

## **GLOBAL FINANCIAL CRISIS EFFECT, ON GROSS DOMESTIC PRODUCT (GDP) AND THE NIGERIA CAPITAL MARKET**

Anyesha Amos Audu, Maku Sampson Hassan, and Mercy A. Daniel  
Nasarawa State Polytechnic, Lafia

### **ABSTRACT**

*The paper did a review on the global financial crisis effect on the Nigeria GDP and capital market: The world encountered financial crisis since 2007 and the crisis was unprecedented in the history of the modern world which caused a terrible effect on countries' wellbeing in GDP and capital market and Nigeria was not an exception. The crisis resulted into recession in some many economies with enormous impact on developing nations like Nigeria, with influence in GDP and caused a contagion effect in stock markets. The study used secondary data to review global financial crisis effect, GDP, and capital market. The study used GDP values of 2007-2016 as independent variables, source from World Development Indicators (WDI) Nigeria- GDP growth (annual %), GDP by country statistics from World Bank and market capitalization values of 2007-2016 as dependent variables, source from Yearly NSE Fact Sheets. The research used linear regression to analyze the data, and the magnitude of the coefficient demonstrates that the independent variables affect the yearly NSE; DPV with 3.440013%, while IDV GDP growth has 1.871314%. The researchers conclude with a recommendation: That since the yearly NSE appreciates from the crisis period as well as the GDP growth increases, this, therefore, denotes a positive relationship.*

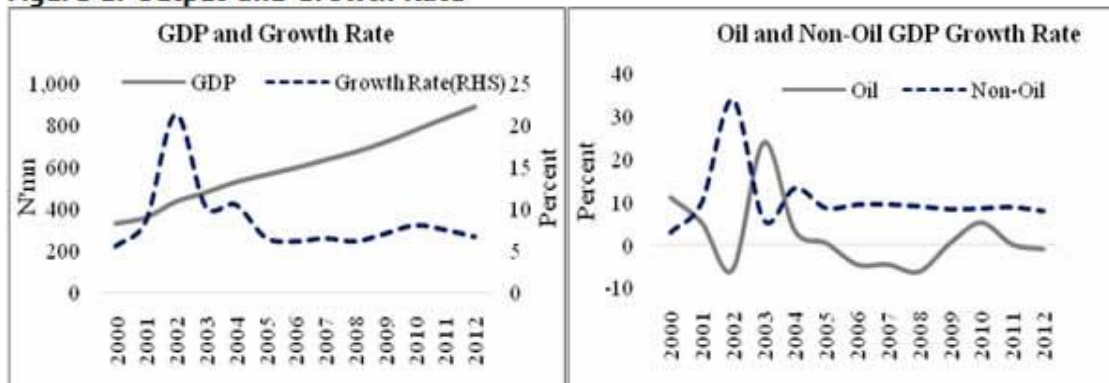
**Keywords:** Financial Crisis, real GDP, Capital Market, Share-Index, and NSE.

### **INTRODUCTION**

The global financial crisis engulfed the World and been tagged the ‘great depression of the 1930s’, and the aftermath is felt, and it is regarded as the most severe financial crisis experienced by the World. Another global financial crisis rises in the mid-2007 in the United States of America when the subprime mortgage borrowers failed to service their loans which resulted in default. The global credit crunch was pressed because the investment bank who sold the debt obligations and could no longer service the considerable debt package as purchase notes from commercial banks, this made and affected most economy in the world both developed and developing countries and caused an effect on countries' GDP, capital market, etc. While to

Dell'Araccia et al. (2013) these financial crises often related to shocks and structural transformation in the market, plus changes in production and productivity, and economic policies, and capital flows. That GDP growth previous was correlated positively with the probability of occurrence of the credit boom. Initially, the (GDP) grew at a decreasing rate during the crisis. The growth rate dropped from 6.4% in 2007 to 6.04% in 2008 but immediately rebounded despite the crisis. The Oil sector GDP suffered the highest fall at the peak of the crisis, reaching a low of -6.19% growth rate in 2008. The Non-oil sector GDP growth fell from 9.46 % in 2007 to 9.01% in 2008 and fall to 7.89% in 2012.

Figure 1: Output and Growth Rate



According to Adamu, (2008) the crisis escalated owe to the fact that the crisis has resulted into recession in some industrialized economies with enormous impact on developing economies like Nigeria which financial contagion and stock markets spillover consequence caused instability in stock driven by the sale of foreign investors. While Amadeo, (2008) posit that investors and depositor are faced with the consequence of total market capitalization and all-share index fall. The earlier challenges of the Nigeria capital market was assumed that the market is insulated from the global financial crisis and the market embarked on a sustainable role in economic development of Nigeria overtime; it adopted a strategy of issuing out shares, debt instruments, bonds for public and private purchases: As Sanusi, (2011) noted that the crisis begins in the U.S, spread to Europe and parts of the world to caused economy recession, as a result of the interdependence and globalization nature of the world, which torn nation's borders and economy, regulations, protection and created debt. Ayuba (2011) observed that some of the key stock market and other economic indicators point to the fact that all is not quite well with Nigeria.

For instance, the total market capitalization that stood at N12.40 trillion in March 2008 fell to N4.69 trillion in March 2009, which represents a sharp decline of 62.18%. Additionally, the nation's foreign reserves slow down from \$64 billion in August 2008 to \$47 billion as at March 2009, a 27% decrease. The crisis caused instability in the country's capital market and economy in general since 2008; it creates great predicament even in government and policy. Though, with a high magnitude toward averting the gap formed by the trend since the crisis engulfed. While the size of the Nigeria capital market and its efficient allocation with a decline in the stocks prices across the market, lead to significant unbalanced and a cut down of investors' confidence and withdrawal of portfolio (Igbatayo, 2011).

**RESEARCH OBJECTIVES**

1. To ascertain the effect of the global financial crisis in the independent variables: (GDP) values and dependent variables: the Nigeria market capitalization values.
2. To identify the relation between the two variables the independent and dependent variables.

**METHODOLOGY**



The research work is reviewed from the effect of global financial crisis to Gross Domestic Product (GDP) and the Nigeria capital market. Data was collected through secondary sources such the World Bank, IMF, Bulletin of the Nigeria Capital Market (NCM), Stock Exchange Commission (SEC), National Bureau of Statistics (NBS), the Nigeria capital market annual publication, and the federal government publication. Other source includes the Nigeria capital market performances on share sources, The Nigeria Stock Exchange (Yearly NSE Facts). The activities of the global financial crisis, annual reports, newspaper reports, and government, printed sources books and online materials on the global financial crisis with a particular focus on GDP and the Nigeria capital market. The researcher restricts the study to data extracted through the internet on 29/10/2017, 30<sup>th</sup>/10/2017 and 3<sup>rd</sup> /11/2017 respectively.

## **LITERATURE REVIEW**

### **The Nigerian Capital Market**

The capital market is a market for raising funds by organizations and trade of securities. It is the major source of long-term funds to finance investment. Studies have identified that feasible ventures have collapsed owing to the mismatch of funds utilized. The primary market segment is for raising funds through the issuance of new securities while the secondary market segment provides facilities for trading in already issued securities. As the major source of appropriate long-term funds, the capital market is apparently crucial to any nation's economic development. Specifically, the capital market facilitates economic growth by, among other things, mobilizing savings from numerous economic units such as governments, individuals and institutional investors for users such as governments and the private sector (Al-Faki, 2007). It also improves the efficiency of capital allocation through a competitive pricing mechanism.

### **The Concept of Gross Domestic Product**

A complete gauge of performance of an economy is the Gross Domestic Product. It is a widely used instrument for measuring the national output of the most economists, while other concepts are often cited, Net Domestic Product and Gross National Product (GNP). However, the link amongst the concepts (GDP, GNP, and Net Domestic Product) is that they measure an economy's output.

According to Nnamocha (2002), He observed that Gross Domestic Product is the sum money worth of all goods and services produced in the domestic economy. Thus GDP includes both the nationals and non-nationals of an economy and GDP must be equal to the value of only the final products.

Therefore, GDP can be calculated by measuring the total value of income. While Nominal GDP is the value of final goods and services in existing market. Nominal GDP can increase as either rising output or increase in the price of products. Real GDP is the measure of the quantity of real goods and services by eliminating the result of rising prices. Accordingly, GDP is defined by the following formula:  $GDP = Consumption + Investment + Government Spending + Net Exports$  or more succinctly as  $GDP = C + I + G + NX$  where consumption (C) represents private-consumption expenditures by households and nonprofit

organizations, investment (I) refers to business expenditures by businesses and home purchases by households, government spending (G) denotes expenditures on goods and services by the government, and net exports (NX) represents a nation’s exports minus its imports.



**The Crisis Effect**

The U.S is considered as the World’s largest in industrial and economy with the highest GDP in the World and its adverse effect on the World economy. The crisis in the Mortgage industry affected the global economy, with serious indications in 2008. The U.S experience, a sharp dropped in the profits of banks, Stock Exchange, share prices in the major markets. While, there was a collapse in economic activities in the U.S, UK and a fall in the capital market in parts of the world. According to Aluko, (2008), this resulted in high-interest rates, credit reduction in circulation by financial institutions with contagious effects on parts of the World and a decrease in household demand. Equally, there was a drop in assets of stocks and estate and high declined in investors’ confidence, consumption and economic activities with high rates of job losses as the crisis affected the world.

However, the Nigeria vulnerability to the crisis was quickly affected as a consequence was mainly reliance on the extraction and exports of crude oil. The developed nations which the crisis started have areverse relation on crude oil price, such that the economic boom and the crises in nation rightly affect Nigeria economy. As Soludo, (2009) posit that the external crude reserve of oil dropped from the peak top of \$ USD 62 billion to \$ USD 42 billion and the exchange rates speedily drop from (USD1) one dollar to 145.25 in 2008. With a high capital market loss on, equities, bonds owed to fall in value and exit of both domestic and foreign investors.

**The Nigerian Capital Market Effect**

The effect of the crisis that began in the United States of America (USA) on rising markets was wide-ranging and was both internally and externally induced (Adedipe, 2009). The initial financial crisis had affected mainly the US and Europe. However, owing to the connectivity of the financial system also known as the „contagion effect,“ most economies were affected.



The impact of the crisis started to show by mid-2007 with the fall of major stock market prices. The crisis entered a new phase with the collapse of Lehman Brothers in September 2009 and spread across economic sectors in advanced, emerging and developing economies, Nigerian inclusive.

Research shows that major firms and financial institutions borrowed and invested seriously in Mortgage-Backed Securities (MBS) and reported losses of approximately US\$2.8 trillion as at October 2008 (Adedipe, 2009). The credit derivatives compounded the effects mainly in the capital markets property and stock markets. The effects of the crisis on major stock markets indicated losses as at end December 2008.

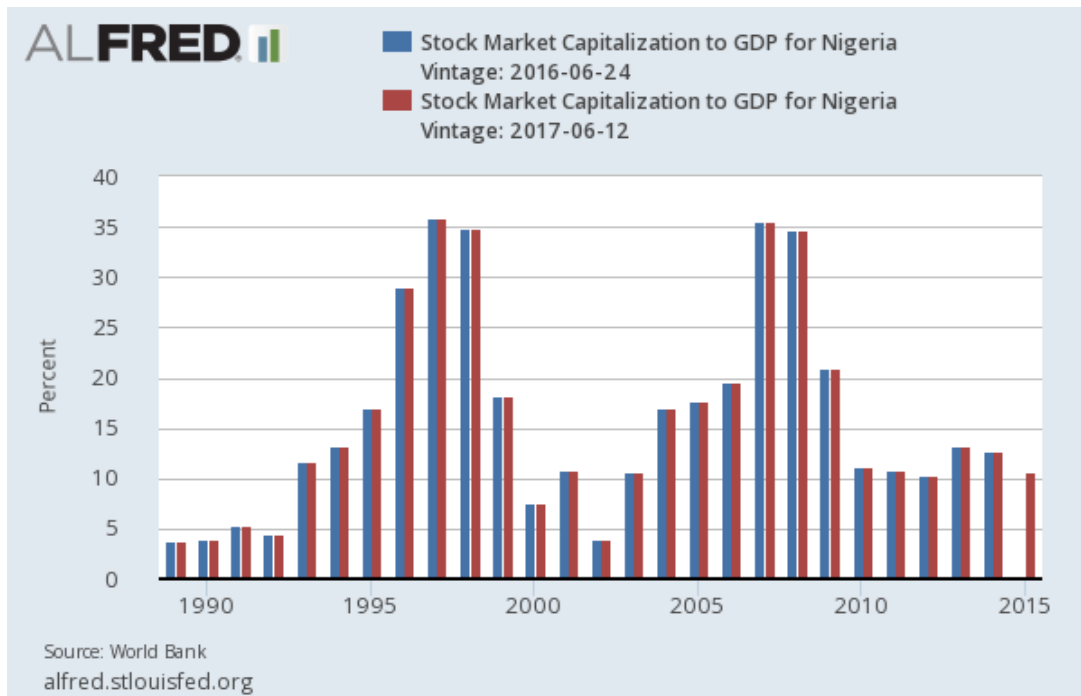
The crisis led to the demise of large banking institutions, large size conglomerates and small businesses with governments, in even the wealthiest nations, providing rescue packages to bail out their financial systems. The impact of the crisis is still currently felt by countries in the world, also by other African countries, the Nigerian economy was initially perceived to have been isolated from the financial crisis. The total share of stock market capitalization stood at only 1.81 percent of the global market (CBN, 2009). However, the effects began to show by end-March 2008 with the crash in the capital market and some firms having expanded their businesses outside the shores of Nigeria, the contagion effect of the crisis hit the Nigerian economy.

Based on the nature of the Nigerian economy, the financial crisis affected the foreign exchange market. This was attributed to the disinvestment and repatriation of capital and dividends by foreign investors thereby intensifying the demand for foreign currencies. This further led to a depletion of the external reserves. The implication for the Nigerian economy was borne by the various sectors of the economy.

Firstly, the Nigerian stock market witnessed a continuous drop in the All-Share Index and volume of traded securities. Secondly, the banking subsector was affected by a credit contraction as most foreign firms reduced their credit lines, exchange rate exposure, and the continuous decline in the NSE eroded their profitability. Thirdly, the decline in the revenue receipts by the three tiers of government, leading to a contraction in the fiscal sector. The contraction of the fiscal sector led to a crowding-out of the private sector credit, which in turn affected the real sector.

With the emergence of the global financial crisis, foreign investors began to withdraw holdings in the capital market which in turn led to capital flight. The withdrawals of portfolio holdings, given the size of the market, led to significant volatility and a sharp decline in stock prices across the Nigerian stock market.

Before the crisis, stock prices had appreciated though without correlation with any market fundamentals. Between 2002 and 2008, the Nigerian stock market capitalization rose to peak at N12.6 trillion in March 2008.



## FINDINGS

Dependent Variable: YRS  
Method: Least Squares  
Date: 11/03/17 Time: 17:49  
Sample: 2007 2016  
Included observations: 10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2006.470	1.653412	1213.533	0.0000
DPV	4.04E-13	7.92E-14	5.097880	0.0014
IDV	1.87E-14	2.61E-14	0.718486	0.4957
R-squared	0.790983	Mean dependent var		2011.500
Adjusted R-squared	0.731264	S.D. dependent var		3.027650
S.E. of regression	1.569525	Akaike info criterion		3.982749
Sum squared resid	17.24387	Schwarz criterion		4.073524
Log-likelihood	-16.91374	Hannan-Quinn criteria.		3.883168
F-statistic	13.24508	Durbin-Watson stat		2.349703
Prob(F-statistic)	0.004175			

## LINEAR REGRESSION

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2006.470	1.653412	1213.533	0.0000
DPV	4.040013	7.921214	5.097880	0.0014
IDV	1.871314	2.613214	0.718486	0.4957

$$\bar{R}^2 = 0.731264, \quad R^2 = 0.790983, \quad F\text{-Statistics} = 13.24508, \quad DW = 2.349703$$

$$\text{Yearly NSE} = 2006.470 + 4.040013\text{DPV} + 1.871314\text{IDV}$$

$$\text{Yearly NSE} = C + \beta_1\text{DPV} + \beta_2\text{IDV} + \epsilon$$

### **Interpretation: Magnitude of Coefficient**

The estimate above illustrates that the independent variables affecting the yearly NSE; DPV has 3.440013%, while IDV GDP growth has 1.871314%.

**Implication:** the implication of this is that the yearly Nigeria Stock Exchange through DPV appreciates as well as the IDV GDP growth is increasing since it has a positive relationship with the period of operation. The government should enhance the national GDP growth as it has positive percentage. An increase in DPV will lead to an increase in GDP growth level, therefore, cause economy stimulation.

### **Interpretation: Apriori Expectation**

The apriori expectation is that DPV has met our apriori expectation since it has a positive coefficient relationship with the yearly operation of NSE. IDV has met our apriori expectation as it has positive coefficient relationship with the yearly operation.

The intercept is 2006.470; this means when the value of yearly NSE of the independent variables is equal to zero. The implication of the sign of the intercept which is positive shows that all the independent not included in the model will have a positive impact on NSE.

### **Interpretation: Statistical Significance**

The statistical significance above is that if the probability variable is less than 0.05, it is statistically significant. The probability variable of DPV is 0.0014 which is statistically significant to yearly NSE. The probability variable of IDV is 0.4957 more than 0.05, not statistically significant to yearly NSE

### **Evaluation Based on Statistical Criteria, the R-Squared**

The  $R^2$  regression result is 0.790983; this means 79% of the variation in yearly NSE is explainable by the independent variables in the model.

### **The t-Test**

The t-test is adopted to test the individual significance of the independent variables. The test is carried out based on the following hypothesis.

**H<sub>0</sub>:** Nigerian GDP does not affect the Nigeria capital market as a result of 'Global Financial Crisis' (The Independent Variable).

**H<sub>1</sub>:** Nigerian GDP affects the Nigeria capital market as a result of 'Global Financial Crisis' (The Dependent Variable).

---

## **CONCLUSION**

For the Nigeria economy especially the GDP and capital market to be essential thrust in checking the crisis effect even in Nigeria, the domestic economic activities such as saving and investment should be encouraging more. More so, to restore investor confidence the regulatory authorities such as the Nigerian Stock Exchange Commission (SEC), Central Bank of Nigeria (CBN) through transparency and fair trading transactions and dealing in share should be encouraged toward ensuring capital market stability.

## **RECOMMENDATION**

The yearly NSE appreciates since the crisis period as well as the GDP growth is increasing, this denotes positive relation, therefore:

The government should ensure Nigeria GDP growth should commensurate with capital market values to cause economy stimulation in all facets and implement policies toward the fallen to stock to revitalize investor's confidence and restore outburst of market productivity. The government should equally, increase liquidity and turnover rates, as this will enhance general growth in Nigeria economy and enhance fiscal and monetary policies implementation.

The government should checkmate a means and measure of curbing and ameliorating the future occurrence of the crisis in enhancing world economy stability and effect in countries and Nigeria.

## **REFERENCES**

- Adamu, A. (2008). The effect of Global Financial Crisis on the Nigeria Economy. Retrieved from <http://depo.gdnet.org/newkb/submissions/1288192072THE%20EFFECTS%20OF%20GLOBAL%20FINANCIAL%20CRISIS%20ON%20NIGERIA%20ECONOMY-1.pdf>
- Adamu, A.(2008). The Effects of Global Financial on Nigerian Economy. Retrieved from [http://www.academia.edu/225073/The\\_Effects\\_of\\_global\\_financial\\_crisis\\_on\\_Nigerian\\_Economy](http://www.academia.edu/225073/The_Effects_of_global_financial_crisis_on_Nigerian_Economy)
- Adewale, D. (2009). Global Economic Crisis: Nigeria and National Strategy. Retrieved from <http://www.nigeriansinamerica.com/articles/2946/1/Global-Economic-Crisis-Nigeria-and-National-Strategy/Page1.html>
- Adedipe, B. (2009), "Impact of Global Financial Meltdown on the Nigerian Financial System and Suggested Way out." A presentation at the seminar on Global Financial Crisis held in Abuja.
- Aluko, M.E., (2008). The Global Financial Meltdown: Impact on the Nigeria's Capital Market and Foreign Reserve. Retrieved from [http://www.nigeriavillagesquare.com/index2.php?option=com\\_content&do\\_pdf=1&id=1052](http://www.nigeriavillagesquare.com/index2.php?option=com_content&do_pdf=1&id=1052)
- Al-Faki, M. (2007). Understanding the Nigerian Capital Market: Best Investment Practices & Regulatory Compliance".
- Amadeo, K. (2008). What was the Global Financial Crisis of 2008? Retrieved from <http://useconomy.about.com/od/criticalissues/f/What-Is-the-Global-Financial-Crisis-of-2008.ht>
- Ayuba, S. (2011). The Impact of the Global Financial Market on the Nigerian Stock Market. An Unpublished M.Sc. Project, Department of Economics, Ahmadu Bello University, Zaria
- Central Bank of Nigeria, (2009). "The Current Global Financial Crisis: Antecedents, Causes, Effects and Implications for the Nigerian Economy" A presentation by the Research Department, CBN at the seminar on Global Financial Crisis held in Abuja.



- Dell’Ariccia, G., D. Igan, L. Laeven, and H. Tong, (2013). Policies for Macro-financial Stability: Dealing with Credit Booms and Busts, in S. Claessens, M. A. Kose, L. Laeven, and F. Valencia, eds., *Financial Crises, Consequences, and Policy*.
- Igbatayo, S. (2011). The Challenges of the Global Economic Crisis and the Nigerians Financial Market Stability. *Journal of Emerging trend in Economic and Management Sciences (JETEMS)*. 477-503. Scholar link Research. Institute Journal, 2011 (ISSN: 2141-7024). Retrieved from <http://jetems.scholarlinkresearch.org/articles/The%20Challenges%20of%20the%20Global%20Economic%20Crisis%20and%20Nigeria%20Financial%20Market%20Stability.pdf>
- Nnamocha P.N. (2002). *Basic Macroeconomics*. Millennium Publishers, Onitsha Nigeria.
- Sanusi, L. S. (2011). The impact of Global Financial crisis on the Nigeria Capital Market moreover, the Reforms, 7<sup>th</sup> Annual Pearl Award and Public Lecture Muson Centre, OnikanLagosNigerian [http://pearlawardsng.com/uploads/downloads/the\\_impact\\_of\\_the\\_global\\_financial\\_crisis\\_on\\_the\\_nigerian\\_capital\\_market\\_and\\_the\\_reforms.pdf](http://pearlawardsng.com/uploads/downloads/the_impact_of_the_global_financial_crisis_on_the_nigerian_capital_market_and_the_reforms.pdf)
- Soludo, U. (2009). Global Financial and Economic crisis how vulnerable is Nigeria? Abuja – Nig: CBN, January. Retrieved from <http://www.cenbank.org/out/speeches/2009/govadd-21-1-09.pdf>