FINANCIAL CRISIS AND SUSTAINABLE DEBT MANAGEMENT IN NIGERIA, 1980 – 2017

ISRAEL ONOKERO IMIDE (PH.D); RICHARDCHINYEOSADUME (PH.D, FCA); MELVIN U. EKO-RAPHAELS; BLESSING C. UZOMAH.

Nigeria Maritime University, Okerenkoko, Nigeria

ABSTRACT

The study examined the effect of financial crisis and sustainable debt management in Nigeria. The main objective of the study is to examine financial crisis and sustainable development in Nigeria. The model built for the study has sustainable debt management (SDM) as endogenous variable and exogenous variables wasfinancial crisis (FINCR) proxied by financial Deepening (Bank Deposit to GDP ratio). Annual time series data were gathered from the Central Bank of Nigeria Statistical Bulletins from 1980 to 2017. The techniques used for analysis are the Ordinary Least Square Techniques, the Augmented Dickey Fuller Unit Root Test Techniques and the Co-integration Test. The econometric techniques of Ordinary Least Squares (OLS) results show that a positive and significant relationship exists between FINCR and SDM in the short and long run periods. The study concludes that there is a significant relationship between financial crisis and sustainable debt management in Nigeria and recommends government's reduction of its over-dependence on other global economies for goods and services importation and development of its productive base to facilitate export trade.

Keywords: Debt Management, Financial Crisis, Gross Domestic Product.

1.0 INTRODUCTION

1.1 Background to study

The global financial crisis of 2008-2009 was the worst the world has seen since the great depression of the 1930s in both intensity and the global reach. Even the emerging market countries were not immune against the global scourge that spread like wild –fire (Abubakar, 2009). The effect of the financial crisis that began in the United States of America (USA) on emerging markets was wide-ranging and was both internally and externally induced (Naijathaworn, 2010). The initial financial crisishad affected mainly the US and Europe. However, due to interconnectivity of the financial system also known as the "contagion effect", most economies including Nigeria became infected (Soludo,2011).

In Nigeria, the financial crisis took place at the time when the region wasslowly recovering from negative effects of fuel and food crisis (Aluko.2009).Against this background, the key challenge facing Nigeria was how to manage her external debt in the paradigm of the financial crisis to ensure that it does not reverse progress made in the new millennium and reduce the prospects of achieving the Millennium Development Goals (MDGs). Hence, this study focused on the effect of the global financial crisis on the Nigeria Debt Management.

The current financial crisis has indeed enhanced risk aversion by investors coupled with the tightening of global credit conditions, the deterioration of the macroeconomic and political

environment of some countries in the region as well as increased volatility of capital markets and exchange rates have led to a reduction of portfolio inflows in sub- Saharan Africa (SSA).The countries in the region mostly affected by this phenomenon have been South Africa, Nigeria and Kenya. Apart from the introduction, section 2 of the study will deal with the reviews of literature, section 3 presents the methodology while section 4 will be used for the presentation of the result and section 5 concludes and provides possible recommendations.

1.2 Statement of the problem.

The changes in the structure of global capital markets since the debt crisis of 80's, the continuing process of financial market integration, and the increasing role of private investment flows. The developing countries are increasingly becoming susceptible to the vagaries of the private capital flows, largely governed by the macroeconomic uncertainties of the major economies and the fall out of the financial innovations.

The financial crisis affected severely the public finances of most developing countries, determined by the extent of direct fiscal support to the banking sector, the revenue impact of commodity prices and discretionary fiscal stimulus to support growths (Ajayi&Oke, 2012).

The decline in exchange rates in the region was primarily due to reversal in capital flows impacted by the financial crisis, and easy monetary policies pursued in response to credit crunch. One question that one may then ask is that; what is the impact of this financial crisis associated with debt management on economic growth in a small open economy like Nigeria? This becomes the problem in which this study tries to examine, so as to draw up a reasonable conclusion for the study.

1.3 Objectives of the Study

The main aim of the study is to examine financial crisis and sustainable debt management in Nigeria. The specific objectives is to examine the effect of financial crisis on sustainable debt management in Nigeria

1.4 HYPOTHESIS OF THE STUDY

For the purpose of this study the hypothesis tested was;

H_{O1} There is no significant relationship between financial crisis and sustainable debt management in Nigeria

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Literature

Financial crisis is a situation in which the supply of money. This means that liquidity is quickly evaporated because available money is withdrawn from banks, causing banks to either sell other investments to make up for the shortfall or to collapse, according to Abubakar (2008), Financial crisis is applied broadly to a variety of situations in which some financial institutions or assets suddenly lose a part of their value. However, in the 19th and early 20th centuries, many financial crises were associated with banking panics, and many recessions coincided with these panics, other situations that are often called financial crisis

include stock market crisis and busting of other financial bubbles, foreign crises, and sovereign defaults (kindleberger and Aliber, 2005, Laeven and Valencia, 2008)

Debt on the other had is created by an act of borrowing. It is defined according to Oyejide T.A. &Kayode M.O. (2004) as the resource or money uses in organization that is not contributed by its owner and does not in any other way belong to them. It is a liability represented by a financial instrument or any other formal equivalent. Whether corporate or individual. The world Bank (1998, cited in oke, 2012) described external debt as the amount of money at any given time disbursed and outstanding contractual liabilities of residents to pay interest, with or without principal. Many developing countries result to external borrowing to bridge the domestic resource gap in order to accelerate economic development. It means that the processes are utilized in a productive way that facilitates the external servicing and liquidation of debt.

2.2 Theoretical Literature

The impact of public debt (both positive and negative) cannot be overemphasized. This assumption is not farfetched when it comes to the analysis of the relationship between capital investment and debt in the growth and development process of developing countries of the world. In this line of thought, this study will be incomplete without a proper review of some theories of debt and economic performance in an attempt to have a better understanding of the subject matter. All economists believe in the equality of saving and investing, in the production process (Jhingan, 2010). But they differ as to the manner in which the equality is brought about.

2.2.1 Theories of Growth

2.2.1.1 The Classical View

The classicists are of the opinion that there is the existence of fully employed economy where saving and investments are always equal (both being the function of interest rate)

That is S=f(r) and I=f(r)

Therefore S=I

They argued further that when interest rate rises, savings rises and investment falls. On the other hand, when interest rate fall, saving falls and investment rises.

2.2.1.2 Harrod-Dormar Model

Harrod and Dormar assigned a key role to investment in the process of economic growth, being one of the major goals of macroeconomic policy of modern government. Firstly, it creates income (i.e. demand effect of investment), and secondly, it augments the production capacity of the economy by increasing its capital stock (supply effect of investment).

They worked on the influence of money on economic growth within the context of the classical thesis of

    a) Price flexibility
    b) Full employment

They argued that growth in the economy depends on savings and capital output ratio.

$g=s/v$…………….. (1)

$V=\Delta k/\Delta l$ or $L\Delta K/\Delta L$………. (2)

Where Δk is change in capital

The model assumes the following

1) Proportional savings fraction, that is saving depends on proportion of income.

2) Ignoring depreciation: it is also assumed that the rate of change in capital stock(k) is equal to flow of total investment. That is

$S=Sy$………. (1)

$K=I$…………. (2)

Given an accelerated type of relationship between capital and output and a fixed output ratio (V) we have

$K=Vy$ ……….. (3)

Substituting equation (2) into (3) we have

$I=vy$ ……… (4)

At equilibrium,

$S=I$ ……….. (5)

Combining (1) and (4)

$Sy=Vy$ …….. (6)

Which means that;

$Y/Y=S/v=g$ ……… (7)

2.3. Empirical Literature

Diamond and Dybvig (1983), used theoretical model of bank runs to study the impact of global financial crisis on the USA economy using production output (GDP) and financial deepening as variables. Diamond and Dybvig's(1983) concluded that in an economy where banks and other economic units require cash, global financial crisis using runs on bank would have significant effect on the economic output.

Cass and Shell (1983) used Diamond and Dybvig model to study the impact of global financial crisis on the US reserve system and concluded that the impact was significant Kruger (1997) states that after the rise in oil prices, the oil importing developing countries faced large current account deficits. On the other hand, oil exporters had large current account surpluses, thus the surpluses of the oil exporting countries were used by oil importing developing countries.

Sanusi (1998) is of the view that faulty domestic policies which range from project financing mismatch, inappropriate monetary and fiscal policies was responsible for domestic borrowing problem. He believes that some of the policies were of little significance because of the perceived temporary effect of the external shocks.

Bauerfreund (2000) uses a computable general equilibrium model to measure the cost of external debt to the Turkish economy. His dissertation explains the issue of debt overhang, using a multi sector, non-linear general equilibrium model. In order for government to pay debt obligations, they need to levy a tax on the private economy. This increasing taxation

causes a decrease in the net returns of investment, resulting in a reduction of investment in the debtor countries, and a negative effect on future production and income. It is believed that indebted countries are able to achieve this by, increasing exports, but in practice, the experience shows that maintaining the increase in export is very difficult. On the other hand, the ratio of imports of developing countries grows more rapidly than that of developed countries.

Stokey and Lucas (2011) studied the impact of liquidity on Global Financial crisis contagion and concluded that the fall of the Lehman Brothers in 2008, had negative and significant impacts on expenditure and national output in the United States and was not a modest recession.

Osadume and Mbachu (2017) studied the Impact of Global Financial Crisis on Nigerian Economy covering 2000 to 2015, used gross domestic product to measure economic growth as dependent variable and dummy variables of 0 and 1 were used to depict pre and post financial crisis period, with exports both acting as independent variables. The study concludes that global financial crisis had significant impact on the Nigerian economy.

3.0 DATA AND METHODOLOGY

3.1 Sources of Data and Description

This research study makes use of secondary data. The variables used are the Sustainable Debt Management (SDM), proxy by Gross Domestic Product (GDP), Financial Crisis (FINCR) proxy by ratio of bank deposits to gross domestic product, and Error Term (U). The data are collected by CBN statistical bulletin, the publication of CBN, the international Financial Statistics (IFS), and the World Development Indicators 2018. It covers the period of 1980-2017.

3.2 Model Specification

Following Odugbemi and Oyesiku, (2000). The functional model is specified thus;

SDM=F(FINCR)……. (1)

Where

SDM =   Sustainable Debt Management

FINCR=   Financial Crisis

U=   Error Term

For the purpose of statistical test, equation (1) would be stated as follows:

$$SDM = \beta_1 + \beta_2 \, FINCR + U \ldots\ldots\ldots\ldots (2)$$

$\beta_1 > 0$, $\beta 2 < 0$, (Parameters)

Model I

$$SDM = \beta_1 + \beta_2 \, FINCR + U \ldots\ldots\ldots\ldots\ldots\ldots.. (3)$$

Where SDM, FINCR, β_1, β_2 are as previously defined.

3.3 A Priori Expectations

A priori refers to what the theory (with regard to the different schools of thought) says about each of the variable considered in this study. Based on this we expect our independent variables to display their respective behaviour according to what the theory says in relation to

the dependent variables that is being specified in our model. Hence, on apriori we expect a significant relationship, this is developed to see the overall impact of the global financial crisis on foreign debt management in Nigeria.

4.0 DATA PRESENTATION AND ANALYSIS

Table 4.1 – Table showing selected variables

Year	SDM	FINCR	Year	SDM	FINCR
1980	4.20	16.18	1999	0.47	13.68
1981	-13.13	21.64	2000	5.32	13.75
1982	-1.05	22.16	2001	4.41	18.70
1983	-5.05	23.80	2002	3.78	15.80
1984	-2.02	25.80	2003	10.35	14.80
1985	8.32	23.72	2004	33.74	13.01
1986	-8.75	24.41	2005	3.44	13.31
1987	-10.75	18.29	2006	8.21	13.52
1988	7.54	18.85	2007	6.83	19.32
1989	6.47	14.41	2008	6.27	27.18
1990	12.77	12.13	2009	6.93	34.66
1991	-0.62	14.20	2010	7.84	17.52
1992	0.43	13.43	2011	4.89	16.91
1993	2.09	16.97	2012	4.28	17.41
1994	0.91	16.70	2013	5.39	17.95
1995	-0.31	10.03	2014	6.31	17.91
1996	4.99	8.48	2015	2.65	17.69
1997	2.80	9.55	2016	-1.58	17.40
1998	2.72	11.83	2017	0.82	17.15

Source: Central Bank of Nigeria, World Bank and National Bureau of Statistics

ED   – External Debt to Gross Domestic Product
SDM   - Gross Domestic Product Growth Rate
GEXP - Government Net Expenditure to Gross Domestic Product
FINCR - Financial Crisis represented by financial deepening (Bank Deposit to GDP ratio)
EXCHR-Exchange Rate to the US Dollar
Summary:
The table shows unstable and rising debt to GDP ratio between the periods 1980 to 2017 (37 years). The period also shows high government expenditure to GDP while the exchange rate post crisis period have moved up to unimaginable levels from N0.55 to 1 US Dollar in 1980 to N323.50 to 1 US Dollar by close of 2017. The national output growth rate depicted by SDM has remained below double digit and sometimes in the negative, indicating an economy that has been in and out of crisis.

4.1 Diagnostic Tests

The aim here is to carry out various diagnostic tests to ensure that our data and model used in this research work conforms to the basic assumptions of the classical linear regression. This will ensure that the output of this process is not error prone and is reliable.

4.1.1 Unit Root Tests

The test for stationarity requires that the variables in the series model must be stationery at a given level and p-value must be significant at that level. Stationerity is attained where the test statistics is most negative and greater than the critical value of the chosen level of significance.

Table 4.2 – Unit Root Test Table

VARIABLES	ADF Test Statistic	Critical Values @5%	P-value	Order Integration
D(SDM)	-9.8056	-2.6308	0.0000	I(1)
D(FINCR)	-6.000287	-3.5403	0.0001	I(1)

Source: Author's E-view 7 Computation

Table 4.2 reports the tests for stationarity properties of the series following the Augumented Dickey Fuller (ADF) statistics. All the variables were found to be stationery at order one (1). At the First difference as reported, the ADF Statistics for the respective variables were more negative than the critical values at 5% significance level. The reported P values were all less than 0.05 chosen level of significance for which cause, the Null Hypothesis of the presence of unit root in all the variables is convincingly rejected. For the purposes of Co-integration analysis and tests, it is also interesting to state that the variables are all integrated of the same order.

4.1.2 Descriptive Statistics

Table 4.3 – Descriptive Statistics Table

	FINCR	SDM
Mean	17.37500	3.471316
Median	17.06000	3.990000
Maximum	34.66000	33.74000
Minimum	8.480000	-13.13000
Std. Dev.	5.258065	7.417481
Skewness	1.023578	1.268838
Kurtosis	4.594071	9.155954
Jarque-Bera	10.65886	70.19799
Probability	0.004847	0.000000
Sum	660.2500	131.9100
Sum Sq. Dev.	1022.948	2035.704
Observations	38	38

Source: Author's E-view 7 Computation

The descriptive statistics in table 4.3, reveals the skewness as a swing between positive and negative signs and the Kurtosis platykurtic(FINCR and SDM). The Jarque-Bera statistics p-values while significant for SDMand FINCR at the 5% threshold of significance.

4.1.3 Test For Serial Correlation – Breusch-Godfrey (BG) Tests

The Breusch-Godfrey tests is used to test for the presence or absence of serial or autocorrelations in the model with the Null hypothesis stating that there is No autocorrelation. This holds if p-value is greater than the chosen level of significance otherwise reject

Table 4.4 – B-G Serial Correlation Result

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.453337	Prob. F(2,31)	0.6397
Obs*R-squared	1.079824	Prob. Chi-Square(2)	0.5828

Source: Author's E-views Computation (See Appendix 1)

From table 4.4, the p-value is greater than the chosen level of significance of 5%, indicating the absence of autocorrelation in the model. This is further enhanced with a Durbin-Watson statistics of 1.948. Hence, we do not suspect any violation of the assumptions of classical linear regression.

4.1.4 Test for Heteroskedasticity

The assumption of the classical linear regression that the variance of the errors is constant is known as *Homoskedastycity*. If the variance of the errors is not constant, this would be known as *Heteroskedasticity*. Hence, we test for the presence of heteroskedasticity with the intention of treating same if found. The treatment method adopted here is the Autoregressive conditionally Heteroscedastic test known as BRESCH-PAGAN-GODFREY. The Null hypothesis states that there is no Heteroscedasticity if the p-value is greater than the level of significance (Brooks, 2014).

Table 4.5 – Heteroskedasticity Test Outcome

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.587617	Prob. F(4,33)	0.6739
Obs*R-squared	2.526637	Prob. Chi-Square(4)	0.6399
Scaled explained SS	6.194112	Prob. Chi-Square(4)	0.1851

Source: Author's E-View 7 computations (See Appendix 2 for details)

The null hypothesis states that there is No heteroskedasticity if p-value is not significant and is greater than the chosen level of significance of 5%. Hence, in table 4.5, we accept the Null hypothesis that there is no evidence of heteroskedasticity since p-value is greater than 5% significance level. Also, the Durbin Watson statistics of 2.2184 further supports this position.

4.2 Hypothesis Testing
4.2.1 Hypothesis

H_{O1} There is no significant relationship between financial crisis and sustainable debt management in Nigeria.

H_{i1} There is a significant relationship between financial crisis and sustainable debt Management in Nigeria.

4.2.1.1 ORDINARY LEAST SQUARE REGRESSION TEST

Table 4.6 – Result of Regression Test

Dependent Variable: SDM(-1)				
Method: Least Squares				
Date: 08/30/18 Time: 08:37				
Sample (adjusted): 1981 2013				
Included observations: 33 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.753882	4.287517	-1.808478	0.0802
FINCR2(4)	0.679532	0.245789	2.764700	0.0095
R-squared	0.198938	Mean dependent var		3.621515
Adjusted R-squared	0.173097	S.D. dependent var		7.892145
S.E. of regression	7.176658	Akaike info criterion		6.838237
Sum squared resid	1596.637	Schwarz criterion		6.928934
Log likelihood	-110.8309	Hannan-Quinn criter.		6.868753
F-statistic	7.698626	Durbin-Watson stat		1.518783
Prob(F-statistic)	0.009279			

Source: author's e-views computation

In table 4.6, the R^2 and Adjusted R^2 both showed 19.89% and 17.31% respectively. This shows that the variable under consideration does not exert much influence on the outcome of the overall model. This position is not unexpected as the influence of the financial crisis within the coverage period was minimal. F-statistics of 7.6986 is considered good being positive and significantly large enough and it shows that there is significant positive relationship between the dependent and explanatory variables. The overall probability (F-statistics) of 0.00928 is rightly signed and very significant and displays a Durbin-Watson of 1.5188, which is considered good as it shows little or no effect of autocorrelation on the chosen data.

Hence, from table 4.6, the FINCR(4) was led by 4 periods, has a t-statistic value of 2.7647 and a p-value of 0.0098, was found to have a positive effect on Sustainable debt management and this effect is statistically significant at 5% level since its p-value is well below 0.05. Therefore, we reject null hypothesis to accept the alternative. The implication of this result is that a 1% increase in FINCR will result to a 0.6795% increase in Sustainable debt stock and the coefficient of the future levels of FINCR variable hasa positive sign and is positive at the 5% significance level. This supports the view that thefuture level of FINCR in Nigeria significanteffect on sustainable Debt management.

4.2.1.2   Co-integration Tests

Table 4.7 – Result of Co-integration

Date: 08/30/18 Time: 08:54		
Sample (adjusted): 1982 2017		
Included observations: 36 after adjustments		
Trend assumption: Linear deterministic trend		
Series: FINCR2 SDM		
Lags interval (in first differences): 1 to 1		

Unrestricted Cointegration Rank Test (Trace)				
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.293370	20.07318	15.49471	0.0095
At most 1 *	0.189692	7.572266	3.841466	0.0059
Trace test indicates 2 cointegratingeqn(s) at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None	0.293370	12.50092	14.26460	0.0932
At most 1 *	0.189692	7.572266	3.841466	0.0059
Max-eigenvalue test indicates no cointegration at the 0.05 level				
* denotes rejection of the hypothesis at the 0.05 level				
**MacKinnon-Haug-Michelis (1999) p-values				

Source:Author's Eviews computation

Observations: Table 4.7 shows trace and maximum Eigenvalue for a possible co-integration between FINCR and SDM. The p-value (0.0095 and 0.0059) being below the chosen level of significance of 5% is considered highly significant.

Decision: We reject the Null hypothesis and accept the alternative hypothesis that there is a strong long-run relationship between financial crisis and sustainable debt management.

4.3 Discussion of Findings

This study on financial Crisis and Sustainable Debt management in Nigeria examined three objectives for which an hypothesis was developed and tested. Preliminary tests were carried out on the data and model, it was discovered that the variables under study were all stationery at first difference level with highly significant p-values. They also passed the relevant serial correlation tests and Heteroscedasticity tests with an acceptance of their relevant null hypothesis since the p-values were all greater than the chosen level of significance. Based on above success, we proceeded to test the hypothesis now discussed below;

a) To examine the effect of financial crisis on sustainable debt management – The least square regression test shows a significant (p = 0.0104) relationship between financial crisis and sustainable debt management proxied by GDP in the short-run and this result agrees with the findings of Sanusi (1998);Osadume and Mbachu (2017) of a significant relationship between financial crisis and economic growth (SDM). Similarly, in the long-run there was significant (p = 0.0095) relationship between the dependent and the independent variable at the 5% chosen level of significance. The OLS and Co-integration result thus conformswith the theory and apriori expectation of positive and significant relationship. The implication of this is that country with trade interconnectivity will deepen the impact of global financial crisis of one country on another in the immediate (short-run) and long-run periods.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The study investigates the impact of financial Crisis and sustainable debt management in Nigeria. The findings from this study revealed that financial crisis and external debt have not really impacted positively on sustainable debt management during the period covered. However, exchange rate and government expenditure in the long-run both had positive and significant relationship with sustainable debt management. From the findings and conclusion of this study, we recommend that;

1) The over-dependence of the economy on the external sector should be reduced so as to ensure that any shock that affected other countries should not automatically affect our country. To this end, there should be long-term plan to diversify the productive base of the economy from overdependence on oil.

REFERENCES

1. Abubakar, M. (2008). The implication of Global Financial Crisis on International Marketing. Unpublished M.sc Assignment on *International Marketing, Bayero University, Kano*.
2. Ajayi, S.I. (1995). Capital Flight and External Debt in Nigeria. *AERC Research Paper No. 35, Nairobi.* AERC.
3. Ajayi, S.I. (2002). Macroeconomic Approaches to External Debt: The case of Nigeria. *AERC Research Paper No. 8, Nairobi.* AERC.
4. Aluko, F &Arowolo, D. (2010). Foreign Aid, The third world's Debt Crisis and the Implication for Economic Development: The Nigeria Experience.*African Journal of political science and International Relations, vol. 4(4), pp. 120-127, April* Development of Dickey, D.A, and Fuller, W.A. (1979). Distribution of the Estimators for Autoregressive Time Series with a Unit Root. *Journal of the American Statistical Association, 74, 427-431*.
5. Bamidele T.B & Joseph A.I; (2013). Financial Crisis and External Debt Management in Nigeria.*International Journal of Business and the Rural Science Vol. 3.*
6. Brooks, (2014). *Econometrics,* fourth Edition, USA.
7. Diamond, D. &Dybvig, H.P. (1983). Bank runs, Deposit insurance and Liquidity. *A Journal of Political Economy, Vol. 91(3), p.401-419, June 1983*.
8. Engle, R.F. & Granger, C.W.J. (1987). Co-integration and Error Correction: Representation; Estimation, and Testing. *Econometrical, 55,251-276*.
9. Josten, S.D. (2000, March). Public debt in an endogenous growth model of perpetual FinanzArchiv: *Public Finance Analysis, 57 (2), 197*.
10. Kindleberger, C.P &Aliber, R. (2005). *Manias, Panics and Crashes: A History of Financial Crises* (Hoboken, N.J.: John Wiley and Sons).
11. Laeven, L.& Valencia, F. (2008). 'Systemic Banking crises: a new database' *International*
    a. *Monetary fund Working Paper* 08/224.
12. Morisset, J. (1991). Can Debt Reduction Restore Economic Growth in highly indebted countries. *Revie D'economique Politique, 101, pp. 639-666*.
13. Mukolu, M.O. &Ogodor, B.N. (2012). The Impacts of Macroeconomic Variables on Nigeria
14. External Debt (1975-2005). *Journal of science and Management.Vol. 1(1)*.

15. Nijathaworn, B. (2010) "Post-crisis challenges to emerging markets- what are at stake for

16. Central Banks?" (online) available at http://www.bis.org/review/r100326e.pdf

17. (accessed May 11, 2011).

18. Oke, M.O. & Suleiman L.A. (2012). External Debt, Economic Growth and Investment in

19. Nigeria: *European Journal of Business and Management Vol. 4.*

20. Osadume, R.C. &Mbachu, A. (2017). Impact of Global Financial Crisis on the Nigerian   Economy. *International Journal of Economics and Financial Management, 3(1), 1-19,   2017.*

21. Oyejide T.A. Soyede A. &Kayode M.D. (2004) *Nigeria and the IMF.* Heinemann

22. Educational book Nig. Ltd Ibadan, pp. 9.

23. Pattillo, C.A. Poirson, H. & Ricci, L.A. (2002). External Debt and Growth.*IMF Working*

24. *Papers No. 02/69. International Monetary Fund.*

25. Pattillo, C. Ricci L, Poirson, H. & Ricci, L.A. (2001). Non-Linear Impact of External Debt on

26. Growth.*IMF Working Papers No. 02/69). International Monetary Fund* Washington DC.

27. Pattillo, C, Ricci L, Poirson, H & Ricci, L.A. (2002).External Debt and Growth. *IMF*

28. *Working Paper International. Monetary Fund Washington DC. Economic and Financial*

29. *Review, Vol, 42 No. 2 41-66.*

30. Saint-Paul, G. (1992, November). Fiscal Policy in an endogenous growth model. *The*

31. *Quarterly Journal of Economics, 107(4) 1243-59.*

32. Sanusi. J.O. (2011). The Impact of The Global Financial Crisis on the Nigerian Capital Market

33. And the Reforms. Lecture delivered at the 7th Annual Pearl Awards and Public Lecture

34. Held at the Muson Centre, Onikan, Lagos.

35. Stokey, N. L &Lucas Jnr, R. E. (2011). "Liquidity Crisis: Understanding Sources and Limiting   Consequences" A Theoretical Framework. An economic policy paper presented at the *Federal Reserve Bank of Minneapolis: U.S.A.*

APPENDIX
1. B-G SERIAL CORRELATION TABLE

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.453337	Prob. F(2,31)	0.6397
Obs*R-squared	1.079824	Prob. Chi-Square(2)	0.5828
Test Equation:			

Dependent Variable: RESID				
Method: Least Squares				
Date: 08/29/18 Time: 15:30				
Sample: 1980 2017				
Included observations: 38				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.125937	6.853666	0.018375	0.9855
ED	-0.001311	0.027390	-0.047871	0.9621
EXCHR	0.000774	0.024006	0.032229	0.9745
FINCR	-0.142347	4.253317	-0.033467	0.9735
GEXP	-0.000552	0.076537	-0.007219	0.9943
RESID(-1)	0.147546	0.184160	0.801186	0.4291
RESID(-2)	-0.108834	0.195449	-0.556841	0.5816
R-squared	0.028416	Mean dependent var		-2.80E-15
Adjusted R-squared	-0.159632	S.D. dependent var		6.860554
S.E. of regression	7.387871	Akaike info criterion		7.002378
Sum squared resid	1692.000	Schwarz criterion		7.304039
Log likelihood	-126.0452	Hannan-Quinn criter.		7.109707
F-statistic	0.151112	Durbin-Watson stat		1.947574
Prob(F-statistic)	0.987436			

 Source: Author's E-views computation

2. Heteroskedasticity Test (Breusch-Pagan-Godfrey Test)

Heteroskedasticity Test: Breusch-Pagan-Godfrey				
F-statistic	0.587617	Prob. F(4,33)		0.6739
Obs*R-squared	2.526637	Prob. Chi-Square(4)		0.6399
Scaled explained SS	6.194112	Prob. Chi-Square(4)		0.1851
Test Equation:				
Dependent Variable: RESID^2				
Method: Least Squares				
Date: 08/29/18 Time: 15:42				
Sample: 1980 2017				
Included observations: 38				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.75709	111.1687	0.150736	0.8811
ED	-0.132789	0.447924	-0.296455	0.7687
EXCHR	0.453535	0.388244	1.168168	0.2511
FINCR	-101.1267	69.67255	-1.451457	0.1561

GEXP	0.312808	1.239171	0.252434	0.8023
R-squared	0.066490	Mean dependent var		45.82860
Adjusted R-squared	-0.046662	S.D. dependent var		118.4214
S.E. of regression	121.1528	Akaike info criterion		12.55406
Sum squared resid	484374.1	Schwarz criterion		12.76953
Log likelihood	-233.5272	Hannan-Quinn criter.		12.63072
F-statistic	0.587617	Durbin-Watson stat		2.218436
Prob(F-statistic)	0.673872			

Source: Author's E-views computation