

# The Sustainability and Prospects of the Nigerian Capital Market on Economic Growth

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## Abstract

The study assessed the sustainability and prospects of the Nigerian capital market on economic growth. The objectives were to determine the impact of market capitalisation, government security and equity on economic growth. Data were collected from secondary source using CBN Statistical Bulletin. Multiple regression model was employed using ordinary least square. The findings revealed that market capitalization, government security, equity, had a positive impact on economic growth using GDP as a proxy. The study recommended that the Nigerian capital market should be internationalized and properly deregulated and sufficient information should be given to both investors and brokerage firms for effective security pricing.

**Keywords:** Capital market, Market capitalisation

## 1. Introduction

According to Fama (2005) the capital market is the prime tool that drives any economy on its path to growth and development. It is responsible for long term growth and capital formation through the provision of funds for long term investment which ensures an efficient and effective allocation of scarce resources for optimal benefits to the economy. To enhance economic growth and development, funds must be effectively mobilized and allocated to enable businesses and the economy harness their human, material, and management resources for optimal output. The capital market is an economic institution, which promotes efficiency in capital formation and allocation. It enables government and industry to raise long term capital for financing new projects, and expanding and modernizing industrial commercial concerns.

The capital market deals on long term funds, the market provides a mechanism for lenders to provide long term funds in exchange for financial assets issued by borrowers or traded by holders of negotiable debt instruments. According to Nzotta (2004), capital is needed in the productive process to increase productivity and also the tempo of industrialization in the economy. Thus, this generates interest in the capital market as an important segment of the financial market that sustains real development in the economy (Fama, 2008).

According to Ben (1999), capital market provides arrangement through which households, firms and government that intend to invest more than they can bid for the funds of other spending unit who have surplus funds, and this is necessary for economic growth. Capital markets are the complex of institutions and mechanism through which long term funds with nativity of 5years and above are pooled and made available to business, governments, individuals and instruments already outstanding are transferred.

### 1.1 Statement of the problem

Despite the popular belief that the capital market stimulates and promotes economic activities which in turn engenders economic growth, the growth of the capital market in Nigeria is still very small in relation to the size of the economy. According to CBN (2007), the comparative analysis of market capitalization of the Nigerian capital market with some courtiers in North and South America, Europe shows that the Nigerian market is relatively very small. Worse still are the attendant ugly consequences of the capital market meltdown, characterized by the crash of the market capitalization from a high record of ₦13.5 trillion to less than 4.5 trillion in the corresponding period. However, given this scenario, one began to wonder if the Nigerian capital market has really fared well in terms of its impact on the growth of the Nigerian economy. The study intends to assess the sustainability and prospects of the Nigerian capital market on economic growth.

### 1.2 Objective of the study

The general objective of the study is to examine the sustainability and prospects of the Nigerian capital market on economic growth. The specific objectives of the study are:

1. To examine the impact of market capitalization on the growth of Nigeria economy.
2. To determine the effect of government security on the growth of Nigeria economy.
3. To ascertain the relationship between equity and the growth of Nigeria economy.

### 1.3 Research Questions

The formulated questions are based on the objective of the study

1. Does market capitalization have impact on Nigeria economy?
2. Does government security have effect on Nigeria economy?

### 3. What is the relationship between equity and Nigeria economy?

#### 1.4 Research Hypotheses

The hypotheses are tested in null form

Ho1: There is no significant relationship between market capitalization and the growth of Nigeria economy

Ho2: There is no significant relationship between government security and the growth of Nigeria economy.

Ho3: There is no significant relationship between equity and the growth of Nigeria economy.

#### 1.5 Significance of the study

On completion of the study, the research result would be beneficial to various groups. The study will be beneficial to the academic community, the nation, capital market practitioners, stockbroker and the investing public. To the nation, it will limit losses to the federal government and will strengthen the growth and development process in the economy. The result will also stimulate further research in the capital market.

#### 1.6 Scope of the study

The study is concerned with the sustainability and prospects of the Nigeria capital market on economic growth. In particular, the study will be from 1986-2013 i.e. 28years.

#### 1.7 Organisation of the study

To make for effective presentation, this study has been divided into five (5) chapters. Chapter one serves as the general introduction of the study, it features on the background of the study, statement of the problem, objectives, research question, hypotheses, significance of the study, scope of the study, organization of the study and definition of terms. Chapter two encompasses a review of literature related to the study and theoretical framework.

Chapter three specifies the methodology to be employed in the study which are research design, sources of data, method of data collection, limitation of the study, techniques of data analysis and model specification. Chapter four embodies the presentation of data, analysis of data and discussion of findings. Chapter five is dedicated to summary of findings, conclusion and recommendation.

## 2. Literature review and theoretical framework

### 2.1 Empirical literature

Capital market is the market where medium and long term finance can be raised. Capital market offers a variety of financial instruments that enable economic agents to pool, price and exchange risk. Through assets with attractive yields, liquidity and risk characteristics, it encourages saving in financial 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 specialised financial institutions, series of mechanism processes and infrastructure that, in various ways facilitate the coming together of suppliers and users of medium to long term capital for investment purposes.

Several attempts have been made by previous writers to link the growth of the capital market with the economy. Levine (1991) argued that developed stock market reduces both liquidity stock and productivity shock of businessmen to investment funds as well as enhancing the production capacity of the economy, thereby leading to higher economic growth.

Pedro and Erwan (2004) asserted that financial market development raises output by increasing the capital used in production and by ensuring that capital is put into best uses. Thorawanji (2007) observed that countries with deeper capital market face less severe business cycle output contraction and lower chances of an economic downturn compared to those with less developed capital market. On their part, Ben and Ghazonani (2007) reported that financial system development could have adverse effect on economic growth in a sample of 11 countries they studied, and therefore advocated for a vibrant financial sector. The World Bank (1994) found that stock market development does not merely follow economic development, but provides the means to predict future rates of growth in capital, productivity and Gross domestic product.

### 2.2 Theoretical Framework

The following theories were considered in this study;

1. Random walk theory
2. Fundamental analysis
3. Technical analysis
4. Modern Portfolio theory

#### Random Walk Theory

Basically, randomness relates to the characteristic of variable distributed in a population such that the variables are identically distributed with equal chances of occurrence or selection and usually independent of one another. The all random models implicitly assume as the case may be.

- zero means of variance
- constant variance
- normality of distribution
- independence of variable implying absence of autocorrelation of the variables

in essence, the random walk theory challenges the technical analysis approach believing it to be real value in stock market analysis. It is pertinent to mention here that random walk hypothesis is a special case of the more general efficient market hypothesis.

### **Fundamental Analysis**

This theory posits that at any point in time, an individual security has an intrinsic or true value, which is the present value of the future receipts accruing to the security holder. The theory also holds that, the intrinsic value of the security depends on some essential factors affecting the company, the industry and the economy. The principal decision variables in fundamental analysis are earnings and dividends. Earnings depend on the relationship between expected sale and cost, which are affected by several factors, internal and external to the firms opening environment.

Therefore, fundamental analysis forecast stock prices on the basis of economy, industry and company statistics. Fundamental analysis also attempts to identify factors influencing or likely to influence share prices that is the market reaction to information about the economy, industry and company.

### **Technical Analysis**

The theory assumes the following:

- i. The forces of demand and supply are reflected in patterns of price and volume of trading. And by examination of these patterns, predictions could be made whether prices are moving higher or lower and even by how much.
- ii. Price fluctuations reflect logical emotional forces.
- iii. Price movements whatever their cause, once in force persist for some period of time and can be detected.

In analyzing the market, the technical analysis approach relies on trends. This is based on the assumptions that stock markets do not perform on a random basis but are influenced by three distinct cyclical trends, namely: primary, secondary and minor or tertiary trends. Primary trend is a long range cycle that carries the entire market up or down. It gives the direction to which the share is moving over a period of one year or more.

### **Modern Portfolio Theory**

Harry Markowitz developed an approach that helps an investor to achieve its optimal portfolio position. These propositions were based on rational investors who thought they would prefer portfolio with the highest rate of return at a given level of risk. Thus, any rationally investor should establish the level of risk, he must desire for any given level of return in order for him to carry out any systematic selection of optimum portfolio. Sharpe (1963: 277-293) contribution to modern portfolio theory helped in modifying the complex mathematical presentation in Markowitz's theory. In his article, he offered a modified version of Markowitz model through the introduction of a single index model. Sharpe and Litner have these follow up questions. If rational investors follow the Markowitz prescription, what kind of relationships exists between risk and return? The Capital Asset Pricing Model (CAPM) developed by them in an exercise in positive economics is concerned with 2 key questions:

- What is the relationship between risk and return for an efficient portfolio?
- What is the relationship between risk of an asset and its expected return? The relationship helps in two ways: first it produces a benchmark for evaluating various investments. For instance, when we are analyzing a security, we are interested in knowing whether the expected return is in line with CAPM. Secondly, it helps to make and inform a guess about the return that can be expected from an asset that has not yet been traded in the market. For instance, how should a firm price its initial public offering of stocks?

## **3. Research methodology**

### **3.1 Research design**

The focus of this study has been on the sustainability and prospect of the Nigerian Capital Market on Economic Growth. Research design is the approach or scheme which defines the tools and strategies of the research. In this

study, exploratory design is employed to identify the factors that contribute to capital market on economic growth.

### **3.2 Sources of data**

The validity of any research depends largely on the quality of data collected. The data used for this study were obtained mainly from secondary sources. The main source of the secondary data include: CBN statistical bulletin.

### **3.3 Methods of data collection**

The study employs desk survey. Data were gotten from statistical bulletins of the Central Bank of Nigeria, relevant journals and textbooks.

### **3.4 Techniques of data analysis**

In analyzing the data gathered for this work, multiple regression models were employed to establish the relationship between dependent and independent variables.

### **3.5 Model specification**

The objectives of the study are to establish the relationship existing between capital market and economic growth. Based on this, the model below has been developed for the study.

$$GDP = f(MKTCAP, GOVSEC, EQTY)$$

Where

GDP = Gross domestic product

MKTCAP = Market capitalization

GOVSEC = Government security

EQ = Equities

Therefore, the functional relationship is liverized into ordinary least square (OLS) model

$$GDP = b_0 + b_1 MKTCAP + b_2 GOVSEC + b_3 EQTY + e$$

Where

Dependent variable – GDP

Independent variable = MKTCAP, GOVSEC, EQTY

Regression constant =  $b_0$

Regression coefficient =  $b_1 - b_3$

Stochastic error term =  $e$

## **4.0 Data presentation, analysis and discussion of findings**

### **4.1 Data presentation**

The presentation of Nigeria's macroeconomic financial indicators on capital market and economic growth.

Table 4.1  
 Nigeria's macroeconomic and financial indicators

Year	GDP	MKTCAP	GOVSEC	EQTY
1986	71859.00	38,80000	2,020600	10,50000
1987	108183.0	40,40000	4,017900	17,50000
1988	142618.0	42,40000	4,017900	26,80000
1989	220200.0	43,80000	7,319600	25,50000
1990	271908.0	40,30000	8,037800	20,01000
1991	316670.0	42,00000	9,909500	29,80000
1992	536305.1	38,10000	172984.0	18,32000
1993	688136.6	37,20000	22,05110	21,00000
1994	904004.7	30,40000	21,88610	20,18000
1995	1934831	29,29000	21,88610	19,74000
1996	2703809	32,46000	21,88610	13,54000
1997	2801973	30,40000	21,88610	18,29000
1998	2721178	32,40000	21,88610	24,85000
1999	3313563	34,60000	92,69340	20,71000
2000	4727523	36,10000	102,1052	19,18000
2001	5374335	42,70000	111,9433	17,95000
2002	6232244	54,90000	120,9702	16,89000
2003	6061700	56,50000	129,3565	19,94000
2004	11411067	55,70000	133,5004	18,42000
2005	14610881	54,80000	132,1470	19,18000
2006	18564595	53,30000	128,6516	18,42000
2007	20657328	54,60000	124,7600	18,80000
2008	24296329	53,95000	126,7058	18,99000
2009	24794239	54,27000	125,7392	18,89000
2010	29205783	54,11000	126,2193	19,23000
2011	27000011	54,19000	125,9761	1906000
2012	28102897	54,15000	1260977	1914500
2013	27551454	54,17000	1260369	1910250

#### 4.2 Data analysis

The regression result on the sustainability and prospects of the Nigerian capital market on economic growth.

Table 4.2

Regression results

Dependent variable: LGDP

Variable	Coefficient	Std error	t-stat	Prob
C	2.177221	1.335329	1.630476	0.1470
LMICTCAP	1.075826	0.378000	2.846100*	0.0248
LGOVSEC	0.256807	0.166544	1.541976	0.167
LEQTY	0.168432	0.491524	0.342673	0.741

$$R^2 = 0.980220$$

$$R^2 (\text{adj}) = 0.971743$$

$$\text{SER} = 0.112229$$

$$\text{Fstat} = 115.6306$$

$$\text{DW} = 2.066662$$

\*significant at 1% level

The result are discussed using economic a prior criteria, statistical criteria and economic criteria

#### Economic a prior criteria

Examination of the regression result shows that the regression statement is significant. As expected market capitalization with a positive points and significant coefficient. This conforms to economic theorizing which also indicates that an increase in market capitalization by one percent leads to 10075826 percent increase in GDP.

The next policy variable, government security also revealed a positive but weak coefficient. Hence the result suggests that a one percent rise in government security (GOVSEC) leads to 0.256807 percent increase in GDP.

Number of equity came out with a positive coefficient. As such a one percent rise in EQTY generates an increase in GDP by 0.168432. As expected, the result indicated that a lot of activities now take place in the capital market.

#### **Statistical Criteria**

From the estimated equation, t-value calculated shows that market capitalization is statistically significant at 1% level of significant.

The  $R^2$  (0.980220) is very good and the adjusted  $R^2$  (0.971743) is also good. It implies that 97% of the total systematic variation in the model is explained by the explanatory variables, this means that the model is good. In other words, an increase in all the explanatory variable will also increase the GDP, all things being equal.

The t-statistic (115.6306) is a good fit at one percent level. This conforms that the model has high predictive power.

The calculated t-statistic of 115.6306 is higher than the table value, therefore the model is significant.

#### **Economic Criteria**

From the result the DW statistic (2.066662) shows that there is positive autocorrelation among variables entered in the model.

### **4.3 Test of Hypotheses**

In order to test the already stated hypotheses, decision rule is stated thus;

#### **Decision Rule**

The decision rule is to reject the null hypotheses if the t-calculated is  $> f$  table

#### **Hypothesis I**

Results

t-calculated for Mktcap = 2.846100

t-critical at 25 df 0.01 = 2.787

Based on these results and decision rule, alternate hypothesis is upheld and null hypothesis is rejected. It is concluded that there is a significant relationship between market capitalization and economic growth.

#### **Hypothesis II**

Results

t-calculated for GOVSEC = 1.541976

t-critical at 25 df 0.01 = 2.485

Based on these results and decision rule, alternate hypothesis is rejected and null is upheld. It is concluded that government security had no significant relationship on economic growth.

#### **Hypothesis III**

Results

t-calculated for EQTY = 0.342673

t-critical at 25 df 0.01 = 2.485

Based on these results and decision rule, alternate is rejected and null hypothesis is upheld. It is concluded that there is no significant relationship between equity and economic growth.

### **4.4 Discussion of findings**

The study empirically examined the sustainability and prospects of the Nigerian capital market on economic growth.

Based on the analysis of the results, it is shown that sustainability and prospects of the Nigerian capital is not an illusion on economic growth is not an illustration. It is shown that market capitalization had a significant impact on economic growth. The study conforms to the works of Ben (1999), capital market provides arrangement through which households, firms and government invest more than they can bid for the funds of other spending unit and this leads to economic growth. The arguments is in conformity with the proposition of Nzotta (2004) who opined that capital is needed in the productive process to increase productivity and also the tempo of industrialization in the economy.

As an addendum, government stock and equity had a positive contribution on the growth of Nigeria economy. These results conform to the works of Levine (1991) who argued that stock market reduces liquidity shock and productivity shock of businessmen to investment finds as well as enhancing the production capacity of the economy, thereby leading to higher economic growth.

## 5.0 Summary of findings, conclusion and recommendation

### 5.1 Summary of findings

Based on the analysis of the results, the following findings were discovered

- i. Market capitalization had a significant relationship on economic growth and it led to the performance of Nigeria economy. It was a factor that catalyses the growth and development of Nigeria economy using GDP as a proxy.
- ii. Government security contributed positively to the growth of Nigeria economy. In considering this capital market which deals in long term funds is performing its function by providing funds for government and other investors.
- iii. Based on our empirical results, the capital market has contributed positively to Nigeria's economic growth through equity. This equity policy variable had a positive impact on economic growth.

### 5.2 Conclusion

This research work has been on the sustainability and prospects of the Nigeria capital market on economic growth. It is not an illusion, since the result on market capitalization (MKT CAP) has a positive impact on economic growth and development. From the findings, government security (GOVSEC) and Equity entered with a positive sign related to gross domestic product.

It is concluded that capital market is an important source of long term funds in any economy.

### 5.3 Recommendations

The specific policy recommendation which may enhance the development of the capital market for economic growth include thus;

- i. The Nigerian capital market should be internationalized and properly deregulated.
- ii. Sufficient research information should be given to both investors and brokerage firms. So that they can analyse the security price effectively.
- iii. There should be availability of basic infrastructure and human resources.

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