets the requirements of sound econometric inference.

Conclusion

This paper explores the effect of capital market development and growth in the Nigerian economy using a 35 years' time series, dating back to 1990 to 2024. These variables are analyzed with the help of the Autoregressive Distributed Lag (ARDL) model that enables the determination of both short-run and long-run effects. These findings do suggest that capital market development indicators are actively related to the economic growth in Nigeria

where long-term and short-term relationships are found to be statistically meaningful.

As per the descriptive statistics (Table 1), there is a significant temporal variation among economic growth, in the spread of GDP growth rate (GDPGR), and the mean is equal to 4.08 percent. The GDPGR contact is between 15.33 percent and -6.37 percent indicating a very narrow variability in the economy of Nigeria. The market capitalisation (MC) is having an average of 8.40 percent and the dispersion is significant (standard deviation =6.45) with the range between 0 and 30.51 percent. The stock market turnover ratio (STR) measures mean of 5.70 percent having high coefficient of variation (standard deviation 6.95), the lowest and highest value is 0-34.79 percent. The mean of inflation (INF) is 18.71 percent with the overwhelming volatility (standard deviation = 15.87) and a range of 5.39 to 72.84 percent, meaning that there is so much price volatility in the country. The standard deviation of the exchange rate (EXR) will indicate a high volatility (= 263.66) between the maximum and minimum values (8.04) and maximum (1478.97) indicating a significant level of currency instability.

The correlation analysis shown in Table 2 indicates that the economic growth correlates with market capitalisation (0.10) and with stock market turnover (0.17) in a weak positive relation that economy development by the capital market is weakly positively associated with the performance of the economy. Economic growth has a negative relationship with inflation (-0.37) and the association between price fluctuation and economic growth appears to limit economic growth. There is a weak negative relationship between the exchange rate and growth (-0.10). Comprehensively, the value of the pairwise correlation coefficients are below the critical value of 0.8, meaning that the multicollinearity may not be manifested in a serious manner.

Table 3 presents the result of the error-corrective model, and this shows the presence of a strong adjustment mechanism showing the error-correction term coefficient of -0.650 (p= 0.0006). The implication of this coefficient is that about 65 percent of the short-run disequilibrium is eliminated in a short period which just means that the adjustment mechanism is moderately fast. The findings hence substantiate the idea of there being a sound incorporation between the capital market development variables and the economic growth in Nigeria.

According to long-run regression results, market capitalisation has positive and insignificant impact on economic growth and the coefficient is of value 0.129 (p = 0.5772). This poor association indicates that where there is the theoretical support to growth due to deeper capital markets, their practical effects in the Nigerian situation are not strong perhaps because of market inefficiencies or the importance of equity financing to the actual economy. A weak positive effect is also observed in the stock market turnover (coefficient = 0.013, p = 0.9447), and hence has little impact on the growth in the long run. The inflation rate show negative relationship with growth (coefficient = -0.067, p=0.3166) that despite the insignificant value, may indicate that the price instability can limit economic growth although not effectively to necessarily. The currency exchange rate represents a coefficient, which is essentially negligible in nature (-0.002, p= 0.7222), signifying that currency movements do have little (or, no) direct long run effect on the growth.

Important findings are gotten with short-run dynamics. Market capitalisation has positive contemporaneous effect (coefficient = 0.084, p = 0.5725), but it is not statistically significant implying that there are not immediate effects on growth. The short-run effect of stock market turnover has the lowest positive value (coefficient = 0.009, p = 0.9448) which shows

that the trading activity gives insignificant stimulus to the economy. The negative short-run coefficient of inflation (-0.044, p=0.3438) also shows the possible limiting effect of price instability on the economic activity, although, the positive relationship is not significant. The negative short-run effect on the exchange rate is minimal (0.001, p=0.7240) indicating that there is a low impact on the growth in the short term.

Diagnostic tests that are presented as Tables 4 and 5 support the strength of the results. Using Breusch-Godfrey serial correlation test the F-statistic is 1.091 (p =0.3508), which demonstrates that the residual values are not autocorrelated. Breusch Pagan Godfrey heteroskedasticity test reports F =0.525 (p=0.755) which means that the test results are homoskedastic. These results of diagnosis support the consistency and trustworthiness of the designed model.

Such results lead to a number of policy suggestions to Nigeria. First, development of capital market has poor positive growth effects, however, policymakers should focus on the growth of the market in terms of efficiency and depth. The measures that the SEC should take to enhance transparency, the protection of investors, and minimize transaction costs should aim at securing that the growth of the capital markets will be translated into productive economic activity and not speculative trading. Second, considering the negative correlation between the inflation and the growth, the Central Bank of Nigeria should consider maintaining price stability by adopting a sound monetary policy. Inflation control is a key to the establishment of a stable macroeconomic environment that will lead to investment and sustainable growth. Third, policymakers ought to understand that increasing capitalisation in the market or increasing trade volumes is not enough to spur growth; policies rather need to channel capital market resources to productive sectors especially in manufacturing and infrastructure and technology so that real economic transformation is supported by financial development. Fourth, the medium adjustment rate as indicated by the error-correction term implies that capital market reforms are capable of affecting the growth patterns over a realistic time span, thus it is highly important to be consistent on implementing the policies. Fifth, the low correlation of capital market indicators with growth suggests that there has to be complementary reforms in other areas such as ensuring better infrastructure, better human capital, better institutions, and less regulatory bottlenecks to maximise the growth effects of capital markets development.

The weaknesses of the current investigation are mostly related to its basis on summarized time-universal information over a span of 35 years, which might be insufficient to capture structural change or regime changes that have occurred over an industry in Nigeria and among its capital markets during a 35-year period. Besides, the lack of data quality around the stock-market indicators in the previous periods, especially in the 1990s, a rather backward period in terms of the maturity of the market when the estimates that were calculated were derived, might invalidate the accuracy of the generated estimates. It is also worth noting that the study does not put into consideration the possible structural breakages or threshold effects that may redefine the capital-market-growth nexus over time.

Further studies should seek to adopt a systematic study of structural disruptions of the time-series series so as to identify instances of time when capital-market-growth relation might have been substantively changed as an aftermath of policy changes or macroeconomic events. Further studies need to query the existence of threshold effects so that the development of capital-markets can be seen to have its effect on growth only when it reaches critical threshold levels of depth or liquidity on

the part of the markets. Studies based on asymmetric nonlinear ARDL models can also shed light on the difference effects between capital-markets expansion and contraction on the growth path. The incorporation of variables aimed at collecting institutional quality, measures of governance and advances in trading and settlement technology would provide deeper analysis also. Intercity comparative analyses that ultimately recreate overall methodologies of similar time-series across other African economies would have found useful lessons on regional policy coordination and assistance on the discernment of the ideal practices to leverage capital markets to make economies thrive.

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