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CAPITAL MARKET INDICATORS AND ECONOMIC GROWTH IN NIGERIA

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ABSTRACT

This study examined the effect of capital market indicators on economic growth in Nigeria 1990 - 2018. Data was collected on the subject from Central Bank of Nigeria's (CBN) Statistical bulletin and Annual reports as well as Nigeria Stock Exchange reports. The Error Correction Model (ECM) was used in the analysis. It was found that a positive relationship exist between market capitalization, total value of transactions, number of listed securities and economic growth in Nigeria. However, only number listed securities had a positive and significant effect on the growth of Nigerian Economy. The other two variables (NCAP and TVAL) had insignificant effect on the economy. Conversely, total volume of transaction (TVol.) has insignificant effect on the economy in the short run. The capital market indicators were found to have jointly significant effect on the growth of the economy. It is recommended that government should invest in the capital market by issuing securities at set intervals to boost activities in the market. Regulatory policies should be investor-friendly, new investors should be encouraged to get listed on the stock market. Moreover, an improvement of security of life and properly will further encourage investment in the economy.

Keywords: Market capitalization, Stock Exchange, Real Gross Domestic Product, Nigeria.

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INTRODUCTION

The financial market in any economy has two segments; the short term and long term segments of the market. The short-term end of the market is referred to as the money market whereas the

long term end of the market defines the capital. Money market deals in securities maturing in a short period, say one or two years. Examples of such securities include treasury bill, treasury certificate and eligible development loan stock. Capital market, on the other hand deals with securities with longer duration. Examples include long-term loans, mortgage bonds, debentures, ordinary and preference shares.

The market not only provide needed fund, but also allocate them in the most efficient manner. The interest in capital market studies stems from the fact that it is highly correlated with economic growth. According to Ali et al (2016), extensive research in capital market is due to its correlation with economic development. The authors' notes that controversy surrounds the role of capital market in an economy; while some argue that financial development pave way for economic development others say economic development brings financial development. However, it is known that intermediation of funds enhance production of goods and services. Increases in output of goods and services define the growth of the economy.

In this paper, we shall opt for the forward looking posture of the investor and so, see capital market indicators as predictors of economic outcomes. It is in consideration of this argument that the Nigeria stock market was established. The benefits anticipated explain the establishment of the Nigerian capital market. The Nigeria stock exchange (NSE) is in place, Nigeria Securities and Exchange Commission and a number of legislative frame work including the companies and Allied Matters Act (CAMA) has been put in place to streamline activities in the market. The ultimate purpose is to mobilize funds into most efficient outlets. This is done with a view to grow the national economy. In order to achieve the purpose, there must be practitioners – the stock brokers, jobbers, licensed agents as well as institutions, which include finance houses, pension funds, unit trust, banks and production companies. Orderliness is engendered by the regulatory agencies e.g. NSE and NSEC. The laws guiding their operations are also provided in CAMA and CBN Act.

It is widely acknowledged that the capital market plays very important role in economic growth. Activities in the market send signals to investors as well as the macro economy about expectations in the level of production of goods and services. We may consider capital market indicators such as securities prices, number of equities, new listing, volume of transaction as well as foreign capital inflows. How do these indicators explain the direction of the economy? We need to determine the extent of reliance on each of the indicators in making decisions that affect the national economy. Consequently, this study sets to examine the effects of trade volume, trade value, number of government stocks on economic growth in Nigeria.

LITERATURE REVIEW

In this section an attempt is made to discuss literature related to capital market indicators and economic growth in Nigeria. In the process we present conceptual issues, theoretical considerations and empirical studies.

Capital Market

The capital market is a segment of the financial market that deals in long-term securities. The other component is the money market that deals with short-term securities. According to Ezirim (2005) financial market deals with financial claims. The author adds that the claim is created for the purpose of facilitating transactions between the surplus and deficit economic

units. The financial market intermediates between the surplus and deficit spending units. This is done in an attempt to pull idle fund from surplus economic units to the deficit units. It is expected that the borrowing unit will provide more efficient use of the funds in production of goods and services. Adoghor (2001), Nwikina (2007), Sethi (1986), Osaze (2007) agree that the financial market is made up of money and capital market sections. Brealey and Myers posit that a company's financial decisions cannot be separated from the capital market. This is the avenue for raising funds to fund new or existing projects.

Capital market serves as economic barometer and confidence builder. It also encourages transparency and accountability in business dealings through its adequate disclosure mechanism. Ezirim (2005) argues that the financial market plays the role of a market maker. A market maker, according to Burton et al (2003) quoted in Ezirim (2005) is one that links up buyers and sellers of financial securities. It involves arranging and executing transactions between buyers and sellers. Ezirim (2005) further argues that the market carries information which is an indispensable phenomenon that determines the value and terms of transactions.

Nigerian Capital Market

Development of stock market in Nigeria started in the colonial era. Nwikina (2012) explains the evolution of Nigeria's capital market. It is noted that it started with the ten-year local loan ordinance in 1946. This resulted in floatation of a loan stock with maturity of 10 – 15 years. This was upgraded to capital issue, committee in 1962. It was saddled the responsibility of regulating the orderly conduct of capital market activities in Nigeria. Between 1973–1977 it was known as capital issues commission. The Lagos stock exchange was established in 1961. This later metamorphosed into Nigerian Stock Exchange (NSE).

The capital market acts as engine of growth in any economy. This is accomplished by mobilising long-term funds for long-term capital formation. Osaze (2004) argue that Nigerian capital market has not fully performed its natural function of funding investment. The author adds that one of the major indicators of capital market development is the proportion of long-term fixed capital raised, in relation to Gross Domestic Product (GDP). This has been very low. The Capital Market has a range of regulatory authorities, institutions, instruments and operators that carry on business in the market.

In terms of valuation, the Nigerian Securities Exchange Commission approves the price, amount and timing of securities. It also determines whether the sales will go through offer for sales or subscription. Allotment of shares is done by the commission in a public offering to ensure fair spread. Surveillance is done by monitoring activities on the trading to ensure fair play and equitable dealings. The commission takes responsibility for registering all securities and operators on the exchange. The Nigerian Stock Exchange was set up to create appropriate mechanism for capital formation and efficient allocation of resources among competing projects (Osaze, 2007). Other objectives include: maintaining discipline in the capital market, broaden share ownership and maintain fair prices of securities.

Capital Market Indicators

Occurrences at the stock market may have consequences for the larger economy. According to Brad (1996), the stock market has traditionally been viewed as an indicator or predictor of the economy. Economy watch (November 2010) notes that indicators in the stock market include:

moving averages, Moving Average Convergence/Divergence, Relative Strength Index (MACDI) and On-Balance Volume (OBV).

It posits that moving averages smooth price data by creating a single flowing line. The line represents the average price over a period of time. MACD is an oscillating indicator. It usually fluctuates above and below zero. It follows trend and momentum in stock trading. The RSI, though an oscillating indicator, it possesses the unique feature of its movement been with 0 – 100, carry some information that may differ from MACD. OBV provides volume information which compiled into one straight line and this serves as indicator on volume. Normally, volume confirm trend. A rising price should be accompanied by a rising OBV and vice versa.

The key indicators that should have consequences for the economy therefore, include price (of stock), volume of transactions, gross capital formation and foreign capital inflow.

Economic Growth

Economic growth finds expression in the increase in the output of goods and services over time. According to Anyanwu and Oaikhenan (1995) economic growth is the increase overtime of an economy's capacity to produce those goods and services needed to improve the wellbeing in increasing number and diversity. However, the concept – economic development is often confused with economic growth, while growth deals with increase in output of goods and services, economic development, is multidimensional including not only increase in output but also improvement in social welfare issues like health, education, nutrition and so on. Indeed, Seers, quoted in (Nwikina, 2004) insists that the questions to ask in determining development are: (a) what has been happening to poverty? (b) What has been happening to unemployment? (c) What has been happening to inequality? If the effects of these problems have been less severe, we can say that there is development in the country. If one or more of these problems have worsened, it will be strange to say that there is development in that country. In this study, we shall see economic growth as increase in output of goods and services in the economy over time.

Todaro (2015) presents economic growth as the steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national income. The author identified three components of economic growth. They include capital accumulation, growth in population and technological process.

Capital accumulation comes up when a proportion of current income is saved and subsequently invested. This will result in building new industries and provision of basic infrastructures such as roads, railways and electricity.

Population growth has implications for growth of labour force. More hands will be available for work. Human capital development will further enhance skills needed to bring about development. Positive development presents itself in terms of skills required to harness the resource endowment. Larger population increases potential labour force and consumers of goods and services produced.

The third issue is technical progress. These are new ways of solving problems. It is improvement in ways of accomplishing tasks. Invention of new machines and equipment is likely to release labour for other tasks in the economy. This will likely lead to increased output of goods and services, lower prices and improved quality of products. This position is in agreement with Jhingan (2016) that the process of economic growth is determined by two types of factors: Economic and non-economic. According to the author, economic growth depends on

the country's natural resources, human resources, capital, enterprise and technology. The author however insists that growth can still not take place if social conditions are not appealing. Social, political and cultural conditions must complement the issues raised in the economic setting to bring about growth. Consider the existence of natural resources (oil) in the Niger Delta area of Nigeria and social unrest existing side by side, the machines /equipment as well as trained personnel can still not explore the oil reserve.

Three approaches can be used to measure economic growth. These include nominal, real growth and changes in per capital income. Anyanwu and Oaikhenan (1995) noted that this measure of growth is based on trend behaviour of aggregate expenditure over time.

Nominal GDP is the money value of goods/services produced at current prices while real GD is the money value of final goods measured by the ruling price in a previous year Nwikina(2011).It is added that per capital income shows the spread of national income over the population. It is calculated as GNP/population. The higher the value obtained, the greater the growth of the economy.

Relationship between Capital Market and Economic Growth

Two hypotheses have been put forward to explain the relationship between capital market and economic growth. Patrick (1996) quoted in Zivengwa et al (2011) identified the two hypotheses as demand-pull and supply leading hypotheses. The demand pull hypothesis posits that development of the economy tend to be followed by financial sector development. The supply leading hypothesis states that financial sector development leads to economic growth. Levine (1991) and Saint-Paul (1992) support the supply leading argument when they insist that an efficient financial market raises the quality of investment, thus leading to economic growth. A more liquid market can create long term investment, leading to economic growth.

It has also been noted that four possible causal relationships exist between capital market and economic growth. Graff (1999) noted that there are four possibilities concerning the casual relationship between financial development and economic growth. First, financial development and economic growth are not causally related. Here development of the capital market is independent of the economic growth. Secondly, financial development follows economic growth. That is economic growth causes financial institutions to change and to develop vibrant credit market. Thirdly, financial development is a cause of economic growth. Here, either financial development is pre conditional for economic growth or financial development encourages economic growth.

Fourthly, financial development is an impediment to economic growth. In this case, causality runs from financial development to real sector development. However, the focus is on potentially destabilizing effects of financial overtrading and attendant crisis.

Controversies surrounding the direction of causality between capital market variables and economic growth or the interdependencies of the factors affecting these key variables. Zivengwa et al (2011) present four scenarios in the discus of the relationship or causality between capital market and economic growth. Conclusions on the issues where drawn from empirical review of literature on the subject.

One, a bi-directional causality would exist where the capital market is developed and promotes economic expansion through technological changes. This will, in turn create more demand for capital market products. As the capital market products respond to demand for them, this will stimulate economic growth which will in turn promote the capital market

activities. Two, unidirectional causality running from stock market development to economic growth (supply side hypothesis) obtains when efficient functioning of the financial market channel funds from surplus to deficit sector for productive investment thereby promoting economic growth.

The third view is the demand following argument. As the economy expands its demands for financial instruments increases, leading to growth of these services. The fourth argument deals with independent hypothesis. This posits that stock market growth and economic growth are not causally related. It is possible to posit that the different views exist because of the research methodology and /or the evolving technology.

Trends in Global Capital Market

Rapid changes, innovations and co operations have been witnessed in the global capital market recently. Osaze (2007) listed these emerging trends as new market realities, technology and innovations, integration of markets, transparency, reliability and comparability of information. One current reality is the increased popularity of hedge funds as a means of reducing or transferring risks. Also, computer driven electronic trading has replaced open outcry system. Stricter regulations and effective enforcement tend to stabilize the market. Technological innovations have resulted in electronic trading platforms. Improved trading software are being developed. Also new and sophisticated financial software are now available. These have revolutionized trading in stock exchanges.

Integrations of financial markets are currently going on. Trading in securities is now done across national boundaries. Stock trading has been regionalized and stock exchanges hybridized. This has resulted in mega exchanges, e.g., EURONEXT, coming out the Paris, Amsterdam, Lisbon, Geneva, and Brussels stock markets.

The issue of transparency, reliability and comparability of information arises from globalization of the stock markets. This highlights greater transparency in reporting. International standards and practices are now in vogue. This will further reduce fraud and increase reliance on capital market for raising long term funds.

Finally, corporate governance issues are now in the front banner. This is because of the need to handle conflict of interest at board level and allow auditors independence in their duties; Good corporate governance will protect the investor's value and market integrity. This is achieved by ensuring vigilance, enforcement and compliance and maintaining internal control.

Theoretical Framework

In this section, attempt is made to discuss the theoretical issues on capital market and economic growth.

Efficient Capital Market Theory

The theory states that an efficient market is one in which security prices adjust rapidly to the infusion of new information and that current stock prices fully reflect all relevant and available information about the affected security at any given time. Fama classified the efficient market hypothesis into the weak –form, semi-strong form and strong-form market efficiency, each

depending on the nature of information available to each participant test of efficiency (Gbarato et al., 2020).

According to Okereke et al (2013), in an efficient market, the price of securities is a function of relevant information concerning those securities. The authors argue that the capital market theory is epitomised by the Random Walk (Efficient to market) Hypothesis which is based on three issues:

- Security prices reflect all available information about such securities;
- Successive changes in security prices are independent;
- There is no specific and recurring pattern in the behaviour of market prices of securities on which basis a reliable trading rule could be formulated.

Random Walk Theory

Random Walk Hypothesis depicts random price movement and so such prices are unpredictable and represent the weak form hypothesis. The strong form of the argument consider that the information is available before decisions on market price and, so have no regards for any information coming from private or public domain.

The importance of this argument hinges on efficient market delivery. This finds expression in efficient allocation of resources at reduced cost and consideration for the role of information in determination of stock prices. Such efficient functioning will facilitate more efficient mobilisation of fund and more economic allocation in the economy for optimal utilization in an attempt to grow the economy.

Harrod-Domar Growth Model

The Marxian economic growth theory was led by Karl Marx. He made an economic interpretation of history in which he indicated the motivating force of capital development and suggested an alternative growth path (Nwikina, 2015). The materialistic interpretation of history shows continuous economic struggles between different classes and groups in society (Jhingan, 2016). Transformation of society hinges on mode of production and ownership of capital. Economic growth is traced to labour surplus. The surplus is defined as the difference between labour value and the prevailing rate.

Anyanwu and Oaikhenan (1995) note the possibility of collapse of capitalism as a result of intensified class struggle. The clash is between the bourgeoisie and proletariat, that is, the owners of capital and labour force.

Empirical Review

Several studies have been carried out on the effects of capital market indicators on the economy. Here, we review studies done on the subject in Nigeria and other countries with a view to developing appropriate approach to the current study.

Fasanya et al. (2013) studied capital market development and economic growth in Nigeria. They used Johanson Co-integration technique to test for long run relationship among the variables under study. The Augmented Dickey–Fuller (ADF) was used to test for stationarity and order of integration of variables. The variables used include real GDP as proxy

for economic growth, savings in the money market, market capitalization and improvement in active labour population. The empirical result showed that capital market in an essential catalyst for economic growth in Nigeria.

A study of the impact of Nigeria capital market on economic growth and development from 1990 to 2011 was undertaken by Odetayo and Sajuyigbe (2012). The variables in the model were GDP as dependent variable while market capitalization total new issues value of transactions and total listed equity and government stocks were used as independent variables. Multiple regression analysis was used. The result of the Least Square Estimation technique shows that the predictor variables were significantly joint predictors of gross domestic product. The predictor variables jointly explain 97% of GDP, the remaining 3% is attributed to extraneous variables.

Obiakor and Okwu (2011) did an empirical analysis of impact of capital market development on Nigeria's economic growth (1981-2008). Growth rate of GDP was used on the dependent variable while ratios of value of shares traded, market capitalization, gross capital formation and foreign direct investment to GDP were used as explanatory variables. The study employed multiple regression analysis via ordinary least squares (OLS) technique this was done using the econometric view (E-views). They introduced the one period lagged error correction term to accommodate effect of changes in variables values over time, and captured the adjustment from short term to long term equilibrium. The T-stat and F-stat were used to statistical significance and acceptance rejection of research hypothesis. The explanatory power or goodness of fit of the model was determined using the coefficient of multiple determination. Test for stationarity in variables' time series data was carried out using Augmented Dickey Fuller (ADF) unit root test at specified level of differencing. Test for existence of long run relationship between the two sets of variables was carried out using co integration test. The interaction between GDP growth and stock market development was investigated using both vector error correction model (VECM) and Granger –causality techniques. The result shows that long run association exists between stock market development and economic growth. It also shows unidirectional Granger-causality running from MASI, traded volume and stock market index to real GDP.

A test of the causal relationship between stock market development and economic growth in Zimbabwe was conducted by Zivengwa et al (2011). The authors used annual time series data for the period 1980 to 2008. Stock market development was measured using two variables, namely market capitalization as a ratio of GDP and stock market turnover as measured by the value of stocks traded as a ratio of market capitalization. The variables were tested using unit root test, Vector Auto regression (VAR) and granger causality test to explore the relationship between the variables. The result shows a unidirectional causal link that runs from stock market development to economic growth. Also, there was evidence of an indirect transmission mechanism through the effect of stock market development on investment.

Ho and Odhiambo (2012) conducted a study on stock market development and economic growth in Hong Kong. Three proxies were used for capital market development, namely. Stock market capitalization, stock market traded value and stock market turnover. The study used the ARDL-bounds approach to examine the nexus between stock market development and economic growth in a dynamic setting. Empirical result shows that the direction of causality between stock market depends on the proxy used to measure the level of stock market development, when stock market capitalization is used as a proxy for stock market development, a unidirectional causal flow from stock market development to economic growth

is found to prevail without any feedback. However, when stock market turnover is used, a causal flow from economic growth to stock market development is found in the short run and the long run. A causal flow from stock market development to economic growth only found in the short run. It was further found that the causality between stock market traded value and economic growth failed to yield any long run causal relationship from either direction.

Impact of Indian capital market on socio-economic development was studied by Vasanthakumari et al. (2018). The endogenous variables used include: market capitalization, capital issues of non-government public companies and mutual funds investment while GDP is the exogenous variable. The ordinary least square (OLS) and Durbin Watson test were carried out on the variables. The result shows that market capitalization, capital issues of non-governmental public companies have positive and significant impact on the GDP.

Ali et al (2016) investigated the impact of Malaysia's capital market on economic growth from 1988-2012. The key variables studied are foreign direct investment and real interest rate. It also examined the long run and short run relationship between economic growth and capital market, foreign direct investment and real interest rate. Bound testing co integration of Auto Regressive Distributed Lag (ARDL) and Error correction model (ECM) version of ARDL model. The result suggests that capital market and real interest rate have positive impact on economic growth in the short and long run. Foreign direct investment does not show positive impact on economic growth in the short run, but it does in the long run.

The effects of stock market development on economic growth in Turkey are presented by Bayer et al (2014). The study examines the relationship between stock market development and economic growth in Turkey during the period 1999-2013 using Johanson – Juselius co-integration test and Granger Causality test. The result shows a long run relationship between economic growth and stock market capitalization, total value of stock traded and turnover ratio of stock traded. The researchers found unidirectional causality from stock market capitalization, total value of stocks traded and turnover ratio of stock traded to economic growth.

Correlation between capital market development and economic growth in Romania was undertaken by Brasoveanu et al. (2008). The researchers used repression function and VAR models market in the analysis. The variables include market capitalization, number of listed shares, trading volume, liquidity proxy and Bucharest stock market index as independent variables while gross Domestic product is the dependent variable. The result shows that capital market development is positively correlated with economic growth. It however has feedback effect but strongest link is from economic growth to capital market. This suggests that financial development follows economics growth determining institutions to change and develop.

In reviewing researches conducted on the subject and related areas we found varying results. This may be attributed to many factors such as methodological differences. Methodologically, some authors used ordinary least square, others engaged the Granger Causality test, Vector Error Correction model, which tend to yield varying results, sequencing the data in moving averages or percentage change. Some of the researchers used nominal GDP while others used real GDP and some others too used real GDP per capita. Moreover, choice of variables may also constitute an issue in varying results. For example, Obiakor and Okwu (2011) used growth rate of GDP as dependent variables while ratio of market capitalization, value of stock traded, foreign direct investment to GDP ratio and Gross capital formation to GDP ratio, were used as independent variables. However, in the current study, we drop foreign direct investment and gross capital formation.

METHODOLOGY

Secondary data were used in this study, sourced from Nigeria Stock Exchange (NSE), Central Bank of Nigeria (CBN) statistical bulletin and annual reports as well as National Bureau of statistics (NBS) for the period 1990-2018. Error Correction model is used in this study to analyse the effects of capital market indicators on RGDP. Granger – Causality test is used to test the statistical causality between capital market variables and economic growth. Model used in the study hinges on the economic theory and series of empirical works reviewed. Here, we rely largely on Brasoveanu et al. (2008) model. The study seeks to determine the effects of capital market indicators on economic growth in Nigeria. Thus, the Model is:

$$RGDP = f(MCAP, TVAL, TVOL, NL)$$

Where;

RGDP = Real Gross Domestic Product, MCAP = Market capitalization, TVAL = Total Value of Transactions, TVOL = Total Volume of Transactions, NL = Number of Government Stocks/Securities Listed.

By linearizing the model from its functional form is given as:

$$\text{Log}(RGDP) = \alpha_0 + \alpha_1 \log MCAP_r + \alpha_3 \log(TVAL) + \alpha_4 \log(TVOL) + \alpha_2 NL + \varepsilon$$

Where,

α_0 = Regression constant, $\alpha_1 - \alpha_4$ = Regression coefficient, ε = Stochastic error term.
The a priori expectation is that $\alpha_1, \alpha_2, \alpha_3, \alpha_4 > 0$

RESULTS AND DISCUSSION

Unit root Test

Table 1: ADF Stationarity Test Result

Variable	ADF test statistic	5% Critical Value	Order of Integration	Assessment
RGDP	-3.402595	-2.971853	1(1)	Stationary
MCAP	-4.165918	-2.991878	1(1)	Stationary
TVAL	-5.007810	-2.991878	1(1)	Stationary
TVOL	-5.279589	-2.976263	1(1)	Stationary
NL	-4.301509	-2.976263	1(1)	Stationary

Source: Author's Computation

From the results above, the variables are stationary of order one. Therefore, we will proceed to co-integration test.

Johansen Co-integration Test

Table 2: Johanson Co-integration Test Result

Date: 01/14/20 Time: 19:05				
Sample (adjusted): 1992 2018				
Included observations: 27 after adjustments				
Trend assumption: Linear deterministic trend				
Series: RGDP MCAP TVAL TVOL NL				
Lags interval (in first differences): 1 to 1				
Unrestricted Cointegration Rank Test (Trace)				
Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.800303	73.24454	69.81889	0.0260
At most 1	0.461941	29.74883	47.85613	0.7317
At most 2	0.250315	13.01459	29.79707	0.8909
At most 3	0.171237	5.235842	15.49471	0.7833
At most 4	0.006081	0.164686	3.841466	0.6849
Trace test indicates 1 cointegrating eqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source: Eviews 9 Output

From the results above, there is only one co-integrating equation in the model. Evidently, Trace stat (73.24454) > 5% critical value (69.81889) and Maximum Therefore, we proceed to the estimation of vector error correction model.

Estimation of the Error Correction Model

Table 3: Results of the Estimation of the Error Correction Model

Dependent Variables	Independent Variables						
	Short Run						Long Term
	Δ RGDP	Δ MCAP	Δ TVALa	Δ TVOLu	Δ NL	ECT _{t-1}	CointEq1
Δ RGDP	350.8289	7.025964	3.443205	-0.000179	0.032308	0.398559	0.249876
Δ MCAP	0.632946	-3.816495	1.872579	0.046670	-0.125546	0.787182	1.000000
Δ TVALa	0.056365	0.097550	0.313913	-0.010957	0.000986	12.11607	0.005630
Δ TVOLu	2.994730	-29.37845	-4.375325	0.095458	-0.000436	-218.6548	0.000787
Δ NL	-0.729971	-0.910867	109.1735	121.4590	-0.337498	0.490801	1.587975

Source: Author's Computation

From the estimation, all the results of the long run estimates are the co-integrating equations indicating a long run relationship among the variables in the model. The model equally shows that the short run and long run estimates have statistically significant relationship with RGDP. The short run estimates vary; the long run estimates are positive. The coefficient of the Error Correction Model (ECM) is negative and statistically significant; showing that an established

long-run dynamic relationship can be attained given that a deviation in RGDP is reconciled annually.

Granger Causality Test

Table 4: Results of the Granger Causality Test

Pairwise Granger Causality Tests
Date: 01/14/20 Time: 20:41
Sample: 1990 2018
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
MCAP does not Granger Cause RGDP	27	0.20993	0.8122
RGDP does not Granger Cause MCAP		0.19119	0.8273
TVAL does not Granger Cause RGDP	27	0.54401	0.5880
RGDP does not Granger Cause TVAL		0.08992	0.9143
TVOL does not Granger Cause RGDP	27	0.99598	0.3854
RGDP does not Granger Cause TVOL		0.49069	0.6187
NL does not Granger Cause RGDP	27	0.22816	0.7979
RGDP does not Granger Cause NL		0.00814	0.9919

Source: Eviews 9 Output

From the results above, there is presence of individual significant relationship among the various pairs of variables, indicating that capital market indicators have not promoted the output level of goods and services in Nigeria, and economic growth has not supported the operations of the capital market in Nigeria within the period of study.

CONCLUSION AND RECOMMENDATIONS

Consequently, the estimates from the error correction model revealed that there is a positive relationship between market capitalization, total value of transaction, number of listed securities and economic growth in Nigeria. However, only number of listed securities had a positive and significant effect on the growth of the Nigerian economy. The other two variables (MCAP and TVAL) had insignificant effects on the growth of the Nigerian economy. Conversely, the total volume of transactions (TVOL) has negative relationship with growth of the economy but the negative effect was not found to be significant in the short run analysis.

The implication of these findings is that market capitalization still has not maintained its strong stance in growing the nation's economy. There is still investment apathy in the capital market and this has translated to low volume of trade which negatively impacts on the economy.

The brighter side of it is that the capital market growth indicators were jointly found to have significant effect on the growth of the economy. Thus, there is a good combined effect of

the indicators on the economy. This suggests that with increased volume of transactions comes increased value of transactions, which invariably increases market capitalization and the capacity of the capital market in growing the nation's economy.

Based on the findings, the following recommendations are made:

- Government should invest more in the capital market by issuing securities at intervals to boost the market;
- Also, new companies should be quoted on the exchange to further improve the growth indicators of the NSE.;
- Favourable policies such as investor protection laws, review of current securities regulatory requirements and so on, should be enacted so as to encourage volume of trade on the exchange.

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Appendix 1

Real Gross Domestic Product (RGDP) and Capital Market Indicators Annual Data (1990-2018)

Year	RGDP (N' Billion)	Trade Volume	Trade Value (N' Million)	Mkt Capitalization (N' Billion)	Number of Gov't Stocks/Securities Listed (NL)
1990	19305.63	39270	225.4	16.3	3.40
1991	19199.06	41770	242.1	23.1	3.30
1992	19620.19	49029	491.7	31.2	3.20
1993	19927.99	40398	804.4	47.5	3.60
1994	19979.12	42074	985.9	66.3	3.20
1995	20353.2	49564	1838.8	180.4	3.20
1996	21177.92	49515	6979.6	285.8	3.00
1997	21789.1	78089	10330.5	281.9	2.80
1998	22332.87	84935	13571.1	262.6	2.70
1999	22449.41	123509	14072	300	2.40
2000	23688.28	256523	28153.1	472.3	2.10
2001	25267.54	426163	57683.8	662.5	8.30
2002	28957.71	451850	59406.7	764.9	12.70
2003	31709.45	621717	120402.6	1359.3	25.20
2004	35020.55	973526	225820	2112.5	178.10
2005	37474.95	1021967	262935.8	2900.06	365.47
2006	39995.5	1367954	470253.4	5120.9	902.99
2007	42922.41	2615020	1076020.4	13181.69	2,976.58
2008	46012.52	3535631	1679143.7	9562.97	2,558.96
2009	49856.1	1739365	685717.29	7030.84	2,030.76
2010	54612.26	1925314	799910.95	9918.21	1,939.27
2011	57511.04	1235467	638925.7	10275.34	2,400.47
2012	59929.89	1147616	808994.18	14800.94	4,425.05
2013	63218.72	3245866	2350875.7	19077.42	4,456.90
2014	67152.79	2248939	1338600.65	16875.1	5,247.96
2015	69023.93	950001	978047.07	17003.39	6,942.87
2016	67931.24	837259	620018.05	16185.73	6,652.03
2017	68490.98	879067	1078491.84	21128.9	7,236.23
2018	69810.02	1039333	1284976.28	21904.04	9,920.63