EFFECT OF CAPITAL MARKET ON ECONOMIC GROWTH IN NIGERIA: A QUANTITATIVE APPROACH

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Abstract

The study aims to explore the effect of the Nigerian capital market on economic growth. The study employs quantitative research using annual secondary data for 38 years from 1981 to 2018 to assess the effect of capital market on economic growth in Nigeria. The data were analyzed using Lag Length Selection Criteria, ARDL Bound Test for Cointegration, Long and Short Run Estimations, and Diagnostic Tests encompassing Serial Correlation, Heteroskedasticity, Cusum Test, and Ramsey Reset Test. The results show a well-established long-term connection between capital market and economic growth in Nigeria. This conclusion is substantiated by the F-statistics of 10.96, exceeding the upper bound values across all levels of significance, thereby affirming the existence of a lasting link between the capital market and economic growth within the Nigerian context. Specifically, capital market variable such as market capitalization and equity indicate a positive and significant effect on economic growth. The ARDL error correction model (ECM) was used to estimate the parameter estimates that align with the expected signs, validating their appropriateness. The findings of the study validate the existence of effect of capital market in Nigeria, and the study recommends that the regulatory authority should formulate policies aimed at enhancing capital market operations.

Keywords: *Capital Market, Economic Growth, Bound Test. Market Capitalization*

1. INTRODUCTION

An expanding economy necessitates fresh mechanisms for financial mediation to fund investments that are either long-term or too risky for conventional banks, serving as a crucial catalyst for the growth of capital markets. Furthermore, capital markets play a multifaceted role: they're not solely instrumental in raising funds for infrastructure and business expansion, but they also foster strong corporate governance and accountability, enhance transparency, facilitate the creation and distribution of wealth, encourage inclusivity, democratize access to prosperity, and champion meritocracy (Arunma, 2013).

While it is widely acknowledged that nurturing the advancement of capital markets can strongly stimulate innovation and economic progress, the Nigerian capital market has faced various challenges since its inception. These challenges include a lack of substantial securities from companies, a scarcity of tradable shares, and the impact of global financial crises. Additionally, the decline in oil prices has deterred numerous foreign investors from participating in the market (Ikeobi, 2015). Despite being established in 1961, the Nigerian Stock Exchange lists less than 1% of registered companies in Nigeria, with a mere 214 equities listed, whereas other developing

economies like Singapore, Kuala Lumpur, Hong Kong, and Istanbul have significantly higher listings despite being established later. Furthermore, the Nigerian capital market's depth is relatively limited compared to its size, predominantly listing traditional securities. In contrast, exchanges like the Johannesburg Stock Exchange (JSE) and the Egyptian stock exchange offer a more extensive array of products Osaze (2007).

Furthermore, the Nigerian capital market's depth is relatively limited relative to its size. It predominantly lists traditional securities including standard equities, bonds, money market securities, and a couple of exchange traded funds (ETFs). In contrast, the Johannesburg Stock Exchange (JSE) offers a more extensive array of products such as bonds, derivatives, equities, exchange traded products, and debt equity. Similarly, the Egyptian stock exchange features a diverse range of traded instruments including stocks, bonds, funds, structured products, and ETFs (Nigerian capital market Master Plan, 2015).

These observations highlight a significant research gap regarding the effect of the Nigerian capital market on economic growth, particularly in terms of market depth and the diversity of listed securities. Therefore, this study aims to explore this effect, addressing the need for a deeper understanding of the factors influencing economic growth in Nigeria's capital market. The subsequent sections of the paper will delve into a literature review, the methodology employed, data presentation and analysis and ultimately conclude with recommendations.

2. LITERATURE REVIEW

2.1 Theoretical Review

The Efficient Markets Theory (EMT) in financial economics posits that asset prices incorporate all relevant information available about their intrinsic value (Fama, 1970). While applicable to various financial securities, discussions often center on common stock shares. Such securities represent claims on future cash flows, with intrinsic value defined as the present value of expected cash flows (Fama, 1970).

Investment analysts actively seek mispriced stocks, thereby driving market efficiency by correcting price deviations. In an efficient market, stock price changes are random due to new information being randomly favorable or unfavorable relative to expectations, leading to the concept of a "random walk" in stock prices (Fama, 1970). Consequently, investors cannot consistently earn abnormal returns in an efficient market where prices reflect intrinsic value. Eugene Fama notes that market efficiency exists along a continuum, with lower transaction costs indicative of higher efficiency. For instance, U.S. markets are considered relatively efficient due to the accessibility of reliable information and low trading costs (Fama, 1970). Market efficiency holds significance in determining whether trading strategies can outperform the market and ensuring optimal allocation of investment capital.

Despite criticisms, EMT remains relevant, serving as a benchmark for understanding stock price behavior and resource allocation efficiency. While markets may deviate from efficiency over shorter horizons, the theory guides discussions on market transparency, regulatory effectiveness, and the role of rational arbitrage in driving out noise traders. Ultimately, the informational efficiency of capital markets varies across contexts, with ongoing academic inquiry focusing on improving market efficiency conditions rather than questioning the theory's validity.

The advent of high-frequency trading (HFT) has introduced new complexities to market efficiency. Recent studies by Kyle and Wang (2020) delve into the impact of HFT on market liquidity and price discovery, shedding light on the evolving nature of information dissemination and its implications for market efficiency. Additionally, advancements in technology have facilitated access to vast amounts of data, enabling researchers to explore market efficiency across various asset classes and geographic regions.

Recent empirical studies by Lo and MacKinlay (2019) provide insights into the efficiency of emerging markets, offering valuable perspectives on the interplay between information dissemination and market efficiency in a global context.

Furthermore, interdisciplinary research at the intersection of finance and psychology has enriched our understanding of investor behavior and its implications for market efficiency. Contributions by Barberis and Thaler (2021) explore the role of psychological biases in driving market anomalies, highlighting the need for a nuanced understanding of investor decision-making processes within the framework of EMT.

2.2 Empirical Review

The impact of the capital market on economic growth has been a subject of interest in recent research. Omir et al. (2024) delves into this relationship, utilizing econometrics as a tool to analyze the influence of financial instruments on economic growth in Kazakhstan and the CIS countries. Their study, spanning over 20 years, aims to determine the dependence of gross domestic product (GDP) on various financial factors. Employing an econometric model, they find that the capital market indeed affects economic growth in these regions, presenting a model of the GDP function for Kazakhstan. Their findings suggest a dependency of the capital market size on variables such as securities issuance transactions and the rate of change of shares of leading issuers. Similarly, Okpara et al. (2023) focus on Nigeria, investigating the impacts of capital market development on economic growth. Utilizing quarterly data from 1981 to 2021, they employ a quantile regression framework to analyze the data. Their results indicate varied impacts of capital market indicators on GDP across different quantiles, with recommendations emphasizing the need for serious regulation of the capital market to ensure stability and promote economic growth.

Further, Yakubu (2023) explores the relationship between capital market capitalization and economic growth in Nigeria. Using annual time series data from 1990 to 2021 and employing various statistical tests, their study reveals a positive and significant relationship between these variables. They recommend policymakers focus on implementing policies to develop the Nigerian financial system, particularly the capital market, to enhance economic growth. Building upon the finding of Yakubu. Kocha and Iwedi (2023) conduct a study examining the effect of capital market performance on economic growth in Nigeria. Their analysis of financial time series data from 1990 to 2021 reveals a positive impact of market capitalization, all-share index, value of transactions, and total listing of stock on economic growth. They stress the importance of government investment in infrastructure to create an enabling environment for business growth.

In addition, Iwedi et al. (2023) further investigate the effect of capital market deepening on economic growth in Nigeria. Using similar data and methodology from 1990 to 2021. The data was analyzed using multiple regression techniques. The results show that capital market deepening variables of market capitalization, all share index, value of transaction and total listing of stock have positive effect on economic growth in Nigeria. The global result shows that 72 percent of the changes in real gross domestic product are explained by joint effects of capital market performance variables. The study emphasized the need for infrastructure development to foster economic activities.

Correspondingly, Olarinre et al. (2023) contribute to this body of literature by assessing how the capital market affects Nigeria's economic expansion. Specifically, the impact of the Nigeria stock exchange's total value of transactions (TVTs), all-shares index (ASIs) and stock market capitalization (MCAP) on Nigeria's economic development was evaluated. Time-series data covering 1986–2021 was obtained in the study. Estimation methods used in the study's analysis

include descriptive statistics correlation analysis, ARDL co-integration analysis, parsimonious error correction model, variance decomposition and other post-estimation tests. Findings from the study showed that MCAP positively impacts economic growth in the long and short run. The ASI affects economic growth positively and insignificantly in the long and short runs, and the TVTs exerts a significant positive effect on the economic growth of Nigeria. The study recommends measures to deepen development in the capital market.

Similarly, Oyegun and Idogun (2023) focus on capital market indicators and economic growth in Nigeria. It is a time series study covering a period of 33 years (1990-2022). Data was analyzed using inferential statistics. The inferential statistics consisted of correlation matrix, Augmented Dickey Fuller and Phillips Peron, Unit Roots Tests, Co-Integration and Error Correction Method (ECM). This paper revealed that Market capitalization, stock prices and market turnover has significant positive effect on Economic growth, while, new issue and value of transaction has negative and no significant influence on economic growth in Nigeria. The study emphasizes the need for increased market capitalization and regular release of new issues in the market to stimulate economic growth.

3. METHODOLOGY

The study adopts quantitative research using annual secondary data for 38 years from 1981 to 2018 to assess the relationship between capital market and economic growth in Nigeria. The data for the variables Bonds and equity were obtained from the Central Bank Statistical Bulletin (2019), market capitalization and total value of traded shares were sourced from the Central Bank Annual Reports (2020), and gross domestic product data was retrieved from the World Development Index (2020).

Table 1: Variable Description and Measurement

Variables	Notation	Definition and Description	Measurement	Apriory Expectation
Dependent variable	**LGDPR**	Log of Gross Domestic Product. It measures the economic growth of the country.	Economic Growth	Positive
(Capital Market) Independent variables	**LMCAP**	Log of Market Capitalization. This measures the performance of the capital market. It is the total value of all shares/stock at the current year. It measures the liquidity in the capital market.	Liquidity	Positive
	LBNDS	Log of Bonds. This is also long term means through which the capital market raise money for cooperates and government. It measures how liquid the capital market is and how money can be raised for investment purposes in the	Liquidity	Positive

		country.		
	LEQUT	Log of Equities. This measures the amount of money the company's shareholder. It measures the financial health of the companies in a country. It measures liquidity of the capital market.	Liquidity	Positive
	LDLS	Log of Development Loan stocks. This is a collateral for a loan in development project usually infrastructure. It is shares can be easily sold for cash that are used in development projects. It measures liquidity in the capital market	Liquidity	Positive
	LTVTS	Log of Total Value of Transactions. The total value of shares traded is the total number of shares, domestic and foreign, multiplied by their respective similar prices. It measures liquidity in the capital market.	Liquidity	Positive

Source: *Author's Compilation***,** *2019.*

The investigation into the effect of market capitalization, total value of Bonds, Equities, Development Loan stocks, and Total Value of shares traded on economic growth employed a range of robust econometric techniques. These techniques encompassed unit root tests, ARD cointegration tests, autoregressive distributive lag bound tests, granger causality tests, as well as diagnostic assessments for serial correlation, stability, and heteroskedasticity.

In earlier analyses, traditional methodologies such as the Johansen (1988) and Johansen and Juselius (1990) methods were commonly employed for testing the long-term relation among variables. Notably, the rigor of these methods rested on the prerequisite that the series must share the same order of integration to establish a long-run relationship. However, addressing this limitation, Pesaran et al. (2001) introduced the ARDL bound test, which liberates the analysis from the constraint of variable orders.

In evaluating the relationship, the computed F-statistics were compared with critical values. If the

F-statistics surpassed the critical values across significance levels, the null hypothesis of no cointegration was rejected, signifying the presence of a meaningful relationship. Conversely, acceptance of the null hypothesis indicated otherwise. The foundation of this model is drawn from the pioneering work of Pesaran et al. (2001), signaling an evolution in the methodology employed.

The ARDL bound test representation of relationship between the variables in the model is given as:

$$LGDPt = \gamma 0 + \gamma 1 LGDP_{t-1} + \gamma 2 LMCAPI_{t-1} + \gamma 3 LBNDS_{t-1} + 4 LEQUT_{t-I} + 5 LDLS_{t-1} + 6 LTVTS_{t-1} + \sum_{k=0}^{n} \text{ʒ} i1 \Delta LGDP_{t-i} + \sum_{k=0}^{n} \text{ʒ}\ i2 \Delta LMCAPI_{t-i} + \sum_{k=0}^{n} \text{ʒ}\ 3 \Delta LBNDS_{t-i} + \sum_{k=0}^{n} \text{ʒ} 4 \Delta LEQUT_{t-i} + \sum_{k=0}^{n} \text{ʒ} 5 \Delta LDLS_{t-i} + \sum_{k=0}^{n} \text{ʒ} i6 \Delta LTVTS_{t-i} + \eta 1 ECM_{t-i} + \varepsilon t_2 \quad \text{eq. (1)}$$

In the model, the a priori expectations concerning capital market variables (instruments) are as follows: the coefficient of market capitalization (MCAP), denoted as γ2, is anticipated to exhibit a positive sign. The coefficient of bonds (BNDS), represented by γ3, is expected to display a positive relationship with economic growth. Similarly, the coefficient of equities (EQUT), γ4, is envisioned to possess a positive sign. Additionally, the coefficient of development loans (DLS), γ5, is foreseen to bear a positive sign, and lastly, the coefficient of total value transactions (TVTS), γ6, is projected to hold a positive sign as well, signifying a favorable connection with economic growth.

The Error Correction Mechanism (ECM) is a pivotal term reflecting the level of long-term convergence within the economy. This term's presence signifies that all capital market variables (instruments) are expected to maintain a positive relationship with economic growth.

4. DATA PRESENTATION AND INTERPRETATION

4.1 Descriptive Statistics

The outcome of the descriptive statistics reveals the mean average value for each variable, encompassing their respective lowest and highest values, alongside the standard deviation from these mean values.

Table 2: Descriptive Statistics

	LGDP	LMCAP	LBONDS	LEQUT	LDLS	LTVTS
Std. Dev.	66113.04	7235.740	375.0677	4575.332	2440.361	640.8179
Skewness	0.655490	1.127328	2.896113	1.011523	1.479947	1.506366
Kurtosis	1.830744	2.731859	9.819330	2.461791	3.788339	4.412407
Jarque-Bera	4.885897	8.162669	126.7508	6.938778	14.85555	17.52979
Probability	0.086904	0.016885	0.000000	0.031136	0.000595	0.000156

Sum	10044008	191897.7	5471.736	128018.3	56291.87	16163.47
Sum Sq. Dev.	1.62E+11	1.94E+09	5205004.	7.75E+08	2.20E+08	15193961
Observations	38	38	38	38	38	38

Source: *Author's Computation Using E-views 9.0, 2019.*

The skewness of the variables signifies distinct patterns: GDP exhibits a normal distribution with a value of 0.655, while the remaining variables including MCAP, BONDS, EQUT, DLS, and TVTS exhibit positive skewness. This positive skewness indicates a prevalence of values higher than the sample mean.

As for kurtosis, BONDS, DLS, and TVTS exhibit a positive distribution with values of 9.82, 3.79, and 4.41 respectively. In contrast, GDP, MCAP, and EQUT display a platykurtic pattern, indicative of a negative distribution. This implies that values lower than the sample mean predominate.

The evaluation extends to the Jaque-Bera statistics, where it becomes evident that only GDP conforms to normal distribution at the 5% significance level, with a p-value of 8%. In contrast, the remaining variables (MCAP, BONDS, EQUT, DLS, and TVTS) do not follow a normal distribution, substantiated by their p-values falling below the 5% significance threshold.

4.2 Unit Root Test

The outcomes of the ADF and PP tests are detailed in table 4.6.

Table 1: Unit Root Test

		Level			**First Difference**				
		ADF			**PP**				
Variable	**t-stat. and Significance Levels**	**Trend and Intercept values**		**P-value**	**Trend and Intercept values**		**P-value**	**Order**	**Decision Rule**
		Level	**1st Differen**		**Level**	**1st Differen**			
LMCAP	**t-stat**	**-1.233625**	**-4.606412**	**Level**	**-1.562155**	**-4.625580**	**Level**	**I(1)***	Stationary
	1%	-4.226815	-3.626784	0.8884	-4.226815	-3.626784	0.7886		
	5%	-3.536601	-2.945842	**1st Diff**	-3.536601	-2.945842	**1st Diff**		
	10%	-3.200320	-2.611531	0.0007	-3.200320	-2.611531	0.0007		
LBNDS	**t-stat**	**-2.434689**	**-5.179004**	**Level**	**-2.479666**	**-6.907078**	**Level**	**I(1)***	Stationary
	1%	-4.273277	-3.670170	0.3561	-4.273277	-3.670170	0.3352		
	5%	-3.557759	-2.963972	**1st Diff**	-3.557759	-2.963972	**1st Diff**		
	10%	-3.212361	-2.621007	0.0002	-3.212361	-2.621007	0.0000		
LEQUT	**t-stat**	**-0.708819**	**-6.412922**	**Level**	**-0.654611**	**-9.380117**	**Level**	**I(1)***	Stationary
	1%	-4.226815	-3.626784	0.9649	-4.226815	-3.626784	0.9692		
	5%	-3.536601	-2.945442	**1st Diff**	-3.536601	-2.945842	**1st Diff**		
	10%	-3.200320	-2.611531	0.0000	-3.200320	-2.611531	0.0000		
LDLS	**t-stat**	**-4.683057**	**-4.282216**	**Level**	**-4.727363**	**-3.986530**	**Level**	**I(0)***	Stationary
	1%	-4.252879	-4.262735	0.0014	-4.234972	-3.632900	0.0012		
	5%	-3.548490	-3.552979	**1st Diff**	-3.540328	-2.948404	**1st Diff**		
	10%	-3.207094	-3.209642	0.0004	-3.202445	-2.612874	0.0040		
LTVTS	**t-stat**	**-1.440787**	**-5.227788**	**Level**	**-1.675332**	**-5.520521**	**Level**	**I(1)***	Stationary
	1%	-4.226815	-3.626784	0.8316	-4.226815	-3.626784	0.7421		

	5%	-3.536601	-2.945842	**1st Diff**	-3.536601	-2.945842	**1st Diff**		
	10%	-3.200320	-2.611531	0.0001	-3.200320	-2.611531	0.0001		

Source: *Author's Computation Using E-views 9.0, 2019.*
Note: *Note: (*), (**) Suggest Stationarity at 1%, 5% and10%.*

This presentation underscores that, except for LDLS, all variables lack stationarity at the base level. Interestingly, LDLS displayed stationarity at the 1% significance level in both the ADF and PP tests. This determination was made by comparing the absolute values of the ADF and PP test statistics with the corresponding critical values at significance levels of 1%, 5%, and 10%. Nevertheless, the variables exhibit stationarity once differenced. Consequently, we deduce that the variables LGDP, LMCAP, LBONDS, LEQUT, and TVTS share an integration order of I(1) at all levels of significance. In section 4.8, the selection of lag length is discussed, followed by the presentation of the ARDL bound test in section 4.4

4.3 Lag Length Selection

The ideal lag was determined through conventional selection criteria (LR, FRE, AIC, SC, HQ) extracted from the empirical vector correction estimation.

Table 2: Lag Length selection Creteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-116.8193	NA	8.69e-05	7.676207	7.951033	7.767304
1	68.57099	289.6723	7.99e-09	-1.660687	0.263092	-1.023008
2	100.8963	38.38625	1.30e-08	-1.431016	2.141715	-0.246756
3	201.1613	81.46537*	5.09e-10*	-5.447582*	-0.225898*	-3.716742*

Note*: * indicates lag order selected of the information criterion, (each test at 5% level).*
Source: *Author's Computation Using E-views 9.0, 2019.*

All of the lag length selection criteria—LR, FRE, and AIC indicated an optimal lag of 3. Opting for a lag of three successfully mitigated residual serial autocorrelation, establishing it as the preferred lag length.

4.4. Autoregressive Distributed Lag (ARDL) Bound Test for Cointegration

The ARDL bound test outcomes presented in table 6 reveal that when gross domestic product (GDP) functions as the dependent variable, the computed F statistics consistently surpass the critical values at significance levels of 1%, 5%, and 10%. This pattern indicates that the critical value of 4.48 remains consistently higher than the upper bound values at all significance levels. Such findings strongly imply the presence of a sustained long-term cointegration or relationship between gross domestic product and factors like bank credit to the private sector (BCPS), commercial paper (CMPP), certificate of deposit (CODP), Bankers' Acceptances (BKAC), and Treasury Bills (TBILL). In essence, a substantive long-run connection between economic growth and the money market within Nigeria is established.

Table 3: ARDL Bound Test for Co-integration

Models	Variables	F-Statistics	Decision
	LGDP=F(LMCAP, LBONDS, LEQUT, LDLS, LTVTS)	10.96	Co-integration
	Critical Value	**Lower Bound**	**Upper Bound**
	1%	3.06	4.15
	5%	2.39	3.38
	10%	2.08	3.00

Source: *Author's Computation Using E-views 9.0, 2019.*

Building upon the confirmation of cointegration or long-run relationships within the model, the calculation of the error correction term (ECT) was executed to determine the rate of adjustment from long-term to equilibrium, as explained in section 4.5.

Similarly, the ARDL bound test outcomes within this particular model illustrate that when gross domestic product (GDP) is taken as the dependent variable and capital market variables serve as the explanatory variables, the calculated F statistics of 10.96 consistently exceed the upper bound values at confidence levels of 99%, 95%, and 90%. This compellingly suggests the existence of cointegration between gross domestic product and capital market components, specifically market capitalization (MCAP), bonds (BONDS), equities (EQUT), development loan stocks (DLS), and total value traded shares (TVTS). Given the solid evidence of cointegration within this model, the conclusion drawn is that a sustained long-term relationship prevails between the capital market and gross domestic product. Consequently, the estimation of the error correction term (ECT) was undertaken to ascertain the pace of adjustment from the long-term state to equilibrium, as in table 4.5.

4.5. ARDL Cointegration and Long Run Estimation

The Autoregressive Distributed Lag Model (ARDL) is a hybrid encompassing both short-term and long-term dynamics. While the differential coefficients delineate the short-term aspects, the Error Correction Mechanism (ECM) encapsulates the long-term perspective. Given the ARDL bound test's indication of a sustained long-term relationship between the capital market variables and economic growth, the focus shifts to estimating the ECM in order to gauge the degree of convergence and the pace of adjustment.

Table 4: ARDL Cointegration and Long Run Estimation

Regressors	Coefficients	Std Error	t-Stat	P-Values
GDP	0.228117	0.083065	2.746249	0.0252
MCAP	0.397698	0.128416	3.096963	0.0074
BNDS	-0.021555	0.010498	-2.053316	0.0741

EQUT	-0.031184	0.007681	-4.059639	0.0010
DLS	0.029984	0.023035	1.301657	0.2293
TVTS	-0.003947	0.021789	-0.181125	0.8608
ECM(-1)	-0.588620	0.101998	-5.770872	0.0000
	R-Squared 0.993720	**Prob(F-Stat)** 0.000001	**DW Stat** 2.587355	
	Adjusted R-Square 0.977234		**F-Stat** 60.27672	

Source: *Author's Computation Using E-views 9.0, 2019.*

The outcomes from estimating the ARDL error correction model (ECM) reveal parameter estimates that align with the expected signs, validating their appropriateness. The estimated coefficient for the error correction term, -0.662520, stands as significantly distinct from zero at a 5% significance level, and it possesses the expected negative sign. This validates the existence of a long-term equilibrium relationship among the variables. The specific coefficient value points to a rapid 66.25% annual speed of adjustment toward long-term equilibrium at the 5% significance level. This signifies a noteworthy swiftness of adjustment within the economy, implying a substantial progress toward the long-run equilibrium at a rate of 66.25%.

Similarly, the estimated coefficient for the error correction term, -0.588620, emerges as significantly divergent from zero at a 1% significance level, adhering to the anticipated negative sign. This further validates the presence of a long-term equilibrium relationship among the variables. The particular coefficient value implies a considerable 58.86% annual adjustment speed toward long-run equilibrium at the 1% significance level. This underscores a pronounced agility in the adjustment process, indicating that the economy is rapidly converging toward its long-term equilibrium at a rate of 58.86%.

4.6. Autoregressive Distributed Lag (ARDL) short Run Estimation

The Autoregressive Distributed Lag (ARDL) coefficient elucidates the intensity of the connection between capital market indicators and economic growth. The ARDL data in table 6 highlights that a 1% increment in LMCAP leads to a 12.52% reduction in LGDP. Although the coefficient is positive, its significance is absent at the 5% level, given that the p-value exceeds 5%. Correspondingly, the positive coefficient of LBNDS lacks significance at the 5% level, evident in the p-value of 22.22%, which surpasses the threshold. This implies that a 1% rise in BNDS contributes to a 1.25% increase in LGDP. For LDLS, a 1% augmentation leads to a 3.84% LGDP rise, but this coefficient lacks significance at the 5% level, given the p-value of 11.00, which surpasses the 5% threshold. The positive coefficient of LTVTS suggests that a 1% elevation in LTVTS correlates with a 3.8% LGDP boost, yet its statistical insignificance at the 5% level is evident, as the p-value of 6.82% notably exceeds the 5% threshold.

Table 5: ARDL Short Run Estimation

Regressors	Coefficients	Std Error	t-Stat	P-Values
C	7.397152	3.098070	2.387664	0.0306
GDP	0.492471	0.270490	1.820665	0.0887
MCAP	-0.125242	0.060636	-2.065466	0.0566
BNDS	0.012949	0.010309	1.256141	0.2283
EQUT	0.018235	0.009772	1.865970	0.0817
DLS	0.031897	0.018778	1.698689	0.1100
TVTS	0.038427	0.019556	1.964975	0.0682
	R-Squared Adjusted 0.994048	**Prob(F-Stat)** 0.000000	**DW Statistics** 2.156324	
	R-Square 0.986510		**F-Statistics** 131.8586	

Source: *Author's Computation Using E-views 9.0, 2019.*

The model's R-squared (R2) indicates that the capital market variables account for 99% of the explanation for economic growth, with an adjusted R-squared (adjusted R2) of 97%, reinforcing this finding. The F-statistics underscore the collective impact of money market variables as significant, evident in the p-values falling below the 5% threshold. This significance, observed at the 1% level, is complemented by the Durbin-Watson (DW) statistics, which point to the absence of autocorrelation. Thus, the model demonstrates suitability, with the independent variables effectively fitting the model.

The outcomes suggest a lack of short-term correlation between the money market and economic growth. Essentially, this implies that the short-term securities introduced to raise funds or capital on the market do not effectively drive investment in the economy. Consequently, their contribution to economic growth in the short run remains limited in effectiveness.

4.7. Diagnostic Tests

This section comprises tests that ensures the stability and application of the results of the finding. They include serial correlation, Heteroskedasticity Test, Ramsey RESET test and Cusum Test of Square Test for Stability.

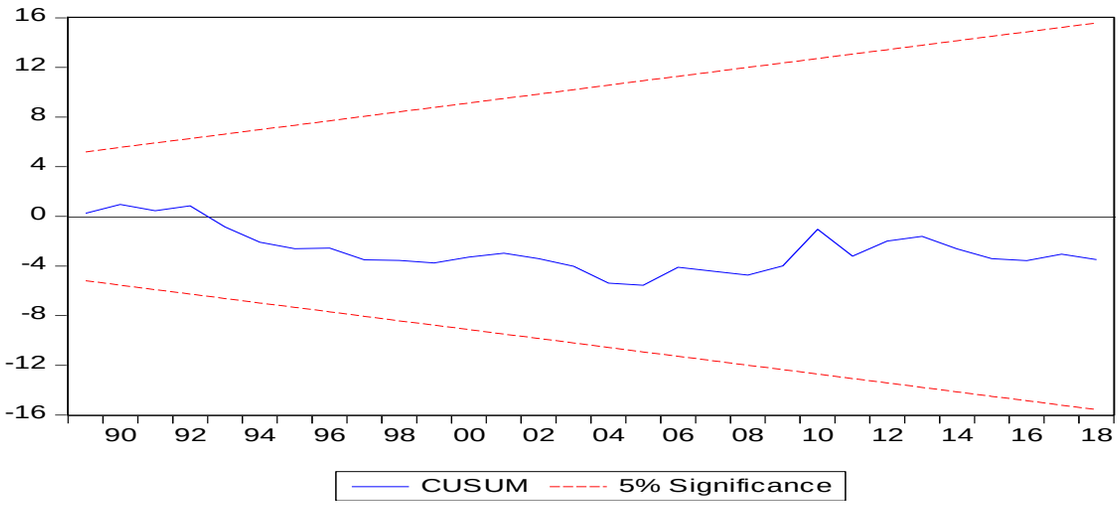
Table 6: Diagnostic Test Results

Test	F-Statistics	Prob. F	Obs*R-squared	Prob. Chi-Square(2)
Serial Correlation Test	0.548226	0.5982	3.857157	0.1454

Heteroskedasticity Test	0.596504	0.8471	17.79455	0.6620
	F-statistics		**t-statistics**	
Ramsey RESET Test	**Value**	**Prob.**	**Value**	**Prob.**
	0.305517	0.5847	0.552738	0.5847

Source: *Author's Computation Using E-views 9.0, 2019.*

Figure 1: Cusum Test of Square Test for Stability



Source: *Author's Generated Using E-views 9.0, 2019*

The findings from the serial correlation and Heteroskedasticity Test, as presented in table 9, indicate the absence of serial correlation. This conclusion is drawn from the fact that the F-statistics surpass the 0.5 significance level, signifying the model's appropriateness and lack of serial correlation. Similarly, the Heteroskedasticity test aligns with this outcome, revealing that the null hypothesis of no Heteroskedasticity is accepted at the 5% significance level, as evidenced by the p-value exceeding 5%.

Likewise, the Ramsey RESET test's results suggest that we cannot dismiss the null hypothesis of absence of misspecification, since the p-value exceeds the 5% significance threshold. This leads to the conclusion that the model is accurately specified and free from indications of non-linearity. All diagnostic tests collectively confirm the model's suitability and the absence of issues within the model.

5. CONCLUSION AND RECOMMENDATION

In summary, the outcomes of the study validate the existence of effect of capital market on economic growth in Nigeria. This enduring effect is characterized by a significant long-term linkage with a notable rapidity of 58%, which holds the potential to accelerate the country's economic growth. Furthermore, it was observed that the capital market variables exhibit positive yet statistically insignificant connections with economic growth. This discovery underscores the pivotal role played by capital market activities in fostering the nation's economic growth over the long term. Consequently, it becomes essential for the country to enhance the development of capital market variables, a move that could potentially amplify economic growth. Thus, the study recommends that the capital market regulatory authority should formulate policies aimed at enhancing capital market operations. Additionally,

they should be vigilant in addressing any activities that might hinder the smooth functioning of the capital market, ultimately contributing to the realization of robust economic growth in the nation.

Limitations and Suggestions for Further Studies

The analysis fails to account for external factors such as government policies, macroeconomic indicators, political stability and global economic conditions, which could hinder a comprehensive understanding of the relationship, while conclusions drawn from a limited time frame and sample size may not fully encompass the relationship's dynamics across various contexts. Despite identifying a significant long-term relationship, the immediate impact of capital market activities on economic growth lacks statistical significance.

The study recommends exploring additional avenues for research, such as conducting a comprehensive and longitudinal analysis that considers a wider array of external factors, including government policies, macroeconomic indicators, political stability, and global economic conditions. Expanding the time frame and sample size would enable researchers to more accurately understand the complexities of the relationship between capital market activities and economic growth in diverse contexts. Furthermore, investigating the underlying reasons for the observed lack of statistical significance in the immediate impact of capital market activities on economic growth could offer valuable insights for policymakers and investors.

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