The Nigerian Capital Market and Economic Development: A Critical Appraisal

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Abstract

This article is centered on the role of the Nigeria capital and economic development. The capital market is primarily established to boast the industrial growth and economic development of Nigeria economy by mobilizing long-term funds and capital formation for investment and productive purposes. Using time series data from 1971-2010 and applying the Engle-Granger and Johansen method of co-integration in a VECM setting estimation technique. The results revealed that in the long run, the Nigerian capital market positively and significantly influence economic development. We therefore recommend that government should put more effort in developing an active new issues market by encouraging more floatation of new issues and create stable environment for business.

1. Introduction

Over the years economic transformation has been the borne of contention in the Nigerian economic policy and reform programme. This meticulous sojourn into the realm of rapid economic advancement induced the establishment of the Nigerian capital market in 1960 to assist in the area of long-term funds mobilization, capital formation and optimal allocation of resources for investment and productive purposes aim at responding to the socio-economic development need of the nation. Indeed, the primary aim of the Nigerian capital market is to mobilize long-term funds for investment as well as stimulating industrial and economic development of the nation, but the market has suffered some serious bans which make the aim almost unattainable despite all the reforms and effort put in place by the Government to revitalize the market and make it more efficient. These bans have served as chronic problems inhibiting the Nigerian capital market development and performance. The objective of the paper is to critically evaluate the contribution of the Nigerian capital market to the development of the Nigerian economy. However, the importance of this research work cannot be over-emphasized. This is in view of the fact that capital market is an indispensable tool for enhancing productivity, investment activities and stimulating rapid industrial as well as economic development. There is an argument that most industrialized countries of the world would not have recorded reasonable socio-economic progress without developing viable and efficient capital market capable of promoting and mobilization of long-term funds for investment purposes and optimal allocation of resources that ensure sustainable economic development.

The most important role of the Nigerian Capital Market is the mobilization and efficient allocation of capital for investment purposes.   The market puts in place structures for the mobilization of savings from numerous surplus economic units for the purposes of the productive process and thus enhances economic growth and development. However, because of certain problems inherent in or affecting the market, the performance of the capital market has always been questioned. Some of these problems include stringent listing conditions especially in the first and second tier markets. There is also lack of awareness by the investing public, leading to low activity and insufficient funds in the market arising from the buy and hold attitude of majority of investors. Other problems are poor economic conditions making companies not to perform well in terms of product availability and dividend payment. This further leads to loss of confidence by investors in the institutions operating in the market and divestment of funds to some other areas outside the capital market, where appropriate returns are envisaged. In doing this, the investors shy away from investment in the capital market resulting in the reductions of securities traded in the market. Since the amount of securities traded could determine the amount of funds mobilized, a reduction in securities traded thus creates insufficient funds. This affects the economic growth and development in the country

since companies cannot raise sufficient funds for expansion, modernization and optimum utilization of their operational capacities.

2. Theoretical Framework and Literature Review

Financing the savings - investment gap, especially in the less developed economies like Nigeria, where savings mobilization could not keep pace with the level of investment, has called for encouraging foreign capital inflow in order to bridge the gap and thus promote economic growth (Ahmed, 1997).

This is in line with the general belief that in the absence of domestic savings which is the source of needed capital, the encouragement of foreign capital inflow is more likely to have positive influence on the development process (Fobbozzi & Modiglian, 1992). This involves the conversion of domestic and foreign resources into tangible and intangible productive assets that would improve the overall output of the economy. These resources would also need to be structured into acceptable tenors (short, medium and long) to promote development. Thus, the cardinal role expected of the money and capital markets is to provide such investible funds. The stock market in particular contributes to economic development through the provision of required resources, which are within the medium to long-term spectrum. The stock market also provides veritable avenue for private enterprises to raise investible funds for expansion, modernization and other long term purposes (Anyanwu, 1998).

There is a large body of literature on the stock market development. However, this work is anchored solely on the Efficient Market Hypothesis (EMH). Thus, the stock market efficiency is divided into two major areas: the information efficiency and the operational efficiency Baumol (1965), Fama (1970), Weston and Copeland (1986) among others. It should be observed that a stock market that is operationally efficient may not be informational efficient and vice versa.

2.1 Evolution of Nigerian Capital Market

The capital market is the long-term end of the financial market. It is made up of institutions, which facilitate the issuance and secondary trading of long-term financial instruments. Unlike the money market, which function basically to provide short-term funds, the capital market provides funds to industries and government to meet their long-term capital requirements, such as financing of fixed investments buildings, plants, bridges and so on (CBN 2010).

In Nigeria, the capital market first came into existence with the establishment of the Lagos stock Exchange in 1961. The Exchange was incorporated under the company's ordinance as an association limited by guarantee. The Lagos Stock Exchange was given initial financial backing by the Central Bank of Nigeria (CBN) in the form of annual subventions. Following the recommendations of the Government Financial System Review Committee of 1976, the Lagos Stock Exchange was re-named and reconstituted into the Nigeria Stock Exchange in 1977. Additional trading floors were also opened in the same year in Port-Harcourt and Kaduna (CBN, 2010).

The Nigerian Stock Exchange (NSE) is the central point of the Nigerian Capital Market, while the security and Exchange Commission (SEC) serves as the apex regulatory body. The NSE provides a mechanism for mobilizing public and private savings, and makes such funds available for productive purposes The Exchange also provides a means for trading in existing securities (CBN, 2010).

In order to be at par with developed nations the Nigerian capital market authorities have recently initiate a number of reforms aimed at making the market attractive and vibrant to both domestic investors and operators and their foreign counterparts alike. Although the progress of internationalization of the Nigerian capital market has reached an advanced stage, there are, however, certain conventions, standards and practices that enhance the growth of a capital market, which cannot be legislated into being achieved overnight (Onoh, 2002).

The introduction of the Automated Trading System (ATS) is a welcome effort in the right direction. The system is aimed at facilitating speedy trading and clearing at the capital market. It interfaces with the Central Security Clearing System (CSCS) and was commissioned in 1998. The Abuja Stock Exchange, which has been converted to Abuja Security and Commodity Exchange also, installed its own Automated trading system. The system which is an online, screen based integrated system is capable of performing multiple functions, being equipped with equity, debt and depository modules (Onoh, 2002).

Again, to deepen the Nigerian capital market, Decree No.45 of 1999 was promulgated to restructure and widen the functions and powers of the Nigerian Stock Exchange Commission (NSEC) to establish a commodity exchange, future markets, derivatives and any other exchanges which the commission considers desirable. The commodity exchange has various benefits for the members. Thus, members can deal on the floor of the exchange or with the clients of the exchange, who deal through brokers registered with the exchange (Onoh, 2002).

The growth and development of the Nigerian capital market according to Nwankwo (1980) was influenced by series of government policies. Firstly, was the permissive legislature, in which the Stock Exchange Act of 1961 was given the impetus in the development and growth of the Stock Exchange. Besides, the government instituted a number of positive measures that could stimulate the growth of the capital market. One of such measure was the indigenization of the credit base objective. The huge investments in second and third development loan stock issues in 1961 and 1962 is a ready case in point (Nyong, 1996).

Secondly was the income tax management Act No.21, 1961 in which existing pension and provident funds in the country were obliged to invest at least one-third of their funds in Nigerian government stocks at the penalty of forfeiting valuable tax concessions. On the other hand, pension and provident funds established after 1961 were required under the Act to invest at least a half of their funds in these stocks. This elucidates the consistently huge investment of these funds in government stocks (Nzotta, 2004).

Another factor which stimulated capital market growth was the insurance of miscellaneous provision Act, 1964. Under this Act, insurance companies operating in Nigeria were to invest locally at least forty percent of the premium received on locally insured risks in any financial year (Nzotta, 2004).

2.2 Capital Market and Economic Development

Gurley and Shaw (1967) and Shaw (1973), recognized the important roles played by financial institutions in economic development. Capital markets have important and strategic roles of proving risk capital for long-term structures that ensures the liquidity and stability of the financial system. Thriving capital markets are closely associated with vibrant private sector development and strong economic growth.

Within the broad classification of the capital market are the securities and non securities markets. The non-securities markets, which comprise banks and bank-related institutions, mainly intermediate in debt and debt related instruments. In most developing and developed countries, this type of financial institution performs most of the functions of financial intermediation and is quite developed relative to the securities markets.

3. Methodology

In carry out time-series analysis of data in financial econometrics, it is important to examine the stationarity properties of the time series. However, if the mean, variance and auto-covariance are not time dependent then it is stationary.

$$Y_t = \beta + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-2} + \ldots\ldots\ldots\ldots\ldots \alpha_p Y_{t-p} + U_t \tag{1}$$

where U_t is a white noise disturbances term. Hence equation (1) can take this shape.

$$Y_t = B + \sum \alpha_1 Y_{t-1} + U_t \tag{2}$$

Where b is a constant and α_1-------α_p are parameters of the model.

$$\sum_{i=1}^{p} Y_t = B + \alpha L^i Y_t U_t \tag{3}$$

As log operator

$$A(L) = (1 - \alpha_1 L - \alpha_2 L^2 \ldots\ldots\ldots\ldots \alpha_p L_p) \tag{4}$$

If U_t is a white noise process with $E(U_t) = 0$ and V at $(U_t) = \theta^2$

$$Y_t = B + U_t + \alpha_1 U_{t-1} + \alpha_2 U_{t-2} + \ldots\ldots\ldots\ldots + \alpha_q U_{t-q} \tag{5}$$

$$Y_t = B + \sum_{i=1}^{q} \alpha_1 U_{t-1} + U_t \tag{6}$$

A linear combination of white noise process such that Y_t is a function of current and lagged values of a white noise disturbance process (Brook, 2008). Equation can be rewritten with the lag operation notation.

$$Y_t = B + \sum_{i=1}^{q} \alpha L^i U_t + U_t \tag{7}$$

$$Y_t = B + \alpha_1 Y_{t-1} + \alpha_2 Y_{t-2} + \text{-----------} \alpha_p Y_{t-p} + \alpha_1 Ut-1 + \alpha_2 U_{t-2} + \text{------} \alpha_q U_{t-q} + U_t \tag{8}$$

Where $E(U_t = 0)$; $E(U_t^2) = \theta^2$; $E(U_t U_s) = 0$, $t \neq s$.

Stationarity in a time series data is a desirable property for an estimate AR model. This is because a model whose co-efficients are non-stationary will have a non-declining effects on the current values of the dependent variable as time progress which is counter-productive, empirically defective and could lead to spivicus regressions. In this staning, the Augmented Dickey-fuller(ADF) and Philips-Perron (PP) unit root test are employed to handle the problem of data stationarity.

$$Y_t = B + \alpha Y_{t-1} + U_t \tag{9}$$

Where B and α are parameter of the model and U_t is a white noise disturbance term.

If and only if, -1 /α/ 1, then $\alpha=1$, then Y_t is a non-stationary series.

$$\Delta Y = B + RY_{t-1} + U_t \qquad (10)$$

Where $R = (\alpha - 1)$ and the null hypothesis can be tested as H_o: $R = 0$

$$\Delta Y_t = B + RY_{t-1} + \sum_{i=1}^{p} \Delta Y_{t-1} + U_t \qquad (11)$$

Therefore in order to be sure that the problem of errors uncorrelated the lagged term are included.

The study also adopted Engle and Granger (1987) co-integration.

$$Y_t = B_o + B_t X_t + U_t \qquad (12)$$

$$U_t = Y_t - B_o - B_t X_t \qquad (13)$$

In addition to determine the direction of causality between the variables, the study employ the Granger causality test;

$$Y_t = B_o + \sum_{i=1}^{n} B_i Y, \; Y_{t-1} \sum_{i=1}^{n} X_{t-1} BX + U_t \qquad (14)$$

$$X_t = \alpha_o + \sum_{i=1}^{n} \alpha_i Y \quad Y_{t-1} \sum_{i=1}^{n} XB_i X + Y_t \qquad (15)$$

Where X_t and Y_t are the variables to be tested and U_t and V_t are white noise disturbance terms.

The model:

$$PCGDP = \alpha_o + \alpha_1 MCR + \alpha_2 VTR + \alpha_3 TR + \alpha_4 INS + \alpha_5 INF + \alpha_6 GE + \alpha_7 OPEN + \alpha_8 POL + U_t \qquad (16)$$

Where:

PCGDP = Per Capital Gross Domestic product

MCR = Market Capitalization Ratio

VTR = Value of all Share Traded Ratio

TR = Turnover Ratio

INS = Interest Rate Spread

INF = Inflation

GE = Government Expenditure

OPEN = Exports plus imports as a ratio of GDP used to measure of openness of the economy

POL = Political Stability

U_t = Stochastic error term.

4. Results and Discussions

From the table 1, R^2 is 98.37% while the adjusted R^2 is 98.17% showing that 98.37% of the variation ion lnPCGDP can be explained by changes in the explanatory variables. Furthermore the overall fit of the model is good given an F-statistics of 492.7898 (P-value = 0.0000).

Table 1. Dependent Variable: lnGDP. Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.560437	2.758538	1.290697	0.2074
LnMCR	0.70412	0.380947	1.849892	0.0749
LnINF	0.300916	0.669444	0.449501	0.6565
LnTR	0.438375	0.330659	1.325759	0.1956
LnINS	0.233831	0.076796	3.044820	0.0050
LnVTR	-0.603713	0.343058	-1.759799	0.0894
LnGE	-0.294439	0.245449	-1.199592	0.2404
LnOPEN	-0.414585	0.121929	-3.400206	0.0020
LnPOL	-1.173179	0.318384	-3.684793	0.0010
R-squared	0.983726	Mean dependent var		5.933368
Adjusted R-squared	0.981710	S.D dependent var		2.440057
S.E of regression	0.222168	Akaike info criterion		0.050171
Sum squared resid	1.382045	Schwaz criterion		0.481115
Log likelihood	9.046750	F-statistic		492.7898
Durbin-Watson stat.	1.895730	Probability (F-stat.)		0.000000

Source: Authors' Computation (2012).

Table 2. Testing for Unit Root

In view of the time dependent feature of our data, the variables were tested for unit root using both the ADF and PP tests at the level, first difference and second difference series. The results of the unit root tests are presented in Table 2 Below.

Variables	ADFTest: 2nd Diff. statistics	PP Test: 2nd Diff. Statitics	Order of integration
LnPCGDP	-6.909437	-13.18082	1(2)
LnMCR	-5.409861	-8.277836	1(2)
LnVTR	-8.547662	-16.17624	1(2)
LnINS	-7.173717	-18.42792	1(2)
LnINF	-6.247241	-7.382012	1(2)
LnTR	-7.772326	-16.57801	1(2)
LnGE	-8.733000	-15.11812	1(2)
LnOPEN	-7.511231	-18.30047	1(2)
LnOPEN	-6.928203	-13.29821	1(2)
RESID	-9.450283	-18.66942	1(2)

Source: Authors' Computation (2012).

Note: Critical Values: (ADF): 1% -3.6289; 5% -2.9472; 10% -2.6118.

(Phillips-Perron): 1% -3.6228; 5% -2.9446; 10% -2.6105.

However, the DW-statistics is found to be 1.896 which is higher than the adjusted R^2 value of 0.9917 and lies between the D-W critical values of 1and 2, suggest the presence of some degree of positive autocorrelation in the level series. This indicates that there may be some degree of time dependence in the level series which could lead to spurious regression results, suggesting the need for more rigorous analysis of the stationary of level series data.

Table 2 above presents the summary results of both the ADF and PP unit root tests. The result of the unit root tests show that the null hypothesis of a unit root test for second difference series for all the variables can be rejected at all the critical values indicating that the level series which is largely time-dependent and non-stationary at the second difference and maximum lag of one. Thus, the reduced from model follows an integrating order of 1(2) process and is therefore a stationary process. From table above also, the test of stationarity in the residuals from the level series regression is significant at all lags.

Applying the Johansen co-integration test, we find that the null hypothesis of no co-integration is rejected and we conclude that the variables are co-integration in the long run. To determine the number of co-integrating equations, we employ the Johansen (1991) test for co-integrating vectors in a VAR system. The test assumption as shown in table below is linear deterministic trend in the data lag interval of 1 to 1.

Table 3 shows the results of the Johansen co-integration test. The null hypothesis of at most 5 co-integrating equations is rejected at 5% level of significance and hence the alternative hypothesis of at most 6 co-integrating equations at the 5% level of significance is accepted. This implies that there are 6 linear combinations of the variables that are stationary in long run.

Table 3. Johansen Co-integration Test

Sample: 1971-2010. Included observations: 39. Test assumption: Linear deterministic trend in the data. Series: ln(PCGDP) ln(MCR) ln(GE) ln(TR) ln(INS) ln(VTR) ln(OPEN) ln(POL). Lags interval:1 to 1.

Eigevalue	Likelihood Ratio	5% critical value	1% critical value	Hypothesis No. of CE(s)
0.981655	506.5345	233.13	247.18	None**
0.959596	370.5896	192.89	205.95	At most 1**
0.879482	261.4899	156.00	168.36	At most2**
0.821014	189.5475	124.24	133.57	At most 3**
0.780599	131.0523	94.15	103.18	At most 4**
0.646830	79.47932	68.52	76.07	At most 5**
0.421980	44.09197	47.21	54.46	At most 6
0.326396	25.45498	29.68	35.65	At most 7
0.289004	12.02115	15.41	20.04	At most 8
0.012397	0.424145	3.76	6.65	At most 9

Source: Authors' Computation (2012).

Note: * (**) denotes rejection of the hypothesis at 5% (1%) significant level; L.R test indicates 6 co-integrating equations at 5% significant level.

The parsimonious error correction result indicates a good fit with an F-ratio of 5.4606, an R^2 of 72.31% and an adjusted R^2 of 59.07%, meaning that the model explains approximately 72.31%. To further the analysis of the long run relationship, the capital market-growth model under investigation is then specified in a VECM incorporating a two-period lagged residual. The VECM is employed to capture the short-run deviations of the parameters from the long run equilibrium. The autoregressive distributed lag technique was used with a maximum lag of 1 to obtain an over-parameterized result (table 5) and then arriving at the parsimonious error correction result using the general-specific approach as presented in table 6.

Table 4. Over-Parameterized Result

Dependent Variable: D(D(lnPCGDP)). Method: Least Squares. Sample(adjusted): 1971-2010. Included observations: 39. Excluded observation: 4 after adjusting endpoints.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.005854	0.030685	-0.190793	0.8522
D(D(ln(PCGDP(-1))))	-0.312107	0.208813	-1.494670	0.1631
D(D(ln(POL)))	-1.823699	0.472870	-3.856661	0.0027[*]
D(D(ln(POL(-1))))	-0.769175	0.358770	-2.143922	0.0552[**]
D(D(ln(GE)))	-0.392777	0.185573	-2.116561	0.00579[**]
D(D(ln(GE(-1))))	-0.033600	0.129880	-0.258700	0.8006
D(D(ln(MCR)))	-0.199161	0.239905	-0.830167	0.4241
D(D(ln(MCR(-1))))	-0.231023	0.539318	-0.428361	0.6767
D(D(ln(OPEN)))	-0.130497	0.203425	-0.641498	0.5343
D(D(ln(OPEN(-1))))	-0.253702	0.196988	-1.287908	0.2242
D(D(ln(NL)))	2.056782	1.476954	1.392583	0.1913
D(D(ln(NL(-1))))	0.703733	1.193636	0.589571	0.5674
D(D(ln(TR)))	0.039202	0.234434	0.167218	0.8702
D(D(ln(TR(-1))))	-0.170705	0.331809	-0.514468	0.6171
D(D(ln(INS)))	0.063621	0.066071	0.962915	0.3563
D(D(ln(INS(-1))))	0.026474	0.063015	0.420117	0.6825
D(D(ln(VTR)))	0.037198	0.257857	0.144258	0.8879
D(D(ln(VTR(-1))))	0.315051	0.372870	0.844935	0.4161
ECM(-2)	-0.246881	0.354527	-0.696367	0.5006[**]
R-squared	0.885150	Mean depedent var	-0.007523	
Adjusted R-squared	0.676332	S.D depedent var	0.287672	
S.E of regression	0.163662	Akaike info criterion	-0.537370	
Sum squared resid	0.294637	Schwarz criterion	0.424519	
Log likelihood	29.59792	F-statistic	4.238864	
Durbin-Watson stat	2.010799	Prob(F-statistic)	0.008741	

Source: Authors' Computation (2012).

Note: [*]([**]) significant at 5% (10%).

Table 5. Parsimonious Error Correction Result

Dependent Variable: D(D(In(GDP))). Method: Least Squares. Sample (adjusted): 1971-2010. Included observations: 39. Executed observations: 1 after adjusting endpoints.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.015596	0.031140	0.500822	0.6213
D(D(In(PCGDP(-1))))	-0.562467	0.142630	-3.943539	0.0006[*]
D(D(In(POL(-1)))	-0.861583	0.310343	-2.776232	0.0107[*]
D(D(In(POL(-1))))	-0.702870	0.242973	-2.892790	0.0082[*]
D(D(In(OPEN))))	-0.119907	0.077189	-1.553418	0.1340
D(D(In(MCR)))	-0.128479	0.100797	-1.274631	0.2152
D(D(In(GE(-1))))	-0.448422	0.165942	-2.702288	0.0127[*]
D(D(In(INF))))	1.135747	0.760245	1.493922	0.1488
D(D(In(TR(-1))))	-0.151253	0.076893	-1.967071	0.0614[**]
D(D(In(VTR(-1))))	0.198733	0.090657	2.192139	0.0388[*]
ECM(-2)	-0.478747	0.248325	-1.927903	0.0663[**]
R-squared	0.723114	Mean dependent var	0.005358	
Adjusted R-squared	0.590690	S. D. dependent var	0.282967	
S. E. of regression	0.180971	Akaike info criterion	-0.315099	
Sum squared resid	0.753262	Schwarz criterion	0.218163	
Long likelihood	17.51423	F-statistic	5.460598	
Durbin-Watson stat	1.990834	Prob(F-statistic)	0.000302	

Source: Authors' Computation (2012).

Note: [*]([**]) sig. at 5% (10%).

The error correction term (ECM) is low, has the appropriate negative sign and shows that approximately 47.9% of the deviation from the long-run equilibrium in the capital market-growth model is corrected bi-annually by the market.

Pairwise Granger causality tests were run on the model with at all optimal lag or I. The results are as presented in Tables 6 and 7. The researcher's interest here is to establish the direction of causality between the capital market indicators (MCR, INF, TR, INS, VTR) and PCGDP as well as using their natural log transform.

The results show that the F-statistic for the null hypothesis of the causality test running from InMCR to InPCGDP is 1.38600 with a P-value of 0.24703 and from InPCGDP> to InMCR, the F-statistic is 9.18796 and P-value is 0.00456 indicating a uni-directional causality from In PCGDP to InMCR at 5% level of significance. The results also show causality running significantly and uni-directionally from InINF to InPCGDP; from InTR to InPCGDP; from InPCGDP to InINS and finally from InPCGDP to InVTR. On the other hand, using the unlagged values of the variables, causality runs predominantly fromPCGDP to MCR and VTR respectively and from INS only toPCGDP.

Table 6. Pairwise Granger Causality Test Results

Sample: 1971 – 2010 (InPCGDP, InMCR, InINF, InTR, InINS, InVTR). Lags: 1.

Null Hypothesis:	Obs	F-Statistic	Probability
In(MCR) does not Granger Cause InPCGDP	39	1.38600	0.24703
In(PCGDP) does not Granger Cause LN(MCR)		9.18796	0.00456[*]
In(INF) does not Granger Cause InPCGDP	39	4.40488	0.04312[*]
In(PCGDP) does not Granger Cause In(INF)		0.00198	0.96476
In(TR) does not Granger Cause InPCGDP	39	7.18211	0.01115[*]
In(PCGDP) does not Granger Cause In(TR)		0.74602	0.39362
In(INS) does not Granger Cause InPCGDP	39	2.17678	0.14959
In(PCGDP) does not Granger Cause In(INS)		5.48770	0.02533
In(VTR) does not Granger Cause InPCGDP	39	1.51039	0.22728
In(PCGDP) does not Granger Cause LN(VTR)		5.46641	0.02523[*]

Source: Authors' Computation (2012).

Note: [*] sig.at 5%.

Table 7. Pairwise Granger Casuality Test Results

Sample: 1970 – 2008 (GDP, MC, NL, TOR, VN, VT). Lags: 1.

Null Hypothesis:	Obs	F-Statistic	Probability
MCR does not Granger Cause PCGDP	39	0.96986	0.33147
PCGDP does not Granger Cause MCR		40.4204	0.00000[*]
INF does not Granger Cause PCGDP	39	1.02838	0.31750
PCGDP does not Granger Cause INF		0.01706	0.89684
TR does not Granger Cause PCGDP	39	0.08814	0.76831
PCGDP does not Granger Cause TR		0.12700	0.72370
INS does not Granger Cause PCGDP	39	4.83583	0.03457
PCGDP does not Granger Cause INS		37.1926	0.00000[*]
VTR does not Granger Cause PCGDP	39	0.72090	0.40162
PCGDP does not Granger Cause VTR		8.13991	0.00722

Source: Authors' Computation (2012).

Note: *sig.at 5%.

With respect to the level series regression the results show that the interest rate spread (INS) is positively and significant1y related to PCGDP while the degree of openness of the economy (OPEN) and political stability (POL) impact negatively and significantly on PCGDP. Market capitalization (MCR), number of listed securities (INF), Turnover ratio (TR), value of transactions (VTR) and Government expenditure (GE) are not significant explanatory variables in the model. Overall, the leve1 series multiple regressions show a high R^2 of 99.37%, an adjusted R^2 of 99.17% and a D-W statistic of 1.89 (very close to 2.00). However, given the non-stationary feature of the Level series data, the application of the ADF and PP unit root tests indicate that the series are an integrating I (2) process. The Johansen co-integration test conducted indicates the existence of 6 co-integrating equations in the model meaning that there exists a long-run relationship among the variables.

The results of the parsimonious error correction model show the short-run dynamic adjustment of the variables in the second difference model. The one-period lag of value of transactions, turnover ratio (at 10%), minimum rediscount rate, foreign exchange rate and the degree of government regulation are significantly associated with changes in economic growth. This means that an increase in the value of transactions on the Nigerian capital market significantly increases PCGDP just as a substantial dismantling of government regulation (decrease in POL) significantly leads to improvements in PCGDP as presented in Table 4. The error correction variable (ICM) is appropriately signed significant and demonstrates that approximately 47.9% of disequilibrium in the model is corrected bi-annually by changes in the explanatory variables.

5. Conclusions and Recommendations

This article set out to examine whether there is a long run relationship between capital market activities and economic development in Nigeria. It also look at the direction of causality between capital market indicators and economic development employing the method of Johansen co-integration and the Granger causality tests using data spanning the period 1971-2010. The absence of consensus in the literature of financial economics with respect to the nature and degree of relationship between capital market and economic development as well as the controversy surrounding the direction of causality between these two variables provide a compelling motivation to examine specifically the capital market relationship with economic development within the Nigerian context.

The research findings indicate that Nigerian capital market has over the period under review contributed significantly to economic development in Nigeria. It holds a major key to the emancipation of developing countries from servitude. This conforms to the theoretical assessments as highlighted in this study. Therefore we conclude that the role of the Nigeria capital market in economic development in Nigeria is significant. Based on the research findings, it is observed that the Nigerian capital market has often suffered from certain fundamental lapses; consequently, this study in the light of our findings has formulated concise policy suggestions geared towards the creation of a more conducive atmosphere for the orderly growth and development of the market.

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