

Managing the Residual Impacts of Global Financial Crisis in Developing Economies: The Case of Nigeria

Omika Mohammed¹ & Amana Mohammed²

¹Department of Accountancy, Federal Polytechnic, Idah, Kogi State, Nigeria
Email: omika2020@yahoo.com. (**Corresponding Author**)

²Department of Accountancy, Federal Polytechnic, Idah, Kogi State, Nigeria.
Email: abamana599@yahoo.com

Manuscript ID: RCMSS/IJCBE/13007

Abstract

Global Financial Crisis seems to have gone but the residual impacts are still around. The study was intended to determine whether or not the Residual Impacts of Global Financial Crisis can be managed and to ascertain whether or not the consumption patterns of the various Economic Units have been affected by the Financial Crisis. The Ordinary Least Square (OLS) was used in testing the hypotheses. Simple Regression Analysis was used too. Augmented Engle Granger (AEG) and Augmented Dickey-Fuller (ADF) were used. The results showed that there was co-integration between the consumptions of the Economic Units and significant dispersion from Economic Growth. It was concluded that the financial crisis still have some residual impacts of Economic Growth. It was recommended that the Federal Government should give out packages to banks to improve their liquidity positions which would ultimately transcend to other corporate and private units of the Economy.

Keywords: Financial Crisis, Residual Impacts, Consumption, Economic Units, Economic Growth.

Introduction

Global Financial Crisis (GFC) was the anomaly in the financial systems of countries all over the world. The crisis began in 2007 but was felt heavily in 2008 and beyond. Many opinions exist as to where and how it started. Understanding the channels of transmission of GFC and the size of its impact is pertinent to help curb the menace. The current global financial crisis, which was triggered by the credit crunch with the US sub-prime mortgage market, is continuing to spread and deepen in several countries (Ajakaiye and Fakiyesi, 2009; http://www.odi.org.uk/publications/3310-global-financial-crisis-nigeria_br). Most of the studies conducted on the recent Global Financial Crisis pointed to the US as the country of origin with the sub-prime mortgage as the core point of commencement of the crisis. The global financial crisis was triggered by the bursting of the United States Housing Bubble in 2007 and the reverberations of this are now being felt throughout the world (Bakrania and Brian, 2009).

Nigeria has been having its own peculiar crises before the 2007/2008 global financial crisis that put most nations of the world in disarray. The impacts are still lingering on. The influences are still significant globally, continentally, nationally, and individually. Abraham (n.d.) citing UNESCECA and AUC, 2009, buttressed that the global economic and financial crisis presents significant challenges for African countries. Although the crisis was triggered by events in the United States Housing Markets, it has spread to all regions of the world with direct consequences on global trade, investments and growth.

Generally, the emergence and spontaneous flow of Global Financial Crisis came as a shock as it permeates every facet of Nigerian economy: Capital Market, Banking System, Real Sector, Employment Status etc. It impacts on Nigeria is evident in the performance of

the Nigerian Stock Exchange and the Financial System as well as in the Real Sector. Some of the stylized indicators include market capitalization which fell by 45.8% in 2008; the crude oil price declined precipitously from US \$147 per barrel July 2008 to \$47 per barrel in January 2009 leading to a decline in external reserves and hence accruable revenue. The debt profile is also increasing (Ajakaiye & Fakiyesi, 2009; http://www.odi.org.uk/publications/3310-global-financial-crisis-nigeria_br). Agaba and Tenuche (2010) confirmed that around the world, Stock Markets have fallen, large Financial Institutions have collapsed or being bought out, and governments in even the wealthiest nations have had to come up with rescue packages to bail out their Financial Systems. Adequate understanding of ramification of financial crisis is of immense importance to the government of nations. Bail-out packages granted financial institutions are intermediary but cannot completely curb the impacts of the crisis. The period of coverage was 2008 – 2013 as a focus.

Literature Review

It is acceptable that the Global Financial Crisis emanated from the Sub-prime of the Mortgage Market in the US. The reverberation was alarming to the extent that most countries all over the world are groaning from the excruciating pains caused by the 'whirl wind'. The channels of the transmission were more of contagions resulting from resource flows and capital flows around the world. The African Development Bank Group (ADB) posts that Africa's low level of financial integration meant that African economies were relatively isolated from the direct impact of the financial crisis. Thus, Africa found itself shielded from the impact of the 2007 sub-prime and the summer 2008 banking crises, thereby avoiding the negative effects of a financial crisis that affected the very foundations of international financial markets. The contagions came through financial tunnels. Those tunnels or channels include:

- i. Stock Markets
- ii. Banks through financial flows
- iii. Financial links with other regions
- iv. Export remittances
- v. Foreign Direct Investment (FDI)

The nature of global financial crisis has been the same right from inception of date. The impact is cyclical. It has been characterized by shrinkage in the economic and financial trends engulfing the very existence of private and public entities despite the prevalence of extant financial Rules and Regulations. Nigeria, being a mono-product economy, has suffered considerably as a result of over dependence on oil revenue. Soludo (2009) at a special briefing of the Federal Executive Council said that resource flows and capital flows around the world are frozen. From the inception of the global financial crisis and the subsequent frozen of essential flows, there has been no defrozen mechanisms employed by the Nigerian Government as bail-out approach or approaches. The Nigerian government in January, 2012 embarked on fuel subsidy removal which aggravated the economic squeeze which was previously in existence. The rate of capital flight is on the increase. This is the phenomenon that has created shortage of capital necessary for the development of Nigerian economy.

Zakaree and Ayodeji (2012) maintained that capital flight has been a source of major concern to developing countries, especially in Africa, where there is shortage of essential capital for development.

Africa has been a developing continent in which larger concentration on industrialization should be issue of major concern yet the reverse is the case. The deficiencies in economic trends go unabated, technological advancements are non-existent and poor policy formulations and implementations are issues of no concern to governments in Africa.

The Nigerian Economy had suffered greatly from the inconsistencies and lapses of policy decisions especially in the public sector. The indigenous policies are normally formulated on debased premises. The non-existence of active and rolling plans has created high level of porosity in the achievement of objectives in Nigeria. The over-dependence on foreign policies has put the Nigerian economy in disarray. The financial system is on the verge of complete collapse. The capital flows being the main contagion point of the Nigerian economy to the global financial crisis with the residues still haunting Nigeria, has been looked variously by analysts: to the developed countries- a capital flight. In Zakaree and Ayodeji (2012) citing Ajayi (1997), capital shift out of developed countries is regarded as capital outflows because the investors from developed countries are responding to investment opportunities while those from developing countries are said to be escaping the huge risks perceived at home, hence regarded as capital flight. The concepts: capital outflows and capital flight are one and the same concepts. The difference is the consciousness of the investors in the countries of inflows and outflows.

In Nigeria, consciousness to investment opportunities is at low ebb or sometimes non-existent due to economic imbalances. The developed economies are already developed. These economies encourage capital flight but discourage capital outflow. The perceived risks leading to capital flight can be hedged, if desired. The developing economies need development and capital flight should be discouraged to encourage economic development. Banking sector has been the trigger point for economic development as major financial flows are done through the sector. This sector had a hit of the global financial crisis in terms of liquidity squeeze, polarization of lending, and downsizing of workers. The banking sector and capital market are the first major victims of the current crisis. This is so for the margin lending operations in the financial industry. Areas of impact on Nigeria include:

- Reduction in bank lending,
- Reduction in portfolio flows,
- Reduction in remittances from emigrant populations
- Reduction in export revenues as demand in rich countries starts to shrink (Ajakaiye & Fakiyesi, 2009).

Research Methodology

The data used here are purely quantitative and Time-sensitive. Hence, they are time-series data. Much of the data were attained from Central Bank of Nigeria publication and National office of statistics. Some data were obtained from other secondary sources.

Analytical Framework

The trends of the data collected were descriptive to show how the various economic units: Individuals, companies and governments feel the impacts of Global Financial Crisis especially the residual ones within the sample period. The estimations are done for the three components:

- i. Individuals

- ii. Companies and
- iii. Governments

Analytical Tools

The Augmented Engle Granger (AEG) Co-integration Test was used to carry out the tests of the impacts of residual global financial crisis. Similarly, Autoregressive Distributed Lag (ADL) model was used. AEG was sufficient. Using the ADL, the series would need to be stationery at levels and then a linear regression obtained connecting the series. The residual will then be obtained and tested for stationarity using Augmented Dicky Fuller (ADF) Unit Root Test. The residuals being stationery at 1% Mackinnon Critical Value would imply that the series are co-integrated else they are not co-integrated.

Model Specification

In order to capture the precise relationship between Global Financial Crisis, Residual Impacts and Economic Development, we specified empirical model to show the effects of residual financial crisis on economic growth proxies as GDP and the consumption patterns of the Economic Units: Individuals (Private-Ps), Companies (Corporate Entities-Cc), and Government (Public-Pt).

Model is as stated below:

$$C_p = f(P_s + P_t + C_c) \varepsilon + GDP$$

$$G_k = \varepsilon - GFC$$

Where C_p = Consumption Patterns

P_s = Private Sector Consumption

P_t = Public Sector Consumption

C_c = Corporate Consumption

ε = Effect on; ε_+ = Positive, ε_- = Negative (Error term – Capturing variables not explicitly included)

GDP = Economic Growth

GK = Government Policy

GFC = Global Financial Crisis

Hypotheses

Two hypotheses are to be tested by this study.

Hypothesis One

H_0 : Residual Impacts of Global Financial Crisis cannot be managed effectively

H_1 : Residual Impacts of Global Financial Crisis can be managed properly

Hypothesis Two

H_0 : Consumption Patterns of the Economic Units have not been affected by the Global Financial Crisis.

H_1 : Consumption Patterns of the Economic Units have been adversely affected by the Global Financial Crisis.

Data Processing and Estimation Techniques

The estimation techniques employed in this study is Parametric Statistical Techniques since the research is experimental and the data is quantitative. Hence the hypotheses are tested with the use of Ordinary Least Square (OLS). The simple Regressions are used to estimate parameters. The OLS method is an econometric technique. The choice of OLS in this study has in it being BLUE (Best Linear Unbiased and Efficient) estimator.

Results and Discussions

Table 1: Regression Result

Dependent Variable: Consumption Patterns (Cp)
 Independent Variable: Gross Domestic Product (GDP)
 Method: Least Squares
 Date: 28/07/13 Time: 15:36
 Period of Observation: 2008 – 2013

Variables	Coefficient	Std. Error	t- Statistic	Prob.
Ps	47534.21	63076.15	-0.867458	0.4672
Pt	481102.01	66128.21	-0.830536	0.47351
Cc	501765.63	60333.27	-0.801375	0.460366
GDP	4.623576	0.097628	40.03562	0.000000

R – Squared	0.679275	Mean dependent var.	836648.3
Adjusted R-squared	0.659528	S.D dependent Var.	1943626
S.E of regression	432143.3	Akaike Info. Criterion	29.337130
Sum Squared Resid.	4.85E+13	Schwarz Criterion	29.45383
Log likelihood	-686.7533	F-statistic	1526.242
Durbin-Watson stat.	1.392596	Prob (F-statistic)	0.000000

Source: e – view program

Table 2: ADF Result

ADF Test Statistic	-	3.159737	1% Critical Value	-3.5814
			5% Critical Value	-2.9271
			10% Critical Value	-2.6013

Mackinnon Critical Values for rejection of hypothesis of a Unit Root.

Source: e – view Program.

From the Regression Result above, there is significant relationship between Consumption Patterns (CP) and the economic growth (Proxies as GDP). The positive coefficients of the components of consumption patterns indicating that for every 100% increase in the GDP, there must be a corresponding 48%, 48% and 50% increase in the consumption of the economic units respectively for private cons, pub. Cons. Corporate. The



coefficient of determination (R^2) showed the good cons. fitting with the regression line of the samples observed as dependent and independent variables. $R^2 = 68\%$. This implies that 68% of the total variation in the dependent variables (consumption of economic units) is being explained by the independent variable (GDP) while the remaining 32% is due to error term or factor (U.E) not captured within the model. The Critical Value for testing the hypotheses is 5%. The Augmented Dickey-Fuller (ADF) test showed a value of -3.159737 which is less than -2.9271 at 5% critical value and this given stationarity at the first difference. F- Statistics of the model showed that the model was statistically significant. Durban-Watson result showed that there was positive first – order correlation.

Table 3: Regression Result

Dependent Variable: Gross Domestic Products (GDP)

Independent Variable: Global Financial Crisis (GFC)

Method: Least Square

Date: 28/07/13 Time: 15:40

Period of Observation: 2008 – 2013

Variables	Coefficient	Std. Error	t-stat.	Prob.
GDP	-23124.87	43162.38	-0.432422	0.2561
GFC	5.734803	0.085281	30.01366	0.000000
R – Squared	0.226310	Mean Dependent Var.		625231.1
Adjusted R-Squared	0.210027	SD Dependent Var.		08213462
S.E of Regression	312201.6	Akaike Info. Criterion		26.256130
Sum Squared Resid.	2.62 E+12	Schwarz Criterion		24.23178
Log Likelihood	-325.6240	F-Statistic		1206.134
Durbin-Watson Stat.	0.321956	Prob. (F-Stat.)		0.000000

Source: e – view program

The result of Table 3 regression showed that there was inverse relationship between Gross Domestic Product (GDP) and the Global Financial Crisis. The negative co-efficient showed that increase in GFC led to decrease in the GDP. R^2 showed non-co relational relationship with regression line. R^2 was 23% wide gap (lag) with GFC at 100% value but F-Statistics showed that the model was still statistically significant.

Summary of Findings, Conclusion and Recommendations

The research was on ways of managing the residual impacts of the Global Financial Crisis in developing economies. It was discovered that the rates of consumption were low at private, public and corporate levels. The Augmented Engle Granger (AEG) co-integration test revealed that there was co-integration between the economic units’ consumption patterns and the Gross Domestic Product (GDP) but Autoregressive Distributed Lag (ADL) showed that there was lag (gap) between the Gross Domestic Product and the Global Financial Crisis. The gap accounted for the residual impacts on the consumption units.

Conclusion

The impacts of the Global Financial Crisis were very much significant and excruciating on the economic elements. These impacts cannot be eradicated but managed until such a time



when the economic disequilibrium can be balanced through appropriate government policies, investments, grants, loans, commercial activities etc.

Recommendations

To adequately manage the residual impacts of the Global Financial Crisis, the following recommendations are essential:

- Government should give ‘bail-out packages’ to banks to boost their liquidity positions
- Government should, through the Central Bank, re-position the Stock Exchange
- Consumption Patterns should be changed from foreign-based products to home-made goods.
- Government activities should not involve foreign deals in order to reduce impacts of foreign exchange and the attendant demerits associated with them.
- Improvement of the existing facilities to boost internal economic activities.
- Proper strengthening of Small and Medium Scale Enterprises (SMEs) as private consumption is at low ebb.

References

- Abraham, T. W.(n.d.). The Impact of the Global Financial Crisis on selected Stock Markets in Africa: Evidence from AEG – ADL Estimations
- African Development Bank Group (2009 March). Working Paper on Impact of the Global Financial and Economic Crisis on Africa – No. 96.
- Agaba,N. P. & Tenuche, M. K (2010 August),Impact of Global Financial Crises on Nigerian Economy: An Empirical View. International Journal of Humanities and Social Sciences 2(15)
- Ajakaiye, O & Fakiyesi, T. (2009 May). Global Financial Crisis: Discussion Series –Paper 8: Nigeria.
- Bakrania, S. & Brian, L. (2009). The Impact of the Financial Crisis on Conflict and State Fragility in sub-Saharan Africa –Governance and Social Development Resource Centre (GSDRC).
- Central Bank of Nigeria (2008a) Annual Report and Statement of Accounts’ Year Ended 31Dec. 2007; Abuja, Nigeria: CBN.
- Central Bank of Nigeria (2008b). First Half – year Report 2008’. Year Ended 31 Dec. 2007Abuja, Nigeria: CBN.
- Saheed, Z. S. & Ayodeji, S. (2012 July). Impact of Capital Flight on Exchange Rates and Economic Growth in Nigeria (Abstract). International Journal of Humanities and Social Sciences 2(13)
- Soludo C. C. (2009). Banking in Nigeria at a time of Global Financial Crisis. Being a speech read at the Special Interactive on the Banking System, Lagos.
- Nigeria | Publication | Overseas Development Institute (ODI). (n.d.). Retrieved from http://www.odi.org.uk/publications/3310-global-financial-crisis-nigeria_br*
- Nigeria | Publication | Overseas Development Institute (ODI). (n.d.). Retrieved from http://www.odi.org.uk/publications/3310-global-financial-crisis-nigeria_br*