Stock Market Performance and Economic Growth in Nigeria: An Empirical Appraisal

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Abstract

This study is aimed at determining the role and contributions of the Nigerian stock market to national income in Nigeria from 1981 – 2012. This is necessitated by the concern as to whether a lean stock market like we have in Nigeria with an average of 240 quoted companies (within the period of study) with an average market capitalisation of N4 billion can significantly exact the much expected positive impact on total output. Four explanatory variables were specified for this study based on theoretical underpinning. Stationarity test were conducted using Augmented Dickey Fuller unit root test, while Johansen Cointegration test was used to estimate the long-run equilibrium relationship among the variables. The Granger causality test was conducted in order to establish causal relationship, while the model was estimated using the error correction model (ECM).

Key words: Nigerian stock exchange, stock market performance, economic growth, capital formation, and cointegration.

1. Introduction

Recent studies suggest that, stock market liquidity has been a catalystfor long-run growth in developing countries.Without a liquid stock market, many profitable long-term investments would not be undertakenbecause savers would be reluctant to tie up theirinvestments for long periods of time. In contrast, aliquid equity market allows savers to sell theirshares easily, thereby permitting firms to raiseequity capital on favorable terms. By facilitatinglonger-term, more profitable investments, a liquidmarket improves the allocation of capital andenhances prospects for long-term economic growth.

The capital market is an organized market which provides facilities to the government and private investors to raise long term loans to finance its expenditures and for expansion and modernization of industries. It also exists to offer platform where suppliers of capital can quickly and easily restore their liquidity. The capital market serves the purpose of capital mobilization and allocation of the nation's capital resources among various competing alternative uses.

These vital functions for rapid economic growth and development as performance by the capital market are in consonance with the aims and objectives for establishing the Nigeria Stock Exchange (NSE) in March 1960 (as the Lagos stock Exchange). NSE organizes the market for the buying and selling of stocks, shares, debentures and Government bonds, collectively known as securities. There are two markets within the NSE like other stock exchanges in the world. These are:
  I.   The primary market; and
 II.   The secondary market.

The primary market operates when the initial capital raising takes place. It is also known as the New Issue market. Through the primary market operations, the Government and industrialists were able to raise long-term loans to finance development projects and for expansion and modernization of industries respectively. This market channel of NSE exacts enormous impact on the Nigeria's economy. It meant that Nigeria businessmen and nascent industrialists could otherwise have no organized market where they could raise long term loans for investment purposes. Subsequently, the mobilization of long term funds for productive purposes in the economy could have been difficult without the NSE.

The secondary market of NSE is where securities are bought and sold after its issuance in the primary market. Thus, the NSE through this market channel provide the means of restoring liquidity to investors and allowing them to spread their risks while the borrowers such as Government and industrialists retain the funds in their investments. Activities of the exchange through these channels provide it with the functions of mobilizing saving from the surplus spending unit (SSU) of the economy and allocate them to the deficit spending unit (DSU). Where greater proportion of these funds go to those investments with the highest rates of return after giving due allowance for risks. This allocative function of the NSE is crucial in determining the overall growth and efficiency of the economy.

If capital resources are not provided to those economic units where demand is growing, and which are capable of increasing productivity, and at the appropriate time, the growth rate of the economy will be inevitably compromised. The NSE thus became the hallmark of the Nigerian capital market, hence NSE and capital market are often used interchangeably.

The main objective of this study is to first, assess the extent to which the stock market have been able to live up to those expectations for which it was established. Secondly, this study seeks to provide critical evaluation of the performance, roles and contributions of the Nigerian stock market to the growth and development of the economy; unveiling the capital formation process of the NSE, since this is an essential factor to a nation's economic growth and development; and finally, it is the objective of study to bring to bear the limiting factors on the performance of NSE towards the Nigeria economic development.

2.1. Conceptual Literature
2.1.1. The Nigeria Stock Exchange

The NSE provides facilities for raising long term capital for Government and industrialists to finance development projects and for expansion and modernization of industries respectively. This means that the NSE is a place where long term securities of varying forms are tradedThe NSE provides all necessary facilities, rules and conducts for healthy competition and growth of the market. Therefore, the NSE is an intermediary between suppliers of funds and the investors of long term funds. This allocative function of the NSE is critical in determining the overall growth of the economy. "If capital resources are not provided to those economic areas, especially industries where demand is growing and which are capable of increasing productivity, then the rate of expansion of the economy will inevitably suffer" Alile (1996). The stock market therefore, plays a central and indispensable role for which it is described as the hallmark of the Nigerian capital market

2.1.2. The Growth of the Nigerian Stock Exchange

The NSE has witnessed tremendous growth since its establishment in 1960. This growth is conspicuous in the increasing number of capital market instruments traded in the exchange, market operators and size of market capitalization. Undoubtedly, various factors are responsible for this growth among which are as follow:

a. The indigenization of the credit base objective. This was responsible for the huge investments in the second and third development loan stock issues in 1961 and 1962.

b. The income tax management Act, 1961. Under this act, existing pension and provident funds in the country were obliged to invest at least one-third of this funds in Nigerian Government stocks at the penalty of forfeiting valuable tax concession.

c. The National Provident Funds Act, 1961. Pension and provident funds established after 1961 were required under this Act to invest at least half of this funds in stocks.

d. The Insurance, Miscellaneous Provisions Act, 1964 required that at least 25 percent of all local investment of these insurance companies must be in government securities as the Act required the insurance companies operating in Nigeria to invest locally at least 40 percent of their premium on locally insured risks in any financial year.

e. The operations of the Central Bank of Nigeria (CBN) has greatly stimulated the growth and development of stock market in Nigeria via Government securities. Apart from acting as the issuer, underwriter and retailer of these stocks, the CBN provides facilities to ensure the marketability of these securities.

f. The pioneer industries ordinance 1951, as amended, stipulates that only those foreign companies which allowed at least 10 of their equity capital to be held by Nigerians would benefit from liberal tax holidays and other concessions under the ordinance. This no doubt encouraged few companies to offer part of their share equity to Nigerians through the NSE.

g. The indigenization Decree had great potential in stimulating dealings in industrial stocks. Reflecting the efforts of various companies to comply with the requirements of this decree, the increasing pace of economic activity and the growing confidence in the Nigerian economy.

h. The unbundling and eventual privatization of key Government monopolies and other enterprise have greatly stimulated dealings in industrial stocks in the NSE.

i. The Bank of Industry (formal Nigerian Industrial Development bank) also exerts tremendous impact on the development of the stock market in Nigeria. This it has being doing by encouraging promising enterprises to incorporate as limited liability companies and then offer to take up their shares after incorporation, and finally encouraging such companies to apply at the appropriate time for stock exchange quotation.

2.1.3. Developments in the Nigerian Stock Market

Market capitalisation of the Nigerian stock exchange continued to improve gradually from a total of N5 billion in 1981 to N8.2 billion in 1987 with Government securities taking the lead with N3.1 billion as compared

to N1.9 billion and N4.2 billion compared with N4 billion in 1981 and 1987 respectively. Thereafter the total market capitalisation not only began to show remarkable improvement, but equities began to take the lead with market capitalisation of N175.1 billion in equities in 1995 compared with Government stocks of N3.2 billion in the same year. By 2007, total market capitalisation had hit ₦13,181.7 billion, this limp was attributable to the privatization of some public concerns by the Federal Government. However 2008 the effects of the global financial crunch which started in July 2007 had begun to take its toll in the Nigerian capital market. Foreign portfolio investors had begun to divest from Nigeria perhaps in order to meet up with obligations in their home countries.

This scenario saw the general price level crashing down by 80 percent by 2009. Although, the market correction had started since fourth quarter 2009, the bartered confidence in the market is yet to be seen restored and the market far from full recovery. Growth in total market capitalisation had continued to oscillate downward from -27.8 percent, -26.3 percent, 41 percent and 4 percent in 2008, 2009, 2010 and 2011 respectively, while annual turnover value oscillated between 14.3 percent, -71.4 percent, 16.3 percent and -21.9 percent in 2008, 2009, 2010 and 2011 respectively. Also the number of listed securities had oscillated between -2.6 percent, -11 percent, -0.8 percent and -5.3 percent in 2008, 2009, 2010 and 2011 respectively.

2.1.4. Contributions of the Stock Market to Capital Formation in Nigeria

Stock market exists primarily as a vehicle for the mobilization of funds. However, capital mobilization will be restricted to the channeling of savings into new issues, which will therefore, result to a new increase in capital formation. The Federal Government of Nigeria through the stock market had raised long term loans for on lending to the regional and later state governments for development projects since 1961 when the NSE began operation.

The Federal Government had been encouraging the state Governments to approach the stock market to raise long term capital for development projects on their own merit. In this way, the state governments will be subjected to market discipline. Currently most state governments have raised long term funds through the stock market for development purposes. Also, foreign exchange market liberalization, the deregulation of interest rate structure and dividend policy have made the Nigeria stock market a viable option for capital formation. More companies now use the stock market facilities for strengthening their balance sheets and growth. In this process, there have been flurry of rights issues, offers for subscription for equity and debenture stocks.

2.1.5. The Promotion of Indigenous Industries

The NSE having given due recognition to the need to turn small and medium scale companies into big ones introduced the Second Tier Securities Market in 1985 for the promotion of small and medium scale companies in the country. This it does by making available its facilities at the stock market to viable small and medium scale indigenous entrepreneurs to raise funds for expansion and modernization of their business at less stringent listing requirements. The second tier securities market has contributed tremendously to the country's capital formation process and subsequently, reduction of unemployment.

2.2. Theoretical Literature

There are a number of theories explaining the stock market activities, its role in capital formation, restoring liquidity, financial deepening, price stabilization, economic growth and employment generation.

2.2.1. The Bernoulli Hypothesis

Daniel Bernoulli was very much concerned finding solution as to why the Russians of his time were very much averse to risk and are not willing to make bets at a better than 50 – 50 odds knowing that the expected monetary value (EMV) of such bets are infinite, a situation known as the St. Peterburg paradox. In resolving this paradox, he came to the conclusion that though the monetary gain or loss is equal, the loss in utility is greater than the gain in utility. Thus, in Bernoulli's view, rational decisions in the case of risky choices would be made on the basis of expectations of total utility rather than the mathematical expectations of monetary value.

Therefore, the primary reason influencing peoples' choices in cases of uncertainty (risks) is that the fact that marginal utility of money diminishes as income rises. There is a greater loss in utility than a gain in utility in an equal amount of money lost or gained. This suggest why majority of Nigerian are seldom interested in the activities of the stock market, and makes it even more difficult restoring confidence in the market.

2.2.2. Gurley and Shaw Hypothesis

According to Gurley and Shaw, it is the non-bank financial institutions that provide liquidity and safety to financial assets and help in transferring funds from ultimate lenders to ultimate borrowers for productive

purposes. Thus, the quantity and composition of financial variables induce economic growth through increase purchase of financial assets. The buying of primary securities from ultimate borrowers and selling indirect securities to the ultimate lenders influence the availability of credit and of course, the structure and level of interest rate in the economy.

2.2.3. Loss-Aversion Theory

Loss-Aversion theory states that people's perceptions of gain and loss are skewed. That is, people are more afraid of a loss than they are encouraged by a gain. If people are given a choice of two different prospects, they will pick the one that they think has less chance of ending in a loss, rather than the one that offers the most gains. For example, if you offer a person two investments, one that has returned 5% each year and one that has returned 12%, lost 2.5%, and returned 6% in the same years, the person will pick the 5% investment because he puts an irrational amount of importance on the single loss, while ignoring the gains that are of a greater magnitude. In the above example, both alternatives produce the net total return after three years.

Loss-Aversion theory for financial professionals and investors, although the risk/reward trade-off gives a clear picture of the risk amount an investor must take on to achieve the desired returns, prospect theory tells us that very few people understand emotionally what they realize intellectually. For financial professionals, the challenge is in suiting a portfolio to the client's risk profile, rather than reward desires. For the investor, the challenge is to overcome the disappointing predictions of prospect theory and become brave enough to get the returns you want.

2.2.4. Rational Expectations Theory

Rational expectations theory states that the players in an economy will act in a way that conforms to what can logically be expected in the future. That is, a person will invest, spend, etc. according to what he or she rationally believes will happen in the future. Although this theory has become quite important to economics, its utility is doubtful. For example, an investor thinks a stock is going to go up, and by buying it, this act actually causes the stock to go up. This same transaction can be framed outside of rational expectations theory. An investor notices that a stock is undervalued, buys it, and watches as other investors notice the same thing, thus pushing the price up to its proper market value. This is the problem with Nigerian stock market trying to restore market confidence since after the global financial crunch. The general expectation of Nigerian investors is pessimistic and hence the market is dragging irrespective of the innovations introduced by the regulatory agency and the Nigerian stock exchange.

2.3. Empirical Literature

A large body of empirical studies clearly shows that the development of stock markets is strongly and positively correlated with the level of economic development and capital accumulation. This is a solid and uncontroversial result, and it appears to be true across time and for many countries. Indeed, data confirm that as economies develop equity markets tend to expand both in terms of the number of listed companies and in terms of market capitalization (Atje and Jovanovich 1993; Demirgüç-Kunt and Levine 1996a, 1996b; Demirguc-Kunt and Maksimovic 1996; Korajczyk 1996; Levine and Zervos 1996, 1998). This result, however, does not suggest a direct and monotonic expansion of the share of equity markets in the financial system. In reality, the expansion of equity markets always appears to be preceded and accompanied by the general expansion of the overall financial system. And to a careful observer, far from being a simple and straightforward fact, the co-evolution of real and financial variables is a complex and multifaceted phenomenon. Indeed, the expansion of stock markets generally follows the development of commercial banks and other financial intermediaries which, in many cases, continues as equity markets expand. This process produces an apparently puzzling situation: an expanding equity market together with a financial system persistently dominated by banks and their financial products. Even if the evidence often appears to be bewildering, and in many circumstances difficult to interpret, some simple general stylized facts about the relationship between financial development and economic growth can be drawn from the empirical literature (De Gregorio and Guidotti 1995; King and Levine 1993a, 1993b; Levine and Renelt 1992; Roubini and Sala-i- Martin 1991). These facts are summarized in the following points:

a) In the early stages of economic development, financial markets are very thin and very rudimentary. During these stages, financial markets are dominated by banks, or similar types of financial intermediaries. Stock markets are completely absent or, if they exist in any form, their size is negligible.

b) As capital accumulates financial intermediaries develop, the number of financial instruments increases, as does the level of sophistication and complexity of financial contracts and the flow of resources and funds accruing to the financial market increases its size. Stock markets start developing both in terms of the number of listed firms and market capitalization.

c) As the economy continues to grow, equity markets develop further and so do banks and other financial intermediaries.

d) Stock markets appear to develop in a non-monotonic ways. In economies where stock markets are relatively small, capital accumulation seems to be followed by a relative increase in banks' share in the financial system. In economies where the stock market has already reached a reasonable size, further development of the market causes an increase in the equity markets' share. In other words, evidence shows that the equity/debt ratio first decreases and, only with further development of the stock market, increases.

The co-evolution of equity markets and capital accumulation is only one aspect of the more general interrelationship between economic growth and the expansion of the financial system. Since the seminal contributions by Goldsmith (1969) and McKinnon (1973), economists have devoted considerable attention to the study of the role played by financial intermediation in the process of real resource allocation and capital accumulation. Only very recently have economists specifically focused their attention on the role of stock markets in the process of economic development. Interestingly, these recent studies have not only revealed novel theoretical and empirical aspects of the channels of interaction between real and financial variables, they have also been able to shed light on individual firms' optimal financial choice in connection with economic development.

At this juncture, it is necessary to define stock markets' development, and to specify a measure of such development. The primary measure to assessing the expansion of a stock market is to look at changes in its dimension. A simple measure of a stock market's size is the total value of all the shares in the market at each point in time (market capitalization) or the average of this value over a period.

Okodua, H. and Ewetan, O. (2013) in their study, Stock Market Performance and Sustainable Economic Growth in Nigeria, using the autoregressive distributed lag (ARDL) estimation technique came to conclusion that the overall output in the Nigerian economy is less sensitive to changes in stock market capitalization as well as the average dividend yield.

Market size is important because the level of savings mobilization and risk diversification depend strongly on this indicator. Of course, a measure of a stock market's size needs to take into account the dimension of the economic system overall. For this reason, the typical measurement employed in empirical analyses is the ratio of market capitalization to gross domestic product (GDP) (market capitalization/GDP). Stock market size can also be measured by the number of listed companies in the stock exchange in each period. Although market size is an important indicator of stock market development, this measurement by itself does not capture all the relevant features of a financial markets' development. Indeed, a developed market is also an efficient and liquid market in which financial funds can be mobilized at low cost and can move easily from one investment to the other. These qualitative features of market development can be captured by indicators such as the volume of shares traded in each period and the degree of concentration. While the former of these indices measures the level of liquidity in the market, the latter takes into account the level of risk diversification. It is useful to provide a brief and schematic description of such indicators:

a. **Market capitalization ratio**: this is calculated by dividing the value of listed companies (market capitalization) by GDP. It gives a measure of the size of the stock market relative to the size of the economy. It is a good measure of the relative size of the stock market in the economy.

b. **Number of listed companies**: this specifies the number of all companies listed in the country's stock exchange at any point in time. This indicator is also a measure of stock market size.

c. **Total value traded**: this gives the total value of shares traded during the period. Total value traded divided by GDP gives a measure of the liquidity in the market. Market liquidity measures how easily securities can be bought and sold. This indicator complements the market capitalization ratio and signals whether market size is matched by trading activity.

d. **Turnover ratio** is the total value of shares traded during the period divided by the average market capitalization for the period. Average market capitalization is calculated as the average of the end-of-period values for the current period and the previous period.

e. **Concentration**: the degree of market concentration is important to show how well a market really works. A very high degree of concentration signals a heavy and illiquid market. In such circumstances, the benefits of risk diversification in markets are very low. A measure of concentration could be provided, for example, by the average size of firms listed in the stock market

3.0. Methodology

The method of analysis in this study is the Error Correction Model (ECM) technique with E-VIEWS 7 as the operational software. It is one of the most commonly employed methods in estimating relationships in econometric models where major assumptions of the Ordinary Least Square (OLS) have been violated and its use in a wide range of economic relationships, has provided satisfactory results.

This study employed secondary data collected from various sources including the Central Bank of Nigeria statistical bulletin, 2012, Annual Report and Statement of Account (various issues), the National Statistical Bureau and Stock Exchange Annual Reports 2012. The data series used in this study for analysis includes; Real Gross Domestic product (RGDP), total value traded (TVT), market capitalization ratio (MCR), turnover ratio (TOR), and number of listed companies (Q).

3.1. Model Specification

Economic growth (proxied as RGDP) is expressed as a function of total value traded (TVT), market capitalization ratio (MCR), turnover ratio (TOR), and number of listed companies (Q).

$lnRGDP = f(lnTVT, lnMCR, lnTOR, lnQ)$

$lnRGDP = \beta_0 + \beta_1 lnTVT + \beta_2 lnMCR + \beta_3 lnTOR + \beta_4 lnQ + \mu_t$

All explanatory variables are expected to have positive effects on RGDP, i.e., $\beta_1, \beta_2, \beta_3, \beta_4 > 0$.

Where: RGDP is the Real Gross Domestic Product, TVT is the Ratio of Total Value Traded to GDP, MCR is Market Capitalization Ratio, TOR is Turnover Ratio, and Q is Number of Listed Companies, ln stands for logarithm transformation.

4.0. Analysis of Results and Discussion of Findings

4.1. Testing for Stationarity

In order to avoid the occurrence of spurious results, this study adopted the Augmented Dikky – Fuller (ADF) test for testing the Stationarity of the time series data. The ADF test statistic outcome of the time series data for the period, 1981 – 2012 shows that all-time series data are stationary at first difference at 1% level of significance. See table below

Table 1: Augmented Dickey-Fuller test statistic

	t - statistic	Critical values 1%	Critical values 5%	Critical values 10%	Prob.	Decision
D(lnRGDP)	-5.516956	-3.670170	-2.963972	-2.621007	0.0001	I(1)
D(lnTVT)	-5.805901	-3.670170	-2.963972	-2.621007	0.0002	I(1)
D(lnMCR)	-4.491473	-3.670170	-2.963972	-2.621007	0.0013	I(1)
D(lnTOR)	-5.805901	-3.670170	-2.963972	-2.621007	0.0000	I(1)
D(lnQ)	-3.700260	-3.670170	-2.963972	-2.621007	0.0093	I(1)

4.2. Testing for Cointegration

We seek to determine whether there exists long-run equilibrium relationship among the variables of study. In doing so, the Johansen cointegration test was used. This test identifies the number of long-run relationship that exists among the sets of integrated variables. The trace statistic tests the null hypothesis that there are at most r cointegrated equations. Therefore, a rejection of the null hypothesis means that there are more than r cointegrating relationships.

Table 2: Johansen Cointegration Test

Sample (adjusted): 1984 2012
Included observations: 29 after adjustments
Trend assumption: Linear deterministic trend
Series: LNRGDP LNMCR LNQ LNTOR LNTVT
Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.788073	102.3268	69.81889	0.0000
At most 1 *	0.638923	57.33298	47.85613	0.0050
At most 2	0.520873	27.79174	29.79707	0.0837
At most 3	0.175904	6.453875	15.49471	0.6419
At most 4	0.028661	0.843304	3.841466	0.3585

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.788073	44.99387	33.87687	0.0016
At most 1 *	0.638923	29.54124	27.58434	0.0277
At most 2 *	0.520873	21.33787	21.13162	0.0468
At most 3	0.175904	5.610571	14.26460	0.6635
At most 4	0.028661	0.843304	3.841466	0.3585

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

From the table above the trace statistic of 102.3268 and 57.33298 clearly exceed the critical values of 69.81889 and 47.85613 respectively at 5 percent confidence interval, hence, we are not accepting the null hypothesis and conclude that there is at least one cointegrating relationship and therefore, a long run equilibrium relationship exists among the variables.

The eigenvalue test also supported this claim of long run equilibrium relationship among the variables. The maximum eigenvalue statistics of 44.99387, 29.54124 and 21.33787 exceed the critical values of 33.87687, 27.58434 and 21.13162 at 95 percent confidence level, thus, we are not accepting the null hypothesis of no cointegrating relationships among the variables.

Table 3: Error Correction Model

Dependent Variable: D(RGDP)
Method: Least Squares
Sample (adjusted): 1986 2012
Included observations: 27 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000283	0.163587	-0.001731	0.9987
D(TVT)	-1.232893	0.593978	-2.075656	0.0716***
D(TVT(-2))	3.840412	1.312320	2.926429	0.0191**
D(TVT(-3))	5.936180	1.967576	3.017002	0.0166**
D(TVT(-4))	2.414038	1.142240	2.113425	0.0675**
D(MCR)	0.274275	0.607209	0.451697	0.6635
D(MCR(-1))	3.784217	1.631663	2.319239	0.0490**
D(MCR(-2))	-3.936743	1.392250	-2.827612	0.0222**
D(MCR(-3))	-6.159065	1.691614	-3.640941	0.0066*
D(MCR(-4))	-6.653892	2.560853	-2.598311	0.0317**
D(Q)	21.25539	9.614550	2.210752	0.0580***
D(Q(-1))	-11.60323	5.263652	-2.204406	0.0586***
D(Q(-3))	-13.42078	8.068851	-1.663282	0.1348
D(Q(-4))	27.65256	11.89832	2.324073	0.0486***
D(TOR)	-1.104318	0.672195	-1.642854	0.1390
D(TOR(-2))	-1.953935	0.786302	-2.484968	0.0378**
D(TOR(-3))	-3.229779	0.950067	-3.399526	0.0094*
D(TOR(-4))	-2.952243	1.170723	-2.521726	0.0357**
ECM(-1)	-0.663488	0.244396	-2.714804	0.0265**

R-squared	0.860567	Mean dependent variable		0.113338
Adjusted R-squared	0.546844	S.D. dependent variable		0.316567
S.E. of regression	0.213103	Akaike info criterion		-0.063071
Sum squared resid	0.363303	Schwarz criterion		0.848814
Log likelihood	19.85146	Hannan-Quinn criterion		0.208080
F-statistic	2.743075	Durbin-Watson stat		2.474082
Prob(F-statistic)	0.074051			

* denotes rejection of the hypothesis at the 0.01 level
** denotes rejection of the hypothesis at the 0.05 level
*** denotes rejection of the hypothesis at the 0.10 level

The result of the Error Correction Model estimation above revealed that market capitalisation ratio (MCR) and Turnover ratio (TOR) are insignificant at all acceptable statistical levels of significance (of 0.01, 0.05. and 0.10 levels of significance). The ratio of total value traded (TVT) was significant at 10 percent. Although the TVT has a negative elasticity of -1.232893 running contrary to its a priori expectation it actually reflects true situation in the Nigerian economy. Less than 1 percent of Nigerians knew what the stock market is all about, hence the continuous loss of confidence in the market further heightened by the global financial crunch of 2007 to 2009 which left stock prices in the economy crashed beyond imagination. Due to the continuous loss of confidence in the market which still permeates the economy is the reason investors are divesting into the real sectors of the economy at the expense of the stock market. Thus, as the GDP is growing investors is divesting from the stock market, resulting to less investment in the stock market hence the inverse relationship that now exists between RGDP and TVT in the Nigerian economy. Also Number of listed companies (Q) was rightly signed and significant at 10 percent critical value, while the result also revealed that the past (lag) values of all explanatory variables affect the Nigerian economic growth at varying levels of significant as shown in the table 3 above. The ECM was rightly signed with the economy recovery rate of 66 percent. The Adjusted R-squared indicated that 55 percent variation in Nigeria's economic growth is explained by the explanatory variables.

4.3. Granger Causality Test

The Granger Causality tests whether X causes Y is to see how much of the current Y can be explained by past values of X and then to see whether adding lagged values of X can improve the explanation. A variable granger causes another if the F-statistic is significant at p-value of 5 percent or less.

Table 4: Granger Causality Test

Pairwise Granger Causality Tests
Sample: 1981 2012
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LNMCR does not Granger Cause LNRGDP	30	2.36635	0.1145
LNRGDP does not Granger Cause LNMCR		2.26582	0.1246
LNQ does not Granger Cause LNRGDP	30	3.75515	0.0375
LNRGDP does not Granger Cause LNQ		1.65670	0.2110
LNTVT does not Granger Cause LNRGDP	30	0.59448	0.5595
LNRGDP does not Granger Cause LNTVT		2.11544	0.1417
LNTOR does not Granger Cause LNRGDP	30	0.27148	0.7645
LNRGDP does not Granger Cause LNTOR		0.44077	0.6484
LNQ does not Granger Cause LNMCR	30	1.56922	0.2280
LNMCR does not Granger Cause LNQ		0.01580	0.9843
LNTVT does not Granger Cause LNMCR	30	3.53121	0.0446
LNMCR does not Granger Cause LNTVT		9.31410	0.0009
LNTOR does not Granger Cause LNMCR	30	1.74680	0.1949
LNMCR does not Granger Cause LNTOR		1.07621	0.3562
LNTVT does not Granger Cause LNQ	30	0.96945	0.3931
LNQ does not Granger Cause LNTVT		2.34292	0.1168
LNTOR does not Granger Cause LNQ	30	2.56490	0.0970
LNQ does not Granger Cause LNTOR		1.25637	0.3020
LNTOR does not Granger Cause LNTVT	30	1.55815	0.2303
LNTVT does not Granger Cause LNTOR		1.50872	0.2407

Table 4 above authenticates the evidence obtained from the Error Correction Model estimation technique**.** The result revealed that there is unidirectional causal relationship between Numbers of listed Companies (Q) and Real Gross Domestic Product (RGDP) and it runs from Numbers of listed Companies (Q) to Real Gross Domestic Product, while bi-directional causal relationship exists between Market Capitalisation Ratio (MCR) and the Ratio of Total Value Traded (TVT). Ratio of total value traded Granger causes Market capitalisation ratio and Market capitalisation ratio Granger causes Total value traded. Moreover, there are no causation between Market capitalisation ratio and real gross domestic product; Ratio of Total Value Traded and real gross domestic product; and Turnover ratio (TOR) and real gross domestic product.

5.0. Conclusion/Policy Implementation

Although, the stock market size remain a very important indicator in measuring the stock market impact on economic growth, this study reveals that the Nigeria's stock market size with an average of 250 listed companies exacts significant influence on Nigeria's economic growth. This study also revealed that the Nigerian economic growth and stock market capitalization has no causal relationship. Thus, it is clear from this study that the Nigerian stock market has the potentials to drive the economy only if enabling environment is created for easy enlisting of firms in the NSE. It does not go without saying that the NSE must set up mechanism for reaching out to viable enterprises in the economy. Stock market regulators should therefore address policy issues that are capable of boosting the investors' confidence through improved policy formulation and creation of awareness. When confidence is restored the total value traded will increase significantly thus raising stock market capitalisation.

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