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# INVESTIGATING THE RELATIONSHIP BETWEEN STOCK MARKET DEVELOPMENT AND ECONOMIC GROWTH IN NIGERIA

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**ABSTRACT**

*Growth theories concede that capital markets have a positive influence on economic growth. However, empirical evidence is divided on the possible impact of stock market development on economic growth in various economies including Nigeria. This study seeks to ascertain the true nature of the relationship between stock market development and economic growth in Nigeria using annual time series data spanning from 1981 to 2021. The study employed the Autoregressive distributed Lag (ARDL)-error correction modelling technique. Stock market development was captured using market capitalization and all shares index as proxies. Other related explanatory control variables theoretically acclaimed to be drivers of growth such as investment and Bank credit to the private sector were added to prevent omitted variable bias. From the result, market capitalization was not significant while All-share Index (ASI) was significant. Bank credit to the private sector was also significant, suggesting that banks are more active drivers of growth. The study recommended among othersthat effective policy frameworks towards the development of the Nigerian stock market should be a policy focus to substantially enhance the size, depth and liquidity of the Nigerian stock market.*

**Keywords: Stock Market, Economic Growth, Capitalization, Gross Domestic Product, Nigeria.**

## 1.0 Introduction

The prominence of a stable financial market has been emphasized as essential for the growth of a nation because the stock market is generally believed to be an indicator of the macroeconomic performance of a country. The stock market as an economic institution enhances efficiency in capital formation and allocation. It enables both corporations and the government to raise long-term capital which enables them to finance new projects and expand other operations (Wang and Ajit, 2013, Adusei, 2018). Caporale, Howells and Soliman (2014) argue that a well-built stock market helps investors to circumvent risk when capitalizing. In addition, active stock markets perform a decisive role in assigning investment to the corporate sector. Another argument is that a well-functioning stock market contributes to total productivity, and developed financial markets are considered to be important components of long-run economic growth (Cooray, 2010 & Shin, 2013). It is therefore expected that every stable stock market will expedite the convenience of long-term capital for cost-effective activities of production which is required for the process of economic growth and development (Wang and Ajit, 2013).

Given the importance attached to the stock market globally as an engine of growth, the relevance of empirical studies for policy decisions cannot be overlooked. For this reason, much research concerning stock market development has been conducted. However, conflicting predictions about the role of stock markets in promoting economic growth are evidenced in some of these works. Empirical evidence provided by studies such as Haque and Hossain (2011); Owusu and Odhiambo (2014, 2015) indicate no significant relationship between stock market development and economic growth. On the other hand, Azarmi, Lazar and Jeyapaul (2005) and Wang and Ajit (2013) found a negative relationship between stock market development and economic growth which is a contradiction to the theoretical position of a positive relationship between the stock market and economic growth.

The general observation from these studies on the connection between stock market development and economic growth, therefore, is still inconclusive. The variation in the results may be due to the peculiarity of the country under study or the nature of the data used. Given the nature of the Nigerian stock market relative to those of the developed nations, would the stock market significantly affect the growth of the Nigerian economy positively or negatively? Furthermore, given the dynamic nature of modern societies like Nigeria will the result vary from other prior studies conducted? To get a better understanding of the relationship between stock market development and economic growth in Nigeria and to substantiate or refute previous studies, a more current empirical study is desirable. Therefore an attempt to investigate the relationship between stock market development and economic growth using updated and current Nigeria data constitute the core of this study.

## 2.0 Review of Related Literature

### 2.1 Conceptual Literature

Economic growth involves a positive change in all aspects of an economy, from profits to taxes and wages, to such things as production rates (Alqadi& Ismail, 2019). The economic growth of a country is directly related to the economic state of affairs of that country which consist of various variables like the index of industrial production, inflation rate, money supply, exchange rate, private investment, foreign direct investment and many others which are considered to be the backbone of any economy (Maku, 2020). One institution generally acclaimed to play a major role in the economic growth of any country is the stock market.

The stock market is recognized as an institution that contributes to the socioeconomic growth and development of emerging and developed economies. Pan and Misra (2018) noted that this is made possible through some vital roles played, such as channelling resources, promoting reforms to modernize the financial sectors, having financial intermediation capacity to link the deficit to the surplus sector of the economy, and a veritable tool in the mobilization and allocation of savings among competing uses which are critical to the growth and efficiency of the economy. Levine (1991) suggested that stock market activities spur economic growth basically in two ways. First, stock markets make property changes possible in the companies, whilst not affecting their production process. Second, stock markets offer higher possibilities for portfolio diversification to the agents.

Stock markets are normally classified according to certain criteria. One of the criteria is the market size measured by the market capitalization ratio, which is defined as the value of shares listed divided by GDP. The essence of the market capitalization ratio is that the size of

the market should be positively correlated with the ability to mobilize capital and diversify risk in an economy (Demirguc-Kunt& Levine, 1995).

Another criterion for classifying the stock market is its level of liquidity. The liquidity of a stock market relates to the ease with which shares are traded in the market. Liquidity is measured by the ratio of the securities traded to the total national output, which is computed as the total value traded/GDP. The liquidity of the stock market as argued by Osinubi (2004), facilitates profitable interactions between the equity and the money market, since, with a liquid stock market, shares are accepted as collateral by banks for lending purposes, consequently increasing access to credit for growth. Similarly, Shaw (1973) highlighted liquidity as an important characteristic of a stock market and pointed to its ability efficiently to allocate capital as well as allow investors to divest their assets easily. The total value traded ratio and turnover ratio are the two main measures of stock market liquidity.

### 2.2 Theoretical Review

Though theoretically, stock market size, liquidity, and integration with world capital markets affect economic growth. Theory, however, does not provide a unique concept or measure of stock market development. Levine and Zervos (1996) remarked that the extent to which the stock market affects liquidity, risk diversification, information acquisition and savings mobilization determines the rate of economic growth. Several writers including Apergis, Filippidis, &Economidou, (2007) and Graff (1999) have attempted to explain the relationship between financial development and economic growth and the mechanisms through which financial systems influence the development of the productive sector.

In the neo-classical endogenous growth theory, the natural rate of growth is determined endogenously by technical progress and the nation's stock of capital. Saving and broad investment have a permanent effect on the natural rate of growth. Because savings are transformed into investible funds; savings is thus beneficial for a steady growth rate. Kaldor (1961) and Robinson (1962) opine that in a monetary production economy, investment by firms is independent of prior saving and this makes savings an important driving force of the growth process. These theorists relied on the Keynesian theory of effective demand and they extended the Keynesian theory to growth and distribution issues. From a supply-leading view, the leading theory that provides a clear understanding of the extent to which stock market dynamics affect economic growth is the Harrod-Domar model (Hein, 2016).

The Harrod-Domar model facilitates knowledge about the rate at which an economy must grow if it is to make full use of the capacity created by new investment. It also provides the framework for determining the capital-output ratio required if income is to attain a certain target growth rate. The model assigned roles to investment in the process of economic growth. Firstly, it creates income for the saver-investor, and secondly, it augments the productive capacity of the producer and increases the nation's capital stock. The model maintains that a high capital coefficient is required to keep the economy in a steady state. A high capital coefficient implies a high level of capital accumulation. This is where a vibrant capital market becomes imperative. A well-developed capital market will generate enough capital that to keep the economy in a steady state.

## 2.3 Empirical Review

The relationship between stock market development and economic growth has garnered research interest over several decades and a robust number of empirical works exist across countries' related issues. Some of the more recent works include Boca (2011) who used a data set of 93 countries from 2000 to 2007 and a two-step GMM estimator to examine the impact of financial development on economic growth. Results indicated that stock market capitalization is important for economic growth. For countries that exhibit low levels of protection of property rights, stock market capitalization has a negative impact but for countries that exhibit high protection of property rights, the impact of stock market capitalization on growth is positive. In another study of 16 selected low-income countries for the period of 20 years from 1995 to 2014, Bist (2018) investigates the long-run association between financial development and economic growth using panel co-integration analysis and confirms that financial development has a positive and significant impact on economic growth.

Another panel study that confirmed the positive impact of stock market development on economic growth is Azam, Hassed, Samsi and Raji (2016) who examined the role of stock market development in economic development in four Asian countries which include India, Bangladesh, Singapore and China using annual time series data for the period 1991 to 2012. The study employed the autoregressive distributed lag bounds approach. Boubakari and Jin (2010) applied quarterly time series data to examine the relationship between stock market development and economic growth in five Europe countries (Netherlands, Belgium, Portugal, United Kingdom and France), the study covered the period 1995 to 2008. The empirical result from the study revealed that there exists a positive link between stock market development and economic growth for countries in which the stock market is liquid and highly active. However, the result was contrary for countries with small stock markets which are less liquid. Country-specific studies include Pan and Mishra (2016) who investigated the "interplay between the stock market and real economy" for the Chinese economy. Using unit root testing in the presence of structural breaks and an autoregressive distributed lag (ARDL) model, the study found a negative but infinitesimal long-run impact while no evidence of a short-run impact was found. The study period covers annual time series data from 1994 to 2019. The results suggest that Stock market size and liquidity are significant contributors to economic growth.

Related studies for Nigeria also exist. Bernard and Austin (2012) investigated the importance of stock market development on economic growth in Nigeria, using time series data from 1994 to 2008. The ordinary least square(OLS) regression analysis revealed a negative but insignificant impact of market Capitalization on economic growth in Nigeria. Using the same OLs estimation technique, Aigbovo and Uwubamwen (2014) however found negative short-run and long-run relationships between financial development and economic growth in Nigeria by employing annual time series data for the period 1980 to 2011. Similarly, Osakwe and Ananwude (2017) analyzed the short-run and long-run relationship between stock market development and economic growth in Nigeria from 1981 to 2015. The results show that stock market development is not important for Nigeria's economic growth.

Another OLS analysis done by Amu, Nwezeaku and Akujiobi (2015) on the effect of stock market development on Nigeria's economic growth covering 1985 to 2014 revealed that though the stock market has the potential of inducing growth, however, it has not contributed

meaningfully to Nigerian economic growth judging by the insignificant impact of market capitalization variable on GDP and the meagre value of 26.5% R-squared result obtained for the stock market variables employed. Akpunonu, Muogbo and Dim (2018) examined the effect of the stock market on economic growth in Nigeria from 1986-2013. The study employed Co-integration tests and the granger causality test. The findings revealed a strong positive correlation with market capitalization, all share index and economic growth contrary to the findings of Amu et al (2015) despite using almost the same set of data.

The more recent study done by Umar and Shittu (2020) using the same Johansen co-integration analysis and vector error correction mechanism on data covering an extended period of 1985 to 2018 revealed that growth in market capitalization does not have a significant impact on the Nigerian economy. In his investigation of the relationship linking stock market development and economic growth, Maku (2020) employed the relatively more advanced ARDL technique on a data set covering the same period (1985-2018). Empirical results from the investigation confirm the existence of a long-run positive relationship between stock market development and growth, albeit statistically insignificant.

In summary, the empirical findings on the relationship between stock market development and economic growth are mixed and therefore it is apt to conclude that the impact of stock market development on economic growth is still empirically inconclusive. Further investigation to reconcile this controversy is therefore required.

## 3.0 Materials and Methods

3.1. Model Specification

In line with contemporary econometric modeling tradition, the general model adopted in this study is given as:

$$Y = f(\alpha, \emptyset, \delta) + \varepsilon \qquad \ldots\ldots 3.1$$

Where Y stands for the variable of interest, $\alpha$ is the autonomous component or constant or intercept; $\emptyset$ is the vector of regressors under consideration, $\delta$ is the vector of identified control variables that are reasonably expected to be other prime drivers the explanatory variable while ⊚ represents all other unobserved factors. In a well-specified model, ⊚ is random, unrelated to X, $\delta$ and its value should be closest to zero among other competitive models. In specifying the model for the relationship between stock market development and economic growth, this study relied on the variables used in Demirgue-Kunt and Levine (1996) as its foundational model. Demirgue-Kunt et al (1996) employed the All-share index, Market capitalization ratio, turnover ratio, total share traded ratio, Total number of deals, the value of the transaction and the total number of listed equities as their explanatory variables. However, due to the paucity of data as well as the need to avoid multicollinearity, the linear form of the model for estimation in this study is given as:

$$LGDP = \beta_0 + \beta_1 MACAP + \beta_2 ASI + \beta_3 TBR + \beta_4 INV + \beta_5 EXR + \beta_6 CRP + U \quad \ldots . \quad (3.1)$$

Where:

LGDP = Log of Real Gross Domestic Product
MACAP = Stock market capitalization
ASI = All share Price Index
TBR = Treasury Bills Rate
INV = Investment rate
EXR = Exchange rate
CRP=Bank credit to private sector
U = Error Term

The *apriori* sign expectations are:

$\beta_1 > 0$; $\beta_2 > 0$; $\beta_3 > 0$; $\beta_4 < 0$ ; $\beta_5 < 0$ and $\beta_6 < 0$

3.4 Estimation technique

The study focuses on the impact of stock market development on economic growth in Nigeria for the period spanning from 1981 to 2021. Based on preliminary investigations concerning the levels of stationarity of the data employed, the study adopted the Autoregressive Distributed Lag (ARDL) co-integration technique to Pesaran, Shin and Smith (2001) for its estimation. Among other advantages, the ARDL ignores the order of integration of variables and still yields consistent estimates of the long-run normal coefficients irrespective of whether the underlying regressors are stationary at I(1) or I(0) or a mixture of both (Pesaran et al, 2001). To test for the time series properties of the selected variables, the unit root test based on Augmented Dickey-Fuller (ADF) statistics is conducted. This is to ascertain the order of stationarity of the time series. Lastly, the study conducted the Cumulative Sum (CUSUM) and the cumulative sum of square (CUSUM-SQ) tests to check for parameter stability.

3.5 Sources of Data

The study employs annual time series data for the period 1981 to 2021. Higher frequency data would have been preferred such as quarterly data; however, this is not available for some of the selected variables for the period under study. The data is sourced from the Central Bank of Nigeria (CBN) statistical bulletin and the annual report of the National Bureau of Statistics (NBS).

## 4.0 The Results

4.1 Preliminary Tests

4.1.1 Descriptive Statistics

Descriptive statistics to ascertain if the data distribution is of the data was conducted in this study. An extract of the result of the test is presented in Table 1.

Table :Descriptive Statistics

| | TBR | MACAP | LGDP | INV | EXR | CRP | ASI |
|---|---|---|---|---|---|---|---|
| Mean | 12.04222 | 3758.856 | 14.58929 | 19.17806 | 82.93170 | 13.01111 | 13521.42 |
| Median | 11.88500 | 292.9000 | 14.91131 | 11.85000 | 88.07500 | 11.00000 | 6716.300 |
| Std. Dev. | 4.645098 | 5642.179 | 2.394986 | 16.97746 | 67.34220 | 6.535869 | 14912.39 |
| Skewness | 0.926174 | 1.320189 | -0.322157 | 1.666577 | 0.015844 | 1.780888 | 0.998396 |
| Kurtosis | 4.402716 | 3.440583 | 1.642964 | 4.821588 | 1.518912 | 6.573030 | 3.325592 |
| Jarque-Bera | 8.098212 | 10.74857 | 3.385030 | 21.64214 | 3.291941 | 38.17918 | 6.139783 |
| Probability | 0.017438 | 0.004634 | 0.184056 | 0.000020 | 0.192825 | 0.000000 | 0.046426 |

Source: Author's computation

The results shown in Table 1 reveal that except for the All-Share Price index (ASI) and Market capitalization (MACAP), all other variables were normally distributed, showing very negligible differences between their mean values and their median values. The standard deviation also reveals that deviations from the mean value provide no evidence to suspect outliers in the variables treasury Bills rate (TBR), Log of gross domestic product (LGDP), investment rate (INV), the exchange rate (EXR) and financial deepening (CRP). However, for MACAP and ASI, the standard deviation reveals a substantial deviation from the mean. This is expected because of the rapid increase over time in the values of the two variables. The P-value of the Jarque-Bera(JB) statistics for the exchange rate (EXR) and gross domestic product (LGDP) creates room for doubt that both data are normally distributed although both variables had the lowest level of skewness with values closest to zero.

4.1.2: CORRELATION TEST

The study also confirmedthe level of correlation between economic growth and the explanatory variables usedby conductinga correlation analysis. Extracts of the results of the correlation analysis are shown in Table 2

Table 2. Correlation Test

| | LGDP | TBR | MACAP | INV | EXR | CRP | ASI |
|---|---|---|---|---|---|---|---|
| LGDP | 1.000 | -0.015 | - 0.27 | 0.366 | -0.0999 | -0.320 | -0.299 |

Source: Author's computation

The correlation coefficients shown in Table 2 indicate a negative correlation between economic growth and TBR, MACAP, EXR, CRP and ASI while a positive correlation exists between economic growth and investment rate. The result also indicates that the variables are weakly correlated which implies that there is a negligible possibility of multicollinearity existing between the dependent variable and the explanatory variables.

4.1.3 UNIT ROOT TEST

UNIT ROOT TEST

This study employed the Augmented Dickey Fuller (ADF) standard tests for unit root and an extract of the result is presented in Table 3

Table 3: Unit Root Test

| Critical values: 1%=3.6463 5%=2.9540 | TBR | MACAP | LGDP | INV | EXR | CRP | ASI |
|---|---|---|---|---|---|---|---|
| ADF at levels | -2.4991 (0.5907) | -1.3584 (0.5907) | -1.6770 (0.4335) | -3.1816 (0.0299) | 0.1308 (0.9635) | -2.0155 (0.2791) | -1.4274 (0.5574) |
| ADF at first difference | -5.4281 (0.0001) | -5.0546 (0.0002) | -3.0411 (0.0414) | | -4.1771 (0.0026) | -5.9251 (0.0000) | -5.6328 (0.0000) |
| Order of stationarity | I(1) * | I(1)* | I(1)** | I(0)** | I(1)* | I(1)* | I(1)* |

Source: Author's computation using E-views 10 *= Significant at 1% **= Significant at 5%

Based on the confirmation that the variables were either I(0) or I(1), the study, therefore, sought to establish the long-run relationship among the variables. The study, therefore, tested the null hypothesis that no long-run relationship exists among the variables using the Wald test commonly referred to as the bounds test. An accepted bounds test procedure is to compare the computed value with the bipolar critical values given in Pesaran et al (2001pp.300) which is a table of pairs of values. One set of values which forms the lower bound is calculated assuming a null hypothesis that no long-run relationship exists among the variables ($H_0$: $C_1=C_2=C_3=C_4=C_5=C_6=C_7=0$) and the upper bound using the other set of values is estimated under the assumption that the null hypothesis is false ($H_1$: $C_1\neq C_2\neq C_3\neq C_4\neq C_5\neq C_6\neq C_7\neq 0$). If the computed F-statistic values fall above the inclusive band, a conclusive decision to accept the alternative hypothesis is drawn. Where it falls below the inclusive band, the null hypothesis is accepted. Where it falls within the band, the null and the alternative hypotheses cannot be rejected. The results are presented in Table 4

Table 4: Bounds Test Results

Null Hypothesis:
C(1)=C(2)=C(3)=C(4)=C(5)=C(6)=C(7)=0
Wald Test:
Equation: Untitled

| Test Statistic | Value | df | Probability |
|---|---|---|---|
| F-statistic | 14.94738 | (7, 52) | 0.0000 |
| Chi-square | 149.4738 | 7 | 0.0000 |

Source: Authors' computation

Table 4 shows that the computed result of 14.95 is above the critical value of 3.86 at k=7. This implies that long-run relationships exist among the variables. Based on the verified existence of a long-run equilibrium relationship, the study, therefore, proceeded to determine the

maximum numbers of lags (a,b,c,d,e,f,g,) for the respective variables. The results are presented in Table 5.

Table 5: VAR Lag Length Selection Criteria

| | TBR | MACAP | LGDP | INV | EXR | CRP | ASI |
|---|---|---|---|---|---|---|---|
| FPE | 1 | 1 | 1 | 1 | 1 | 3 | 2 |
| AIC | 1 | 1 | 1 | 1 | 1 | 3 | 2 |
| SIC | 0 | 1 | 1 | 1 | 1 | 1 | 2 |
| HQ | 1 | 1 | 1 | 1 | 1 | 3 | 2 |

Source: Author's computation using E-views 7 FPE= Final Prediction Error; AIC=Akaike information criteria; SC=Schwatz information criteria; HQ= Hannan Quinn information criteria

Table 5 shows that except for the results on CRP and ASI, all other criteria supports one period lag length for the variables. The study therefore adopts an ARDL (1,1,1,1,1,3,2) model for its empirical work.

4.5 REGRESSION RESULT

The results of a trend co-integrating regression on the ARDL-ECM model, using theARDL (1,1,1,1,1,3,2) incorporating the lag variables.. The result is presented in Table 6.

Table 6 ARDL Estimation Result

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| DLGDP(-1) | 1.007412 | 0.360228 | 2.796599 | 0.0151 |
| DTBR | -0. 55206 | 0.027349 | -2.018900 | 0.0646 |
| DMACAP | -2.238755 | 9.905144 | -0.226019 | 0.8247 |
| DTBR | 2.130364 | 1.153476 | 1.846909 | 0.0876 |
| DINV | -0.643663 | 0.758059 | -0.849094 | 0.4112 |
| DCRP | 3.810121 | 0.749226 | 5.085408 | 0.0366 |
| DCRP(-1) | 3.304804 | 0.40980 | 8.064430 | 0.0150 |
| DCRP(-2) | 1.638187 | 0.23926 | 6.832824 | 0.0208 |
| DASI | -2.346429 | 1.030564 | -2.276840 | 0.0531 |
| DASI(-1) | 1.300813 | 0.598528 | 2.197866 | 0.0603 |
| ECM(-1) | -0.892887 | 0.301703 | -2.959489 | 0.0097 |
| C | 126.8771 | 147.8339 | 0.871702 | 0.3992 |
| @TREND | -208.712 | 197.8122 | -1.055401 | 0.3105 |

| | | | |
|---|---|---|---|
| R-squared | 0.534549 | Mean dependent var | 1276.530 |
| Adjusted R-squared | 0.069099 | S.D. dependent var | 8517.636 |
| S.E. of regression | 8218.091 | Sum squared resid | 8.78E+08 |
| Durbin-Watson stat | 2.212178 | Long-run variance | 24686617 |

From the results presented in Table 6, the negative sign in the ECM(-1) value suggests that the long-run equilibrium relation comes back to the steady state in the event of system shocks. 89% of the adjustments to such disequilibria are achieved in the first period. The Durbin-Watson test of 2.21 reduces the suspicion of spuriousness in the computation while the computed $R^2$ of 53.45% show that the overall goodness of fit of the models is above average.

The results obtained from the short-run dynamics confirm that the reaction of Economic growth to stock market shocks lingers for up to three years as in the case of financial deepening (CRP). The result further reveals that economic growth is an autoregressive property and that every unit change in the previous year's price causes a proportionate change in the current year's price

4.5 STABILITY TEST

The sensitivity analysis done in this study is the parameter stability test using the cumulative sum (CUSUM) test and the Cumulative Sum of Square (CUSUM-SQ) test. The test is a plot of the recursive residuals about the zero line. Parameters are found to be stable if the plot about the zero line remains within the upper and lower bounds which are a pair of lines of significance (critical lines). The results of both tests are shown in Figure 1

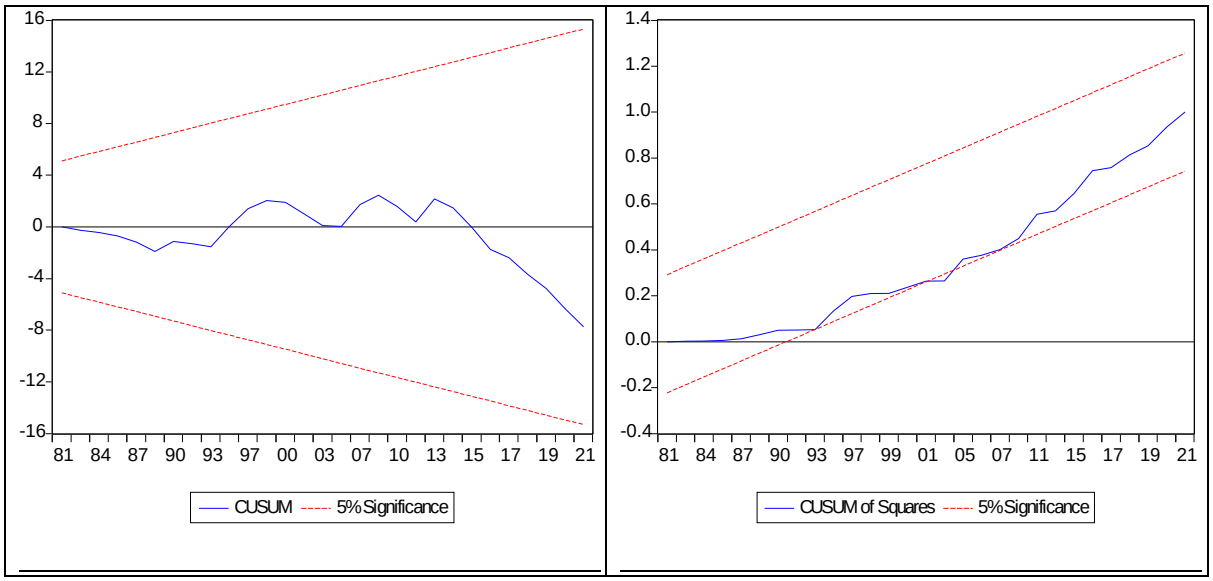



FIG 1: CUSUM and CUSUM-SQ Results Source: Author's computation

The result of the CUSUM parameter stability test as shown in Figure 1 reveals that the plot of the recursive residuals about the zero line are within the upper and lower bounds of the pair of critical lines. However, for CUSUM-SQ, the results reveal that between 2003 and 2004, the plot was slightly outside the lower-bound region. This however can be ignored for two reasons. Firstly, the period in question is relatively short compared to the whole observation (1:40). Secondly, the plot was able to return to the area within the critical region and to remain there which indicates a return to parameter stability after a deviation. Based on this result the null hypothesis of parameter instability is rejected

**5.0.Discussion of Findings and Conclusion**

The importance of a sound and vibrant capital market in promoting capital accumulation has been well discussed in the literature. Theoretically, there is a consensus on the role of capital market development on economic growth. However, empirically there is a divide on the possible impact of stock market development on economic growth in various economies. This study examined the impact of stock market development on economic growth using annual time series data from Nigeria.

The study employed the Autoregressive distributed Lag (error correction modelling technique to examine the relationship between stock market development and economic growth in Nigeria. Stock market development was captured using market capitalization and all shares index as proxies. On the other hand, real GDP was used as a proxy for economic growth. Other explanatory control variables were added to prevent omitted variable bias.
The result revealed that the model is dynamically stable with a high speed of adjustment.
Other important findings from the empirical estimation include:
Stock market capitalization does not significantly impact economic growth in Nigeria.

i. All-share index has a significant and positive impact on economic growth in Nigeria, both in the short run and in the long run.
ii. The impact of investment is not statistically significant.
iii. Bank credit to private sector (CRP) is significant

The above findings support the findings of Amu *et al* (2015) and Umar *et al* (2020) despite using different estimation techniques. Based on the above findings, the sturdy opines that banks are relatively more active players in the economic growth of Nigeria. This may be because of the underdeveloped nature of the stock market (see Cooray, 2010) coupled with the prevalence of micro, small and medium-scale enterprises (MSMEs) in Nigeria. The study, therefore, recommends that there is a need to develop effective policy frameworks towards the development of the Nigerian stock market to substantially enhance the size, depth and liquidity of the Nigerian stock market. The government should prioritize the development of the stock market by relaxing laws and listing requirements for investors to encourage more market participants on the stock exchange. The study, therefore, concludes that the stock market can contribute to economic growth if more attention is given to its development.

**References**

Adusei, C (2018). Determinants of non-performing loans in the banking sector of Ghana between 1998 and 2013. *Asian Develop PolicyReview*, 6(3), 142–154

Aigbovo O. &Uwubanwem A. E. (2014), Financial system development and economic growth in Nigerian stock market and bank perspective. *Asian Journal of Business Management, 6(4), 155-172*

Akpunonu, U., Muogbo, U. S.& Dim, E, M. O. (2018) Stock Market and Economic Growth: An Empirical Analysis for Nigeria. Available at SSRN: https://ssrn.com/abstract=3402423 or http://dx.doi.org/10.2139/ssrn.3402423

Amu, C. U., Nwezeaku, N. C., &Akujuobi A.B.C. (2015) Impact of Capital Market Growth on Economic Growth and Development In Nigeria. American journal of Marketing Research vol. 1, No. 3: 93-98

Alqadi M, Ismail S (2019) Taxation and Economic Growth: Theoretical and Empirical Literature Review. J Glob Econ 7: 344.

Apergis, N., I. Filippidis& C. Economidou, (2007). Financial deepening and economic growth linkages: A panel data analysis. *Review of World Economies 143(1): 179-198.*

Azam M., Haseeb M., Samsi A. B &Raji J. O (2016). Stock market development and economic growth: Evidence from Asia-4 countries.*International Journal of Economics and Financial issues, 6(3) 1200 – 1208.*

Azarmi, T., Lazar, D., &Jeyapaul, J. (2005), Is the Indian stock market a casino? *Journal of Business and Economics Research, 3(4), 63-72.*

Bhattarai, J. K., Gautam, R., &Chettri, K. K. (2021). Stock Market Development and Economic Growth: Empirical Evidence from Nepal. Global Business Review, 0(0).https://doi.org/10.1177/09721509211016818

Black, J., Hashimzade, N., & Myles, G. (2009).*A Dictionary of Economics (3rd Edition ed.)*. NewYork: Oxford University Press.

Boca, G.N.A., (2011). Financial development, institutions and economic growth: An empirical evidence. *M.Sc. Thesis, Submitted to Jonkoping University*.

Boubakari, A. A. &Jin, D. (2010), 'The Role of Stock Market Development in Economic Growth: Evidence from Some Euro next Countries',*Journal of Economic and Business studies 1(1), pp.14-20.*

Caporale, G.M., Howells, P.G.A.,&Soliman, A.M. (2014), Stock market development and economic growth: The causal linkage. *Journal of Economic Development, 29(1), 33-50.*

Cooray, A. (2010), Do stock markets lead to economic growth? *Journal of Policy Modeling, 32 (1), 448-460.*

Demirguc-Kunt, A. &Levine, R. (1996). Stock market development and financial intermediaries: Stylized facts. *World Economic Review, 10(2): 291-321.*

Graff, M. (1999).Financial Development and Economic Growth - A new empirical analysis. *Dresden Discussion Papers in Economics No. 5/99.*

Haque, M.E., Hossain, M.K. (2011), Impact of stock market development on economic growth: Evidence from SAARC countries. *Eastern University Journal, 3(3), 1-13.*

Hein, E. (2016). The Bhaduri/Marglin post-Kaleckian model in the history of distribution and growth theories – an assessment by means of model closures, *Berlin School of Economics and Law and Institute for International Political Economy (IPE) Berlin working paper* No. 66/2016

Kaldor, N. (1961), 'Capital accumulation and economic growth', in F.A. Lutz and D.C. Hague (eds), The Theory of Capital, London: Macmillan, reprinted in N. Kaldor, Collected Economic Essays, Volume 5, Further Essays on Economic Theory, London: Duckworth, 1978.

Levine, R. &Zervos, S. (1996). Stock Market Development and Long-Run Growth.The World Bank Economic Review 10(2):323-39

Maku, A. O. (2020). Stock Market Development and Economic Growth: Empirical Evidence from an Institutional Impaired Economy*InternationalJournal of Financial Research.* 11(5):496

Osakwe, C. I., &Ananwude, A. (2017). Stock market development and economic growth: A comparative evidence from two emerging economies in Africa –Nigeria and South Africa. Archives Current Res Int, 11, 1-15.

Osinubi, T.S. (2004). Does Stock Market Promote Economic Growth In Nigeria? Sematic Scholar, corpus ID 23442850

Owusu, E.L.,&Odhiambo, N.M. (2014), Stock market development and economic growth in Ghana:An ARDL-bounds testing approach. *Applied Economics Letters, 21(4), 229 – 234.*

Pan, L., & Mishra, V. (2018). Stock market development and economic growth: Empirical evidence from China. Economic Modelling, 68, 661-673

Pesaran, M. H., Shin, Y., & Smith, R. J. (2001).Bounds Testing Approaches to the Analysis of Level Relationships.*Journal of Applied Econometrics*, *16*(3), 289-326. https://doi.org/10.2307/2678547

Robinson, J. (1962), Essays in the Theory of Economic Growth, London: Macmillan.

Schumpeter, J.A. (1911), *The Theory of Economic Development. Cambridge*, MA: Harvard University Press.

Shaw, E.S. (1973), *Financial Deepening in Economic Development*. New York: Oxford University Press.

Umar &Shittu (2020).*Stock Market Performance and Economic Growth in Nigeria: An Empirical Analysis*. Available from: https://www.researchgate.net/publication/34534647 [accessed Mar 22 2023].

Wang, B., &Ajit, D.S. (2013).Stock Market and Economic Growth in China. *Economics Bulletin, 33*, 95-103.