



## ASSESSING THE IMPACT OF CAPITAL MARKET ON ECONOMIC GROWTH IN NIGERIA: EVIDENCE FROM ARDL APPROACH

<sup>1</sup> Ibrahim Imam\*, <sup>2</sup> Yusuf Yunusa, <sup>3</sup> Moshood O. Habeeb, <sup>4</sup> Gideon O. Ibeakuzie, <sup>5</sup> Ayuba O. Yisau  
<sup>6</sup> Praises V. Uwua & <sup>7</sup> Muhammad Usman  
\*Corresponding authors' email: [olabode216@gmail.com](mailto:olabode216@gmail.com)

<sup>1-4</sup> Department of Economics, Yobe State University – Nigeria

<sup>5</sup> Department of Economics and Development Studies, Federal University of Kashere, Gombe State – Nigeria

<sup>6</sup> Department of Business Administration, Federal Polytechnics, Monguno, Borno State – Nigeria

<sup>7</sup> Department of Accounting, University of Maiduguri, Borno State – Nigeria

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### ABSTRACT

*The prevailing challenges in the world financial markets, especially the capital market justify the various forms of reforms going on around the World. Conversely, this study examines the impact of Capital Market on Economic growth in Nigeria for the period 1974 – 2024. The study adopted Autoregressive Distributive Lag (ARDL) model and applied on time-series data for Nigeria. The findings of the study show that the capital market has negative and insignificant, while capital is negative but significant. Listed equities are positive but not significant. Labour is positive but not significant. Furthermore, total new issues, volume of transaction are positive and significantly impacted on the Nigerian economy in the period of the study. The study therefore, recommends among others that there is a need to introduce and implement policies that will increase the level and size of Market Capitalization in the Nigerian Capital Market by the government through the Central Bank, the Nigerian Stock Exchange (NSE) and Security and Exchange Commission (SEC), as increase in Market Capitalization will surely increase fund availability for desired investment, which in turn will increase productivity of the nation. Investors should be encouraged with necessary incentives so as to increase the investment of market capitalization value being traded upon in Nigeria, thus widening the coast of investment opportunities as well as increasing productivity.*

**Keywords:** Capital Market, Economic Growth, ARDL

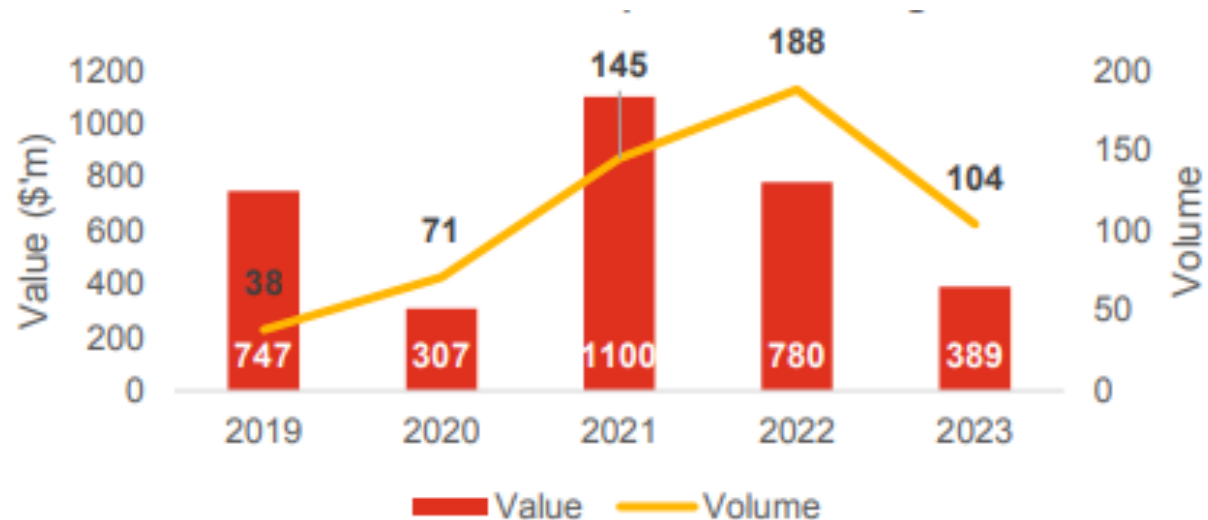
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### 1.0 Introduction

The Nigerian Financial system as in many other countries of the world is broadly divided into two distinct market segments, the Money market and the Capital market. While the former facilitates money flows in the short term, the latter provides the avenue for money creation and exchange in the medium to long term. The Capital market can be differentiated into the primary market where funds are raised to finance businesses and project, and the secondary markets for exchange of pre-existing funds among investors. Central Bank of Nigeria regulates the money market, while the Securities and Exchange Commission oversees activities in the capital market. Other players in the capital market include; Nigerian Stock Exchange, Stock Brokers, Registrars, Reporting Accountants, Solicitors to an issue, Auditors, Receiving Agents, Under-writers, and the Investing Public. The capital market facilitates capital formation by mobilizing funds from the surplus segment of the economy to the deficit segment through financial intermediaries which include Deposit Money Banks, Insurance companies, pension funds, unit trust, issuing houses and merchant banks. Funds so mobilized are invested in several sectors of the economy thereby facilitating economic growth. Thus, capital market deals with ordinary

stocks, shares and debentures of corporations, bonds and securities of governments (Jhingan, 2005). Similarly, the market serves a broad range of classes, including different levels of government, corporate bodies and individuals within and outside the country. The capital market mobilizes long-term debt and equity financing for investments in long-term assets. Capital markets also help in boost the financial system as well as improve the economic growth of a country (Daniel, 2004).

The rate of economic growth is always limited a by shortage of productive factors and if any scarce factor associated with development should be singled out, it will be finance (capital). The capital market is a market which deals with long term loan. It comprises a complex of institutions and mechanisms through which medium-term and long-term funds are pooled and made available to individuals, businessmen and governments. The impact of the capital market is determined by a number of elements, which include how financial assets are priced, such as the size of the stock market, market capitalization, number of listed equities, transactions in buying and selling of securities (liquidity), which in this case refers to the volume of transactions and new issues of securities.

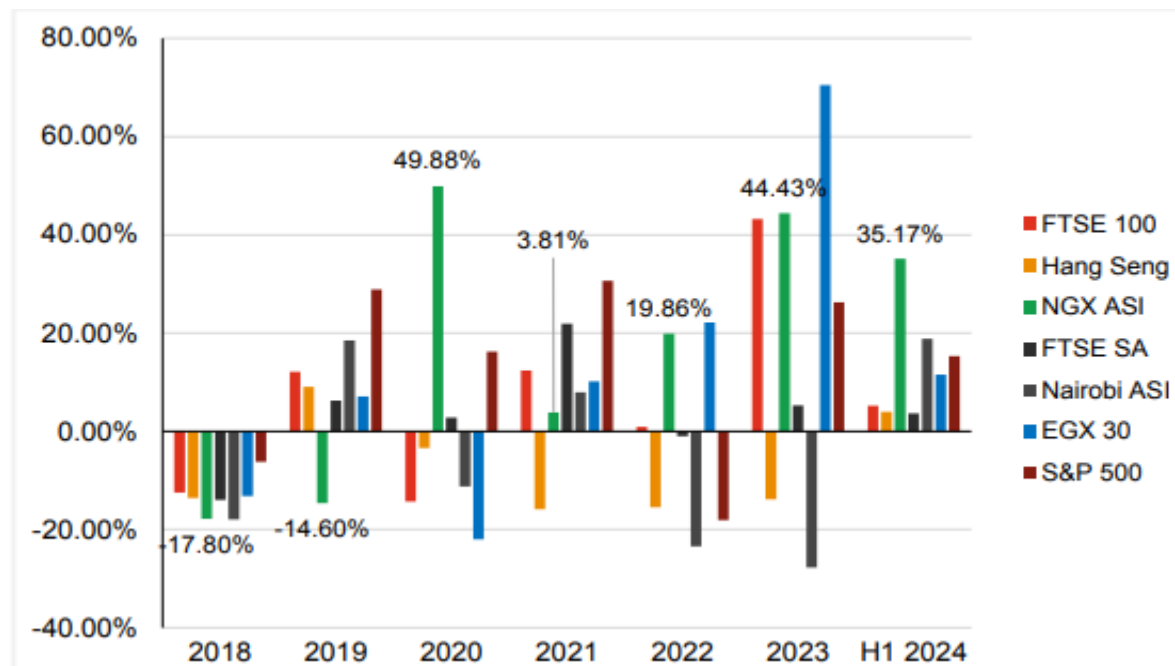


Source: AVCA, Partech

Figure1: Trend of Venture Capital Deals in Nigeria

Nigeria has one of the largest private capital markets in West Africa and for the last 5 years, has been among the top 10 primary destinations for early-stage venture capital investments in both volume and value. However, the venture capital market in Nigeria and Africa as a whole, has experienced a decline in transactions in the past year driven by geopolitical tensions, unsupported company valuations and economic instability, prompting investors to make strategic adjustments as well as changes in investment patterns and deal location. The Central Bank of Nigeria (CBN) recently announced new capital requirements for commercial, merchant and noninterest banks in Nigeria. This reform is part of the CBN's strategy to enhance the banking sector's resilience and attract more investments. The new definition of minimum capital includes only paid-up capital and share premium, excluding retained earnings and other forms of capital. Nigeria has seen a notable exit of multinational corporations in the past year due to challenging economic realities affecting the business environment and the unavailability of foreign exchange to cover resource input needs.

Between August 2023 and July 2024, some companies have exited or announced plans to exit their operations in Nigeria.



Source: AVCA, Partech

Figure 2: The Trend of Nigerian Equities Market

**Market Returns (NGX)** The Nigerian equities market (NGX) ranked 1st in the African stock market with a 35.17% increase in H1 2024 relative to Q4 2023. The NGX capitalization increased by 38.33% in H1 2024 (to N56.602 trillion) compared to Q4 2023 (N40.918 trillion), driven by new listings, significant acquisitions, and increase in share prices. The NGX performed better than several of its peers in H1 2024, recovering from its second position in Q4 2023. Exchanges around the world recorded positive market returns, driven majorly by the growing interest in equities of tech companies. The FTSE 100 (5.20%), Hang Seng (3.96%), FTSE SA (3.66%), Nairobi ASI (18.87%), EGX 30 (11.54%) and S&P 500 (15.29%) all recorded positive returns in H1 2024. Nairobi ASI and Hang Seng recovered from Dec 2023 negative growth position. NGX Banking ASI dropped by 7.4% to 830.20 in June 2024 from 897.20 in Dec 2023, due to the uncertainty associated with the CBN recapitalization directive in March 2024. Some banks made public offers and rights issue programmes in the Nigerian market, while others are seeking international capital to meet up with the new requirement.

In view of the above, this study seeks to investigate the impact of the capital market and economic growth. It is observed that, there a plethora of studies on the impact of the capital market on economic in Nigeria (Abu 2017; Adamu 2018; Ademola et'al 2016; Brasoveanu et al. 2015; Chinwuba 2017; Levine & Zervos 2001; Vazakidis 2016). However, we noticed that the majority of these studies concentrated their analysis using few capital market related variables like market capitalization, interest rate, stock prices, total new issues and equity, but have not taken into cognizance variables such as capital, labour and volume of transactions. These excluded variables are believed to have a very important role in explaining the relationship between the capital market and economic growth. Furthermore, it is also observed that the previous studies use a small sample size in their analysis, which can limit in giving a better true picture of the scenario. Thus, this study attempts to extend the study period to capture both past and recent events in the Nigerian capital market. Lastly, the study

applied sound and robust methodological tools for analysis for efficient and reliable results. Hence, this study traces to cover the above gap identified in the literature by conducting an anatomy of the relationship between the capital market and economic growth. Thus, this study is divided into five sections. Section one gives a general overview of the study. Section two reviews various literatures related to this study. It includes various concepts, theoretical issues, empirical studies of research relating to this study. The third section focuses on the research methodology it includes, technique of estimation, model specification and it also employs statistical technique in finding statistical relationship between the variables.

## **2.0 Literature Review**

### **2.1 Conceptual Clarifications**

#### **2.1.1 The Concept of Capital Market**

The capital market is an integral part of the financial system that provides an efficient delivery mechanism for mobilization and allocation, management and distribution of long-term funds for investment projects (Alile & Anao, 2023).

Sule and Momoh (2022) note that the capital market is the medium through which funds are mobilized and channeled efficiently from savers to users of funds. A capital market is a market for securities (debtor equity), where business enterprises (companies) the government can raise long-term funds (Sullivan & Sheffrin, 2022). It is defined as a market in which money is provided for periods longer than a year, as the raising of short-term funds takes place in other markets, which in this case is the money market. The capital market includes the stock market such as equity securities and the bond market which is about debt. The financial regulators of the capital market such as the Central Bank of Nigeria, Securities and Exchange Commission (SEC) oversee the capital markets in their designated jurisdiction to ensure that investors are protected against fraud (Afolabi, 2021). Ekezie (2022) notes that the capital market is the market for dealings in terms of Lending and borrowing in long-term loan funds. Market capitalization is one of the basic measures of the worth of a publicly-traded company; it is a way of determining the actual value of a company.

#### **2.1.2 Market Capitalization**

Market capitalization represents the aggregate value of stock size (Adewoyin, 2022). Market capitalization is the measurement of the size of businesses and corporations that are equal to the market share price times the number of shares in this case shares that have been authorized, issued, and purchased by investors of a publicly traded company (Al-Faki, 2022). Market capitalization is calculated by multiplying the shares of the company by the price per share.

#### **2.1.3 Economic Growth**

Okpara (2022) opined that economic growth is the increase in the amount of goods and services produced in an economy which is measured by positive changes in a country's gross domestic product. Economic growth is the increase in national income, as reflected in the capacity of production of goods and services regardless of whether the increase is on a larger or smaller population growth rate (Anyanwu, 2023). Economic growth is measured by an increase in capital stock, advancement in technology and improvement in the quality and level of literacy.

## 2.2 Theoretical Literature Review

There are plethora of theories that emphasize the importance of capital in the process of growth and development. For instance, the neoclassical growth theory also known as the Solow-Swan growth theory or exogenous growth theory is a class economic model of long-run economic growth. The growth theory explains long-run economic growth by looking at productivity, capital accumulation, population growth and technological progress (Solow & Swan, 1986).

Similarly, Romer (1986) placed greater emphasis on the concept of human capital. How workers with greater knowledge, education and training can help to increase rates of technological advancement. They place greater importance on the need for governments to actively encourage technological innovation. Furthermore, Domar (1946) opines that endogenous growth theory is about investment in human capital, size of capital stock, innovation and knowledge. All these are significant contributors to economic growth. The theory focuses on positive externalities and spillover effect of a knowledge-based economy which will lead to economic development.

Portfolio theory is about finding the balance between maximizing your return and minimizing your risk. The objective is to select your investments in such a way as to diversify your risks while not reducing your expected return. While it does not replace the role of an informed investor Markowitz (1952). Similarly, efficient market hypothesis (EMH) explains how financial markets are efficient or prices on traded assets that have already reflected all known information and therefore are unbiased because they represent the collective beliefs of all investors about future prospects (Fama, 1965). The financial liberalization hypothesis sees the role of government intervention in the financial markets as a major constraint to savings mobilization, investment, and growth. Government's role in controlling Interest rates and directing credit to priority sectors of the economy in developing countries inhibits savings mobilization and impedes the holding of financial assets, capital formation, and economic growth. Hamilton (1999).

However, this study adopts a modified version of the Solow-swan model. This is informed by the fact that the Solow-swan growth theory links capital accumulation, population growth, technological progress, capital market growth and innovation to economic growth unlike exogenous growth theory which concentrates only on productivity and not on economic growth.

## 2.3 Empirical Review

Several studies on the capital market and economic growth produce mixed results. These mixed findings include among others.

In Romania, Brasoveanu, et al. (2023), study the correlation between capital market development and economic growth for the period 2006 to 2021. The result indicates that capital market development is positively correlated with economic growth by way of feed-back effect.

Bolbol et al (2022), indicates that capital market development has contributed to the economic growth of Egypt.

Levine and Zervos (2022), using a cross-country pooled time series regression to evaluate the relationship between capital market and economic growth for over forty one countries 1n 1986-2021, found that stock market development is positively correlated with measures of financial intermediary development. On the whole, the data suggests that capital market

development is positively associated with economic growth. They found that the instrumental variable procedures indicate a strong connection between predetermined component of capital market development and long-run growth.

King and Swail (2017) study 77 countries over the period 1980 to 2016, systematically controlling for other factors affecting long-run growth, examined the capital accumulation and productivity growth channels, constructed additional measures of the level of financial development, and analyzed whether or not the level of capital market development predicts long-run economic growth. In terms of measures of financial development, they first examine the depth of financial intermediaries which is simply a measure of the size of financial intermediaries. It equals liquid liabilities of the financial system divided by GDP. The intuition underlying this measure is that banks are more likely to provide financial functions than central banks.

There are two notable weaknesses with this measure, however. Banks are not the only financial intermediaries providing valuable financial functions and banks may simply lend to the government or public enterprises. They also examine the amount of credit extended to private enterprises as this affects economic growth. The assumption underlying this measure is that financial systems that allocate more credit to private firms are more engaged in researching firms, exerting corporate control, providing risk management services, mobilizing savings, and facilitating transactions than financial systems that simply channel credit to the government or state-owned enterprises. They observed a strong positive relationship between each of the financial market development indicators and economic growth.

However, this model witnessed a great set back because it both ignores the issue of causality and the numbers of countries used in the model are few. Finally, one cannot use such population as it has been used in the study to make a conclusion about a general phenomenon because the countries involved are diverse in nature.

Goldsmith (2022) predicated his path breaking study of financial market development and growth by investigating the effect of the financial structure and development on the economic growth of a country. Thus, he sought to assess whether or not finance exerts a causal influence on growth or the mixture of markets and intermediaries operating in an economy influence economic growth. Toward this end, he carefully compiled data on 35 countries over the period 1975 to 2021 on the value of financial intermediary assets as a share of economic output.

He suggests that the size of the financial intermediary is positively correlated with the quality of financial functions provided by the financial sector. He graphically documents a positive correlation between financial development and the level of economic activity.

Furthermore, he ultimately does not take a stand on whether financial development causes growth or not. In terms of the relationship between economic growth and the structure of the financial system, he is unable to provide much cross-country evidence because of the absence of data on securities market's development for a broad range of countries. The model seems to be characterized by lots of weaknesses which fault the work. Some of these include the following: It does not examine whether financial development is associated with productivity growth and capital accumulation or not. The study's opinion about the close association between the financial system size and growth does not identify the direction of causality.

In France, Vazakidis and Adamopoulos (2016), employed co integration, Granger causality test and vector error correction model, to examine the causal nexus between capital market

and economic growth for period of 1980 to 2007. The findings reveal that there exists a significant positive association between economic growth and capital.

In Nigeria, Abu (2017) examines whether capital market development raises economic growth in employing the error correction approach. The econometric results indicate that capital market development raises economic growth. The paper recommends SEC to facilitate the growth of the market, restore the confidence of stock market participants and safeguard the interest of shareholders by checking sharp practices of market operators.

Osinubi and Amaghionyeodiwe (2021) examine the relationship between Nigerian capital market and economic growth during the period 1980 to 2000, using ordinary least square regression. The results show that there is a positive relationship between the capital market development and economic growth. They therefore suggested that government should pursue policies that are geared toward rapid development of the capital market.

Adamu (2018), examine the roles of capital market on Nigeria's economic growth, using Granger-causality test and regression analysis. The study reveals a one-way causality between Economic growth and market turnover. Again, a positive and significant relationship between Economic growth and market turnover ratio. The study suggests that government should encourage the development of capital market since it has a positive effect on economic growth.

Chinwuba and Amos (2023), examine the impact of the Nigerian capital market performance on the economic development of Nigeria by using the Ordinary least Square regression model. The result indicates that the performance of the capital market impact positively on the economic growth of Nigeria.

Hakeem, Kamilu, Rasaki and Sanni (2022) examine the relationship between capital market and economic growth. The result shows that there has been a steady rise in the macro economic variables considered i.e. gross domestic product, market capitalization, total shares traded, public capital expenditure, gross capital formation, openness (export plus import divided by GDP) and FDI.

In another study by Adedayo, E. and Taiwo (2021) which seek to evaluate the contribution of capital market to the growth of Nigeria's economy. The result shows that market capitalization rate, total value of listed securities, accumulated savings and capital formation are significant macroeconomic determinants factors of economic growth in Nigeria.

Ademola, F., Kayode, M., Kehinde, T. (2022) investigate the impact of capital market on economic growth in Nigeria using annual data from 1981 to 2020. The results revealed that two variables are statistically significant at 10% and these variables are market index and market capitalization. Also the coefficient value of these two variables suggest that a percentage increase in market index and market capitalization will bring about on the average 33.7 and 44.8 percentage increase in real GDP. However, given the mixed divergent findings of results from various literature reviewed, this call for the need to conduct a fresh study in this area of research. Thus, the present study plans to cover the gaps identified in the literature as noted in the preceding section.

### **3.0 Methodology**

#### **3.1 Sources of Data Collection**

This study employed a time series data from 1970 – 2024 and were sourced from the Nigerian Stock Exchange (NSE), Security and Exchange Commission (SEC) and Central Bank of Nigeria (CBN) Statistical bulletin. In other to measure the impact of capital market on economic

growth of Nigeria, we used their proxies as variables of interest. That is, growth rate of GDP was used to proxy economic growth. Capital market as proxy to market capitalization.

### 3.2 Model Specification

The study adopted the Solow model based on a theory of economic growth. Here we present two formal versions of the mathematics of the model. The first takes as its focus the capital accumulation equation and explains how the capital stock evolves in the economy. The second follows the exposition of the section and is based around the derivation of the balanced growth path. The mathematical expression of this relationship is:

$$y = Af(k) \quad (1)$$

Where  $f(k)$  means that output per worker depends on capital per worker. We assume that  $f(k)$  has the properties that more capital leads to more output per capita at a diminishing rate. As an example, suppose:

$$y = Ak^{1/3} \quad (2)$$

The second component is capital accumulation. If we let  $k_t$  be the amount of capital at the start of year  $t$ , then we know that:

$$k_{t+1} = k_t(1 - \delta) + i_t \quad (3)$$

This expression shows how the capital stock changes over time. Here  $\delta$  is the rate of physical depreciation so that between year  $t$  and year  $t + 1$ ,  $\delta k_t$  units of capital are lost from depreciation. But during year  $t$ , there is investment ( $i_t$ ) that yields new capital in the year.

Along with the per capita production function, we can relate investment and saving to the level of capital:

$$i_t = S Af(k_t) \quad (4)$$

We can then write the equation for the evolution of the capital stock as follows:

$$K_{t+1} = k_t(1 - \delta) + S Af(k_t) \quad (5)$$

Once we have specified the function  $f(k)$ , we can follow the evolution of the capital stock over time. There is a particular level of the capital stock such that if the economy accumulates that amount of capital, it stays at that level of capital. We call this the steady state level of capital, denoted  $k^*$ .

The economy will tend toward the per capita capital stock  $k^*$ . To be more specific, the steady state level of capital solves the following equation:

$$k^* = k^*(1 - \delta) + S Af(k^*) \quad (6)$$

This means that at the steady state, net investment is exactly zero. The property of stability means that if the current capital stock is below  $k^*$ , the economy will accumulate capital so that



$$k_{t+1} > k_t \quad (7)$$

And if the current capital stock is above  $k^*$ , the economy will de-accumulate capital so that  $k_{t+1} < k_t$ . In the Solow Growth Model, we use the notation  $g_x$  to represent the growth rate of a variable  $x$ ; that is,

$$Y = K^\alpha (HL)^{1-\alpha} \quad (8)$$

If we apply the rules of growth rates we get the following expression:

$$gY = \alpha gK + (1-\alpha)(gL + gH) + gA \quad (9)$$

The proof that economies will converge to the balanced-growth ratio of capital to GDP is relatively straightforward. We want to show that if  $K/Y < k^*$  then capital grows faster than output. If capital is growing faster than output,  $gK - gY > 0$ .

Generally Solow's model equation is all combined and mathematically expressed as:

$$(1-\alpha)gY = \alpha[gK - gY] + (1-\alpha)[gL + gH] + gA = \alpha[gK - gY] + (1-\alpha)[gL + gH] + gA \quad (10)$$

The model in Equation (11) can be transformed by including other important variables as expressed in equation (12) hence; we specify the model of this study in a functional form using the selected variables as:

$$GDP = f(CAP, LAB, MCAP, TNI, VLT, LEQ) \quad (11)$$

This equation is linearly expressed as;

$$GDP_t = \alpha_0 + \beta_1 CAP_t + \beta_2 LAB_t + \beta_3 MCAP_t + \beta_4 TNI_t + \beta_5 VLT_t + \beta_6 LEQ_t + \varepsilon_t \quad (12)$$

Where: GDP = Gross Domestic Product  $\alpha_0$  = Regression Constant  $\beta_1$ –  $\beta_6$  = Coefficient of independent variables. CAP= Capital LAB= labour MCAP = Market Capitalization TNI = Total New Issues VLT = Volume of Transactions LE = Listed Equities,  $\varepsilon$  = Stochastic Error term (Disturbance term)  $t$  = Time series.

The log of the model is expressed as:

$$\ln GDP = \alpha_0 + \beta_1 \ln CAP_t + \beta_2 LAB_t + \beta_3 MCAP_t + \beta_4 TNI_t + \beta_5 VLT_t + \beta_6 LEQ_t + \varepsilon_t \quad (13)$$

Where GDP is the gross domestic product, CAP is the capital, LAB is the labour,

MCAP is the market capitalization, TNI is the total new issues, VLT is the total volume of transaction and LEQ is the listed equity.  $\beta_1$  to  $\beta_6$  is the coefficient of the lagged-dependent variable. It provides the rate of self-perpetuating adjustment of the capital market.

$\beta_1$  to  $\beta_6$  are coefficients of the explanatory variables expressed in logarithm.

### 3.3 Tools of Data Analysis

Here, the study attempts to estimate procedure for the study which is the multivariate regression approach starting from Unit root test for stationary using ADF and Philips-Perron tests based on Dickey and Fuller (1979) and Philips and Perron (1987) respectively. ARDL for the determination of the long run relationship among integrated variables of order  $I(0)$  and  $I(1)$  and the short and long run dynamic nature. The rationale behind this methodology is that it performs better than those other conventional techniques when the sample size is small and when the variables are of different order of integration. Furthermore, the study plans to carry out diagnostic tests such as serial correlation, Heteroscedasticity, normality and mis-specification test in order to ensure robustness of results.

### 4.0 Result and Discussions

Prior to the estimating ARDL bound test approach to co integration, the study first tested for the stationary status of all the selected variables to measure their order of integration. This to avoid regressing of variables at order  $I(2)$  given the fact that the computed F statistics developed by Pesaran et al. (2001) are valid only when the variables are either  $I(0)$  and  $I(1)$ . Thus, the study employed Augmented Dickey Fuller and Phillips Perron test followed by ARDL approach to co integration.

Table 1: ADF Unit Root Test

Variables	ADF Statistics	McKinnon Critical Value	Probability Value	Order of Integration
lnGDP	-7.661	1% = -3.574	0.000	I(1)
lnCAP	-4.911	1% = -4.166	0.013	1(1)
lnLAB	-6.335	1% = -3.578	0.000	I(1)
lnMCAP	-7.458	1% = -3.574	0.000	I(1)
lnTNI	-8.567	1% = -3.574	0.000	I(1)
lnVLT	-8.048	1% = -3.574	0.000	I(1)
lnLEQ	-6.635	1% = -3.578	0.000	I(1)

Authors' Computation Using Eview 10

The results of the unit root tests show the presence of a unit root (non-stationary) tested against alternative hypothesis of the absence of a unit root (stationary). On the application of the ADF for the variables to be stationary, the ADF statistic (in absolute terms) must be greater than the standard critical value at the levels of significance: 1%, 5% and 10%. The ADF result shows that the GDP, capital, labour, market capitalization, total new issue, volume of transaction and listed equity are non-stationary at level but they became stationary after taking first difference of the series at integration of order one i.e  $I(1)$  at 1% significance levels respectively.

Table 2: Phillips Perron Unit Root Test

Variables	PP Statistics	McKinnon Critical Value	Probability Value	Order of Integration
lnGDP	-7.738	1% = -3.574	0.000	I(1)
lnCAP	-4.529	1% = -3.578	0.006	1(1)

lnLAB	-9.352	1% = -3.574	0.000	I(1)
lnMCAP	-7.503	1% = -3.574	0.000	I(1)
lnTNI	-8.939	1% = -3.574	0.000	I(1)
lnVLT	-8.157	1% = -3.574	0.000	I(1)
lnLEQ	-8.261	1% = -3.574	0.000	I(1)

Authors' Computation Using Eview 10

Philips- Perron test of the unit root is also applied and this can be seen by comparing the Philips-Perron test statistics with the critical values (in absolute terms) at 1% levels of significance. The Philips-Perron result shows that the GDP, capital, labour, market capitalization, total new issue, volume of transaction and listed equity are all not stationary at level but they became stationary at integration of order one i.e. I(1) at 1% significance levels respectively.

Table 3: ARDL Bounds Test Approach to Co-integration

Significant Levels	Critical Values	
	Lower Bound	Upper Bound
10%	2.309	3.507
5%	2.726	3.057
1%	3.656	5.331
<b>F-Statistics</b>	3.542	<b>K=6</b>

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Table 3 shows the result of bounds test approach to co-integration. It can be seen from the table that the value of F. statistic is 3.542 which is greater than the upper critical values at 5% and 10% levels of significance. This implies that the null hypothesis of no co-integration between external debt and economic growth is rejected, and hence there exists a long run or co-integrating relationship between capital market and economic growth in Nigeria over the period under review. Having established the existence of the long run relationship between capital market and economic growth, the ARDL co-integration approach can now be applied to estimate the individual long run relationship between the variables.

Table 4: Estimated Long run Coefficient Using ARDL Approach

ARDL (1, 2, 0, 0, 0, 1) Selected based on AIC 50 observation used for estimation from 1974 to 2023				
Variables	Coefficient	Standard error	T.Statistic	P. values
lnGDP	-1.949148	0.590711	-3.299664	0.0021
lnCAP	-0.054120	0.021318	-2.538719	0.0155
lnLAB	0.392250	0.140972	2.782470	0.0084
lnMCAP	-0.000201	0.004570	-0.043890	0.9652
lnTNI	0.018659	0.005299	3.521488	0.0012
lnVLT	10.71580	0.317635	33.73618	0.0000
lnLEQ	0.000185	0.000116	1.595115	0.1192

Authors' Computation Using Eview 10

From table 4 it can be deduced that in the long run, capital is negatively related with economic growth but significant. This implies that there is strong negative and significant relationship

between capitals and economic growth in Nigeria. This means that an increase in the level of capital reduces the economic performance of Nigeria. This runs contrary to the theoretical postulation by the neoclassical and endogenous theories that capital is a necessary variable for promoting growth in a country. labour is found to have positive and insignificant relationships with the level of economic growth. That is, is not a strong factor in explaining the economic growth of Nigeria. This is because is not judiciously utilizing in Nigeria due to the fact that unemployment and underemployment of labour in Nigeria is increasing.

Furthermore, market capitalization is negatively related to gross domestic product and not significant. Implying that market capitalization and decrease in the aids of economic growth. Total new issue is positively related to gross domestic product and significant. This is so as market capitalization decreases as total new issues increases as a result of increased domestic savings channeled into investment to boost economic activities level. The volume of transaction is positive and significant to gross domestic product. This means that volume of transaction has a positive impact to gross domestic product and aid economic growth. Listed equity is positive and significant. This means that listed equity aid economic growth. Since the long run relationship is established, the next step is to estimate the short run dynamic within the framework of ARDL model.

Table 5: Estimated Short run Error Correction Model Using ARDL Approach

ARDL (1, 2, 0, 0, 0, 1) Selected based on AIC 50 observation used for estimation from 1974 to 2023				
$\Delta$ Variables	Coefficient	Standard error	T.Statistic	P. values
$\Delta \ln \text{GDP}$	-1.949148	0.363952	-5.355501	0.0000
$\Delta \ln \text{CAP}$	0.011906	0.005820	2.045751	0.0479
$\Delta \ln \text{LAB}$	0.143556	0.064907	2.211732	0.0332
$\Delta \ln \text{MCAP}$	-7.3405	0.002086	-0.035188	0.9721
$\Delta \ln \text{TNI}$	0.006829	0.002768	2.467180	0.0184
$\Delta \ln \text{VLT}$	10.38595	0.111527	93.12520	0.0000
$\Delta \ln \text{LEQ}$	6.7605	7.5205	0.898418	0.3748
ECM	-0.365980	0.068183	-5.367634	0.0000

From table 5 it can be noted that the short-run estimate of the impact of capital market on economic growth confirms the long-run finding as it indicates a negatively significant relationship between capital market and economic growth in the short run. Also, in the short run, capital has a significant positive relationship with economic growth. Similarly total new issues, volume of transaction and listed equity have a significant positive relationship with economic growth.

Additionally, labour has positive effects on economic growth as in the case of long run. But while market capitalization is not significant, Moreover, the estimated error correction coefficient is negative and significant at one percent level of significant ensuring that the adjustment process from the short run deviation is very fast. This suggests that the model adjusts itself towards equilibrium by 81 percent annually. Thus, the model has high convergent adjustment rate.

Diagnostic and significance tests were conducted on the variables in order to examine the robustness of the ARDL estimation. The results are presented below:

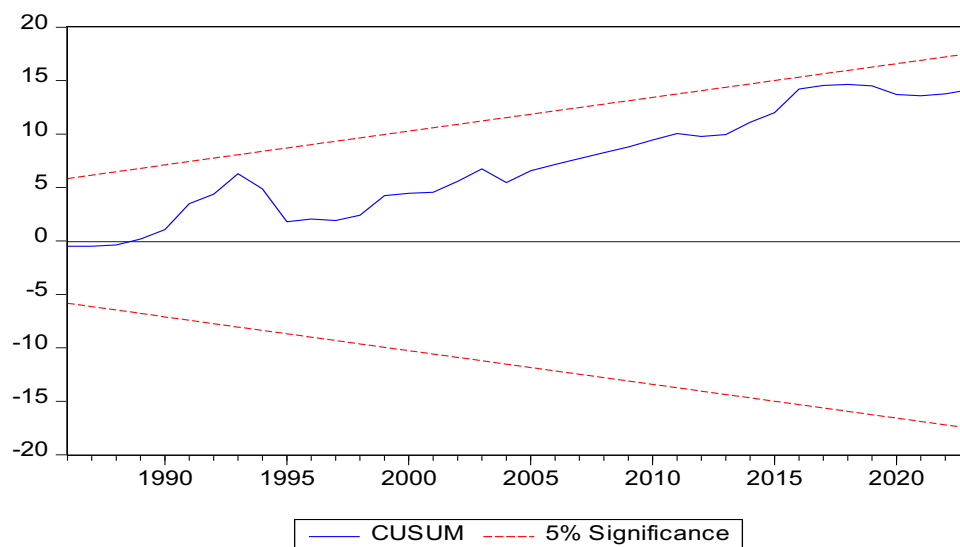
Table 6: Model Diagnosis Test

Diagnosis test techniques	Statistics	Probabilities
Serial Correlation LM test	1.322706	0.2794
Heteroscedasticity test	1.983993	0.640
Normality test	9.561656	0.8389

Authors' Computation Using Eview 10

From table 6 it can be seen that the model passes all the diagnostic tests. It shows that there is no evidence of serial correlation and the model is normally distributed. In the same vein, the model passes the tests for Heteroscedasticity and linearity.

At this juncture, the study tested for the stability of the model. The techniques applied are cumulative sum (CUSUM) test proposed by Brown et al. (1975). If the plot of the CUSUM remains within the critical limits of 5 percent significance level, the null hypothesis that all the coefficients are stable cannot be rejected. However, if one or another of the parallel line crosses, then the null hypothesis of parameters stability is rejected at 5 percent significant level. Figure 1 shows the result of CUSUM test. It indicates evidence of stability of the model as the critical line remains within the boundary at 5 percent significance level.



## 5.0 Conclusion and Recommendations

This study examines the impact of Capital Market on Economic growth in Nigeria for the period 1974 – 2024. Basically, the first section comprises of introduction given an overview of the background of the study. The second section captures the whole projects Literature review, beginning with the conceptual issues, meaning and concepts of capital market and economic growth, the third section reveals the methodology of the study, sources of data collection, model specification, and tools of data analysis. The fourth section gives an overview of the data presentation and analysis, it also explains the various findings. Thus, the study adopted Autoregressive Distributive Lag (ARDL) model and applied on time-series data for Nigeria. The findings of the study show that the capital market has negative and insignificant, while capital is negative but significant. Listed equities are positive but not

significant. Labour is positive but not significant. Furthermore, total new issues, volume of transaction are positive and significantly impacted on the Nigerian economy in the period of the study. The capital market is a highly specialized and organized financial market and has no effect on economic growth.

Based on the findings from the study we recommend the following:

1. The Nigerian Stock Exchange should boost the value of transactions by introducing more derivatives, convertibles, futures, and options, while also reviewing trading factors hindering growth to ensure active trading.
2. The number of listed securities in the Nigerian capital market should be increased by implementing regulatory laws to protect investors, boosting their confidence to retain and expand their investments, thereby increasing the all-share index and positively impacting economic growth.
3. The government should employ appropriate trade policies to foster Nigeria's economic growth.
4. that there is need to introduce and implement policies that will increase the level and size of Market Capitalization in the Nigerian Capital Market by the government through the Central Bank as increase in Market Capitalization will surely increase fund availability for desired investment which in turn will increase productivity of the Nation.
5. This goes beyond mere regulatory measures but should include but not limited to punitive measures to check fraud and other malpractices that betray the trust from investor. Investors should be encouraged with necessary incentives so as to increase the investment of market capitalization value being traded upon in Nigeria, thus widening the coast of investment opportunities as well as increasing productivity.

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