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## Contribution of capital market variables on capital formation in Nigeria

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### Abstract

The study is on the contribution of capital market variables on capital formation in Nigeria for the period 1991-2018. Three hypotheses are formulated in line with the objectives of the study. The study used gross fixed capital formation as proxy for capital formation and employed as the dependent variable; whereas, the explanatory variables include all share index (ASI), market capitalization (MCAP) and value traded (VST). Secondary data were collected from CBN statistical bulletin 2018 and the hypotheses were tested using Ordinary Least Square using multiple regression econometrics model. The study finds out that market capitalization has a positive significant impact on gross capital formation in Nigeria, value of share traded has a negative and insignificant impact on gross capital formation in Nigeria and all share index has a negative but significant impact on gross capital formation in Nigeria. The study concludes that capital market has significant impact on capital formation in the Nigerian economy. The study recommends that monetary authorities should put in proper measures that would regulate the value placed on the shares traded thereby encouraging both local and foreign investors to participate in the market and also device means to restore confidence in the market, particularly through ensuring transparency and fair trading and dealings in the stock market.

**Keywords:** Capital market variables, economic growth, market capitalization, value of shares traded, all shares index, transparency, economy, investors

### 1. Introduction

#### 1.1 Background to the Study

Financial analyst has laid emphasis on capital formation as the major determinant of economic growth. Capital formation simply refers to a society that does not apply all of its current productive activity to the needs and immediate desire of consumption, but direct some part of it to the creation of capital goods and various forms of real capital that can so greatly increase the efficiency of productive effort. The essence of capital formation is to divert a portion of society's currently available resources for the purpose of increasing the stock of capital goods so as to make possible for an expansion of consumable output in the future.

This study focuses its attention on Nigerian Stock Exchange market which seems to be the most visible mirror of the formal capital market in the country. The Nigerian Stock Exchange market is one of the institutions on the capital market that specializes in all forms of marketing trading securities. It is a network of individual institution and instrument. The market plays a central and dispensable role for which it has been variously described as the hall mark or the heart of the capital market.

#### 1.2 Statement of the Problem

The rapid economic development of any economy depends among other things on ready access of adequate financial resources. The desire to develop financial market in an economy is intimately connected with the objective of accelerating industrial and agricultural development. Among this financial market is the stock market, which deals with the mobilization of bank long and medium term capital funds (Pat and James, 2016) <sup>[29]</sup>.

The mechanism of stock exchange came into existence to enable investment, which were inherently illiquid to become liquid through reconversion into cash at the decision of the investor without inconveniencing the company and today words like globalization have become familiar in economic and finance parlance and fast growing intern dependence of

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economic and financial markets cannot be ignored.

The Nigerian Stock Exchange which was formerly called the Lagos Stock Exchange was incorporated on the 15th of September, 1960 through the collective encouragement of the business community, the Nigerian Industrial Development Bank Limited (NIDB) and the Central Bank of Nigeria.

The availability of a secondary market endangers capital formation and socio-economic development and the allocative function is critical in determining the overall growth of the economy such as the financial sector. Therefore, the role of the Nigerian Stock Exchange in the economy is an engine for capital formation saddled with the private sector in general to achieve development programs. Nigerian's stock market growth and improving indices have led to the increase in fund flow to various investments in the economy. This increase in market indices and fund flow has emerged as an important policy issue for capital formation in the country. Though this is of great concern, adequate attention has not been given to analyzing the effect and understanding the key relationship between these stock market variables such as stock market capitalization, value of share traded, all share index and capital formation.

### 1.3 Objectives of the Study

The primary objective of this study is to analyze the impact of the stock market on capital formation in Nigeria. To actualize this, the main objective is broken down into the following specific objectives:

1. To determine the impact of market capitalization on capital formation in Nigeria.
2. To examine the impact of value of shares traded on capital formation in Nigeria.
3. To assess the impact of all share index on capital formation in Nigeria.

### 1.4 Research Questions

In pursuance of the objectives of the study, the following research questions are answered:

1. To what extent does market capitalization influence gross capital formation in Nigeria?
2. How does value of shares in trade influence gross capital formation in Nigeria?
3. To what extent does all share index influence gross capital formation in Nigeria?

### 1.5 Hypotheses

The following hypotheses are tested to provide answers to the above research questions:

1. Market capitalization has no significant influence on gross capital formation in Nigeria.
2. Value of shares traded has no significant influence on gross capital formation in Nigeria.
3. All share index has no significant influence on gross capital formation in Nigeria.

### 1.6 Significance of the Study

The findings of this study will be useful to researchers, capital market administrators, industry players, government and other policy makers, as well as the academic community.

## 2. Review of Related Literature

### 2.1 Conceptual Framework

#### 2.1.1 Stock Market

Stock market (also, known as capital market) has been broadly defined as an institution where medium and long term finance can be raised (Adeniyi, M. A 2017) <sup>[2]</sup>. It can also be viewed as a network of specialized financial institutions, series of mechanism, process and infrastructure that facilitates the contact between suppliers and users of medium to long term capital for investment in the economy.

#### Market Capitalization

Market capitalization is the total value of all equity securities listed on a Stock Exchange. It is a function of the prevailing market price of quoted equities and the size of their issued and paid-up capital. Market capitalization is the most important measure for assessing the size of a Capital market. The ratio of market capitalization to total investment in fixed assets reveal the total amount of investment in fixed assets financed by equity fund on the Capital market. It also indicates the amount of GFCF represented in the Nigeria Stock Exchange.

#### All Share Index

The All share index or Stock market index is an average of the prices of equity and the number of securities in a Stock market at a given period of time. It is an important measure of Stock market performance. The other performance indicators are the Volume and Value of transactions. While the volume of transactions refers to the quantity of securities traded on a market per time. The value of transaction is the quantity of the securities multiplied by the prevailing market prices of each security per day on which business was transacted.

#### 2.1.2 Capital Formation

World Bank (2013), describes gross fixed capital formation (formerly gross domestic fixed investment) includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. It is therefore the total investment in fixed assets in the economy. It is the total investment in fixed assets financed by new issues of financial securities in the Capital market. Osaze (2018) <sup>[28]</sup> theorized that these new issues contribute to the stock of capital in an economy and hence capital formation.

Capital formation will feel the effect of the Capital market activities more positively when the ratio of new issues to total investment in fixed assets, the ratio of market capitalization to total investment in fixed asset, all share index, volume and value of all deals are on the increase. These increases will drive both direct and portfolio investment in fixed productive asset which will in turn translate into high productive capacity (capital formation) and increase output level of goods and services in the economy.

### 2.1.3 Capital Market and Capital Formation

Employing the endogenous growth model posit that financial intermediation of the Capital market could affect economic growth through three channels:

- Changing the proportion of savings funneled to investment.
- Changing the marginal productivity of capital otherwise called Capital formation.
- Changing the rate of savings in the economy.

By this process, capital market lowers transaction cost, achieves diversification and lowers risk; provides liquidity and lowers information asymmetry by which it contributes to capital formation through channels of marginal productivity of capital. Consequently, Capital market allows entrepreneurs to concentrate their efforts, attention and resources on their core business of creating new values or utility, pursuing innovations for future purposes and engaging in real and financial investment that could result in capital formation.

The Capital market activities in relation to capital formation are captured by some indices such as:

- The ratio of new issues to total investment in fixed assets,
- The ratio of market capitalization to total investment in fixed assets,
- All share index,
- Rate of change in the volume of transaction, and
- Rate of changing the value of transaction

## 2.2 Theoretical Framework

It has been shown in financial theory that there is a relationship between the functions of the Nigerian Stock Market and capital formation. This is because the functions of the stock market which include provision of long-term debt and equity financing through the issuance of bonds, debentures and shares for investment in long-term productive assets, the efficient allocation of capital through competitive price mechanism, encouragement of a broader ownership of productive asset, and the mobilization of savings and channeling same to productive investments; are aimed at promoting capital formation (Nzotta, S. M, 2014) <sup>[26]</sup>. These listed functions, among others, can be discussed under the theories of financial intermediation and portfolio management.

### 2.2.1 Financial Intermediation Theory

This theory advocates that capital market should provide a mechanism for the mobilization and transfer of savings from the fund-owners to investments that promise better and higher returns on investment. Since regulation and quantification of direct the capital market activities of borrowing is difficult, it is expected that financial institutions should mediate between owners and users of funds in the impersonal but formal way like the marketable securities created and traded on the Nigerian Stock Exchange (Nwanyanwu, Onyinyechi and Josephine, 2017) <sup>[23]</sup>.

Financial intermediation entails arrangements covering the activities of capital market with respect to providing mechanism for organizing and managing the payment system, mechanism for the collection and transfer of

savings, mechanism covering the investment in long-term financial securities and arrangements covering the activities of financial market complementary to the money and capital markets such as the foreign exchange markets and the futures markets (Nzotta, 2014) <sup>[26]</sup>.

Financial intermediation refers to a financial framework that provide a medium of exchange necessary for specialization, mobilization and transfer of savings from those who generated the funds to those who use the funds for investment in the economic system where the funds will yield the highest return. This arrangement enhances productive activities and positively influences aggregate capital formation in the economy.

### 2.2.2 Portfolio Management Theory

The Capital market has an almost infinite set of financial securities or assets into which investors can commit funds, in order to enhance the value of their investment, earn stable returns, and absorb or maintain associated risks at their barest minimal level. In order to realize these three basic attributes, most investors will prefer to invest in a combination of financial securities and/or physical assets. This combination of securities, investments and assets which an investors hold to satisfy defined risk-return objectives, is what is called a Portfolio. (Osaze, 2018) <sup>[28]</sup> Rationally, every investor would be interested in investments high returns with low risks. Any combination of securities that has high returns but with low risks is considered to be efficient, according to the Capital Asset Pricing Theory (CAPT), and therefore should be preferred. Hence, portfolio management is defined as the careful selection, acquisition and monitoring of the performance of a combination of securities on the Capital market held by an investor to ensure that securities achieve the nominated investment objectives over a given holding period and increases the productive capacity of the economy through increasing values over successive holding periods (gross fixed capital formation) (Babalola and Adegbite, 2017) <sup>[8]</sup>. The portfolio behaviour of the Nigeria Capital Market is targeted at creating optimum amount and variety of assets and hence optimum return on investment at minimal level of risk in conformity with the theories of diversification and efficient market.

## 2.3 Empirical Review

The commonest study on Gross Fixed Capital Formation (GFCF) available to the author is centred on the relationship between GFCF and Gross Domestic Product (GDP). Even these studies conducted between 2008 and 2016 are short of World Bank standard as there is no World Bank measure of the ratio of GFCF to GDP (World Bank, 2013).

Jeferis K (2017) <sup>[20]</sup> traced the impact of the capital market on economic growth through the provision of investable funds to the real sector and the subsequent transmission of the funds into various investments hence transforming the real sector of the economy. As such, the capital market acts as catalyst or engine of capital formation.

Pat and James (2016) <sup>[29]</sup> investigated the effect of the Nigerian capital market on her socio- economic development. Socio-economic development was proxied by Gross Domestic Product while the capital market variables included market capitalization, total new issues, volume of

deals and total listed stocks. Employing the ordinary least square regression method, they reported that capital market indicators do not significantly correlate with the output level of Gross Domestic Product in Nigeria. The study recommended that government should formulate and implement policy measures that can increase investors' confidence and boost activities in the market.

Elendu A, (2018) <sup>[16]</sup> studied the influence of stock market earnings on per capital income in Nigeria. Applying the co-integration technique and error correction mechanism they found that stock market earnings positively and significantly impact on per capital income both from the primary and secondary markets.

Osaze (2018) <sup>[28]</sup> tested whether the stock market activities promote economic growth for the period 1980 to 2017 in Nigeria using the ordinary least square regression method. The result reveals that economic growth indicators in Nigeria are adequately explained by changes in the stock market variables.

Nasseh, A (2015) <sup>[24]</sup> in the review of the stock market activities suggested that the market could improve in performance and propel the desired level of economic growth in Nigeria if it is increasingly patronized and information flow enhanced.

Ajao and Mayowa (2017) <sup>[4]</sup> adopting the efficient market hypothesis approach, advocates a market where information is not truncated and operational performance is optimal for meaningful growth.

Ekogbo, O (2018) <sup>[14]</sup> examined the capital market growth supporting effects of information technology utilizing the modified Gompertz diffusion model in Nigeria. The study reported that growth in total volume and value of shares traded is significantly affected by communication technology. The number of listed securities on the stock exchange and growth in federal and state government bonds does not appear to have any significant correlation with the adoption of information and communication technology. The study concluded that information and communication technology has contributed significantly to the growth of the Nigeria capital market.

Odhiambo N (2017) <sup>[27]</sup> regressed Gross Domestic Product against yearly stock market performance variables adopting a multi-linear approach on Nigerian data. The result shows a positive and significant relationship between total market capitalization, total stock exchange and economic growth indicator respectively.

Studied stock market liquidity and macroeconomic variables in Japan. They reported that liquidity stock is persistently and statistically significant on real balances in the economy. The variance decomposition test result shows that capital market liquid stocks explain more than 16% of the variation in real balances at a frequency of about 18 months. The study also revealed that capital market liquid stock has effects on macroeconomic variables which are consistent with persistent money demand stocks. It was also found that stock market liquidity is significantly affected by stocks output and capital formation but not by stocks to money market variables-call rates. Stocks to macroeconomic activities also have significant impacts on stock market liquidity.

### 3. Methodology

#### 3.1 Study Design

This study adopts the ex-post research design in which case time series historical data are employed and analyzed as a basis for inference.

#### 3.2 Population of the Study

The population of this study comprises all stock market variables from inception as well as gross fixed capital formation of Nigeria as a nation from 1960 to date.

#### 3.3 Sample Size and Sampling Techniques

The sample for this study comprises three stock market variables taken from 1991 to 2018 and gross fixed capital formation for the same period. The sample is chosen as a result of availability of data and for convenience.

#### 3.4 Sources of Data and Method of Data Collection

The data for this study are secondary data obtained from the Central Bank of Nigeria statistical bulletin of 2018.

#### 3.5 Model Specification

Building on the theories and empirical reviews earlier made in this study, we can hypothesize that gross fixed capital formation (GFCF) is a positive function of stock market performance measures. Given the above consideration, we can specify a three predictor model of capital formation-stock market activities in linear function as:

$$GFCF = f(SMC, VST, ASI) \quad (1)$$

Where

GFCF = Gross Fixed Capital Formation

SMC = Stock market capitalization

VST = Value of stock traded

ASI = All share index

Transforming equation (1) into an econometric model gives:

$$GFCF_t = \beta_0 + \beta_1 SMC_t + \beta_2 VST_t + \beta_3 ASI_t + \mu_t \quad (2)$$

Where

$\beta_0$  = intercept

$\beta_1 \dots \beta_3$  = coefficients of the predictor (stock market) variables

$\mu_t$  = error term

Other variables are as previously defined.

#### Apriori Expectations

All the explanatory (stock market) variables are expected to positively affect, or relate to, gross capital formation. In other words, all the variables should have positive coefficients. This is expressed as:  $\beta_1 \dots \beta_3 > 0$ .

#### 3.6 Method of Data Analysis

The data for this study were sourced from the Central Bank of Nigeria statistical bulletin, and the data covers the period 1991 to 2018.

The empirical analysis begins with the description of the data in order to show the characteristics of the data. Next, the study applied the ordinary least squares (OLS) procedure to estimate the time series model in order to



examine the effects of stock market on capital formation in Nigeria for the period under review.

**4. Data Presentation**

**Table 1:** Time series data of the variables from 1991 to 2018

YEAR	GFCF N'bn	SMC N'bn	VST N'bn	ASI N'bn
1991	31130.00	16.3	225.4	513.8
1992	35620.00	23.1	242.1	783.0
1993	58940.00	31.2	491.7	1107.6
1994	105200.00	47.5	804.4	1543.8
1995	140560.00	66.3	985.9	2205.0
1996	148270.00	180.4	1838.8	5092.2
1997	172491.00	285.8	6979.6	6992.1
1998	250099.00	292.0	11100.0	6440.5
1999	283292.40	263.3	13600.0	5672.9
2000	231661.70	299.9	14100.0	5266.4
2001	331056.70	478.6	28200.0	8111.0
2002	327135.70	662.6	57600.0	10963.1
2003	499681.50	763.9	60300.0	12137.7
2004	865878.50	1356.0	120700.0	20128.9
2005	863072.60	2112.0	225800.0	23844.5
2006	804400.00	2900.0	262000.0	24085.8
2007	1546525.70	5120.0	470000.0	33189.3
2008	1915348.80	13300.0	2100000.0	57990.2
2009	2030510.00	9560.0	2400000.0	31450.8
2010	2184828.76	7030.0	102850.0	20827.2
2011	9183060.00	10330.0	797550.0	24770.5
2012	8425760.00	10275.0	638900.0	20730.6
2013	8640770.00	14801.0	809000.0	28078.8
2014	9320350.00	19077.0	2350900.0	41329.2
2015	10571740.00	16875.0	1338600.0	34657.2
2016	10432230.00	17003.0	950400.0	28642.3
2017	9927260.00	18237.0	974277.0	26874.6
2018	9631700.00	21765.0	1128832.0	38243.2

Source: Compilation from CBN statistical bulletin, 2018

**4.2 Analysis and Discussion**

**4.2.1 Descriptive Statistics**

**Table 2:** Summary Statistics of the Variables

	GFCF N'bn	SMC N'bn	VST N'bn	ASI N'bn
Mean	3177092.	6183.996	530938.5	18631.15
Median	833736.3	1734.000	111775.0	20429.75
Maximum	10571740	21765.00	2400000.	57990.20
Minimum	31130.00	16.30000	225.4000	513.8000
Std. Dev.	4145444.	7365.921	740244.9	14890.76
Skewness	0.914545	0.794185	1.429701	0.613725
Kurtosis	1.961390	2.091377	3.949382	2.804508
Jarque-Bera	5.161659	3.906604	10.59042	1.802328
Probability	0.075711	0.141805	0.005016	0.406097
Sum	88958572	173151.9	14866277	521672.2
Sum Sq. Dev.	4.64E+14	1.46E+09	1.48E+13	5.99E+09
Observations	28	28	28	28

Source: Computation using Eviews 9.0

Table 2 is the summary descriptive statistics of the variables. The table shows that gross fixed capital formation (GFCF) has a mean value of N317, 702.20 billion; while the minimum and maximum values for the period are N31, 130 billion in 1990 and N10, 571, 740 billion in 2014, respectively. Stock market capitalization (SMC) has a mean value of N6, 183.996 billion; while the minimum and maximum values are N16.3 billion in 1990 and N21, 765

billion in 2017, respectively. Value of stock traded (VST) has a mean value of N530, 938.50 billion; while the minimum and maximum values are N225.4 billion in 1990 and N2, 400, 400 billion in 2008, respectively. All share index (ASI) has a mean value of N18, 631.15 billion; while the minimum and maximum values are N513.8 billion in 1990 and N57, 990.20 billion in 2007, respectively.

The Jacque-Bera (JB) statistics with corresponding probability values show that whereas four of the variables are normally distributed; one of them, namely value of stock traded (VST) is not, at 5 percent level of significance. This position will not, however, affect the usefulness of the results of analysis.

**4.2.2 Regression Results**

Dependent Variable: GFCF

Method: Least Squares

Date: 07/21/19 Time: 20:58

Sample: 1991 2018

Included observations: 28

**Table 3:** Ordinary Least Squares (OLS) regression results at level

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	678475.2	437077.4	1.552300	0.1337
SMC	733.0980	63.36754	11.56898	0.0000
VST	-1.113929	0.676998	-1.645395	0.1129
ASI	-77.47407	35.38271	-2.189603	0.0385
R-squared	0.908506	Mean dependent var		3177092.
Adjusted R-squared	0.897070	S.D. dependent var		4145444.
S.E. of regression	1329972.	Akaike info criterion		31.17078
Sum squared resid	4.25E+13	Schwarz criterion		31.36109
Log likelihood	-432.3909	Hannan-Quinn criter.		31.22896
F-statistic	79.43789	Durbin-Watson stat		1.298387
Prob(F-statistic)	0.000000			

Source: Eviews 9.0 output

Table 3 shows the level series ordinary least squares (OLS) regression results. The results indicate that only stock market capitalization (SMC) has a positive impact on gross fixed capital formation, with a coefficient of 733.09; meaning that a naira increase in stock market capitalization results in approximately 733 times increase in gross capital formation. Value of stock traded (VST) has a negative coefficient of -1.11 meaning that a unit (naira) increase in value of stock traded leads to 1.11 times decrease in gross fixed capital formation. Similarly, all share index (ASI) shows a negative coefficient of -77.47; meaning that a naira increase in all share index (ASI) leads to 77.47 times decrease in gross fixed capital formation. The above explanations show that only one of the parameters (stock market capitalization) confirms apriori expectations.

However, the intercept (constant, C) is positive with a coefficient of 673475; meaning that where all the stock market variables are held constant, gross fixed capital formation increases 678,475 times on account of other variables not related to the stock market or not captured in the model.

Furthermore, the results reveal that r-squared is .9085; meaning that about 90.85 changes in the gross fixed capital formation are accounted for by stock market variables. Similarly, adjusted r-squared is 0.89707; meaning that the model is good enough for explanatory purposes.

### Test of Hypotheses

The results on table 3 are also used to test the hypotheses formulated in this study.

#### Hypothesis 1

Market capitalization has no significant impact on gross capital formation in Nigeria.

From table 3, the t-statistic is 11.56898 with a corresponding probability value of 0.0000; which means that it is statistically significant at 5 percent. Therefore, the null hypothesis is rejected. The study concludes that market capitalization has a significant impact on gross fixed capital formation in Nigeria.

#### Hypothesis 2

Value of stock traded has no significant impact on gross capital formation in Nigeria.

Table 3 shows a t-statistic -1.645395 with a corresponding probability value of 0.1129; which is statistically insignificant at 5 percent. Therefore, null hypothesis cannot be rejected, but accepted. The study concludes that value of stock traded has no significant impact on gross fixed capital formation in Nigeria.

#### Hypothesis 3

All share index has no significant impact on gross capital formation in Nigeria.

The t-statistic on table 3 is -2.189603 with a probability of 0.0385; which is statistically significant at 5 percent. Therefore, the null hypothesis is rejected. The study concludes that all share index has a significant impact on gross capital formation in Nigeria.

Overall, the f-statistic is 79.437 with a probability of 0.0000; which is statistically significant. This means that all the stock market variables, together, have a significant impact on gross fixed capital formation in Nigeria.

### 4.2.3 Discussion of Findings

The study examines the impact of the stock market on gross capital formation in Nigeria, using market capitalization, value of stock traded, and all share index as the stock market variables. The study found that the stock market has significant impact on gross capital formation. However, not all the variables were significant. Specifically, both capital market capitalization and all share index have significant impact on gross capital formation; but volume of shares traded does not. Also, out of the three stock market variables used in the study, only market capitalization has a positive impact. The results of the study do not totally confirm apriori expectations.

### 5.1 Summary of Findings

The findings of this study are summarized below:

1. That market capitalization has a positive and significant impact on gross capital formation in Nigeria.
2. That value of share traded has a negative and insignificant impact on gross capital formation in Nigeria.
3. That all share index has a negative and significant impact on gross capital formation in Nigeria.
4. That the stock market, generally, has significant impact on gross capital formation in Nigeria.

### 5.2 Conclusion

The study is on the impact of capital market on capital formation in Nigeria for the period 1991-2018. The study uses capital formation as the dependent variable proxied by gross fixed capital formation while the explanatory variable is capital market proxied by market capitalization, value of share traded and all share index. The study concludes that capital market has significant impact on capital formation in Nigeria.

### 5.3 Recommendations

Following the above findings, the study makes the following recommendations:

1. The monetary authorities should take steps to improve on the value placed on the shares traded thereby encouraging both local and foreign investors to participate in the market.
2. The regulatory authority should device means to restore confidence in the market, particularly through ensuring transparency and fair trading and dealings in the stock exchange market.
3. The stock market should make more investment instruments such as derivatives, convertibles, futures, options, swaps etc available in order to attract more investors and encourage greater participation.

### 5.4 Contribution to Knowledge

The study contributed to knowledge particularly in the area of the Nigerian Stock exchange market in Nigeria. The study uses three models to proxy capital market (MCAP, ASI and VST), which is used to the best knowledge of the researcher at this level.

### 5.5 Area for Further Research

This study focuses on capital formation in Nigeria. It is therefore the view of the study that further research can be done on the real sector growth particularly the manufacturing sector of Nigeria and compares their results with those of this study. It is also imperative to undertake similar studies on larger scope like the growth of the Nigerian economy and compare their findings with the current findings.

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