



CAPITAL MARKET DEVELOPMENT AND ECONOMIC GROWTH IN NIGERIA: ANY NEXUS?

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Abstract

The Nigerian capital market plays a crucial role in economic growth by providing a platform for investors to channel surplus savings into productive investments. This study examines the impact of the capital market development on economic growth in Nigeria from 1990 to 2021. Using a longitudinal causal research design and the ordinary least square estimation technique, the study hypothesizes that capital market development does not significantly impact on economic growth in Nigeria, with the capital market development measures as total market capitalization, number of deals, value of transactions, and interest rates while economic growth was measured by the real gross domestic product in Nigeria. The findings suggest that while total market capitalization does not significantly impact economic growth, the number of deals has a positive and significant effect on economic growth in Nigeria. This implies that an increase in market transactions is associated with higher economic growth. However, the value of transactions shows a negative and significant impact on economic growth, contrary to expectations. Additionally, interest rates have a strong and significant effect on economic growth, with higher interest rates leading to the attractions of massive investments in the market. Based on the foregoing findings, the study recommends among other measures, the enhancement of market efficiency and integrity by strengthening regulatory oversight, increasing the number of transactions, managing interest rates effectively in order to further encouraging investors' confidence in the market. Overall, the study highlights the importance of a well-functioning capital market in driving economic growth and provides valuable insights for policymakers and market participants in Nigeria.

Key Words: Capital Market Development, Market Capitalisation, Economic Growth

Introduction

The absence of a well developed capital market in an underdeveloped country where capital is scarcely adequate is a greater hindrance to economic growth (Sami, 2012). Even though people are poor, yet they do not have any inducement to save. Others, who save, usually invest their savings in wasteful and unproductive channels, such as gold, jewelry, real estate, conspicuous consumption etc. Such countries can induce people to save more by establishing banking and non banking financial institutions for the existence of a developed capital market, such a market can go a long way to providing a link between savers and investors; thereby leading to capital formation and economic growth (Afolabi.,2015).

Capital market serves as the channel or link between investor who has surplus savings and is willing to invest their surplus income to generate returns and individuals who have business ideas, corporate organization who want to expand their existing businesses and government that intended to embark on the capital intensive project have not enough capital (Briggs et al., 2015). Therefore capital market is a market that intermediate between borrowers and lenders of financial securities together in an efficient ways and help channel those resources to productive area that will create a healthy national economy balance in the country. As an intermediary between the borrower and lender of securities, capital market provides essential funding that affects people's lives in so many ways, from

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starting a business to expanding a current one, or providing investment opportunities for people planning for their future. Capital markets allow traders to buy and sell stocks and bond, and enable businesses to raise financial capital to grow. Businesses also have reduced risk and expenses in acquiring financial capital because they have reliable market where they can obtain funding without collateral (Enekwe., et al, 2016).

Capital market is a market for long term investments, which entrepreneurs and business owners go to raise cheap long term funding for the sustainability of their businesses and support the growth and expansion of their operation (Imobighe, 2015). Capital market provides opportunities for investors to grow their wealth by investing in the share of companies, thereby helping individuals, corporate organizations and government to make provision for future need. Indeed, capital market plays a major role in the growth of the economy (Imobighe, 2015). The market help to create a better future for all the participants by providing an efficient platform for the companies and government to mobilize long term capital to invest in the expansion of businesses and financing development projects by government (Treasure,2020)

The Capital market acts as an important link between savers and borrowers. The savers are lender of funds, while firms, companies, individual and government are the borrowers of fund. The savers who do not spend all their income are called “Surplus unit” and the borrowers are known as “deficit unit”(Imobighe, 2015). Capital market is the transmission mechanism between surplus units and deficit units. It is a conduit through which surplus units lend their surplus funds to deficit units. Fund flow into the capital market from individuals and financial intermediaries which are absorbed by commerce, industry and government (Imobighe, 2015). It thus facilitates the movement of stream of capital to be used more productively and profitably to increase the national income. Surplus units buy securities with their surplus funds and deficit units sells securities to raise the funds the needed for their operations. Funds flow from lenders to borrowers either directly or indirectly through financial institutions such as banks, unit trusts, mutual funds etc. the borrower issued primary securities which are purchased by

lenders either directly or indirectly through financial institutions. (Sami, 2012)

The capital market plays a crucial role in the economic development of any country, serving as a channel for mobilizing savings and allocating capital to productive investments (Levine &Zervos, 1998). In Nigeria, the capital market has undergone significant reforms since the 1990s, with the establishment of the Securities and Exchange Commission (SEC) in 1992 and the demutualization of the Nigerian Stock Exchange (NSE) in 2019 (SEC, 2020; NSE, 2020). These reforms were aimed at enhancing the efficiency, transparency, and depth of the capital market to stimulate economic growth (Anyfantaki et al., 2019).Despite these reforms, Nigeria's economic growth has been relatively sluggish, with the average annual GDP growth rate between 1990 and 2021 estimated at 3.8% (World Bank, 2021). This raises questions about the effectiveness of the capital market in promoting economic growth in Nigeria. Therefore, it is essential to examine the impact of the capital market on economic growth in Nigeria to provide insights into how the capital market can be leveraged to stimulate economic development in the country.

Conceptual Review

Economic Growth

Kuzneth (1963) posited that the term growth typically connotes a numerical expansion. Professor Kuzneth's writings explicitly emphasise the critical importance of considering the connotation of economic growth when interpreting this concept. He powerfully argues that economic growth is primarily a quantitative concept. Therefore, in order to make significant advancements in the empirical and theoretical analysis of the growth phenomenon, we must prioritise the quantitative aspect. This point is well acknowledged.

Nevertheless, there is still a significant divergence of opinions regarding the specific extent that should be considered as the appropriate indicator of progress. The sole common factor among the several quantitative definitions of economic growth is the consensus that the measurement should ideally focus on the impact of economic activity on the attainment of improved levels of human well-being. When discussing economic growth, it



is suggested that economic action is purposeful, meaning that it can only be recognised and evaluated if the underlying aim of that activity is understood beforehand. Flammang (1979) reviews a considerable amount of development literature. He discusses economic growth and development as related processes based on the structure and functions of the political economy. He offers clarifications by drawing an analogy between biological growth and development. He notes the positive association between growth and development in most instances: When we refer to economic growth, are not most of us thinking in terms of increase, in terms of the quantity of something measurable? But when we use the term "development," are we not trying to imply something in the way of change, something qualitative? These usages seem reasonable, and the quantitative-qualitative distinction is implied, if not stated explicitly, in many of the definitions just surveyed; I suggest that, to most of us, economic growth is a process of simple increase, implying more of the same. The economy of a nation is considered to have grown when the nation's capital dividend by the total population of such a country increases sustainability. It may not be wise to consider a nation's economy as increasing when there are fluctuation in the per capital income of such a nation within a short period of time (Akintoye and Olowulajo, 2008). Khan and Senhadji (2001), the economic growth of an economy may be considered using the GDP of the economy. If the GDP of an economy increases, the country's economic growth is considered increased. Also, if there are an increase in the aggregate goods and services per person in an economy for a reasonable period of time say 5 years and above there are elements of economic growth. Anyawoncha (1993) assert that a nation's economic growth can be measured in terms of its per capital income and the nation's total goods and services within a given period of time. Chigbu (2014), economic growth is a narrow term. It involves increase in output in quantitative terms but economic development includes changes in qualitative terms such as social attitudes and customs along with quantitative growth of output or national income. Kendra (2019) ascertains that economic growth is an increase in the production of economic goods and services in one

period of time compared with a previous period. It can be measured in nominal or real (adjusted to remove inflation) terms. Traditionally, aggregate economic growth is measured in terms of gross national product (GNP) or gross domestic product (GDP), although alternative metrics are sometimes used.

Capital Market Development

Capital market is a financial market that provides facilities for mobilizing and dealing in medium and long term funds. The players on the capital market are the operators who act as intermediaries between the providers of the funds and the fund users. Ugwu (2006) describes the capital market as a financial platform that provides facilities for mobilizing and dealing in medium and long term funds through transfer from where they are less needed to where they are needed more through the operators who act as intermediaries between the providers of the funds and the users of such fund. Cooley and Roden (2009) see capital market as any place where securities greater than one year are bought and sold.

According to Yadirichukwu and Chigbu (2014), the capital market is considered a focal point for economic policies and policymakers due to the perceived advantages it offers to the economy. The capital market serves as the central point for stock market operations and is frequently regarded as an indicator of the national economy's expansion. According to Obadan (1998), an active capital market can be used to gauge fluctuations in overall economic activity. Hence, individuals, corporate entities, and governments that are in a state of financial shortfall yet possess the expertise to produce revenue and enhance their current operations or require funds for government-backed projects that involve substantial investment are in need of monetary resources. The capital markets serve as an efficient intermediary between the two parties. The capital market entails comprehending its operations, the products it offers, and its significance in the economy and investment.

According to Al-Faki (2006), The Nigerian capital market was created with the intent of creating a chain for the supply of medium and long term capital for investment in various economic projects that spur development, the organization of a well-designed network of specialized



financial institutions, series of processes and infrastructure. Because of the delicate structure of the capital market, funds are pushed to where they are needed the most and thus it increases the level of economic output because capital is being put to its best use (Pedro & Erwan, 2004).

Onuaha (2021) explained that, a Capital market is the exchange system that moves capital from people looking to invest for a return to the users of capital who require the capital to finance various projects or business operations. They are the most important way the economy grows and functions effectively. Capital market add efficiency to an economy in the sense that investors will no more look for where to invest their surplus savings or businesses cannot search for investors to borrow funds for projects, because capital market serve as a transmission mechanism system that facilitates these transactions. Capital market is essential for individuals who wish to begin a career, those who want to learn more about how the economy functions and how to make more informed personal investment decisions.

Nigeria Security and Exchange Commission (SEC) describe capital market as that segment of the financial market that deal with the effective channeling of medium to long term funds from the surplus to the deficit unit. The process of transfer of funds is done through instruments which are document or (certificate), showing evidence of investment. The products or instruments traded in the capital market are Debt securities, Equities, preference share and Derivative.

According to Okiemule (2017), the capital market is composed of various institutions that enable the purchase and sale of long-term financial assets, including government bonds, debentures, and shares. It is a component of the economic system that primarily focuses on raising capital through the trading of shares, bonds, and other long-term investments. It functions as a channel for both large and small businesses to directly get equity and debt capital, thereby decreasing their reliance on financing from banks. The market plays a fundamental role in any financial system by supplying the necessary capital for funding not just businesses and other economic institutions but also the government's overall programmes.

Theoretical Review

There are a good number of theories propounded to explain the dynamics and working of the capital market. Some of these theories are reviewed below:

Harrod–Domar Growth Model (1939)

Roy F. Harrod developed the model independently in 1939. The model is based on Keynesian principles and represents an economic growth model. Initially, the Harrod-Domar model was created to examine the fluctuations in the business cycle but was later modified to explain the phenomenon of economic growth. The model suggests that economic growth is dependent on the amount of labour and capital invested. Increased investment leads to the accumulation of capital, which, in turn, stimulates economic growth. The implications of this approach are particularly relevant for underdeveloped countries, where physical capital is scarce, which hinders economic advancement despite the abundance of workforce. LDCs require higher income levels to support substantial savings rates, which leads to lower investment and accumulation of physical capital stock. This means that economic growth is dependent on the implementation of policies that promote investment by increasing savings and effectively utilizing investments through technological advancements. The principle suggests that achieving full employment and stable growth rates is not a natural outcome of an economy. It is used in development economics to explain an economy's growth rate in terms of the level of saving and of capital. It suggests that there is no natural reason for an economy to have balanced growth. The Harrod–Domar model was the precursor to the exogenous growth model. According to the Harrod–Domar model there are three kinds of growth: warranted growth, actual growth and natural rate of growth. Warranted growth rate is the rate of growth at which the economy does not expand indefinitely or go into recession. Actual growth is the real rate increase in a country's GDP per year. Natural growth is the growth an economy requires to maintain full employment. For example, If the labor force grows at 3 percent per year, then to maintain full employment, the economy's annual growth rate must be 3 percent.

Efficient Market Hypothesis (1965)



Efficient market hypothesis was pioneered by Samuelson (1965) but was formally articulated and applied to the stock market by 1970. Efficient market hypothesis is among the theories that explain here the stock market functions and the Nigerian capital market is not an exception. The Efficient Market hypothesis examines security prices in an efficient market, therefore the concept of “Efficiency” is a center point to any segment of financial market, this refer to any of the three efficiencies; Operational efficiency, Allocation efficiency, and Price efficiency (Echekaba, Ezu and Egbunike, 2013). They opined that stock market are so efficient that no matter how smart investors are in accessing and using information in the market, they cannot make arbitrage profit through mispricing (Fama, 1965). Ikenna (2013) States that an efficient markets Hypothesis make instant adjustments to stock price fluctuations. These changes in stock price occur due to the emergence of new information pertaining to that particular stock. The EMH occurs when the active market participants all have access to relevant information, utilizing this information to compete rationally in order to maximize profit on their buy and sell decisions. This eventually leads to the situation where the actual price of a security is a good estimate of the intrinsic value of that security. This implies that no stock is overvalued or undervalued and as such there is no possibility of making gains by outperforming the market. In an article written by Madhri Thakur states that in an efficient market hypothesis stock price indicate all the relevant information, such information is shared universally, making it impossible for investors to earn above-average returns consistently.

Assumptions of Efficient Market Hypothesis (EMH):

- i. Investors in the market may act rationally or normally. If there is unusual information, the investor will react unusually, which is normal behavior, or doing what everyone else is doing is also considered normal behavior.
- ii. The stock price indicates all the relevant information shared universally among the investors.

Prospect Theory of Capital Market

Prospect theory states that when investors face risk, their choices demonstrate various widespread impacts that contradict the fundamental principles of expected utility

theory. Prospect theory, in contrast to the expected utility theory, examines how investors make decisions when faced with uncertainty. It is grounded in cognitive psychology rather than the assumption of investor rationality. As previously mentioned, anticipated utility theory posits that investors exhibit risk aversion while making investment choices. Prospect theory, apart from acknowledging risk aversion, also introduces the notion of loss aversion. Loss aversion posits that investors have a greater inclination to avoid losses rather than pursue gains. Prospect theory proposes that to illustrate the idea of loss aversion, investors evaluate the profits and losses of an investment in relation to a certain reference point, such as the initial purchase price of an asset. Prospect theory suggests that there is a decreasing level of dissatisfaction for losses when the asset position falls below the reference point, resulting in a convex function. Furthermore, the function exhibits a greater slope for losses compared to gains, indicating that the degree of dissatisfaction resulting from experiencing losses is greater than the level of satisfaction gained from an equivalent amount of gains.

Empirical Review

A number of studies have been conducted on capital market and economic growth. The study now takes a look at some of the previous studies and their findings with a view to identifying gaps in the literature.

In their study, Donwa and Odia (2010) conducted an empirical analysis to examine the influence of the Nigerian Capital Market on the country's socio-economic development. They utilized Johanson co-integration and Granger tests, focusing on the time period from 1981 to 2008. The findings revealed that various capital market indices, including market capitalization, total new issue, volume of transaction, total listed equities, and government stock, did not have a significant impact on the socio-economic growth of Nigeria. Adaramola (2012). The study utilized Johanson co-integration and Granger causality tests to analyze the influence of the Nigerian capital market on its economic growth within the time frame of 1990 to 2010. The analysis demonstrates the presence of a durable connection between the capital market (measured by market capitalization, total new issuance, value of transaction, and total listed equities and government



shares) and economic growth (represented by gross domestic product (GDP)) in Nigeria. The findings from these studies indicate that the actions of the capital market have a favourable influence on the Nigerian economy.

Augustine and Salami (2010) conducted a study on the relationship between stock market development and economic growth in Nigeria. They employed ordinary least square (OLS) regression analysis for their research. The researchers utilised time-series data spanning from 1986 to 2006. The per capita gross domestic product (GDP) served as the independent variable and acted as a proxy for measuring economic growth. Stock market development can be measured by three key indicators: total market capitalization, turnover ratio, and total value of shares exchanged. The study findings indicate that there is a positive correlation between stock market capitalization and turnover ratios and economic growth in Nigeria throughout the specified period. However, it is observed that stock market liquidity has a detrimental impact on long-term growth. While the study is valuable, it does not provide a definitive conclusion about the causal relationship between the stock market and economic growth in Nigeria. Moreover, the dataset lacks a sufficient number of observations to conduct a statistically meaningful analysis on the link.

Nevertheless, Nyong (1997) found divergent outcomes when utilising market capitalization to GDP ratio, total value of transaction to GDP ratio, value of transaction to GDP, and stock market listings as indicators of stock market development. The study provided evidence suggesting that the stock market exerts a detrimental influence on economic growth in Nigeria. The study employed a straightforward regression model definition. Osinubi and Amaghionyeodiwe (2003) conducted an empirical study on the association between stock market development and economic growth in Nigeria. They used a basic regression model for their analysis. Their investigation concluded that there was no statistically significant correlation between the stock market and economic development from 1980 to 2000. However, these two studies have been criticised due to the limited number of observations of their data points, which prevents the attainment of a statistically significant conclusion.

Olowantunsi et al. (2013) conducted a study using data from the central bank of Nigeria spanning from 1999 to 2012. The aim of their research was to examine the influence of the capital market on economic growth in Nigeria. Employing the Johanson co-integration and Granger causality test as outlined by Briggs in 2015, analysed the influence of the capital market on the Nigerian Economy throughout the period of 1981-2011. The study observed that the Nigerian economy saw economic growth, and the performance of the stock market had a significant role in driving this growth and development. The measure of economic growth is represented by the gross domestic product (GDP). The variables studied for the capital market include market capitalization, total new issues, value of transactions, total listed equities, and government stock. The Johanson co-integration and Granger causality tests were utilised. The findings indicate that there is a co-integration between the Nigerian capital market and economic growth. This indicates the presence of a long-term relationship between the capital market and economic growth in Nigeria. The result demonstrates a distinct and favourable influence that the capital market has on economic growth, and consequently, on the overall economy.

Taiwo (2016) assessed the impact of the capital market on the development of the Nigerian economy. In order to accomplish the goal, an error correction model was calculated for the economic growth in Nigeria. This was done by employing vector error correction techniques on annual time series data from 1981 to 2014. The data underwent the Phillip Person Units Root test, and it was found that all variables were stationary after being differenced once. The analysis of the normalized co-integrated series indicates that market capitalization, total value of listed securities, labour force participation rate, accumulated saving, and capital formation are key macroeconomic determinants of economic growth in Nigeria.

Keji, (2020). This study empirically investigates the relationship between the capital market and economic growth in Nigeria from 1980 to 2017. The pursuit of desired outcomes led to economic growth, which was measured by the gross domestic product (GDP). The



variables considered in the capital market included market capitalization, all share indexes, number of dealings, gross capital formation, exchange rate, value of all transactions, and interest rate. This study is motivated by the ineffectiveness of the capital market, which has an impact on liquidity and the collection of information about corporate management. Instead, the research utilised the Auto regressive Distribution Lay model and conducted Bound co-integration testing. The findings indicate a significant and enduring connection between the capital market and economic growth in Nigeria. In order to support the conclusion, post-estimation tests were performed. For example, the Jarque-Beta test indicates that the residuals for both models follow a normal distribution, as the probability value above the 5% significance level. Therefore, the hypothesis that the residuals follow a normal distribution cannot be disproven. The Breusch-Godfrey serial correlation (LM) test confirms that the null hypothesis of no autocorrelation (LM) can be rejected. Given that the probability values exceed the crucial value of 5%.

Udoet et al. (2021). This study investigates the impact of capital market development on the economic growth of Nigeria. Real Gross Domestic Product (GDP) data is used as a measure of economic growth, whereas capital market factors such as market capitalization, all share index, and number of listed businesses are considered as independent variables. The study employed an ex-post facto research design, utilising secondary data from 1983 to 2020. Preliminary analysis was conducted using an Augmented Dickey Fuller Unit Root test, and the model estimate was performed using an Auto Regressive Distribution Lag (ARDL) approach. The estimation involved the use of a mixture of ARDL bounds test for co-integration, ARDL short run error correction model, and ARDL long run error correction model. All the tests served to verify the integrity of our model. The study's findings suggest that there is a considerable correlation between the number of listed securities and the All Share Index and economic growth in Nigeria, both in the short and long term.

In 2015, Afolabi carried out an empirical analysis that aimed to evaluate the impact of the Nigerian capital market on the Nigerian economy, with a specific focus on the

period spanning two decades, from 1992 to 2011. During the study, the Nigerian capital market was used as a substitute for market capitalization in relation to various economic variables, including Gross Domestic Product (GDP), Foreign Direct Investment Rate, Total New Issue, value of transactions, and Total Listed Stock. According to the results of the multiple regression analysis, the capital market had an insignificant influence on the economy throughout the entire study period. In 2016, Enekwe, Eziedo, and Kenneth conducted a research study that aimed to explore the effect of the Nigerian capital market on Nigeria's economic development over a period of 30 years, from 1982 to 2012.

The research approach utilized in the study was ex-post facto, and the data was analyzed using descriptive statistics, person correction, and multiple regression. Gross Domestic Product (GDP) was used to measure economic growth. In contrast, the capital market variables measured were Market capitalization (MCAP), Number of Listed securities (NLS), and Total value of securities traded (TVST). The findings indicate that market capitalization (MCAP) alone has the most significant influence on economic growth. The study revealed that neither the Number of Listed Securities (NLS) nor the Total Value of Securities Traded (TVST) have a substantial impact on economic development. These results strongly suggest that the capital market is an essential tool for the country's economic growth. Although the study's results indicate that actions in the capital market have a favourable impact on the economy, the effect may not be as significant as anticipated.

Methodology

The study employs longitudinal and causal research design. This entails measuring the cause and effect relationship between the dependent and independent variables over a long period of time. The periods covered by the study are 1990 to 2021. The choice of this period is because it is the period which precedes major economic reforms-Structural Adjustment Programmes (SAP) of the Federal government of Nigeria and political transition from the Military to civilian administration in Nigeria. The data for this study were collected from the Central Bank of Nigeria (CBN) statistical bulletin for various years, the



National Bureau of Statistics (NBS) Quarterly Reports as well as the Nigeria Exchange annual reports.

Model Specification

To examine the impact of capital market development on economic growth in Nigeria, a multiple linear model was built based on Cobb Douglas production function, which was developed by Charles Cobb and Paul Douglas between 1927 and 1947. This model is adopted for this study with slight modifications. It is based on relationship between production outputs and production inputs. The model was used to calculate ratio of inputs of two variables for efficient production and estimate technological change in production methods.

$$\ln Q = a + dT + b_1 \ln L + b_2 \ln K + e \dots \dots \dots (1)$$

Where: Q = Output

T = Technical changes

$$GDP = f(TMC, NOD, VOT, INTR) \dots \dots \dots (1)$$

From the above, the following econometric form of the model is derived:

$$GDP_t = \beta_0 + \beta_1 TMC_t + \beta_2 NOD_t + \beta_3 VOT_t + \beta_4 INTR_t + e \mu_\delta \dots \dots \dots (2)$$

Where:

TMC = Total Market Capitalization

NOD = Number of Deals

VOT = Value of Transaction

INTR = Interest Rate

β_0 = the intercept or the constant

$\beta_1 - \beta_5$ = the co-efficient of the explanatory variables, which are to be estimated in the regression model.

α = constant term

t = time series property

e = Error Term.

The *a priori* expectations are that β_1, β_2 and $\beta_3 > 0$. In line with the theory, it is expected that the coefficients of the

L = Labour

K = Capital

e = Error Term

The model is then slightly modified to capture the relationship between the variables of capital market and their impact on economic growth in Nigeria. The explanatory variables included in the model are; total market capitalization, number of deals, value of transaction and interest rate, while the dependent variable used in the model is Nigeria Gross Domestic Product (GDP). Therefore, the study specified that the Gross Domestic Product of Nigeria is a function of total market capitalization, number of deals, value of transaction and interest rate.

The model Specified can be stated functionally as follows:

dependent variable have positive relationship with economic growth.

Analytical Technique: The study used descriptive statistics to determine the nature of the data set. The Augmented Dickey Fuller (ADF) unit root test for normality and stationarity of the series and the Least Square Method (LSM) of linear regression to analyze the data.

Descriptive Statistics

Table 1 below shows the individual descriptive statistic for gross domestic product (GDP), total market capitalization (TMC), number of deals (NOD), Value of transaction (VOT) and interest rate (INTR) from 1990 to 2021.

Table 1: Descriptive Statistics

	GDP	TMC	NOD	VOT	INTR
Mean	4.320203	9323.951	944335.7	545.6767	18.39546
Median	4.430627	4010.480	877389.0	366.5946	17.96500
Maximum	15.32916	42054.50	3535631.	2350.876	29.80000
Minimum	-2.035120	16.30000	39270.00	0.225400	11.55463
Std. Dev.	4.017181	11433.30	940496.0	600.0844	3.604466
Skewness	0.435367	1.310056	1.201051	1.022381	0.994567
Kurtosis	3.286581	4.125234	3.903652	3.667236	5.076480
Jarque-Bera	1.120408	10.84152	8.782239	6.168342	11.02457



Probability	0.571093	0.004424	0.012387	0.045768	0.004037
Sum	138.2465	298366.4	30218743	17461.65	588.6548
Sum Sq. Dev.	500.2700	4.05E+09	2.74E+13	11163141	402.7574
Observations	32	32	32	32	32

Source: Author’s computation, 2023 via Eview 8.0

The descriptive statistics in table 1 indicate that only TMC, NOD, and VOT have very high mean values in the series distribution. The variables GDP and INTR have relatively low mean values that are evenly distributed. The variable GDP has the lowest mean value, which is 4.320203. The table demonstrates that the TMC, NOD, and VOT have median values that are significantly different from the mean. This indicates a significant level of variation among the data during the specified time frame. With the exception of TMC, NOD, and VOT, the remaining variables exhibit oscillating trends centred around the mean point in the standard deviation value. This is beneficial for the dissemination of the series utilised for estimation and for inference in the study. The skewness analysis indicates that all variables exhibit positive skewness. This implies that the series utilised in the study are skewed towards the

left side. All of the Kurtosis results are more than 3, indicating that they exhibit leptokurtic characteristics, meaning they have fat tails. The values satisfy the criteria for Kurtosis. This indicates that the series follow a normal distribution. At a 5% level of statistical significance, the probability values for the Jarque-Bera statistic indicate that all variables except GDP fail the normality test (GDP: $0.57 > 0.05$; TMC: $0.004 < 0.05$; NOD: $0.0123 < 0.05$; VOT: $0.045 < 0.05$; INTR: $0.0040 < 0.05$). Given that the Jarque-Bera statistics indicate that the series is not normally distributed, it is necessary to do a stationarity test to see if the data is suitable for making valid judgements.

Unit Root Test

The unit root test was conducted using the Augmented Dickey-Fuller (ADF) test to find out whether the variables exhibit unit roots property. The table below shows this:

Table 2: Summary of Unit Root Test Results

Variables	ADF Test Statistic	95% Critical Value	Order of Integration	Probabilities	Remarks
GDP*	3.625785	-2.960411	1(0)	0.0109	Stationary
TMC*	3.210992	-2.960411	1(0)	0.0000	Stationary
NOD*	-3.176870	-2.960411	1(0)	0.0182	Stationary
VOT*	3.174549	-2.960411	1(0)	0.0190	Stationary
CMP*	-3.763559	-2.963972	1(0)	0.0078	Stationary

Source: Author’s computation, 2023 via Eview 8.0* indicates significant at 5% levels.

From table 2, it is seen that all of the variables are stationary at levels. This is confirmed from the ADF test



statistic which is greater than the 95% critical ADF values for all the variables. This shows that the time series properties of the data were relatively stable as there is no

biasedness of information, indicating that the result is reliable.

Table 3: Least Squares Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.528322	4.603048	-1.852755	0.0749
TMC	8.53E-05	0.000101	0.847445	0.4042
NOD	5.53E-06	1.60E-06	3.458012	0.0018
VOT	-0.006699	0.003152	-2.125506	0.0428
INTR	0.570145	0.215790	2.642132	0.0135
R-squared	0.648420	Mean dependent var		4.320203
Adjusted R-squared	0.566704	S.D. dependent var		4.017181
S.E. of regression	3.196869	Akaike info criterion		5.304822
Sum squared resid	275.9392	Schwarz criterion		5.533843
Log likelihood	-79.87715	Hannan-Quinn criter.		5.380736
F-statistic	5.487562	Durbin-Watson stat		1.805164
Prob(F-statistic)	0.002292			

Source: Author's Estimation from EView 8.0, 2023.

The estimated regression result in table 3 shows that the independent variables are able to explain the systematic variation in the dependent variable to the tune of 64.8 % while the remaining 35.2% variation could not be explained by the independent variables. In other words, 64.8% of the systematic variation of the impact of capital market on economic growth in Nigeria is explained by the independent variables. The Adjusted R-squared value of 56.6% shows that the model is well specified to provide explanation for intended objectives of the study.

On the significance of the individual variables, TMC is found to have not significant but positive impact on GDP (TMC Prob. 0.4042>0.05), NOD has significant and positive impact on GDP (NOD Prob. 0.0018<0.05), VOT has significant and negative impact on GDP (VOT Prob. 0.0428< 0.05), INTR has significant and positive impact on GDP (INTR Prob. 0.0135< 0.05).

On the direction of the effect of the independent variables on the dependent variable, TMC has positive and not significant impact on GDP. A unit increase in TMC will result in 8.53% increase in GDP. NOD has very strong significant impact on GDP. A unit increase in NOD has a positive impact of 5.53% on GDP. A unit increase in VOT will result in 0.66% decrease in GDP. Also, a unit increase in INTR will result in 57.01% increase in GDP. TMC, NOD and INTR have positive impact on GDP. This can be mathematically expressed as:

$$GDP = -8.528322 * C + 8.53E-05 * TMC + 5.53E-06 * NOD - 0.006699 * VOT + 0.570145 * INTR$$

Discussion of the Findings

The finding from the empirical testing of hypothesis one indicates that total market capitalization has no significant impact on economic growth in Nigeria. This finding of the study is consistent with Donwa and Odia (2010) who investigated the impact of Nigerian capital market on her



socio economic development and discovered in their study that market capitalization as a variable in the study has no significant impact on socio economic growth in Nigeria. The result of the empirical testing from hypothesis two revealed that number of deals has positive and significant impact on economic growth in Nigeria. The finding is in line with Udoet, al. (2021) who examined capital market development and economic growth in Nigeria and found out that there is a significant relationship between capital market and economic growth in Nigeria. Also, it was observed from the study especially from the result of hypothesis three empirical test that there is negative and significant impact of value of transaction on economic growth in Nigeria. The finding is however contrary to Afolabi (2015) who examined the impact of Nigerian capital market on the Nigerian economy.

On the significance of interest rate to economic growth in Nigeria, the empirical testing of hypothesis four reveal that interest rate has a very strong significant impact on economic growth in Nigeria. The finding is validated in extant literature that the level of interest rate in the economy determines the level of economic growth. The theoretical foundation is to the effect that the relationship between interest rate and economic growth is inverse. That is to say, the higher the level of interest rate, the lower the level of economic activities as investor would find it difficult to borrow for investments which in turn reduce economic activities.

Conclusion and Recommendations

Based on the findings from the empirical testing of the hypotheses, several conclusions were drawn regarding the impact of the Nigerian capital market on economic growth: The study found that total market capitalization has no significant impact on economic growth in Nigeria. This suggests that the size of the capital market, as measured by market capitalization, does not necessarily translate to economic growth. This finding is consistent with previous research by Donwa and Odia (2010). The study found that the number of deals has a positive and significant impact on economic growth in Nigeria. This implies that an increase in the number of transactions in the capital market is associated with higher economic growth. This finding is supported by Udo et al. (2021), who also found a

significant relationship between capital market development and economic growth in Nigeria. Contrary to expectations, the study found a negative and significant impact of the value of transactions on economic growth in Nigeria. This suggests that a higher value of transactions in the capital market is associated with lower economic growth. This finding is contrary to Afolabi's (2015) findings and warrants further investigation.

The study found that interest rate has a very strong and significant impact on economic growth in Nigeria. This is consistent with existing literature, which suggests that the level of interest rates in an economy can significantly influence economic growth. The theoretical foundation for this relationship is that higher interest rates can deter investment, leading to lower economic activity.

In conclusion, the findings suggest that while the size of the capital market may not directly impact economic growth, the number of transactions and interest rates play significant roles in determining economic growth in Nigeria. These findings have implications for policymakers and suggest that efforts to promote economic growth should focus on improving market efficiency, increasing the number of transactions, and managing interest rates effectively.

Based on the findings of the study, the following recommendations are therefore made;

- i. The Securities and Exchange Commission (SEC) as a regulator of the capital market in Nigeria should formulate policies aimed at attracting more investments into the market. This would boost total market capitalisation as more securities are traded in the market.
- ii. The Securities and Exchange Commission (SEC) as the sole regulator of the capital market in Nigeria should provide a level playing ground for more securities to be listed. This would attract more corporate bodies into the market thereby boosting the number of deals in the market.
- iii. Corporate organizations should be encouraged and educated on the significance of having their securities listed and traded in the market. Doing this would boost the value of transaction in the market enhancing market liquidity.
- iv. The Central Bank of Nigeria (CBN) should regularly monitor the macroeconomic environment in



order to know the appropriate time to either upwardly or downwardly review interest rate as interest rate is a critical factor in the level of investment and economic activities prevailing in the economy at any point in time.

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