
Impact of Global Financial Crisis on Nigerian Economy (2000 - 2015)

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Abstract

The recent financial crisis in Europe and America had had its effects on the rest of the world owing to economic and financial globalization. The ripple impacts are still believed to be felt today. This paper examines the Impact of Global Financial Crisis on the Nigerian Economy covering 2000 – 2015. The objective of this study is to assess the Impact of the global financial crisis on four key variables in the Nigerian economy namely Gross Domestic Product, stock market Capitalization, Foreign Direct Investments and Export Earnings from Crude oil. The study used the Unit Root Test, Ordinary Least Square and Vector Autoregression method to test and analyse the secondary data obtained from world bank and the Central Bank of Nigeria and the findings showed that the Global Financial Crisis had significant impact on Nigeria affecting its Gross Domestic Products, stock market capitalization, Foreign Direct Investments and Export Earnings from Crude oil. The paper recommends options to mitigate the crisis, which include Bail-out of key sectors of the economy through massive injection of funds to revive and reduce poverty effects of the crisis. It also recommends that the financial and stock Regulatory authorities should bring down transaction costs in institutions regulated to boost business activities while government embarks on serious diversification of the economy from oil dependence.

JEL Classification: F650 Economic impacts of Globalization: Finance

Key words: *Financial Contagion, Financial Crisis, Stock market capitalization, Foreign Exchange rate, Foreign Direct Investments, Export Earnings, International Business, Credit*

1. Introduction

Financial contagion or Global Financial Crisis refers to the transmissions of negative market shocks from one country or region to the other either directly or indirectly, a process that impacts exchange rates, stock prices, sovereign spreads, and foreign direct investments. Financial contagion can be a potential risk for countries trying to integrate their financial system with international financial markets and institutions. It helps explain an economic crisis extending across neighbouring countries, or even regions.

The financial crisis which started between 2007–2008 from Europe, also known as the global financial crisis is considered by many economists to have been the worst financial crisis since the Great Depression of the 1930s. It threatened the collapse of large financial institutions, which was prevented by the bailout of banks by national governments, but stock markets dropped worldwide. In many economies such as in the United States of America, the housing market also suffered, resulting in evictions, foreclosures and prolonged unemployment. The crisis played a

significant role in the failure of key businesses, declines in consumer wealth estimated in trillions of U.S. dollars, and a downturn in economic activity leading to Global Recession between 2008 and 2012, contributing to the European sovereign-debt crisis.

In a globalized world with interlinked economies and financial markets where the United States of America plays a major role, it was not surprising to see the crisis quickly gathering steam as it spreads to other economies of the world. Triggering the Sovereign debts crisis in Europe and crossing the Atlantic to set back economic progresses made in Africa and Asia the past few years.

Soludo (2008), initially opposed views that Nigeria was vulnerable to the Global Crisis in a bid to restore confidence in the Nigerian economy, pronounced that the Economy will not suffer adverse effects since it has low integration with the global economy. The governor even posited that all Nigerian banks were safe. The above assertion would have been right if the Nigerian Capital market was not in a bubble, engineered by the banks through its huge financing of shares on the capital market contrary to prevailing fundamentals.

Soludo (2008) did not acknowledge the impact of crude oil export dependence on the Nigerian economy, making the economy vulnerable to “oil shocks”. As the global demand for crude oil retreated and prices succumbed to speculative pressures, the economy started caving-in.

Considering the nature of Global Financial Crisis, this study aims at examining the effect of the crisis on foreign direct investment, stock market capitalization and Crude oil export earnings in the Nigerian Economy over a 16 year period (that is, 2000 – 2015). The remainder of this paper is organized as follows: Next section gives an overview of the global financial crisis. While section three reviews related literature; section four discusses the methodology and Model Specification; section five deals with the Data and empirical analysis. The last section provides conclusion and recommendations from the study.

2. Overview Of Global Financial Crisis

The process of globalization and financial development has been prone to crises. Over the long run, financial development is expected to support economic growth and poverty reduction. But, along the way, even relatively mature financial systems are vulnerable to systemic banking crises, cycles of booms and bursts, and financial volatility (Schmukler, 2004, 2008). This appears to be partly intrinsic and partly due to policy mistakes. It arises as banks expand and capital markets generate financial products. This entails new, unfamiliar, risks for financial intermediaries and regulators. Furthermore, as countries become more open to capital flows, crises are more easily transmitted across borders. The positive long-run relationship between financial development and growth coexists with a negative short-run relationship through financial fragility.

Loayza and Romain (2006) held similar views with Kaminsky and Schmukler (2008) that the lessons from the crises of the past 15 years, developing countries have taken measures to become less vulnerable to the sorts of external shocks likely to emanate from the adjustment problems now facing many developed countries, including the US. For example, many developing countries have accumulated large reserves, have tried to switch to long-term and domestic currency borrowing, and have tended to reduce fiscal and current account deficits, thus lowering their debt levels. Broner, Lorenzoni, and Schmukler (2007) observed that (after the crises of the 1990s) developing countries had learned to avoid risks and, by choosing the right policies, had “decoupled” from turbulence in other parts of the world—effectively insulating themselves from the fate of countries elsewhere.

The effect of the financial crisis that began in the United States of America (USA) was wide-ranging and was both internally and externally induced (Nijathaworn, 2010). The initial financial crisis had affected mainly the US and Europe. However, due to the connectivity of the financial system also known as the “contagion effect”, most economies were affected and 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, Nigeria inclusive.

Avgouleas (2008) enumerated the causes of the crisis as: breakdown in underwriting standards for sub-prime mortgages; flaws in credit rating agencies’ assessments of sub-prime Residential Mortgage Backed Securities (RMBS) and other complex structured credit products especially Collateralized Debt Obligations (CDOs) and other Asset-Backed Securities (ABS); risk management weaknesses at some large US and European financial institutions; and regulatory policies, including capital and disclosure requirements that failed to mitigate risk management weaknesses.

Some analysts, including Bordo and Murshid (2000), identified the crisis that happened in 1825 as the first international financial crisis. Major financial institutions around the world were greatly affected. Financial contagion was felt severely, especially in countries whose financial systems were vulnerable due to local housing bubbles and current account deficits.

Based on the nature of the Nigerian economy, the financial crisis had an impact on 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.

During the crisis, the Nigerian stock market witnessed a continuous drop in the All-Share Index and volume of traded securities. Similarly, the banking sub-sector was affected by a credit contraction as most foreign banks reduced their credit lines, exchange rate exposure, and the continuous decline in the NSE eroded their profitability. Also, there was 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.

Prior to 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 N12.640 trillion by March, 2008 (George, 2008). The boom led to an investment rush by all classes of society. Bank customers took out loans to invest in stocks of their banks. The withdrawal of funds by the foreign investors led to the huge decline of most stock prices as supply exceeded demand. The meltdown continued to erode the market capitalization to only N5.4 trillion in the fourth quarter of 2009 (Aluko, 2008; Olaoye, 2010).

3. Literature Review

Detzer et al (2014), discussed the several theoretical models that support the work on Financial Crisis Contagion and most of which dates back to 1898 from Wicksellian model to present day Behavioural Finance model. These are discussed below:

KNUT WICKSELL’S MODEL (1898) – This model provides a framework of cumulative processes, and with it one of financial crises. Wicksell belongs to the Swedish school of neoclassical economists which in many ways stepped out of the traditional neoclassical model,

that later became mainstream thinking. This approach attempts to explain global financial crisis in terms of rates of returns on investments with one being the real interest rate and the other being the money interest rate. The real sphere in the end dominates economic development, the monetary sphere sooner or later has to adjust.

JOHN MAYNARD KEYNES (1936) - Keynes proposed a model of a monetary production economy. In such an approach money plays a key role and penetrates all spheres of the economy. This model held that in a capitalist economy, a market between savings and investment which is equalized by an interest rate simply does not exist

HYMAN MINSKY MODEL (1992) – This theory is based on two key theorems: An economy has financing regime under which it is stable and financing regime under which it is unstable. A financial system can be described as robust if small changes in cash flows, capitalization rates or in payment commitments will not inhibit the ability of most units to meet their financial commitments. The opposite is true of fragile systems. Minsky's theory of investment combines investment decisions of firms with their financing decisions and the willingness of lenders to provide external funds to them. This is important to determine the level of economic activity and also to explain the gradual move of the system towards instability.

BEHAVIOURAL FINANCE MODEL (1970) – This model tries to explain people's economic decisions by combining findings of behavioural and cognitive research with traditional economics and finance. Behavioural Finance shows that investors do not act in a rational way as implied by rational expectations and the efficient market hypothesis. It tries to give a more accurate picture of human behaviour in financial markets.

4. EMPIRICAL REVIEW

A number of notable empirical research work have adopted some of the above theories in studying the effects of Global Financial Crisis employing mainly empirical approach to analyse these economic disturbance, which are discussed below:

Stokey and Lucas (2011) in their research on impact of liquidity on Global Financial crisis contagion opined that the collapse of the Lehman Brothers in September 2008, with its negative impacts on spending and Gross Domestic Product in United States in the fourth quarter (2008) and preceding first quarter (2009), was not a modest recession.

Diamond and Dybvig (1983), developed a simple and widely used theoretical model of bank runs. It describes an economy in terms of the production and consumption of a real good, but to apply their model to actual banking practice, it is helpful to give it a monetary interpretation. In this section, we will sketch their framework, so modified by lord Keynes (1936) in his original work. Diamond and Dybvig's (1983) concluded that in an economy where cash is required for transactions and banks functions include holding excess cash for its customers, pooling their risk, there could be possibility of bank run in the event of financial crisis.

The views of Diamond and Dybvig were shared in the conclusion established in another remarkable work by Cass and Shell (1983). They showed that accepting the principle that people act rationally—in their own interest—is not, with any generality, sufficient to determine a unique economic outcome. Fractional reserve banking is but one of many examples where if people somehow come to expect a particular outcome, then that outcome will occur, but if they agree on another, the other will occur. Cass and Shell (1983) used the term *sunspot equilibrium* to

emphasize that coordination of beliefs need not make any objective sense: If enough people think the occurrence of sunspots signals a run on a particular bank, it will do so.

Also, Claessens and Forbes (2004), postulated several theories supporting their views on global financial Crisis Contagion. According to the authors most policymakers and government officials prefer the broader and more inclusive definition of contagion. The broader definition captures the vulnerability of one country to events that occur in other countries—no matter why that vulnerability occurs or if those linkages exist at all times. Therefore, for the purposes of this paper, we will focus on this broader definition of contagion. At some points, however, it is useful to differentiate between the broader definition of contagion and the narrower definition of shift-contagion. For example, differentiating between these definitions is important when evaluating the effectiveness of interventions and financial assistance packages. More specifically, if one country is affected by a crisis in another country, but this is only a short-term effect and the two countries have few linkages through trade, finance and other channels (i.e., an example of shift-contagion), then a short-term loan to support the country and avoid contagion is more likely to be effective. On the other hand, if the two countries are closely linked through trade or financial flows (the broader definition of contagion), then a crisis in one country would require that the other economy adjusts to this shock, and intervention would only prolong the necessary adjustment (unless other inefficiencies exist).

Dornbusch et al (2000) identified four agents that influence financial globalization. These are governments, financial institutions, investors, and borrowers. They maintained that these four agents can caused severe recession on any economy if not immediately addressed.

The first branch, spill-over effects, is regarded as negative externalities are also known as fundamental-based contagion. These effects can happen either globally, heavily affecting many countries in the world, or regionally, affecting only neighboring countries. The big players, who are more of the larger countries, usually have a global effect. The smaller countries are the players who usually have a regional effect. These forms of co-movements would not normally constitute contagion, but if they occur during a period of crisis and their effect is adverse, they may be expressed as contagion.

Fundamental causes of contagion include macroeconomic shocks that have repercussions on an international scale and local shocks transmitted through trade links, competitive devaluations, and financial links. Financial links come from financial globalization since countries try to be more economically integrated with global financial markets. Allen and Douglas (2000), and Lagunoff and Schreft (2001) analyzed financial contagion as an outcome of linkages among financial intermediaries. The former provides a general equilibrium model to explain that a small liquidity preference shock in one region can spread by contagion throughout the economy and the possibility of contagion depends strongly on the completeness of the structure of interregional claims. The latter proposed a dynamic stochastic game-theoretic model of financial fragility, through which they explain interrelated portfolios and payment commitments forge financial linkages among agents and thus make two related types of financial crisis occur in response.

Trade links is another type of shock that has its similarities to common shocks and financial links. These types of shocks are more focused on its integration causing local impacts. Any major trading partner of a country in which a financial crisis has induced a sharp current depreciation could experience declining asset prices and large capital outflows or could become the target of a speculative attack as investors anticipate a decline in exports to the crisis country and hence a deterioration in the trade account (Kaminsky et al, 2000). Kaminsky and Reinhart

(2000) document the evidence that trade links in goods and services and exposure to a common creditor can explain earlier crises clusters, not only the debt crisis of the early 1980s and 1990s, but also the observed historical pattern of contagion.

Competitive devaluation is also associated with financial contagion. Competitive devaluation, which is also known as a currency war, is when multiple countries compete against one another to gain a competitive advantage by having low exchange rates for their currency.

Other contending empirical theories also do exist that tries to explain global financial crisis contagion which due to the scope of this studies will not be considered in details, these include: World-Systems Theory or World-Systems Approach (Wallerstein, 2004); Braudel's Structuralism (Braudel, 1977 and as applied by Germain, 1997); Complex Interdependence, Regime Theory and Keohane's Institutional Theory (Keohane, 2002; Keohane & Nye, 2000; Keohane & Nye, 1977; Cohen, 2008); Hegemonic Stability Theory (Cohen, 2008; Kindleberger, 1973); Coxian Critical Theory and Historical Structures Approaches (Cohen, 2008); Friedman's Quantity Theory of Money (Friedman, 1956); Fama's Efficient Market Hypothesis (Fama, 1970); and Austrian School Libertarianism (Ebenstein, 2003).

Consequences Of Global Financial Crisis On Nigerian Economy

According to Sanusi (2010), the global financial crisis had the following consequences on the Nigerian Economy:

- Divestments by many foreign portfolio investors from the country
- Fall in price of crude oil at the international market which triggered a subsequent depreciation of the naira against the US dollar particularly from November 2008
- Decline in the global financial flow to Nigeria in the form of foreign direct investment, portfolio investment, Oversea Development Assistance and remittances as a result of the restriction by developed economies battling to stabilize their own economies
- Higher capital outflow- divestment from capital market particularly of portfolio investments
- Drying-up of lines of credit to Nigerian banks
- Lower foreign exchange earnings/export receipts
- Lower crude oil price and demand
- The crisis led to a de-accumulation of external reserves owing to the sharp fall in crude oil prices
- The capital market recorded significant divestment as foreign investors, notably portfolio investors divested to meet their obligations back home in the face of credit squeeze. Consequently, there was a continuous drop in the All-Share Index as well as the volume of traded securities at the Nigeria Stock Exchange. The market capitalization which was N13.0 trillion in September 2008 fell to N7.2 trillion at end of first quarter, 2009.
- Rise in urban population migrations from rural areas or less developed areas to the established cities in search of greener pastures.
- Rise in militant and terrorist organization activities such as the Islamic State of Iraq and Syria (ISIS) in the mid-east, Boko Haram in Nigeria, Al-Shabaab in North-East Africa etc.
- Corruption activities have peaked within this period.

Policy Responses By The Nigerian Government

The current macro-economic and social challenges posed by the global financial crisis require a much better understanding of appropriate policy responses. Sanusi (2010) further recommended some policy responses which can be applied to the Nigerian situation as enumerated below:

- There needs to be a better understanding of what can provide financial stability, how cross border cooperation can help to provide the public good of international financial rules and systems, and what the most appropriate rules are with respect to development.
- There needs to be an understanding of whether and how Nigeria and other developing countries can minimise financial contagion.
- Nigeria and other developing countries will also need to manage the implications of the current economic slowdown – after a period of strong and continued growth in developing countries, which has promoted interest in structural factors of growth, international macro-economic management will now move up the policy agenda.
- Nigeria and other developing countries need to understand the social outcomes and provide appropriate social protection schemes.
- Central Banks should regulate issue of foreign exchange to companies during this time of crisis to avoid creating a deep in foreign reserves.
- Non-bank financial sector such as Pension Funds should also be regulated. This is to protect pension funds from being invested in some of this complex instruments to enable them meet their liquidity obligation as at when due.
- African countries should strengthen domestic and regional markets and boost intra-African trade and it is also important to promote domestic tourism.
- There is a need for new stability of the global financial system in which the voice of every nation, every continent is heard and their concerns taken into account.

Methodology And Model Specification

This section critically examines the methodology adopted. It deals with the research approach and procedures used in the study detailing the various steps adopted in the research.

Forbes and Rigobon (2002) began by discussing the current imprecision and disagreement surrounding the term contagion. They proposed a concrete definition, a significant increase in cross-market linkages after a shock, and suggests using the term “interdependence” in order to differentiate this explicit definition from the existing literature. It shows the elementary weakness of simple correlation tests: with an unchanged regression coefficient, a rise in the variance of the explanatory variable reduces the coefficient standard error, causing a rise in the correlation of a regression.

Population, Sample And Period Of Coverage

The population of study comprises of the entire globe (all countries of the world that have market and financial linkage with Nigeria), which includes the United States of America (USA), being the crisis originating country (Included here for reference purpose only). Nigeria, the domestic economy under review, is taken as our study sample.

The research period covers sixteen years (That is 2000 – 2015) of the economic indices of the sample under study. This coverage period was informed by the need to have an extensive and comprehensive analysis of the effect of the global financial crisis on the country under review.

Types And Sources Of Data

The main source of data used was secondary and were obtained from the following: Publications of the Central Bank of Nigeria (Statistical Bullions); World Bank Statistics and Reports and United States Energy Information and Administration. The data collated includes – Stock Market

Capitalization Index, Foreign Direct Investments, Gross Domestic Product and Export Oil Earnings and Expenditures.

Model Specifications

This research work is patterned after the principles of Classical Linear Regression Model (CLRM) (Brooks, 2014), Third Generation Model of financial Crisis (Krugman,1998: Braggion et al, 2005) and Ajakaye & Fakiyesi, 2009; Jenrola & Daisi, 2012)

$$Y = \alpha + \beta x_t + \mu_t \text{ (Braggion et al, 2005)Eqn 1}$$

$$(Y_i)_t = \beta_0 + \beta_1 x_{it} + \mu_{it} \text{ (Loayza & Romain, 2006).. Eqn. 2}$$

$$MC = \beta_0 + \beta_1 \text{NOS} + \beta_2 \text{VOT} + \beta_3 \text{DGFC} + \beta_4 \text{ASI} + \mu \text{ ...Eqn 3}$$

(Ajakaye & Fakiyesi, 2009 ; Jenrola & Daisi, 2012)

Where MC = Market Capitalization ; NOS = No. Of Stocks ; ASI = All Share Index ;
VOT = Value of trade ; DGFC= Dummy variable pre -and post – Global
Financial Crisis (i.e. 0 for pre and 1 for post GFC)
 B_0 = constant intercept ; $\beta_1 - \beta_4$ = Coefficients of the explanatory variable

The specification of the model is based on the empirical work of Ajakaye & Fakiyesi (2009) and Jenrola & Daisi (2012) because they are more relevant to our purpose and use macroeconomic variables.

The regression model underlying this research work is as follows:

$$Y_t = \beta_0 + \beta_1 X_{sm} + \beta_2 X_{fd} + \beta_3 X_{eoe} + \beta_4 \text{DGFC} + \mu_1 \dots \text{ Eqn. 4}$$

We transform above model to correct the suspicion of serial autocorrelation associated with time series data of this nature by lagging it by one period:

$$Y_{t-1} = \beta_0 + \beta_1 X_{smt-1} + \beta_2 X_{fdt-1} + \beta_3 X_{eoe-1} + \beta_4 \text{DGFC}_{t-1} + \mu_{t-1} \dots \text{ Eqn. 4}$$

Description Of Variables

Where Y_t = Gross Domestic Products (GDP) (as represented by Braggion et al, 2005; Loayza & Romain,2006) and the Dependent variable

B_0 = Constant intercept

B_1 =Coefficient of Aggregate Stock Market Capitalization

B_2 = Coefficient of Aggregate Foreign Direct Investment

B_3 = Coefficient of Export oil Earnings/Expenditures by Nigeria

β_4 = Coefficient of Dummy variable for Global Financial Crisis

The independent variables and regressors are represented by the following proxies:

X_{sm} = Stock Market Capitalization aggregates for Nigeria (MCAP)

X_{fd} = Foreign Direct Investments aggregates for Nigeria (FDI)

X_{eoe} = Export earnings and Expenditures on Crude oil by Nigeria (EOE)

$DGFC_t$ = Dummy variable for Global Financial Crisis

μ = Error Term for the estimations

Apriori Expectations

1. Global financial crisis, GFC (Banking/currency crisis) leads to recession. This leads to a negative significant relationship between the GDP and other explanatory variables. (Kaminsky & Reinhart, 1999; Loayza & Romain, 2005)
2. GFC leads to undue domestic credit expansion and negative economic growth.
3. GFC has negative and significant relationship with stock market capitalization (Ajakaye & Fakiyesi, T. 2009; Jenrola & Daisi, 2012)

Data And Empirical Analysis

Table 1 –Shows Foreign Direct Investment, Gross Domestic Product, Market Capitalization and Earnings from Oil Export for Nigeria – (2000 – 2015)

YEAR	Foreign Direct Invest (X_{Fd}) (FDI) (\$'Billion)	Gross Domes. Product (Y_t) (GDP) (\$'Billion)	Mkt capitalization (X_{sm}) (MCAP) (\$'Billion)	Earnings on oil Export (X_{EOE}) (EOE) (\$'Billion)	DFGC
2000	1,140.138	46.386	2.356	727.104	0
2001	1,190.632	44.138	1.772	655.200	0
2002	1,874.042	59.117	2.374	663.366	0
2003	2,005.390	67.655	12.219	753.750	0
2004	1,874.033	87.845	15.866	962.945	0
2005	4,982.534	112.248	22.244	1,278.570	0
2006	4,854.416	145.430	32.831	1,542.135	0
2007	6,034.971	166.451	84.895	1,565.990	0
2008	8,196.607	208.065	48.062	2,001.561	1

2009	8,554.841	169.481	32.223	1,273.527	1
2010	6,026.232	369.062	50.546	1,958.589	1
2011	8,841.113	411.744	39.028	2,635.879	1
2012	7,069.934	460.954	56.205	2,543.797	1
2013	5,562.874	514.965	80.610	2,308.800	1
2014	4,655.849	568.508	568.400	2,115.428	1
2015	4,056.850	479.401	49.974	2,095.351	1

Source : World Bank data, 2016

*Source: Central Bank of Nigeria – Statistical Bulletin

Comments

Table 1 shows the trends in Foreign Direct Investments, Gross Domestic Products, Market Capitalization and Earnings from oil export by Nigeria within the period 2000 – 2014. The table shows that the net foreign direct investments into Nigeria have grown astronomically from \$1,140.138 Billion in 2000 to \$8,554.841 Billion in 2009, showing 650.33% growth before the financial crisis. This however, started falling from the period of the crisis as could be observed in the table above, though initially the fall appeared resisted perhaps due to stronger economic variables to \$6,026.232 Billion and back up to \$8,841.113 Billion but eventually collapsed to \$4,655.849, representing 47.34% drop in Foreign Direct Investment.

The Gross Domestic Product and Market Capitalization showed more steady growth trend as the former grew by 1,126% between 2000 and 2014 from \$46.386 billion to \$568.508 billion and the later grew by 240% within same period from \$2.356 billion to \$568.400 billion. The growth on this variable could be attributed to the impact of the GDP rebasing in 2010 by Nigeria.

The earnings from crude oil export by Nigeria however, showed a different trend. Overall, it grew by 191% between 2000 and 2014. However, during the period of the financial crisis, the earnings growth dropped from 175% between 2000 and 2008 to only 75%, showing over 100% decline in earnings between 2008 and 2009. This shows that due to the mono export dependent nature of the country, the impact of the global crisis was severely felt.

Diagnostic Testing

The data in the model were pretested using diagnostic tests methods below after their transformation using first level differencing. The purpose of the tests were to ascertain that the data did not violate any of the Ordinary Least Square assumptions and their results could be relied upon.

Table 2 - Differenced Table

YEAR	DGFC	DEOE	DFDI	DGDP	DMCAP
2000	NA	NA	NA	NA	NA
2001	0	-71.904	50.494	-2.248	-0.584
2002	0	8.166	683.410	14.979	0.602

2003	0	90.384	131.348	8.538	9.845
2004	0	209.195	-131.357	20.190	3.647
2005	0	315.625	3108.501	24.403	6.378
2006	0	263.565	-128.118	33.182	10.587
2007	0	23.855	1180.555	21.021	52.064
2008	1	435.571	2161.636	41.614	-36.833
2009	0	-728.034	358.234	-38.584	-15.839
2010	0	685.062	2528.609	199.581	18.323
2011	0	677.290	2814.881	42.682	-11.518
2012	0	-92.082	1771.179	49.210	17.177
2013	0	-234.997	1507.060	54.011	24.405
2014	0	-193.372	-907.025	53.543	487.790
2015	0	-20.077	-598.999	-89.107	-518.426

Source: Author's Eviews computations

The differenced table above shows the transformed macroeconomic data differenced at period one to eliminate the suspicion of serial autocorrelation and improve the reliability of our results.

Table 3 - Descriptive Statistics

	DGFC	EOE	FDI	GDP	MCAP
Mean	0.500000	1567.625	4807.529	244.4656	68.72531
Median	0.500000	1554.063	4918.475	167.9660	35.92950
Maximum	1.000000	2635.879	8841.113	568.5080	568.4000
Minimum	0.000000	655.2000	1140.138	44.13800	1.772000
Std. Dev.	0.516398	688.8911	2616.520	188.6050	135.7163
Skewness	0.000000	0.022458	0.012650	0.490262	3.396298
Kurtosis	1.000000	1.637522	1.800803	1.631325	13.08457
Jarque-Bera	2.666667	1.238909	0.959142	1.889799	98.55855
Probability	0.263597	0.538238	0.619049	0.388719	0.000000
Sum	8.000000	25081.99	76920.46	3911.450	1099.605
Sum Sq.Dev.	4.000000	7118563.	1.03E+08	533577.9	276283.8
Observations	16	16	16	16	16

Source: Author's Eview computations

The descriptive statistics in Table 3 above shows the basic aggregative averages like mean, median and mode for all the observations. The skewedness for the DGFC, EOE, FDI and GDP are approximately 0, which shows normal distribution. The probability for the controlling variable, MCAP is 0.0000 showing a significant relationship.

Table 4 – Correlogram – Correction Of Autocorrelation

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
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. *	.	. *	.	1	-0.076	-0.076	0.1057	0.745
. *	.	. *	.	2	-0.081	-0.087	0.2343	0.889
. *	.	. *	.	3	-0.086	-0.100	0.3904	0.942
. *	.	. *	.	4	-0.090	-0.116	0.5802	0.965
. *	.	. *	.	5	-0.095	-0.137	0.8115	0.976
. *	.	. *	.	6	-0.100	-0.163	1.0948	0.982
. *	.	. *	.	7	-0.105	-0.200	1.4446	0.984
.	.	.	.	8	0.033	-0.093	1.4851	0.993
.	.	.	.	9	0.029	-0.095	1.5198	0.997
.	.	.	.	10	0.024	-0.098	1.5487	0.999
.	.	.	.	11	0.019	-0.099	1.5718	1.000
.	.	.	.	12	0.014	-0.099	1.5892	1.000

Source: Auther's Eviews computations

Table 4 shows that the variables represented by the asterisks within the dotted lines, confirm correction of possible autocorrelation in the model by differencing the model by one period.

Test For Unit Root

The table 5, below shows that there is no unit root in our explanatory variables of the model as all are integrated at order one using Augmented-Dicky Fuller Tests:

Table 5 – Unit Root Test using Augmented-Dicky Fuller Method

VARIABLE	ADF Statis.	Crit. Value@5%	P-Value	Order of Integration
D(EOE)	-4.1044	-3.0989	0.0084	I(1)
D(FDI)	-4.1392	-3.0989	0.0079	I(1)
D(GDP)	-3.9710	-3.0989	0.0106	I(1)
D(MCAP)	-6.9432	-3.0989	0.0001	I(1)

Source: Auther's Eviews computations

The result shows that the variables are stationary at first level with significant p-value.

Table 7 - Regression Results for the Impact of Global Financial Crisis on Nigeria Economy

Dependent Variable: DGFC

Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EOE	-0.000696	0.000321	-2.167534	0.0530
FDI	0.000143	4.06E-05	3.524555	0.0048
GDP	0.003909	0.001010	3.871186	0.0026
MCAP	-0.000809	0.000554	-1.458670	0.1726
C	0.003232	0.181827	0.017776	0.9861
R-squared	0.877298	Mean dependent var	0.500000	
Adjusted R-squared	0.832679	S.D. dependent var	0.516398	
S.E. of regression	0.211232	Akaike info criterion	-0.021411	

Sum squared resid	0.490809	Schwarz criterion	0.220023
Log likelihood	5.171288	Hannan-Quinn criter.	-0.009048
F-statistic	19.66196	Durbin-Watson stat	2.167228
Prob(F-statistic)	0.000057		

5.0 SUMMARY OF FINDINGS

The results in table 7, shows the that 87.7% variation in DGFC is explained by the explanatory variables. The durbin Watson statistics (2.1672) indicates the absence of serial autocorrelation. The F-statistic (19.66) is statistically significant at 5% level of significance implying that the independent variables are jointly significant in explaining the Global Financial Crisis level. The result also shows a significant relationship between GDP, FDI and earnings from crude oil export and similarly, the result shows an insignificant negative relationship between GFC and Stock market capitalization(MCAP). However, a further test using Vector Auto regression method (Table 7, below), shows a negative and significant relationship between MCAP and GFC. This is in line with our earlier apriori expectation however.

Table 7 – Vector Autoregression Estimate

Included observations: 14 after adjustments
Standard errors in () & t-statistics in []

	DGFC	EOE	FDI	GDP	MCAP
DGFC(-1)	-0.058416 (1.26110) [-0.04632]	-1698.920 (639.145) [-2.65811]	-7170.925 (3061.74) [-2.34211]	-161.5838 (45.9042) [-3.52002]	-698.0731 (191.747) [-3.64059]
DGFC(-2)	0.182958 (1.82817) [0.10008]	1687.296 (926.548) [1.82106]	8087.276 (4438.50) [1.82208]	205.5032 (66.5458) [3.08815]	41.62691 (277.970) [0.14975]
EOE(-1)	-0.000361 (0.00141) [-0.25703]	0.434991 (0.71233) [0.61066]	5.354078 (3.41231) [1.56905]	-0.072724 (0.05116) [-1.42149]	-0.633932 (0.21370) [-2.96642]
EOE(-2)	0.000600 (0.00179) [0.33563]	0.006613 (0.90530) [0.00730]	3.208503 (4.33670) [0.73985]	0.041001 (0.06502) [0.63060]	-0.122013 (0.27159) [-0.44925]
FDI(-1)	8.33E-05 (0.00024) [0.34112]	0.080665 (0.12371) [0.65203]	-0.358280 (0.59263) [-0.60455]	0.008615 (0.00889) [0.96961]	0.015153 (0.03711) [0.40827]
FDI(-2)	-3.35E-05 (0.00027) [-0.12329]	0.019835 (0.13755) [0.14420]	-0.157633 (0.65891) [-0.23923]	0.003565 (0.00988) [0.36086]	0.020662 (0.04127) [0.50071]

GDP(-1)	0.003858 (0.00629) [0.61294]	3.008377 (3.18975) [0.94314]	4.913675 (15.2801) [0.32157]	0.867784 (0.22909) [3.78793]	3.178925 (0.95695) [3.32195]
GDP(-2)	-0.004399 (0.01167) [-0.37711]	-4.502167 (5.91237) [-0.76148]	-49.65463 (28.3224) [-1.75319]	-0.050843 (0.42463) [-0.11973]	0.855108 (1.77375) [0.48209]
MCAP(-1)	-0.000196 (0.00232) [-0.08460]	-0.145763 (1.17353) [-0.12421]	-1.350229 (5.62162) [-0.24018]	-0.333636 (0.08428) [-3.95846]	-2.295765 (0.35207) [-6.52084]
MCAP(-2)	0.007527 (0.02456) [0.30652]	12.44941 (12.4454) [1.00032]	145.6133 (59.6179) [2.44244]	1.585302 (0.89384) [1.77358]	11.85369 (3.73369) [3.17479]
C	-0.337866 (0.82659) [-0.40875]	384.1093 (418.928) [0.91689]	-1181.489 (2006.81) [-0.58874]	29.64675 (30.0879) [0.98534]	241.5873 (125.681) [1.92223]
R-squared	0.881534	0.980536	0.966919	0.998785	0.964716
Adj. R-squared	0.486647	0.915655	0.856648	0.994734	0.847101
Sum sq. resids	0.406169	104330.1	2394120.	538.1645	9390.091
S.E. equation	0.367954	186.4852	893.3308	13.39359	55.94667
F-statistic	2.232371	15.11285	8.768580	246.5800	8.202362
Log likelihood	4.915158	-82.27895	-104.2114	-45.40889	-65.42361
Akaike AIC	0.869263	13.32556	16.45877	8.058413	10.91766
Schwarz SC	1.371380	13.82768	16.96089	8.560529	11.41978
Mean dependent	0.571429	1692.835	5327.835	272.9233	78.24836
S.D. dependent	0.513553	642.1169	2359.447	184.5730	143.0778
Determinant resid covariance (dof adj.)		0.000000			
Determinant resid covariance		0.000000			

From table 7, the overall p-value of tests of 0.000057, indicates a highly significant relationship between the Global Financial Crisis and the explanatory variables namely: GDP, EOE, FDI and MCAP in the short-run using the OLS and VAR. The overall result is in line with our apriori expectations (Loayza and Romain, 2006; Kaminsky and Schmukler, 2008; Ajakaye & Fakiyesi, T. 2009; Jenrola & Daisi, 2012).

6.0 Conclusions And Recommendations

The results of this work shows that the Global Financial Crisis had severe significant negative impacts on the Foreign Direct Investments, Gross Domestic Products, Stock Market capitalization and Earnings from Crude oil Export in the Short-run using the unit root tests, Ordinary Least Square and Vector Auto regression methods.

The following recommendations are suggested from the findings in this research work:

1. The regulatory authorities such as the Central Bank of Nigeria and the Securities and Exchange Commission should make implementable policies that will guide financial transactions in the banks and capital markets respectively. This will include reduction of business and transaction costs for their product and service offerings to boost economic activities.
2. The government should embark on thorough diversification of the economy with appropriate technology transfer to aid the conversion of Agricultural raw materials being exported to local finished products. These raw materials include cocoa, Ground nut, Palm Produce, Kolanut, Timber etc, which will help reduce the present dependence on Crude oil export sales as well as check excessive foreign exchange consumption that has severely depleted our external foreign reserves.
3. The government is encouraged to develop and effectively exploit other Solid mineral basis such as Gold, which is abundant in Ilesha, Nigeria: Tin and Columbite in Jos, Revamping of Ajaokuta Steel mills etc. Local and foreign investors should be wooed into establishing industries that will engage in the development of this sub-sector locally. Full privatization of this sector is advised to make the operations of the companies transparent and ensure accountability.
4. The Existing Refineries are considered obsolete and maintenance costs very high, hence we advise that modern electronic refineries be built and well trained Nigerian professionals hired to operate them. Low cost loans could be secured from multinational financial institutions such as world bank and direct disbursements made to tested foreign multinational construction firms for the projects. This will lead to increase in employments, reduction in crimes/poverty, and conservation of the nation's foreign exchanges reserves.
5. The nation's moribund sectors such as Textile industries, Railways and transportation system, should be bailed out by the government to generate employment and attract foreign direct investments.

Biography

Richard Chinye Osadume is currently a Dissertation Ph.D candidate in finance with the department of Banking and Finance, Nnamdi Azikwe University, Awka, Nigeria. He is a fellow of the Institute of Chartered Accountants of Nigeria (FCA – ICAN). He is also a Fellow and Certified Consultant in Banking, Finance and Allied Matters by the Chartered Institute of Bankers of Nigeria (FCIB). He has over 17 years of banking practice experience in the Nigerian Banking Industry covering banking operations, credits, Marketing and International Finance. He has strong interests in Finance and Economic Researches and is a member of the International Academy of Business and Behavioural Sciences. Richard is married with Children and enjoys travelling, meeting people and giving motivational speeches

Prof. Alexander Mbachu is a Professor of Finance at the Nnamdi Azikwe University, Awka and past head of the department of Banking and Finance. His area of interest is in Capital investment Analysis and Government Policy reviews. He is happily married with children.

REFERENCES

- Adamu, A. (2009). "The Effects of Global Financial Crisis on Nigerian Economy" Global Financial Crisis_Mahboob Ali_Islam. *International Journal of Investment and Finance vol.1 (1&2) page 11-21.*
- 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. Abuja, 2009.
- Ajakaye, O & Fakiyesi, T. (2009), "Global Financial Crisis Discussion Paper 8: Nigeria." Overseas Development Institute, London.
- Al-Faki, M. (2007). "Capital Market Reforms and Real Sector Financing: What Options". (AMERC) Tunis, Tunisia.
- Al-Faki, M. (2007), "Understanding the Nigerian Capital Market: Best Investment Practices & Regulatory Compliance". A Paper presented at the NSE workshop in Abuja, 2007.
- Allen, Franklin and Douglas, Gale.(2000). "Financial Contagion". *Journal of Political Economy*, Vol. 108, No.1,pp.1-11.
- Aluko, M. (2008). "The Global Financial meltdown: Impact on Nigeria Capital Market and Foreign Reserves." <http://www.nigeriavillagesquare.com>.
- Avgouleas, E. (2008). "Financial Regulation, Behaviour Finance, and the Financial Credit Crisis in Search of a New Regulatory Model". University of Manchester, London.
- Bordo, Michael D.; Murshid, Antu P (September 2000). "Are Financial Crises Becoming Increasingly More Contagious? What is the Historical Evidence on Contagion?" Retrieved 17 December 2014. Kluwer Academic Publishers 2001, Boston, MA.
- Braudel, F. (1977). "Afterthoughts on Material Civilization and Capitalism". Baltimore & London. The Johns Hopkins University Press.
- Braggion et al (2005). "Optimal Monetary Policy in a sudden Stop" Mimeo
- Broner, Lorenzoni & Schmukler (2007). "Why do emerging Economies borrow Short-term?". A *Journal of European Economic Association*, CEPR discussion Papers No. 6249 & NBER working Paper No. 13075, 2007.
- Brooks, C.(2014). "Introductory Econometrics for Finance (3rd Edition)". University Printing House, Cambridge CB2 8BS, United Kingdom.
- Calvo, Guillermo A., (1999). *Contagion in Emerging Markets: When Wall Street Is A Carrier, Working Paper*. University Of Maryland.
- 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.
- Claessens, Stijn and Kristin Forbes (2009). "International Financial Contagion: An overview of the Issues". *Springer*. Kluwer Academic Publisher 2001, Dorrecht and London.
- Cass, D. & Shell, K.(1983). "Do Sunspots Matter?". *The Journal of Political Economy*, Vol.91, issue 2 (April, 1983), p.193-227.
- Cohen, B.J. (2008). *International Political Economy – An Intellectual History*. Princeton. Princeton University Press. Published by Princeton University Press.
- Daniel, Detzer & Hansjorg, Herr (2014). "Theories of Financial Crises – An Overview". Berlin. Institute for International Political Economy, Berlin. Working Paper No.

- 32/2014. Berlin School of Economics and Law Press.
- De Gregorio, José; Valdes, Rodrigo O. (2001). "*Crisis Transmission: Evidence from the Debt, Tequila, and Asian Flu Crises*". *World Bank Econ Rev* 15 (2): 289–314.
- 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.
- Dornbusch, Rudiger. Park, Yung. Claessens, Stijn (2000). "*Contagion: Understanding How It Spreads*". *The World Bank Research Observer* 15: 177–197. Retrieved 17 December 2014.
- Ebenstein, A. (2003). "*Hayek's Journey: The Mind of Friederich Hayek*". New York. Palgrave MacMillan.
- Eichengreen, Hale and Mody, (2006). "*Flight to Quality: Investor Risk Tolerance and the Spread of Emerging Market Crises*", in *International Financial Contagion: An overview of the Issues and the Book by Claessens, Stijn and Kristin Forbes*.
- Fama, E.R. (1970). "*Efficient Capital Markets: A Review of Theory and Empirical Work*." In *Journal of Finance*, Vol. 25, Issue 2. Pages 383-417, May 1970. Article first publish online: 30 April 2012. DOI:10.1111/j.1540-6261.1970.tb00518x.
- Forbes, K. J. & Rigobon, R. (2002). "*No Contagion, Only Interdependence: Measuring Stock Market Comovements*", *The Journal of Finance*, Vol. 57, No. 5, pp 2223-2261. First Published online on 17 Dec. 2002. The American Finance Association 2002.
- Friedman, M. (1992). "*Money Mischief: Episodes in Monetary History*." San Diego & New York. *Harcourt Brace & Company*.
- Friedman, M. (1956). "*The quantity theory of money – a restatement*. In *Studies in the Quantity Theory of Money*, ed." M. Friedman, Chicago: University
- George, L. (2008). "*The Courier' Nigeria Stock Exchange holding Up*".
<http://www.acp.encourier.infor>
- Germain, R.D. (1997). "*The International Organization of Credit – States and Global Finance in the World-Economy*". Cambridge. Cambridge University Press.
- Graciela, L., Kaminsky & Schumkler, S. L. (2008). "*Short-run Pain, Long-run Gain: Financial Liberalization and stock market cycles*". *Review of Finance*, Oxford University press for European Finance Association, Vol.12(2), pages 253-292.
- Helleiner, Eric (2011). "*Understanding the 2007-2008 Global Financial Crisis: Lessons for Scholars of International Political Economy*" *Annu. Rev. Polit. Sci.* 14 (1): 67–87. Retrieved 17 December 2014.
- Jenrola, O. A. & Daisi, O. R. (2012). "*The implications of Global Financial Crisis on the Nigeria Capital Market Performance: An Empirical Investigation (2000 – 2008)*". *European Journals of Humanities and social Sciences*, Vol.16, No.1, 2012.
- Kaminsky, Graciela L., and Carmen M. Reinhart, (2000). "*On Crises, Contagion, and Confusion*". *Journal of International Economics* 51, 145-168. *Anthorod, University of Maryland, College Park, Maryland 20742*.
- Kelly, Morgan (2008). "*The New Palgrave Dictionary of Economics*".
- Keohane, R.O. (2002). "*Power and Governance in a Partially Globalized World*". London & New York. Routledge.
- Keohane, R.O. & Nye, J.S. (1977). "*Power and Interdependence: World Politics in*

- Transition*". Boston. Little, Brown.
- Keohane, R.O. (2000). "Introduction." In Nye, J.S. & Donahue, J.D., Eds. *Governance in Globalizing World*". Washington, D.C. The Brookings Institution.
- Kindleberger, C.P. (1973). *The World in Depression, 1929-1939*. Berkeley. University of California Press.
- Kindleberger, C.P. (2000). *Manias, Panics, and Crashes – A History of Financial Crisis*. Fourth Edition. United States. Wiley & Sons, Inc.
- King, Mervyn A., and SushilWadhvani, (1990). "Transmission of Volatility between Stock Markets", *Review of Financial Studies* 3, 5-33.
- Kirman, A. (1993). "Ants, Rationality, and Recruitment." *Quarterly Journal of Economics* 108, 137–56.
- Krugman, P. R.(1998). "It's Baaack : Japan's slump and the Return of the liquidity Trap". Brookings Papers on Economic Activity, 2, p.137-205, 1998.
- Lagunoff, R. D. & Stacey, L. S. (2001). "A Model of Financial Fragility," *Journal of Economic Theory* 99, 220-264.
- Loayza, N. & Romain, R.(2006). "Financial Development, Financial Fragility and Growth". *Journal of Money, Credit and Banking*, Blackwell Publishing, Vol.38(4), p.1051-1076, June.
- Mackay, C. (1841). "Extraordinary Popular Delusions and the Madness of Crowds". London: Bentley.
- Markowitz, Harry (2009). "Proposals Concerning the Current Financial Crisis". *Financial Analysts Journal*65 (1): 25–27. Retrieved 17 December 2014. University of California , Publisher Sandiego U.S.A.
- Maroney, Neal; Naka, Atsuyuki; Wansi, Theresia (March 2004). "Changing Risk, Return, and Leverage: The 1997 Asian Financial Crisis". *The Journal of Financial and Quantitative Analysis*39(1): 143–166. Retrieved 17 December 2014. School of Biz adm, University of Washington Publisher Seatle WA98195.
- Minsky, H.P. (1992). "The Financial Instability Hypothesis." Working Paper Number 74. Prepared for Arestis, P. & Sawyer, M. Eds. *Handbook of Radical Political Economy*. Levy Economics Institute paper, New York.
- Mtango, E. E. E. (2008) "African Growth, Financial Crisis and Implications for TICAD IV" GRIPS-ODI-JICA joint seminar: African Growth In The Changing Global Economy paper presented by Ambassador of Tanzania and Dean of the African Diplomatic Corps in Japan. Policy minutes No.23,GRIPS Development Forum in Tokyo, Japan.
- Nancy L.Stokey and Robert E. Lucas Jnr (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.
- Nigerian Stock Exchange (2008). "Market Capitalisation Indices".
- Nijathaworn (2010). "Rethinking the role of Financial Soundness – Financial Infrastructure and long-term sustainable Growth". A Paper delivered at the 8th Bank of Indonesia Annual International seminar 2010, Bank of International Settlement,Review 143/2010
- Olaoye, F. O. (2010). "The crash of Nigerian Capital Market: Explanations beyond the Global meltdown". *International Business Management*, Vol.2, p.35-40.
- Oteh, A., (2010). "The Global Financial Crisis and Financial Reform in Nigeria: A Capital MarketPerspective". A paper by Director-General, Securities & Exchange

- Commission, Nigeria.
- Peckham, Robert (2013). *"Economies of Contagion: Financial Crisis and Pandemic"*. *Economy and Society* 42 (2): 226–248. Published by Taylor & Francis online 15th March, 2013.
- Pesaran, M.H. and Pick, A. (2007). *"Econometric issues in the analysis of contagion"*. *Journal of Economic Dynamics and Control* 31, 1245–77.
- Robert Kollmann & Frédéric Malherbe, (2011). *"International Financial Contagion: the Role of Banks"*, Working Papers ECARES 2011-001, Université Libre de Bruxelles, Belgium.
- Sanusi L. S. (2010). *"Growth prospects in Africa after the crisis"*. A Paper presented during a Central Bank of Nigeria workshop at Abuja, Nigeria, 2010.
- Sanusi, L.S., (2010). *"Global Financial Meltdown and the Reforms in the Nigerian Banking Sector"*. Being the full text of a Public Lecture delivered at the Convocation Square, Abubakar Tafawa Balewa University, Bauchi.
- Schmukler, Sergio L. (2008). *"Benefits and Risks of Financial Globalization: Challenges for Developing Countries. In capital markets liberalization and Development"*. eds. J. Stiglitz and J. A. Ocampo, 48-73, Oxford University Press.
- Schmukler, Sergio L. (2004). *"Financial Globalization: Gain and Pain for Developing Countries"*. Economic Review, Federal Reserve Bank of Atlanta, 39-66, 2nd Qtr.
- Scott, Hal S. (November 20, 2012). *"Interconnectedness and Contagion"*.
- Sere-Ejembi A.A., (2008). *"Nigerian Stock Market Reflection of the Global Financial Crisis: An Evaluation"*. CBN Bullion Vol 32:4.
- Shiller, R.J. (1984). *"Stock Prices and Social Dynamics"*. *Brookings Papers on Economic Activity* 1984(2), 457–98.
- Stijn Claessens and Kristin Forbes (2004). *"International Financial Contagion: The Theory, Evidence and Policy Implications"*. A paper presented at the World Bank Conference on the IMF Role in Emerging Market Economies: Reassessing the Adequacy of its Resources at Amsterdam, November, 2004.
- Soludo C. C. (2008). *"Global Financial crisis and the Nigeria Economy"*. A paper presented During the Annual Bankers Dinner nite at Lagos, November, 2008.
- Soludo C. C. (2009). *"Global Financial and Economic Crisis: How Vulnerable is Nigeria?"*. A paper presented during the Central Bank of Nigeria quarterly economic review at Abuja, January, 2009.
- Tymoigne, É. (2008). *"Minsky and Economic Policy: Keynesianism All Over Again?"* Working Paper No. 547. The Levy Economics Institute of Bard College.
- Wallerstein, I. (2004). *"World-Systems Analysis – An Introduction"*. Durham & London. Duke University Press.
- Yellen, J.L. (2009). *"A Minsky Meltdown: Lessons for Central Bankers"*. Presentation to the 18th Annual Hyman P. Minsky Conference on the State of the US and World Economies – "Meeting the Challenges of the Financial Crisis." New York. Levy Economics Institute of Bard College.