



IMPACT OF MARKET-BASED FINANCIAL STRUCTURE ON THE GROWTH OF NIGERIAN ECONOMY: AN ECONOMETRIC ANALYSIS

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ABSTRACT

Market-based financial structure plays a key role in the growth and development of all the leading economies in the Western World. The dismal performance of the market-based financial structure calls for concern in Nigeria. The objective of this paper is the examination of the impact of market-based financial structure on the growth of Nigerian economy, with emphasis on market capitalization, total value of transactions, total listed equities and government stocks and total new issues. The paper employs time series data from Central Bank of Nigeria Statistical Bulletin from 1980-2014. Econometric techniques are used to test the time series properties of the data and error correction mechanism is used for the estimation of the variables. The findings of this paper reveal that market-based financial structure significantly impacted on the growth of Nigerian economy. The joint performances of the variables in the model hold positive value for economic growth in Nigeria. The policy recommendation of this paper is that the government should make policy that will encourage firms listing in the capital market so as to improve on market capitalization and value of transactions in the market.

Key Words: Market-Based, Market Capitalization, Financial Structure and Gross Domestic Product.

INTRODUCTION

The concept of market-based financial structure is not new in financial literature. It was premised on the work of Levine (2000). The use of this concept is associated with the 'timing of industrialization' which examines the historical origin of bank-based financial structure in Germany and Japan and market-based financial structure in the United States, particularly in the 1930s (Vitols, 2001). The financial system of any nation is a function of the size of its economy. A growing economy places more responsibilities on the financial sector to mobilize the needed capital to facilitate productions, generate employment and income.

The capital market is a major channel for mobilization of long-term funds. The main institutions of the capital market are the Securities and Exchange Commission (SEC) which is the apex regulatory body, the Nigerian Stock Exchange (NSE), the issuing houses, the Stock broking firms and the registrars. Dabwort (2011) opines that the financial system comprises of various institutions, markets and operators that are in the business of providing financial services. These institutions can be broadly categorized into money market and capital market while money market is a market in which short-term financial instruments are traded; capital market on the other hand deals with long term transactions. Soyode and Oyedeji (2006) observe that since the introduction of the Structural Adjustment Programme (SAP) in 1986 in Nigeria, the capital market has witnessed a very significant increase in its performance. This is as a result of the deregulation of the financial sector and the privatization exercise which exposed investors and companies to sourcing their finance from capital market. Equity finance became one of the cheapest and flexible sources of finance for the market and remains a critical element in sustainable development of the economy (Okereke-Onyiuke, 2008&Oke, 2010).

Despite the seemingly awesome potency of the capital market in the growth and development of the economy, there exists strong controversy over the efficacy of the financial markets in promoting growth and development in the economy. It has been argued by some economists and financial scholars amongst whom are Rakshit (2001), Kim and Wei (2002) and Furman and Stiglitz (2008) that the financial markets (the market-based financial structure and the bank-based financial structure) had not in any way impacted on the growth and development of the economy at the level some scholars would want us to believe. Rakshit (2001) argues that the benefits of open financial markets predicted in neoclassical theory rest on three key assumptions that: Capital and labour resources are fully employed everywhere, International capital movements are determined by long term returns on investment in different countries and that financial and capital markets are essentially the same as other market information.

Some of these assumptions are likely to hold in developing countries. Restrictions on capital flows are certainly distortionary, but this may be optimal in the presence of other distortions (Brecher and Bhagwati, 1982) as predicted in the theory of the second best. Such distortions are pervasive in developing countries where industrial policies are often implemented to protect and promote domestic industries. Where economic institutions are often weak and only weakly able to enforce competition law and property rights and where informational asymmetries abound. In addition, poor people in developing countries face generally weak social safety nets, poor risk markets, and high rate of unemployment and underemployment. Kim and Wei (2002) argue that the models of perfectly functioning markets are even less relevant when one considers that liberalization often take place in the context of contemporaneous economic shocks. For example, liberalization has been promoted as a response to financial crises. During which government is already dealing with difficulties in servicing domestic debts and a host of other stabilization policies. In recognition of the peculiar circumstance of developing countries, the G-24 have repeatedly expressed caution in response to International Monetary Fund demands for financial market liberalization, and have questioned the appropriateness of the liberalization progress prescribe by the International Monetary Fund to deal with financial crises (Caracas Declaration, February 2007).

Following these arguments, it is our motivation in this paper to provide an econometric analysis using a co-integration approach to investigate the impact of market-based financial structure on growth of Nigerian economy. To realize this objective, the paper is organized as follows: following the introduction is section II which is review of literature. Section III discusses the research methods employed in this paper. While section IV deals with data and data analysis (trends and empirical analysis) and findings and section V includes the conclusion.

LITERATURE REVIEW

Capital market is another name associated with market-based financial structure and is defined as the market where medium and long terms finance can be raised (Akingbohunge, 1996). Capital market offers a variety of financial instruments that enable economic agents to pool, price and exchange risks, through assets with attractive yields, liquidity and risk characteristics. It encourages savings in financial assets form. This is very essential for government and other institutions, in need of long term funds. According to Al-faki (2006) the capital market is a network of specialized financial institutions, series of mechanisms, processes and infrastructures that, in various ways facilitate the bringing together of suppliers and users of medium to long term capital for investments in economic developmental projects.

The capital market possesses distinct indicators that permit easy insight to assess the development of capital market. The International Finance Corporation (1991) presents certain key indicators of capital market growth and development. The standard indicators are:

- (i) Net increase in market capitalization
 - (ii) Number of listed companies
 - (iii) Trading of shares in value terms (liquidity).
- From the foregoing, the indicators of capital market growth are:
- a) Increased breath measured by new listings.
 - b) Increased size measured by market capitalization and new Issues.
 - c) Increased liquidity measured by value traded.

Note however, that there are some indicators that are difficult to determine due to their qualitative nature. For the capital market to effectively perform its major functions of funding and lubricating the economy certain fundamental conditions must prevail. The market must be allowed to operate freely, obeying to a large extent the market mechanism.

Stock Market Capitalization is the total value of all equity securities listed on the Stock Exchange. Market capitalization is a function of the prevailing market price of quoted equities and the size of their issued and paid-up capital. The factors that really determine market capitalization are

- (i) *Increases or decreases in the price of securities in the market overtime:* This is a function of investors' perception of the worth of securities on offer, their disposable

discretionary income and their willingness to trade in market securities overtime. The converse is also true.

- (ii) *Trading volume and trading value:* These are the amount of all deals transacted on a market. Traded value is the quantity of the securities multiplied by their prevailing market prices. A rapid rise in the trading volume of a security indicates interest in that security. Trading volume and value are also important to the level of liquidity, the infrastructural facilities (clearing and settlements system) of a stock market and the investment culture of the populace.
- (iii) *Turn-over ratio:* This measures how active the market is. It is the amount of securities traded in relation to market capitalization.
- (iv) *The Stock Market Index:* This measures the stock market performance. It is the average of the prices of equities.

Goodie (2000) and Sidney (1996) opine that stock market is a complex institution with relevant mechanisms for sourcing long-term funds for major sectors of the economy. These sectors comprise households, firms and government. The capital market provides opportunities for greater funds mobilization and improved efficiency in resource allocation. Demirquc–Kunt& Levine (1996) contend that economic boom is associated with the developed and emerging stock markets, with a substantial part of the growth accounted for by the emerging market. The reasons adduced for this are that:

- (i) Investing firms enjoy lower cost of equity when stock market functions efficiently.
- (ii) The opportunity to trade in securities and also to hedge thereby allowing for relative reduction in risk.
- (iii) The ability of the market to adjust share prices almost instantaneously imposes control on the investment behaviors of firms and
- (iv) Countries that desire foreign investments are able to secure it through the Stock Exchange.

The growing concern on the role of stock market in economic growth is widely discussed amongst economists and financial scholars. They include Levine & Zervous (1996), Abu (2009) and Obademi&Adeyanju (2010). The market has been the focus of the modern economists and policy makers, because of the perceived benefits it provides for the economy. The stock market provides support for capital market activities and often refers to as the barometer of business direction. Obadan (1998) and Financial Standard (2007) report that an active stock market may be relied upon to measure changes in the general economic activities using the stock market index. Tharavaniji (2007) observes that countries with deeper capital market face less severe business cycle output contraction and lower chances of economic downturn compared to those with less developed capital market. Stock market development does not merely follow economic development, but provides the means to predict future rate of growth in capital, productivity and per capita GDP. The conclusion of the Bank was that increase in banking and stock market development lead to increase in real per capita growth. Hamid &Sumit (1998) examine the relationships between stock market over 21 years, using a dynamic panel method. Their results indicated a positive relationship between several indicators of stock market

performance and economic growth both directly and indirectly by boosting private investment behaviour.

There are strong evidences the long term relationship between economic growth and financial market development. Ted (2005) examines the empirical association between stock market development and economic growth in India. Whereas the author found support for the relevance of stock market development to economic development during pre-liberation, they discovered a negative relationship between stock market development and economic development for the post liberalization period. Ewa. In Nigeria, some authors have also attempted to examine the relationship between stock market development and economic growth. Abu (2009) examines whether stock market development raises economic growth in Nigeria, by employing the error correction approach. The econometric results indicate that stock market development (market capitalization GDP ratio) increases economic growth. He however, recommended the removal of impediment to stock market development which includes tax, legal and regulatory barriers. Development of the nation's infrastructure create enabling environment where business can thrive, employment policies that will increase the productivity and efficiency of firms as well as encouraging of the Nigerian securities and exchange commission to facilitate the growth of the market, restore the confidence of stock market participants and safe guard the interest of shareholders by checking sharp practices of market operators.

Obamiro (2005) investigates the role of the Nigerian stock market in the light of economic growth. The authors reported that a significant positive effect of stock market on economic growth exists. He suggested that government should create more enabling environment so as to increase the efficiency of the stock market to attain higher economic growth. Ezeola (2009) investigates the nature of the relationship that exists between stock market development and the level of investments (domestic private investments and foreign private investments) flow in Nigeria. The author discovered that stock market development promotes domestic private investment flows thus suggesting the enhancement of the economy production capacity as well as promotion of the growth national output. However, the result shows that stock market development has not been able to encourage the flow of foreign private investment in Nigeria. The submission of the study was that capital market development is negatively and significantly correlated with long run growth in Nigeria.

Ewah, Essangand Bassey (2009) appraise the impact of capital market efficiency on economic growth in Nigeria. They employed time series data on market capitalization, money supply, interest rate, total market transaction, and government development stock between 1961-2004, using multiple regression and ordinary least squares estimation techniques. The results of the study show that the capital market in Nigeria has the potential to induce growth, but it has not contributed meaningfully to the economic growth of Nigeria because of low market capitalization, low absorptive capacity, illiquidity, misappropriation of funds among others.

Research Methods

Theoretical Framework

Given the detail review of the theoretical literature, we acknowledged the fact that, there exist many classical theories of growth which are quite explicit on the roles of capital, labour and technological progress. The theoretical framework employed in this paper is anchored on endogenous growth models. The endogenous growth models were more explicit on the relationships between finance and growth as depicted in the works of Carlin & Soskice (2006) cited in Ohwofasa&Aiyedogbon (2013). The brief explanation of the transmission mechanism of this model is given as follows:

$$X = y, \delta Q, \dots\dots\dots (1)$$

Where (X) is the technological progress and is defined as a function of research and development (R&D) as (Q) while the other two parameters (y) and (δ) defined the probabilities that each unit spend on R&D yields successful innovation (y) and the extent to which each innovation raises the productivity as (δ) respectively. The economic determinants of the R&D are assumed to be taken as exogenous by the entrepreneurs. Thus, these may include discounted values of expected returns on (y) and (δ) , the real interest rate, capital per efficient unit and institutional features of the economy and is represented as:

$$Q = f(y, \delta, r, k, \text{comp}, \text{ppr}, u) \dots\dots\dots(2)$$

From the above equation, the R&D intensity (Q) is assumed to be directly related to the discounted value of the expected returns measures by ‘y’ and ‘ δ ’, inversely related to real interest rate ‘r’ and directly related to capital efficiency per unit ‘k’, while product market competitiveness (comp) and property right (ppr) are example of institutional features within the economy (Ohwofasa&Aiyedogbon, 2013).

From equation (1) and (2) the ‘endogenous relationship’ can be derived as:

$$X = g(k) \dots\dots\dots(3)$$

The equation (3) states that the rate of technological progress (x) depends on Q, which in turn, depends on k, (assuming other variables to be constant), X is a function of k, the capital efficiency per unit. A direct relationship also exists between the two variables. Thus, an increase in the savings rate in the economy will increase the capital efficiency per unit, which in turn stimulates more R&D activities via innovations, bringing about growth in the economy. Thus, in a steady state, technological progress is similar to economic growth. The effective mobilization of savings (financial intermediation) to meet capital efficiency per unit to stimulate R&D for increase in technological progress (economic growth) is the concern of the financial system of a nation.

Model Specification

Following a detailed review of previous studies by Ohwofasa & Aiyedogbon (2013) and improving upon the theoretical postulate described in equation three above, (that is, in a steady society, economic growth is similar to technological progress which is a function of research and development. This is a function of capital efficiency per unit and the capital efficiency per unit is dependent on the general level of savings in the society which is the main thrust of financial

intermediation) economic growth is expressed as a function of financial intermediation F_t and a set of control variables Z_t . This is expressed by equation (4) below

$$Y_t = f(F_t, Z_t) \dots\dots\dots (4)$$

Y_t is the growth rate of gross domestic product, F_t is the financial intermediation indicators while Z_t is the set of other growth determinants.

For the purpose of this paper the financial intermediation indicators is modified as capital market model. The empirical model adopted in this paper take lead from Donwa and Odia (2010), Kolapo and Adaramola (2012). They investigated the linkage between stock market and economic growth in Nigeria. But in this paper we used absolute values of capital market indicators rather than their ratios. Here we assert that the growth of the Nigerian economy is proxy by Gross Domestic Product (GDP) and is significantly influenced by the financial based structures, that is, by the capital market indices such as market capitalization, new issues, value of transactions and total listing in equities and government stocks.

When we modify equation (4) we have equation (5) as Market-based financial structure model and is expressed as:

$$GDP = f(MCAP, TNI, TVT, TLEGS) \dots\dots\dots (5)$$

Where

GDP = Gross Domestic Product

MCAP = Stock Market Capitalization,

TNI = Total New Issues,

TVT = Total Value of Transactions

TLEGS = For Total Listed Equities and Government Stock,

The explicit form of this equation (5) is represented as:

$$GDP = \beta_0 + \beta_1 MCAP + \beta_2 TNI + \beta_3 TVT + \beta_4 TLEGS + U_i \dots\dots\dots (6)$$

$\beta_1, \beta_2, \beta_3$ & $\beta_4 > 0$;

Where β_0 is intercept of relationship in the model, $\beta_1 \dots \beta_4$ are coefficients of each of the independent variables and U_i represents stochastic term. Equation 6 demonstrates the relationships between the Gross Domestic Product (GDP) and the capital market indices such as market capitalization, total new issues, total value of transactions and the total listed equities and government stocks. The a priori expectations of these signs are said to be greater than zero. Thus, $\beta_1 > 0$ because as the stock market capitalization increases, gross domestic product will be impacted positively. Also β_2 is expected to be greater than zero as the total new issues increase, that is, as more and more companies are quoted in the stock exchange and new issues are made, the gross domestic product are expected to be influenced positively. β_3 as the coefficient of the total value of transactions and as this value increases, the gross domestic product is equally expected to increase. β_4 the coefficient of the total listed equities and government stocks and as this value increases, gross domestic product will increase, hence, $\beta_1, \beta_2, \beta_3$ and $\beta_4 > 0$.

Stating the Error Correction Mechanism (ECM) form of equation (6) with one lagged period white noise residual, the model become:

$$(GDP)_t = \beta_0 + \sum_{i=0}^n \beta_1 (MCAP)_{t-1} + \sum_{i=0}^n \beta_2 (TNI)_{t-1} + \sum_{i=0}^n \beta_3 (TVT)_{t-1} + \sum_{i=0}^n \beta_4 (TLEGS)_{t-1} + \sum_{i=0}^n \beta_5 (ECM)_{t-1} + \beta_0 \sum_{i=0}^n \dots (7)$$

Sources of Data and Data Analysis

This paper employs secondary data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin 2010, 2011 2012 and 2014 editions. The time series data covered the period 1980 to 2014. The method of data analysis employed is based on three strands. One, is trend analysis of data, where percentages, pie-charts and graphs are used to describe the growth rate of the variables over the period. This is followed by the examination of the time series properties of the data. This is done in two ways to ascertain whether the data set are stationary at level or not and two to ascertain whether the relationships of the set of variables from the data are co-integrated? First, Augmented Dickey-Fuller stationary test for unit root test is applicable and secondly, by co-integration test where Johansen co-integration test is used to examine if there exists long run relationship between the set of variables. The third strand is the data estimation technique. This is done in two ways; either by Ordinary Least Squares (OLS) estimation if the data sets are stationary at levels or otherwise by Error Correction Mechanism (ECM) and if the data sets are not stationary at levels.

Data Presentation, Analysis and Interpretation

Data Presentation

Five variables were used for the formulation of this model. They are gross domestic product, market capitalization, total new issues, and total value of transactions, listed equities and government stocks.

Table 1

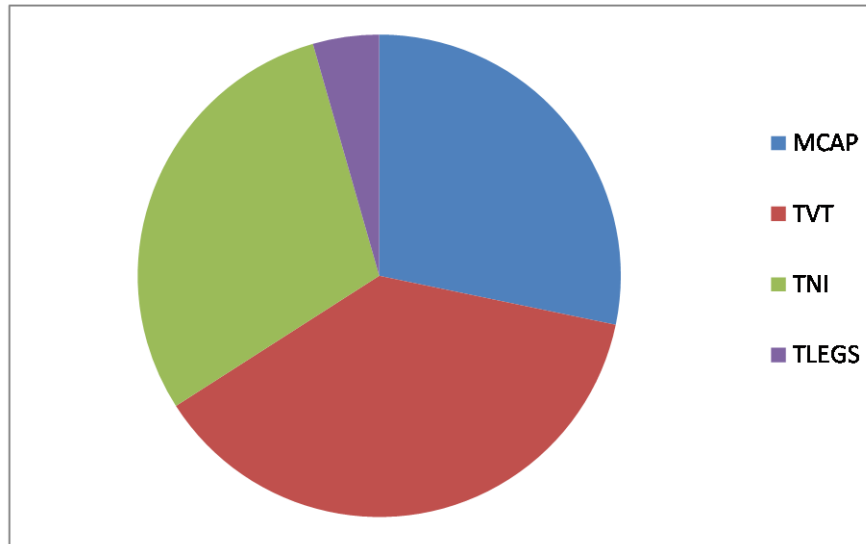
The influence of financial market structures on the Nigerian economy can be viewed through the growth rate of money market and capital market instruments in relation to the gross domestic product. Table 1 shows GDP and variables share of GDP. This is demonstrated in pie chart in Figure 1 as MCAP 102⁰, TVT 136⁰, TNI 107⁰ and TLEGS 16⁰ and the graphical analysis of this trend is represented in Figure 2 below.

Table 1: Market-Based Data

YEA R	GDP	MCAP	% Rati o to GDP	% Δ	TVT	% Rati o to GD P	% Δ	TNI	% Rati o to GD P	% Δ	TLEGS	% Δ
1980	49623.3	4464	9.0		523	1.1		402	0.8		512034 22	
1985	67908.6	6670.6	9.8	49. 4	317	0.5		817.2	1.2	103. 4	287840 41	
1990	267500	16358	6.1	145	225	0.1	-29	9965	3.7	1120	172801 69	-40
1995	1933211. 6	180305	9.3	100 2	1839	0.1	717	4426	0.2	-56	0	0
2000	4582127. 3	472290	10.3	162	28153	0.6	143 1	17208	0.4	289	812040	1.8
2005	1457223 9	290006	20.0	514	262936	1.8	834	552782	3.8	3112	732104	5.0
2010	2920578 3	991820	28.4	242	799911	2.7	204	244370	8.4	342	132523 0	4.5
2012	2810289 7	1009910 0	35.9	0.0 2	3214595 6	114. 4	391 9	2236850	8.0	8	243922 5	8.7
2013	42,770,1 91	15,612,5 51	36.5	55	1647293 4	38. 5	1	9,200,21 3	21. 5	3113 0	784576 2	18. 3
2014	45,910,3 01	17,001,7 76	37.0	9	2430944 5	53. 0	-16	10,211,7 82	2.2. 2	11	514249 3	11.2

Source: Author's Output

Figure 1: The Pie- Chart



MCAP = 102⁰

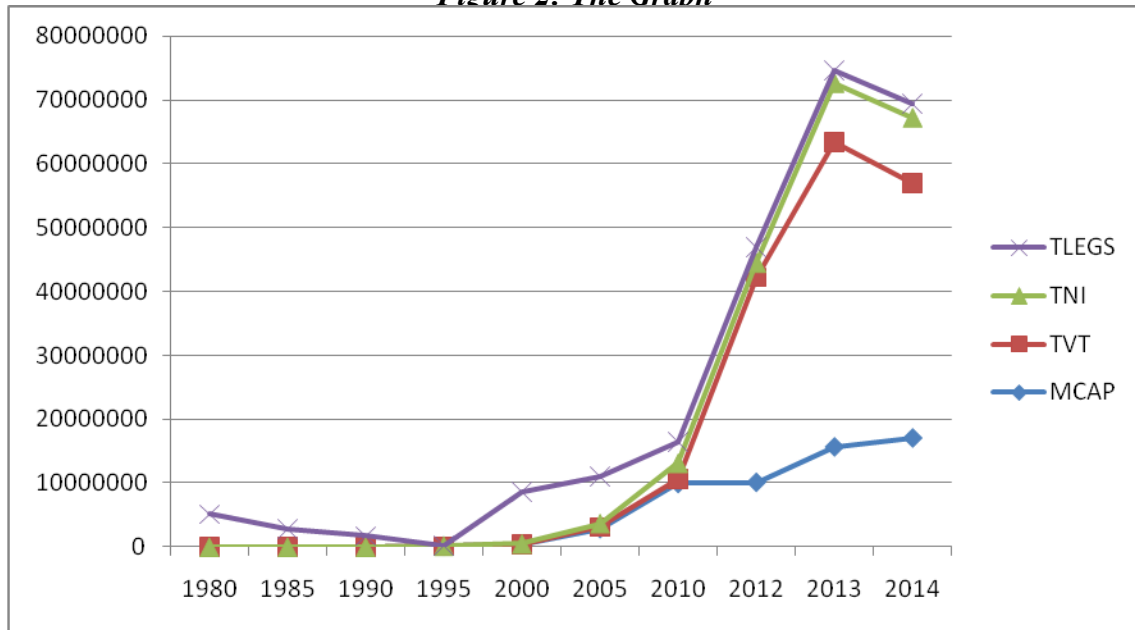
TVT = 136⁰

TNI = 107⁰

TLEGS = 16⁰

Source: Author's Design

Figure 2: The Graph



Source: Author's analysis

**Test of the Properties of Time-Series Data:
Unit Root Test**

The Table below presents the unit root test for the estimated equations.

Table 3 Unit Root Test Results.

Variables	Augmented Dickey- Fuller (ADF)		Philips- Perron (PP)		Order Of Integration
	Level	1 st Difference	Level	1 st Difference	1
GDP	3.1921**	-10.7634	-4.6498*	-10.7634	1(0)
TB	-0.01135	-5.2135	-0.7714	-5.2135	1(1)
EDS	-0.3621	-5.9993	-0.9804	-3.7863	1(1)
BA	-0.03145	-6.3041	-0.2038	-6.3001	1(1)
CMP	-1.8846	-6.0519	-1.7658	-5.6763	1(1)
MCAP	-0.5616	-5.07068	-0.5616	-5.9533	1(1)
TNI	0.0349	-6.9191	-0.6859	-8.5899	1(1)
TVT	-2.8481***	-6.8693	-2.8481***	-8.2500	1(0)
TLEGS	-4.3255*	-6.3689	-4.3255*	-20.0275	1(0)

Mockinnon Haug- Michelins (1999) MacKinnon(1996) One-sided P-Value

*Stationary at 1%

** Stationary at 5%

*** Stationary at 10%

Critical Values 1% = 3.6617

5%=2.9604

10%=2.6192

Source: Author's Computation from E-Views 6 Output

From Table 2 two different unit root tests measures are applied, they are Augmented Dickey-Fuller (ADF) and Philip-Perron (PP). The ADF results revealed that four variables were stationary at level, that is, Gross Domestic Product (GDP) at 5%, total values of transactions (TVT) at 10%, listed equities and government stock at 1% and money supply variable at 1%. The remaining variables were all stationary at first difference. The result was also confirmed by P-P in the same manner. This can be seen in the summary of the order of integration from the table. Therefore, our method of estimation cannot be OLS as a result of the mixed order of integration of variables and ECM will be applicable.

Co-integration Test

The Table 3 below presents the cointegration test for the time series data.

Table 3a: Cointegration Test Results for Equation (5) $GDP = f(MCAP, TNI, TVT, TLEGS)$

Unrestricted Cointegration Rank Test (Trace)				Unrestricted Cointegration Rank Test (Max-Eigen Value)		
Hypothesized		Trace	5%	Prob Value	Max-Eigen 5%	Prob Value
No of CES	Eigen value	Statistic	Critical value		Critical value	

None *	0.9655	206.4462	69.8189	0.0000	104.3231	33.8769	0.0000
At most 1*	0.7887	102.1231	47.8561	0.0000	48.1951	27.5843	0.0000
At most 2*	0.5305	53.9280	29.7971	0.0000	23.4409	21.1316	0.0232
At most 3*	0.4973	30.4871	15.4947	0.0001	21.3230	14.2646	0.0033
At most 4 *	0.2559	9.1640	3.8415	0.0025	9.1640	3.8415	0.0025

Trace and Max-Eigen value tests indicate 5 co-integrating equations at the 5% level

Denote rejection of hypothesis at the 5% level

Mackinnon-Hong-Michelins (1999) P- Values.

Source: Author's Compilation from E-Views 6 Output

From Table 3a above the Trace and Max-Eigen statistics indicate the presence of five co-integrating equations. The null hypothesis that there is no co integration equation is rejected. This is because the empirical trace statistic 206.4462 is greater than the critical tau statistic of 69.8189. This is statistically significant at 5% level of significance and the probability value is 0.0000 which is less than 0.05. The null hypothesis of at most one co integration equation is also rejected because the trace statistic of 102.1231 is still greater than the critical value of 47.8561 and it is statistically significant at 5% level of significance. This also applies in the null hypothesis of at most two co integrating equation and the null hypothesis of at most three co integrating equation.

The Max-Eigen statistic shows five co-integrating equations. The null hypothesis of no co-integration equation is rejected because the Max-Eigen statistic of 104.3231 is greater than the critical value of 33.8769. Also, the null hypothesis of one co-integrating equation was also rejected because the Max-Eigen statistic of 48.1951 is greater than the critical value of 27.5843. It was found to be statistically significant at 5% level of significance. It was the same for the null hypothesis of at most two co integrating equation and the null hypothesis of at most three co-integrating equation. Here the Max-Eigen statistic indicates five co-integrating equations. On the whole, the co-integration results revealed that long run relationship exist between economic growth and financial market indicators as represented by the market based financial structure in Nigeria. This means that the variables in the model are co-integrated since at least more than three co-integrating series were found in both Trace and the Max-Eigen values at 5 percent levels.

Error Correction Regression Estimates

Table 4: Error Correction Estimate Results for the Model

GDP as Dependent variable

Variables	Coefficient	T-Statistic	Prob-Value
C	7460.0	1.4930	0.1469
D(MCAP)	7.4281	2.3240	0.0285
TVT(-2)	84.7602	7.7833	0.0000
D(TNI)	-45.9023	-3.9282	0.0006

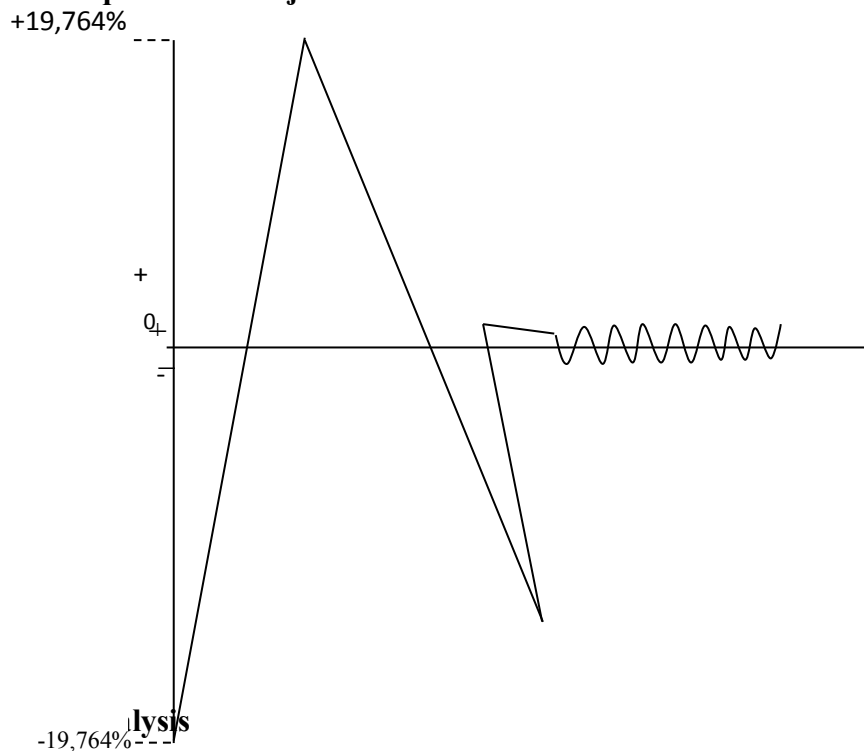
TLEGS	-0.0232	-2.0890	0.0471
ECM(-1)	-197.9467	-9.3372	0.0000
R-squared	0.849633	Mean dependent var	15584335
Adjusted R-squared	0.819560	S.D. dependent var	48143579
S.E. of regression	20450539	Akaike info criterion	36.67690
Sum squared resid	1.05E+16	Schwarz criterion	36.95445
Log likelihood	-562.4920	Hannan-Quinn criter.	36.76738
F-statistic	28.25205	Durbin-Watson stat	2.325505
Prob(F-statistic)	0.000000		

Source: Author's Computation from E-Views 6 Output.

A curious examination of the regression output revealed that all the variables included in the model performed significantly. It shows that market capitalization and total value of transactions have direct relationship with the gross domestic product, though market capitalization variable was estimated at first different and total value of transactions estimated at the lag of two. They were both found to be statistically significant at 5 percent level of significance and their probability values were respectively less than 0.05. The implication of this is that any real increase in the market capitalization and total value transactions in stock market will lead to a tremendous increase in GDP. The findings corroborate the outcomes of Kehinde, Yusuf & Abata (2012) work that capital market changes influence the growth of the economy, with market capitalization being the strongest determinant factors. It is worthy of note that the other two variables the total new issues and the listed equities of government stocks have an inverse relationships with gross domestic product. It was observed that they were both statistically significant at 5% level of significance and the value of total new issues was estimated at first difference and the value of listed equities and government stocks estimated at level. The implication of this is that increased promotion in the activities these variables will tremendously depress GDP. This is contrary to our apriori expectation.

The ECM is correctly signed with its negative and even statistically significant at 5% level indicating that the time series will converge at equilibrium. But that the absolute percentage is high (19,794%) is indication that the convergence towards equilibrium is an explosive oscillation. This explosive oscillation of ECM value is demonstrated in Figure 3. This explosive oscillation shows how GDP is in disequilibrium and is corrected by the explanatory variables on the long run. That is, almost all the errors generated in each period are automatically corrected by the system in the subsequent period. The very high absolute value of ECM has no special significant economic interpretation. What is worthy of note or significant with ECM term is that it is consistent with the t- statistic value and iswell represented with the value of -9.3372. This means that the ECM is statistically significant at 5 % level significance and the probability value of 0.0000 also implies that it is less than 0.05. The full expression is that the coefficient of the error correction term is statistically significant at 5% level of significance and its probability value is less than .05.

Fig 3: The ECM Equilibrium Adjustment Mechanism of Model Three



The R-square is found to be 0.8496 which means that the variables in the model well-explained the changes in the gross domestic product. Precisely, it means about 85% variations in gross domestic product was accounted for by variations in the explanatory variables. The value of the coefficient of determination reinforces support on the argument that financial structures indicators of market-based financial structure are good predictors of economic growth in Nigeria. The implication of this is that other variables not included in the model explained only about 15% of the changes in the growth of the Nigerian economy. The value of Durbin-Watson of 2.3255 also shows the absence of autocorrelation among variables in the model. The test of the overall significance of the model F-statistics was 28.2521 and the probability F-statistic was 0.0000. The implication of this is that the null hypothesis is rejected that is the model is not overall significant. Whereas the model is overall significant given that probability F-statistic value is less than 0.05.

CONCLUSION

The unending search of the relationship between market-based financial structure and economic growth in Nigeria has substantially be addressed. The paper assessed the level of growth and development of financial structures in the Nigerian capital market and the extent it has impacted on economic growth over the last three decades in Nigeria. The performance of stock exchange market in Nigeria has a very strong impact on the growth of the economy. This study shows that there is a high level of significant impact of market-based financial structure on GDP in Nigeria.

We therefore recommend that government should endeavor to put in place policy that will bring about increased participation in the stock exchange market activities in Nigeria. Furthermore, government should make policy that will encourage more firms to go public so as to improve the level of market capitalization in the stock exchange market.

REFERENCES

- Abu, N. (2009). Does Stock Market Development Raise Economic Growth? *Evidence from Nigeria Journal of Banking and Finance*. 1(1) 15 – 26
- Akingbohunge, S. (1996).The Role of the Financial Sector in the Development of the Nigeria Economy. Paper Presented at a Workshop Organized by Centre for Africa Law and Development Studies.
- Al-Faki, M. (2006).The Nigerian Capital Market and Socio- Economic Development. Paper presented at 3rd Distinguished Faculty of Social Sciences; Public Lecture Series, University of Benin, Benin City, July, 26th.
- Brecher, R. and J.Bhagwati (1982), Immiserizing Transfer from Abroad, *Journal of International Economics* 13, pp: 353 - 364.
- Central Bank of Nigeria.Statistical Bulletin.Several Issues.
- Dabwort, T.D (2009). The Impact of Capital Market on Economic Growth in Nigeria: A Causal Analysis Form of Business *Management*, Benue State University. Vol. 3 (1&2) pp: 15 - 40.
- Demirguc-kunt A. Levin R. 1996. Stock Market Development and Financial Intermediaries.Stylized facts.*The World Bank Economic Review*, 10(2): 241 - 265.
- Donwa, P., and Odia, J. (2010).An Empirical Analysis of the Impact of the Nigerian Capital Market and the Socio-Economic Development.*Journal of Social Sciences*, 24(2)
- Ewah, S.O.E., Esang, A. E., and Bassey, J. U. (2009).An Appraisal of Capital Market Efficiency on the Growth in Nigeria.*International Journal of Business and Management*. December, 219 - 225.
- Financial Standard (2007). Issuing houses: Providing Anchor for Economic Growth. Financial Standards.July.
- Goodie, M.I. (2000). Breaking New Grounds: Reflections on the Nigerian Capital Market Lagos: GST Publishing Limited
- Hamid S. and Sumit A. (1998). Stack Market Development and Economic Growth Evidence from Developing Countries.

International Finance Corporation (IFC), 1991.

Kehinde, J.S, Yusuf, B.R. and Abata, M.A. (2012). Market Capitalization Volatility: Effects on the Nigerian Economic Growth. *British Journal of Arts and Social Sciences*.4(2).
<http://www.bjowael.co.UK/BJASS.aspx>.retrieved 11/7/2013

Kim, W. and Shang-Jin Wei, (2002). Foreign Portfolio Investors before and during a Crises, *Journal of International Economics*, 56: 77 - 96.

Kolapo, F.T. and Adaramola A.O. (2012). The Impact of the Nigeria Capital Market in Economic Growth (1990 - 2011). *International Journal of Developing Societies*. 2(1)

Levine, R., (2000). Bank-Based or Market-Based Financial Systems: Which is Better? Finance Department, Carlson School of Management, University of Minnesota. January 2000.
Email: rlevine@csom.unn.edu.

Levine R., and Zervos, S, (1996).Stock Market Development and Long-Run Growth.*The world Bank Economic Review*, 10(3): 323 - 339

Obadan, M.I. (1998). Capital Market and Nigeria's Economic Development. Presidential Address Presented at the 1-day Seminar of the Nigerian Economic Society at the Institute of International Affairs on 21 January 1987.

Obademi, O. E., and Adeyanju, O. D. (2010).The Capital Market and Nigeria's Economic Growth.*Journal of Research in National Development*. 8(1) June.

OkerekeOnyuikeNdi (2008). A Review of Market Performance in 2008 and Outlook for 2009, The Nigerian Stock Exchange 2008 Edition.

Ohwofasa, B.O. and Aiyedogbon, J.O.C. (2013). Financial Deepening and Economic Growth in Nigeria, 1986-2011: As Empirical Investment. *Journal of Economics and Development Studies*.1(1).

Oke, M. O. (2010). Nigeria Capital Market Operation and Economic Growth: A Case of the Oil and Gas Sector, *Asian Journal of Business and Management Sciences*, 1(8).

Rakshit, M.k. (2001). Globalization of Capital Market: Some Analytical and Policy Issues: *International Journal of Developing Societies*. Retrieved 12/04/2013;
<http://www.elgaronline.com/view/180646934.00018.xml>

Sidney, M.R. (1996). The Securities Markets Operators and Issues. New York: The Free Press.

Soyode, A. and Oyedji (2006). The Role of Capital Market in Economic Development, *Security Market Journals* 6

Ted, A. (2005). Is The Indian Stock Market A Casino? *Journal of Business and Economic Research*, 3(4): 63 - 72.

Vitols, Sigurt (2001). The Origin of Bank-Based and Market-Based Financial Systems: Germany, Japan and the United States. Internet Home Page: <http://www.wz-berlin.de>.Retrived 06/11/2015.