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POLITICS OF SECURITIES TRADING MARKET IN THE GROWTH OF NIGERIA'S ECONOMY

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Abstract
The broad objective of this research was to test the influence of securities trading market on economic growth of Nigeria from 1986 to 2020. The study utilized multiple regression analyses in which co-integration test and vector error correction model were the methods of analysis used in the study. Time series data sourced from the Central Bank of Nigeria statistical bulletin on gross domestic product, market capitalization, all-share index, and private domestic savings were analyzed in the research. The results reported that market capitalization had a significant and positive influence on gross domestic product, while all-share index had not significantly impacted gross domestic product (GDP) in Nigeria. The results further showed that private domestic savings had a positive link with GDP, though inconsequential. On the above notes, the study recommended for the re-formulation of appropriate economic policies that ensure stability of share prices in order to encourage both domestic and foreign investors' participations in the securities trading market in Nigeria. In so doing, market capitalization would increase leading to improved growth in the domestic economy.

Keywords: Securities, Trading, Market, Economic Growth, Economy

1. Introduction

Economic growth sustainability is certainly, one of the most significant macroeconomic goals of every country. Consequently, capital accumulation is viewed as a critical factor that stimulates development process, as economic growth remains the key target of national policy. Intuitively, capital accumulation generates demands for particular types of financial assets in which the financial system invariably responds to the demand (Christain et al, 2015). This implies, that financial intermediation is one of the major determinants of economic growth and development of any economy. In this regard, security market as an aspect of the financial system, contributes significantly to growth and development of nation's economy. Meanwhile, security market is a highly organized and specialized aspect of financial market by which medium and long-term funds are raised for various purposes including, investment. The market is very essential as it has the ability to facilitate and mobilize savings required for long-term investments, and as well accelerates growth of countries' economies (Nosakhare & Samson, 2015). The security market is the bedrock of the financial system in Nigeria. Briggs (2015) opines that financial market is a complex mechanism comprising institutions, instruments, and procedures by which the savers and investors are brought together to effect business transactions (Abina & Lemea, 2019; Torbira & Joshua, 2017).

The history of security market in Nigeria is dated back to 1946 with the floating of ₦600,000 worth of public stocks. Over the years, the market experienced upsurge participation from both the local and international investors. For example, in 1981, the equity listed was 194 and increased to 247 in 2016, whereas the market capitalization rose from ₦5 billion to ₦16,185.5 billion in the same period. Similarly, the value of shares traded rose from ₦304.8 million in

1981 to ₦607,407 million in 2016 (Chukwuemeka, 2018). However, the improvement in the security market activities appeared not to have metamorphosed into growth of the Nigeria's economy, as investments, productivity, aggregate demand, and economic growth remained abysmally low. As a result, this study evaluates the role of securities trading market on economic growth of Nigeria.

2. Theoretical Review

There are various theories of economic growth linking securities exchange market with economic growth in the development process. To reinforce this assertion, the major theories considered in this study include the neoclassical and endogenous growth theories.

2.1 Neo-Classical Theory of Economic Growth and Savings

The neoclassical growth theory was a brainchild of the intensive research in the field of growth-economies by Robert Solow and Trevor Swan in 1956. Solow's growth model focused on constant returns to production scale using two inputs, capital and labour, and substitution possibilities between inputs and diminishing marginal productivity (Reza et al, 2014). The theory viewed economic growth as a function of capital accumulation and that a stable rate of growth is ascertained through technological advancement. The theory further argued that though changes in the population growth, savings rate can change the growth path, but argued that they have no significant effect on the long-run growth rate. Thus, an increase in the savings rate causes a rise in the long-run growth path, rather than an increase in growth rate.

As one of the growth theories, this theory outlines how steady growth occurs from a combination of three factors of production including capital stock, stock of labour, and technical process. It discovered that short-term equilibrium occurs from changes in the volumes of labour and capital. A change in technology has a significant impact on productivity in the long-run; hence, improved economic growth via technological progress. The model presumes that total output is produced in a production function, and thus, considered technology as an exogenous variable (Solow, 1956).

2.2 Endogenous Growth-Led Theory of Savings

The endogenous growth theory of savings considered economic growth as a function of internally generated growth factors such as investment, size of the capital stock and human capital. However, it presumes that an increase in the rate of savings results in an increase in economic growth due to its positive effect on capital accumulation and investment (Barro &Sala-i-Martin, 1995). The theory posited that a rise in savings enhances progress of national income and investment. Theoretically, saving was treated as an endogenous factor, as shown by the optimization behavior of firms and households. It reveals that growth in the capital stock only promotes economic growth in the short-run but the influence is infinitesimal in the long-run.

2.3 Theoretical Framework

The study relies on the neo-classical growth model as the theoretical framework for this research. The theory is based on the notion that output (Y) is produced through the interactions of technology, labour and physical capital [i.e. Y= f (A,K,L)]; where Y is the aggregate output, A is the number based on current state of technology, K is the quantitative measure of the inventory of manufactured capital, and L is the quantity of labour employed during production period (Precious, 2015). It was the belief of the theory that improvement in factors of production due to technological change as well as changes in organization and practices results in a rise in output growth rate in an economy.

Consequently, the assertion that growth results from increased capital stock as means of production is linked to series of equations, which indicate the nexus among labour, capital stock, and savings as factors that determine investment and output growth (Faris, 2017). Economic growth is estimated as a function of capital accumulation, labour supply, stock market contribution, and technological progress. The factors as mentioned above, are measured by market capitalization, all-share index and savings accumulation by the private sector.

It is on this basis that the neo-classical growth theory is adopted to address the roles that securities trading market play in productive investment and hence, economic growth via increased labour, capital, and technology. Originally, the function is given as Y=f(A,K,L). However, the model is modified as

$$GDP = f(MCAP, ASI, PDS) \quad 1$$

Where GDP is the gross domestic product growth, MCAP is the market capitalization, ASI is the all-share index, and PDS is the private domestic savings.

2.2 Empirical Review

Using the Ordinary Least Squares and Pairwise Granger causality test, Popoola et al. (2017) investigated the effect of stock market performance on economic growth in Nigeria. The results revealed that stock market performance does not lead to economic growth; rather, economic growth causes stock market performance in the economy. Similarly, Chukwuemeka (2018), also examined the influence of the capital market on economic growth in Nigeria for the period 1981-2016, using unit root test, co-integration test and error correction mechanism. The results revealed evidence of a long-run relationship among the variables. The results of the ECM showed that market capitalization and number of deals had a positive and insignificant impact on economic growth, whereas the volume of transaction and total listed equity had a negative influence on economic growth in Nigeria

Adopting unit root test, co-integration test and error correction model, Gerard and Jaya (2017) studied the effect of capital market development on economic growth in Rwanda, using unit root test, co-integration test, and error correction model. The study discovered that the independent variables had positive contributions to economic growth in Nigeria. More so, Faris (2017), investigated the effect of capital market on economic growth transition in South Africa from 2003-2012, using regression analysis. The estimation results revealed that market capitalization had a significant and positive influence on economic growth in the economy.

Torbira and Joshua (2017), investigated the impact of capital market on economic growth of Mexico, Indonesia, Nigeria, and Turkey for the period 2000-2012.The results revealed that the number of listed securities was the main component of the capital market, which had a negative and significant influence on the economic growth of Mexico, Indonesia, Nigeria and Turkey.

Using the unit root test, co-integration test, error correction model and Granger causality test, Abina (2019) evaluated the impact of the capital market on the performance of Nigeria's economy for the period 1985-2017. The results indicated evidence of long-run relationship among the variables under consideration. It also showed a unidirectional relationship between the variables with causalities running from gross domestic product to total market capitalization and to total value of new issues. The study concluded that the capital market has a significant influence on economic growth in Nigeria for both the public and the private entities for medium and long-term investments.

3. Methods

To evaluate the influence of securities trading market on economic growth of Nigeria from 1981 to 2020, capital market indicators is disaggregated into market capitalization and all-share index. Thus, the study expressed gross domestic product as a function of market capitalization, all-share index, and private domestic savings. Data on these variables were sourced from the Central Bank of Nigeria (CBN) statistical bulletin, volume 31, 2020; and Securities and Exchange Commission (SEC) reports, ranging from 1986 to 2020. Unit root test, co-integration test and vector error correction model are applied in estimation of the variables of the study.

3.1 Model Specification

This study relied on the neoclassical growth model as the theoretical model of this study. The model shows growth as a function of labour, capital, and technology. That is,

$$Y = f(L, K, T) \quad 3$$

Faris (2017) opined that growth results from increased capital stock as means of production is linked to series of equations that indicate the relationship among labour, capital stock, savings as factors that determine investment and output growth. Thus, gross domestic product is estimated as a function of capital accumulation, labour supply, contribution of the stock market, and technological progress. These are measured by market capitalization, all-share index and savings accumulation by the private sector. Therefore, the model showing the relationship between capital market and economic growth is specified in functional form as:

$$\mathrm{GDP} = \mathrm{f}(\mathrm{MCAP}, \mathrm{ASI}, \mathrm{PDS}) \quad 4$$

Where; GDP = Gross Domestic Product, MCAP = market capitalization, ASI = Share Index, and PDS = private domestic savings.
In linear function, the model is illustrated as:

$$\mathrm{GDP}_t = \emptyset_0 + \emptyset_1 \mathrm{MCAP}_t + \emptyset_2 \mathrm{ASI}_t + \emptyset_3 \mathrm{PDS}_t + \mu_t \quad 5$$

Where; GDP is the dependent variable, whereas MCAP, ASI, and PDS are the explanatory variables; $\emptyset_0$ is the constant term, $\emptyset_{is}$ are the coefficients of the regression models and μ_t is the stochastic variable.
In the logarithm function, it is specified as:

$$\log\mathrm{GDP}_t = \emptyset_0 + \emptyset_1 \log\mathrm{MCAP}_t + \emptyset_2 \log\mathrm{ASI}_t + \emptyset_3 \log\mathrm{PDS}_t + \mu_t \quad 6$$

This equation represents the logarithm function of the equation.

3.2 A Priori Expectation

Theoretically, the study expects that market capitalization, all-share index, and private domestic savings to have positive relationships with the gross domestic product (GDP). The a priori expectation trends of the behaviour of the variables in terms of their coefficients are $\varphi 1>0$, $\varphi 2>0$, $\varphi 3>0$.

4. Results and Discussion

4.1 Unit Root Test

The unit root test was undertaken to test for level of integration of the variables used in the investigation through the application of the Augmented Dickey-Fuller (ADF) unit root test. The results are shown in Table 1 below.

Table 1: ADF Unit Root Test
Using Trend and Intercept

	Level		First Difference			
Variables	**ADF Statistic**	**5% CV**	**ADF Statistic**	**5% CV**	**Remarks**	**Rank**
LGDP	-2.731460	-2.954021	-3.347090	-2.957110	Stationary	I(1)
LMCAP	-1.319018	-2.954021	-4.405111	-2.957110	Stationary	I(1)
LASI	-2.538262	-2.954021	-3.929204	-2.957110	Stationary	I(1)
LPDS	-1.075820	-2.954021	-4.276673	-2.957110	Stationary	I(1)

Sources: Computation from E-view 10, 2024

The results in Table 1 illustrate the outcome of the stationarity test of the variables of the study. From the estimation, the results reported that all the variables of the study were non-stationary at levels, but at first differencing at 5% critical value (5%CV), all the non-stationarity variables became stationary. These are evidenced by the ADF statistics and p-values of the variables estimated, which indicated to be greater than the 0.05 critical values. At level, each of the critical value of the variable showed to be greater than the ADF statistic, but in testing the unit root status of the variables at first differencing, the ADF statistics proved to be greater than the critical values. Therefore, these results indicate that the variables possessed long-run properties, which implies that their mean, variance and covariance are constant overtime. Thus, the variables are integrated of the same order one.

4.2 Johansen Co-integration Test

The co-integration test was engaged after the evidence of stationarity at order one among the variables was established in the research. However, the aim of this test was to confirm whether or not evidence of long-run nexus exists among the variable of the study. The results are presented in tables 2 and 3 below.

Table 2: Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	**Eigenvalue**	**Trace Statistic**	**0.05 Critical Value**	**Prob.Val**
None *	0.741777	79.59593	47.85613	0.0000
At most 1 *	0.539280	36.27010	29.79707	0.0078
At most 2	0.198891	11.47122	15.49471	0.1841
At most 3 *	0.127783	4.374952	3.841466	0.0365

Sources: Computation from E-view 10, 2024

Table 3: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	**Eigenvalue**	**Max-Eigen Statistic**	**0.05 Critical Value**	**Prob.Val**
None *	0.741777	43.32583	27.58434	0.0002
At most 1 *	0.539280	24.79888	21.13162	0.0145
At most 2	0.198891	7.096267	14.26460	0.4778
At most 3 *	0.127783	4.374952	3.841466	0.0365

Sources: Computation from E-view 10, 2024

The results as indicated in tables 2 and 3unveiled evidence of long-run equilibrium nexus among the variables of the study. This conclusion is supported by the trace statistics, max-eigen statistics and their associated critical values as estimated from the Johansen co-integration test. From table 2, the estimation showed trace statistics of 79.59593, 36.27010 and 4.374952 for

the variables gross domestic product, market capitalization, all-share index and private domestic savings were greater than their associated critical values of 47.85613, 29.79707 and 3.841466, respectively.

In the same vein, the results in table 3 in revealed that the max-eigen statistics of 43.32583, 24.79888 and 4.374952 for the same variables gross domestic product, market capitalization, all-share index and private domestic savings were also greater than their corresponding critical values of 27.58434, 21.13162 and 3.841466, respectively. Given this evidence, the study concludes that a evidence of long-run equilibrium relationship is established among the variables of the study.

4.3 Vector Error Correction Model (VECM)

The vector error correction model (VECM) is utilized in the investigation after the co-integration test was conducted and the results showed that co-integrating equations exist among the variables of the study through the application of the Johansen co-integration test. The implication would be to help determine the coefficient elasticity of the variables of the research. The results of the VECM model are indicated in table 4 below.

Table 4: Vector Error Correction Model (VECM) Estimation

Variables	Coefficient	Std. Error	t-Statistic	Prob.
ECT(1)	-0.063232	0.012734	-4.965653	0.0000
LGDP(-1)	-0.008550	0.161324	-0.052997	0.9581
LMCAP(-1)	0.229835	0.079677	2.884589	0.0078
LASI(-1)	-0.013799	0.061404	-0.224725	0.8239
LPDS(-1)	0.147224	0.086665	1.698770	0.1013
Constant	0.115700	0.030677	3.771559	0.0008
R-squared	0.641300	Mean dependent var		0.201484
Adjusted R-squared	0.572320	S.D. dependent var		0.102969
F-statistic	9.296811	Durbin-Watson stat		2.331198
Prob(F-statistic)	0.000036			

Sources: Computation from E-view 10, 2024

The results presented in Table 4 portray the VECM estimation of the impact of securities trading market on economic growth of Nigeria. The results unveiled that market capitalization (LMCAP) had a significant and positive impact on the gross domestic product (LGDP), while all-share index (LASI) exert no significant but negative impact on gross domestic product. The result suggests that there were bearish securities trading market in Nigeria within the periods covered by this research. More so, the results reported that private domestic savings (LPDS) has a positive effect on gross domestic product, though the effect is inconsequential. These results were evidenced by the parameters and the associated p-values of the variables estimated through the application of the VECM model. From the results, the coefficients of LMCAP, LASI and LPDS are 0.229835, -0.013799 and 0.147224, with their corresponding p-values of 0.0078, 0.8239, and 0.1013, respectively.

These results are in tandem with the postulations of the neoclassical theory of growth, extended to include the relationship between financial market and economic growth by Faris (2017). The theory indicated that capital, labour, and technology were the key determinants of growth in any economy. The discovery was also in accordance with the findings of Emeh and Chigbu (2014); Taiwo et al. (2016), etc, that evaluated the impact of securities trading market on economic growth across countries of the World; and found that capital market had a significant and positive influence on economic growth. However, the results contradicted the findings of Torbira and Joshua (2017), and Ifeoluwa and Motilewa (2015) that also investigated the nexus

between capital market and economic growth, and the research found a negative links between the variables.

4.4 Diagnostic Tests

The validity of the regression model underlying the VECM model estimation was tested to check for the status of serial correlation and heteroscedasticity in the regression model. There were employed with the aim of unraveling the stability status of the parameters of the model as proposed by Pesaran and Pesaran (1997). The results of the diagnostic tests are shown in table 5 below.

Table 5: Diagnostic Tests

S/N	Diagnostic test	Obs*R-squared	Prob. Chi-Square(2)	Remarks
1.	Serial Correlation LM Test	3.528753	0.1713	No evidence of serial correlation in the model
2.	Heteroskedasticity Test: ARCH	0.032950	0.8560	No evidence of heteroscedasticityin the model

Sources: Computation from E-view 10, 2024

From the results of the Serial Correlation LM Test presented in table 5, the Obs* R-squared is 3.528753, while its prob.chi-square(2) is 0.1713. Having shown the prob. Chi-square value of 0.1713 as being greater than 0.05 critical values, the study infers that evidence of serial correlation is found in the estimation model. Furthermore, the results of the heteroskedasticity test presented in table 5 indicated Obs* R-squared of 0.032950 and its associated prob.Chi-square(2) value of 0.8560. The prob. Chi-square of 0.8560 is greater than the 0.05 critical values. Thus, the study concluded that evidence of heteroscedasticity is not found in the regression model.

Stability Tests

The stability tests of the model were also tested and the results presented in figures 1 and 2 below.

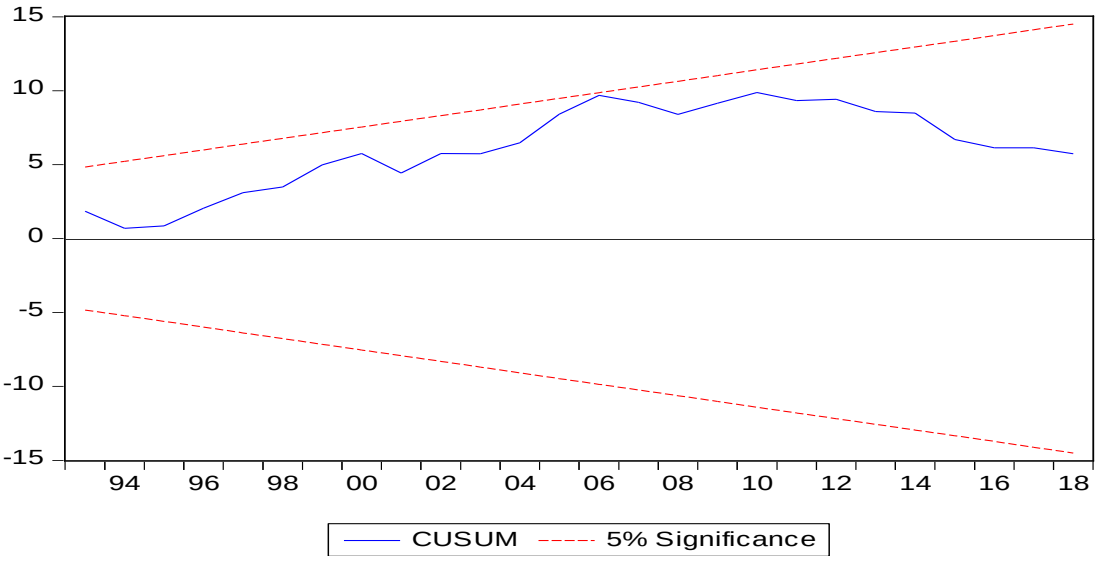

Figure 1: CUSUM Stability Test

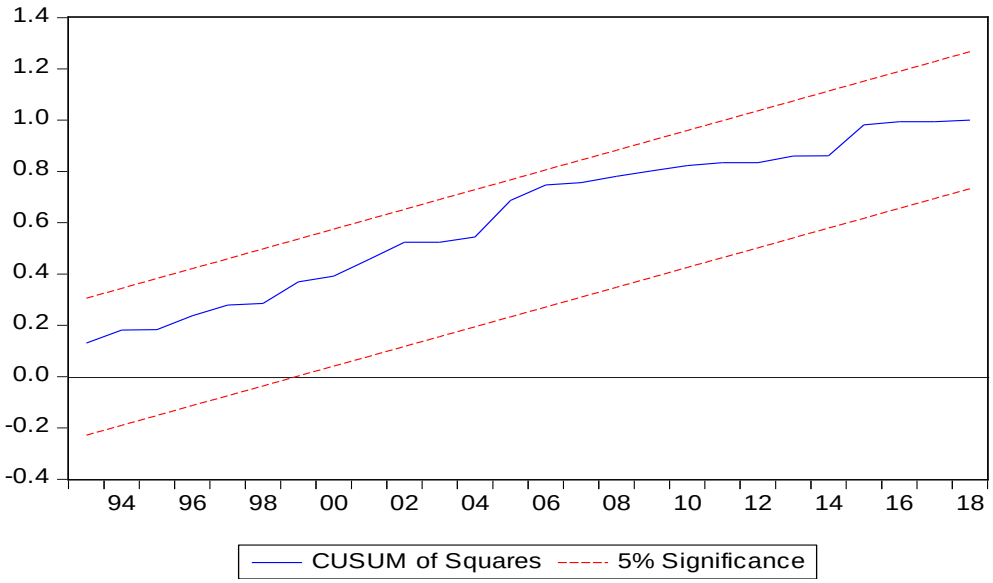

Figure 2: CUSUM of Square Stability Test

In this research, the recursive cumulative sum (CUSUM) of residuals and the CUSUM of square stability tests were employed to determine whether there is stability in the parameters and constancy in the random variables in the regression model. The results as presented in figures 1 and 2 reveals presence of stability in the parameters as the plots of the statistics of the CUSUM test and CUSUMSQ test fell within the critical bands at 5% significance level.

4.5 Policy Implications of the Results

From the results, market capitalization had a significant and positive impact on gross domestic product. Hence, it is estimated on average that a percentage increase in market capitalization results in increase in gross domestic product by 0.23 percent. Contrarily, all-share index had no significant but negative influence on gross domestic product. Thus, the study, estimated that a percentage rise in all-share index will result in a 0.01 percentage point fall in gross domestic product in the economy. The results as well revealed that private domestic savings exert no significant impact on economic growth. Hence, the result implies that a percent point rise in private domestic savings will raise economic growth of Nigeria by 0.15 percentage points, meaning that though private domestic savings had a positive relationship with economic growth, such nexus is inconsequential.

5. Conclusion and Recommendations

The study evaluated the impact of the securities trading market on economic growth in Nigeria from 1986 to 2020. Co-integration tests and vector error correction model (VECM) were engaged in the estimation of the results. Unit root test conducted revealed that all the variables at level were non-stationary; however, at first differencing, the non-stationarity variables became stationary at 5% significance level. The estimation results indicated that market capitalization had a positive and significant influence on economic growth, while all-share index had no significant but negative impact on growth. The results also indicated that private domestic savings had no significant influence on economic growth of Nigeria. In view of these results, the study recommended that government should re-formulate economic policies that ensure stability share prices which could encourage citizens and foreigners adequate participation in the securities trading market in the country. This could be done by floating exchange rates of the country in the exchange market.

References

Abina, P., & Lemea, M. (2019). Capital market and performance of the Nigeria economy. *International Journal of Innovative Finance and Economics Research,*7(2), 51-66.

Barro, R., &Sala-i-Martin, X. (1995). *Economic growth* (2nd Edition). (New York: McGraw-Hill, 539.

Briggs, P. (2015). Capital market and economic growth of Nigeria. *Research Journal of Finance and Accounting*, 6(9), 82- 93.

Christian,U., Nwezeaku, N., & Aghalugbulam, A. (2015). Impact of capital market growth on economic growth and development in Nigeria. *American Journal of Marketing Research,* 1(3), 93-98.

Chukwuemeka, N. (2018). Impact of capital market on the economic growth in Nigeria: An empirical analysis. *IOSR Journal of Economics and Finance,*9(5), 48-59.

Emeh, Y., & Chigbu, E. (2014). The impact of capital market on economic growth: The Nigerian Perspective.
International Journal of Development and Sustainability,3(4), 838-864.

Faris, N. (2017). Capital market and economic growth in transition countries: Evidence from South-East Europe. *Journal of International Business Research and Marketing,* 2(6), 15-22.

Gerard, R., &Jaya, S. (2017). Capital market development and economic growth: Evidence from Rwanda. *International Journal of Economics, Commerce and Management,* 5(10), 507-517.

Ifeoluwa, O., &Motilewa, B. (2015). Stock market liquidity and economic growth in Nigeria. *Journal of Economics and International Business Management,* 3(6), 1-13.

Nosakhare,A., &Samson, E. (2015).Capital market development and economic growth in Nigeria. *Benin Journal of Social Sciences,* 22(1), 111-139.

Popoola et al. (2017). Stock market and economic growth in Nigeria. *International Journal of English Literature and Social Sciences,* 2(6), 97-106.

Precious, L. N. (2015). Effects of public debt on economic growth in Swaziland. *International Journal of Business and Commerce,* 5(1), 1-24.

Reza, N., Michael, R., &Mona, T. (2014). Relationship between savings and economic growth: The case for Iran. *Journal of International Business and Economics,* 2(4), 107-124.

Solow, R. (1956).A contribution to the theory of economic growth. *The Quarterly Journal of Economics,* 70(1), 65-94.

Taiwo,J.,Alaka, A., &Afieroho, E. (2016). Capital market and economic growth in Nigeria. *Account and Financial Management Journal,* 1 (8), 497-525.

Torbira, L., &Joshua, O. (2017). Capital market development and economic growth: Evidence from the Mint Countries. *Journal of Economics and Sustainable Development*, 8(2), 68-107.