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Impact of Global Financial Crisis on Nigerian Stock Market

Onuoha, Theresa E.
Department of Accounting
University of Port Harcourt, Nigeria
&
Nwaiwu, Johnson N.
Department of Accounting
University of Port Harcourt, Nigeria

Abstract

The purpose of this study is to investigate the impact of the global financial crisis on the Nigerian stock market. To achieve this purpose, research questions were raised, hypotheses were formulated and a review of extant literature was made. The survey method of research design was adopted in an effort to generate the required data for the study. The data generated were analyzed using the regression model and our result shows that the global financial crisis measured by currency crisis, credit crisis, liquidity crisis, and foreign investment crisis has a negative significant impact on the Nigerian stock market. Based on our findings, we recommended that mergers and acquisition should be encouraged so as to increase the capital base of stock market participants. With this arrangement, stock market participants will be able to absolve shocks from economic meltdown; the government should implement discriminatory income tax policy for companies quoted in the Nigerian stock market. This is to motivate them participate in the stock exchange market; and the Central Bank of Nigeria (CBN), Securities and Exchange Commission (SEC), and other relevant regulatory authorities should use the financial stress index (FSI) as proposed by IIIing and Liu (2006) to indicate early signals of financial crisis and guiding against such early enough.

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Key words: Global financial crisis, Nigerian stock market, currency crisis, credit crisis, liquidity crisis, and foreign investment crisis.

Introduction

The global financial crisis is a world-wide financial and business situation that is characterized by sudden sustained and alarming credit squeeze, tumbling stock market prices, shrinking demand, substantial job losses and rising prices and interest rates. According to Osaze (2009), global financial crisis is the continuous and dramatic drop in all economic indices over a relatively short period of time leading to corporate failures especially failures of the financial markets which provide the lubricants that oil the economy. There is no doubt that stock market all over the world are somewhat interrelated in that developments especially in major markets throughout the world, often have implications for and often reverberates in others (Agbonifoh and Evbayiro-Osagie, 2011). One may wonder why shocks in European and American stock markets have impact on the Nigerian stock market. This is due to contagion relations. According to Tella (2009), contagion issues are being concerned with the transmission of financial variable movement from one country to another. Dornbusch, Park and Claessens (2000) describe contagion, as a significant increase in cross-market linkages after a stock to an individual country or a group of countries. According to Tella (2009), the increasing global integration in the financial market, including the capital market is providing some ground for the suspicion that stock markets in both developed and developing countries influence each other in both positive and negative ways.

Stock markets are sensitive to national and international events and react immediately. The Nigerian stock exchange (NSE) witnessed unprecedented growth in total market capitalization and value of shares traded between 2004 up to the second quarter of 2008. Immediately the crisis was pronounced in July 2008 in USA, the Nigerian stock market started experiencing serious downturn activities. It was also observed that investors were pulling out their resources which made the stock price to generally go down. Both developed and developing economies faced negative repercussions of the financial crisis and experienced adverse impact on their economies via the channel of finance and trade. Net capital inflows shrunk drastically from the beginning of the crisis. This crisis badly affected foreign direct investment, portfolio investment and exports of developing nations (Igbal, 2010). The ripple effects of the global financial crisis seem to have had a dramatic negative effect on the Nigerian stock exchange. Market capitalization has been reduced from over N10.18 trillion to N5.2 trillion and a market index from 5799 points to 22000 points by October 2009 and a flight of foreign portfolio investment; stock and shares were no longer collaterisable (Osaze, 2009). Yakubu and Akerela (2012) also conducted a study on the analysis of the impact of global financial crisis on the Nigerian stock exchange for the period of 2008 to 2011. Using the ordinary least squares method of analysis, it was found that the global financial crisis has no significant impact on the Nigerian stock exchange.

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More so, Jenrola and Daisi (2012) reported that the Nigerian stock exchange downfall is not attributed to global financial crisis but the instability of macroeconomic variables in Nigeria like unfavourable exchange rate, inflationary pressure, and problems of insecurity, inadequate infrastructural facilities to mention but few. Ajakaiye and Fakiyesi (2009), observe that market capitalization of the Nigerian stock exchange experienced a very deep lull in activity by nose diving 45.8% in 2008. They recall the scenario in 2007 when the market grew by 74.7%. This is a very significant decline.

Prior studies revealed mixed findings of the effects of global financial crisis on Nigerian stock market. In order to revalidate these findings, this study becomes very necessary. More so, since previous Nigerian studies considered a very short period in their analysis, the need to expand the period of analysis upto 2014, calls for this study. Hence, the following research questions were raised.

(i) What is the effect of currency crisis on the Nigerian stock market for the period of 2008 to 2014?
(ii) To what extent does credit crisis affects the Nigerian stock market for the period of 2008 to 2014?
(iii) What impact has liquidity crisis on the Nigerian stock market for the period of 2008 to 2014?
(iv) To what extent does foreign investment crisis affects the Nigerian stock market for the period of 2008 to 2014.

In view of the above, the following null hypotheses were tested for this study.

H_{o1}: Currency crisis has no significant effect on the Nigerian stock market for the period of 2008 to 2014.

H_{o2}: There is no significant relationship between credit crisis and the Nigerian stock market for the period of 2008 to 2014.

H_{o3}: Liquidity crisis has no significant impact on the Nigerian stock market for the period of 2008 to 2014.

H_{o4}: Foreign investment crisis has no significant relationship with the Nigerian stock market for the period of 2008 to 2014.

Literature Review

The financial crisis ravaging the global economy is naturally a serious cause for concern to policy makers. Developed economies like USA, Germany, and England among other were injecting liquidity into the stock market to safeguard the financial system from crashing. The immediate past governor of Central Bank of Nigeria was busy campaigning that Nigerian investor should not panick, and that the Nigerian financial system is insulated from the global financial crisis. The immediate past

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governor of Central Bank's position deceived most Nigerian and also afforded foreign investors the opportunity to exit the market at its prime. The immediate past governor of Central Bank of Nigeria also showed little of understanding of the crisis when he argues that "the world economy may not survive the crisis, as it is the beginning of a long period of economic instability that requires policy makers to create an inclusive and responsive global capitalism" (Soludo, 2009). He argued that from the cost of government interventions around the world, other indirect costs of the crisis could run into several thons of Dollars in income lost, millions of people plunged into poverty for a generation, especially developing countries

Soludo (2009) further posit that "one country could cause a crisis of this magnitude and many countries with sound fundamentals also plunged into a crisis because of the contagious effect, and then the rich ones bail themselves out because they have the resources to do so, while the least developed countries suffer the long-lasting effects of the crisis, is a market-cum system failure of global proportion". In his opinion, the analytical tools for understanding and managing the current system are inadequate, and the national and global governance infrastructure for resolving or even preventing resurgence is at best obsolete. This seems to suggest that the then governor of CBN was confuse and do not know what to do to arrest the situation in Nigeria. This is evident in his statement that the pace of financial and economic globalisation appears to have outstripped the pace of the theory and institutions that underlie it. Thus, he called for a new economic theory that could effectively tackle the crisis.

While the then governor of Central Bank Nigeria was busy canvassing for a new economic model for the global financial crisis, Nigerian investors who were banking on the euphoria that the Nigerian financial system is insulated from the global financial crisis and were caught in the gap. For example, the Nigerian Stock Exchange that witnessed unprecedented growth in total market capitalization and value of share traded for 2004 – early 2008, but is currently experiencing a serious downturn in its activities. According Udeme & Onuba (2009) the market capitalization of the 303 listed equities, which had opened on January 1st, 2008, at N10.18tn and later appreciated to N12,39 tn as at March 2008, suffered its highest fall in the 48-year history of the Nigerian Stock Exchange, depreciating by N3.223tn or 32 percent to N6.957tn by the year end. Similarity, the NSE All Share index depreciated by the same margin from 63,016.60 at which it opened in January, to 31,450.78 at the last trading day at 2008 (Utieme, 2009).

Although the decline is witnessed in the Nigerian stock market, the cause cannot be separated from the global financial crisis. Soludo (2009) again changed his earlier postulation and linked this dwindling fortune of the Nigerian Stock Exchange to global credit crunch. According to him, "the origin of the problem is the credit crunch that started globally". He posits that the institutional investors were pulling out in order to service their facilities elsewhere and then the stock prices went down. One would

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have expected that policy makers and the government would predicted this situation, and take proactive measures to protect investors in the capital market.

The crisis didn't spare the Nigerian Stock exchange either as foreign investors, who realized the danger posed by the on-coming financial turmoil, withdrew their funds and took flight back to safety, depressing the stock market, as the All Shares Index (ASI) shed more than 70 percent of its value between March 2008 and April 2009. The crisis brought in its wake shortage in capital flows as well as Diaspora transfer. Capital inflows into the economy declined, foreign portfolio investment withdrawals and withholdings became the order of the day. At the peak of the mortgage boom in 2006, direct and portfolio investment recorded a growth rate of 126.6 percent and 11.48 percent respectively. At the inception of the crisis in 2007, the growth rate of FDl slowed to 45.6 percent, while that of FPI contracted by 3.3 percent. Both, however, rebounded by the next year. The level of poverty tripled between 2008 d 2009, with value erosion intensifying. Inflation rose from 6 percent in 2007 to 15.1 percent in 2008 id remained at double digits till January 2013 when it returned to single digit. Furthermore, the food price index grew by 16.6 percent in 2009 and 26.5 percent in 2010 after recording a decline of 18.1 percent in 2008 (Udeme & Onuba, 2009).

The exchange rate has been volatile since the crisis ensued. The official exchange rate showed that the Naira depreciated against the dollar by 25.6 percent (highest depreciation recorded since 2000 till date) between 2008 and 2009, reflecting the demand pressure relative to supply with implications for the foreign reserve. Nigeria's External Reserves which was strong before the time of crisis dropped from USD62 billion in mid-2008 to USD42.4 billion in 2009 and USD 32.3 billion in 2010 (Yakubu & Akerele, 2012). Oil prices went plunged due to reduced demand of oil in the global market inducing a reduction in the level of revenue from the mainstay of the Nigerian economy. Prior to the crisis, Nigeria's reference crude oil benchmark, the bonny-light, averaged USD100.6 per barrel as at 2008 (highest price recorded between 1999 and 2008), but declined to USD63.3 per barrel in 2009 – over 37 percent decline between the period but thereafter has recovered, but remains volatile (Oluseyi, 2008).

The fall in oil price had implications for oil revenue as well as borrowing. Total revenue which recorded a growth of 34 percent in 2008, flipped into a contraction of 38 percent in 2009 (over 72 percentage points difference) – highest decline recorded since 2000. Whereas oil revenue which recorded a growth of 46.3 percent in 200€, contracted by 51.6 in 2009 (a difference of over 97 percentage points) but non-oil revenue growth which slowed from over 77 percent in 2007 to about 11 percent in 2008, rebounded and recorded a growth of 23.7 percent in 2009 (Jenrola and Daisi, 2012).

The rise in exchange rate was translated into trade as the current account receded and recorded a decline of 39.6 percent in 2009. Although the account is still in

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surplus, it's yet to attain the growth rate of over 147 percent recorded at the peak of the mortgage boom in 2005. The balance of trade although favourable, declined by 34.1 percent in 2009 from a growth of 12.1 percent recorded in 2008. Export recorded the worst fall in 2009 as it contracted by 17.7 percent from a growth of 22.3 percent in 2008, while import declined from 33.9 percent in 2008 to -2.32 percent in 2009 (Ujunwa, Salami and Umar, 2011). Being the main source of revenue, the fall in oil price prompted the government to seek other sources of financing expenditure, as it could not rely on earnings from crude oil exports. Governments at all levels cut down on budget and social spending. Faced with revenue constraints and shortfall in foreign exchange earnings, debt at all tiers of government increased significantly. Total debt grew by over 32 percent in 2009 after recording a decline of 39.9 percent in 2008 and it has continued to grow but at a declining rate since 2011. While domestic borrowing which declined by 46.12 percent in 2008 recorded a growth of 36.4 percent in 2009, external borrowing fell from 21 percent in 2008 to 12 percent in 2009. The reason being that most economies were overwhelmed by the crisis and could not lend to fellow nations.

The prime lending rate grew by 14.9 percent, rising from 15.9 percent in 2008 to 18.4 percent in 2009, although it declined by the following year to 17.6 percent. The gross fixed capital formation, although declined marginally by 0.73 percent in 2008, thereafter grew by 3.4.7 percent and 18.3 percent in 2009 and 2010 respectively. In 2011, capital stock was halted severely and declined by 10.8 percent. The Non-Performing Loan (NPL) ratio of banks rose to 20.7 percent in 2009. Some distressed banks downsized and tightened expenditure. This did not prevent a number of the banks from being partially nationalized (Udeme & Onuba, 2009; Yakubu & Akerele, 2012).

Research Methodology

The survey method of research design was employed in this study and the population consists of the Nigerian stock exchange from which data on the study variables were generated. The study covers the period of 2008 to 2014. Considering the objectives of this research work, the secondary source of data collection was adopted. The data were obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin of various years and from the office of National Bureau of Statistics. The null hypotheses stated in this study were tested at 5% level of significance using the regression analysis. This statistical technique seems appropriate considering the parametric nature of the data generated and the nature of the research hypotheses, which are intended to measure the impact of one variable on the other. These shall be computed with the aid of the Statistical Package for Social Sciences (SPSS) version 17.

Conceptual Framework and Model Specification

The conceptual framework revealed the relationship between the variables of the study. While global financial crisis is the explanatory variable operationalized as

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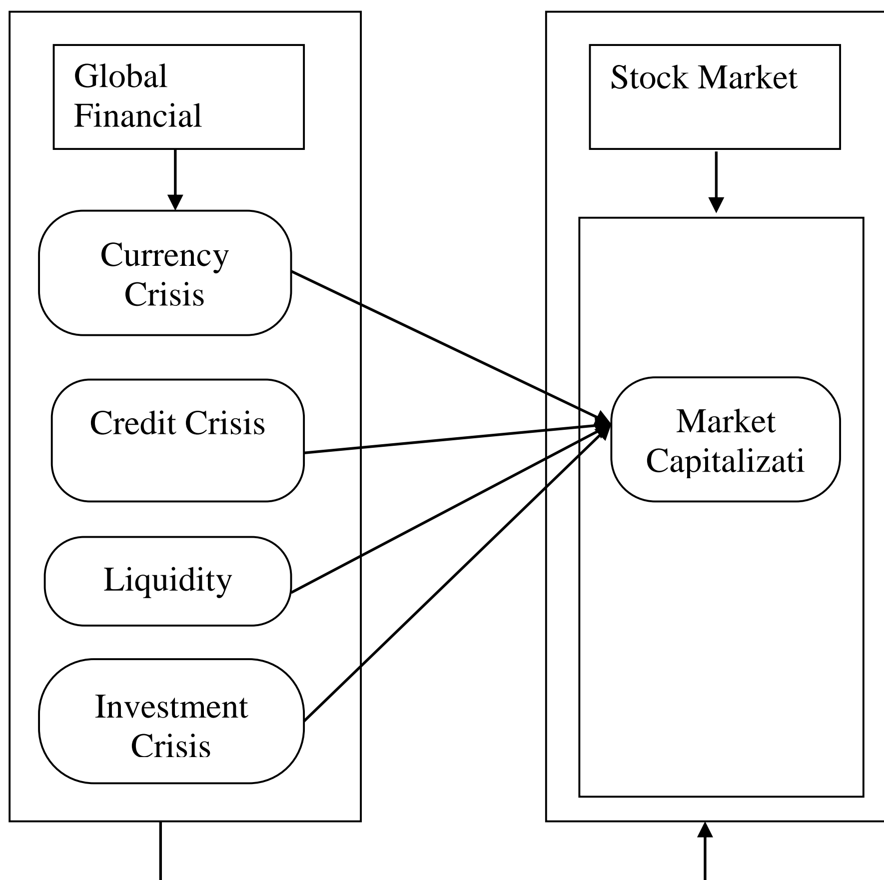
currency crisis, credit crisis, liquidity crises and investment crisis; stock market performance is measured by market capitalization. This is as captured in figure 1 below.

Figure 1: GFC Model



Source: Conceptualized by the Researcher (2015)

The justification of this framework is based on the fact that a negative relationship exists between global financial crisis and the Nigerian stock market performance. The proposition is that global financial crisis, which manifest in currency crisis, credit crisis, liquidity crisis, and foreign investment crisis brings about a decrease in market capitalization of the Nigerian stock market. The currency crisis is measured by foreign exchange; credit crisis by interest rate; liquidity crisis by external reserve; and foreign investment crisis by foreign direct investment. The model designed for this study,

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which explains the relationship between global financial crisis and the Nigerian stock market is given as:

$$NSM = f[FOREX, INRATE, EXREV, FORIN]$$

In order to eliminate abnormality in the data to be generated, and to avoid heterosedacticity of the data, the data will be transformed into logarithm resulting in the model shown below.

$$LogNSM = f[\alpha_0 Log + b_1 LogFOREX + b_2 LogINRATE + b_3 LogEXREV + b_4 LogFORIN]$$

Where:

NSM	=	Nigerian Stock Market
FOREX	=	Foreign Exchange Rate
INRATE	=	Interest Rate
EXREV	=	External Reserve
FORIN	=	Foreign Investment
b_1 to b_4	=	Regression Coefficient
α_0	=	Regression Constant
Log	=	Logarithm Transformation

Analysis and Results

In this section, the hypothetical claims made in the study were verified. In testing the first hypothesis which states that currency crisis has no significant effect on the Nigerian stock market for the period of 2008 to 2014; data on currency crisis measured by foreign exchange rate were regressed with data on Nigerian stock market measured by market capitalization. The result obtained is presented in the table below.

Table 1: Effect of currency crisis on Nigerian stock market

Variable	Beta	R Squared	T	Sig.
FOREX	-0.764	0.584	3.413	0.000

Source: SPSS Version 17 Window Output

The analysis as shown in Table 1 above, revealed a correlation coefficient (R) of -0.764 which is high but negative. This suggests that there is a negative relationship between currency crisis and the Nigerian stock market. The coefficient of determination (R^2) of 0.584 suggests that about 58.4% of the variance in Nigerian stock market performance is associated with variation in currency crisis. In other words, only about 41.6% variation in Nigerian stock market performance is attributed to other variables other

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than currency crisis. However, the p - value (0.000) and t-statistic (3.413) suggest a significant effect. This implies that currency crisis has a significant effect on the Nigeria stock market at 5% level of statistical significance.

In testing the second hypothesis, which states that there is no significant relationship between credit crisis and the Nigerian stock market for the period of 2008 to 2014, data on credit crisis measured by interest rate were regressed with data on Nigerian stock market measured by market capitalization. The result obtained is presented in the table below.

Table 2: Credit crisis and Nigerian stock market

Variable	Beta	R Squared	T	Sig.
INRATE	-0.818	0.669	4.019	0.009

Source: SPSS Version 17 Window Output

The analysis as shown in Table 2 above, revealed a correlation coefficient (R) of -0.818 which is high but negative. This suggests that there is a negative relationship between credit crisis and the Nigerian stock market. The coefficient of determination (R^2) of 0.668 suggests that about 66.8% of the variance in Nigerian stock market performance is associated with variation in credit crisis. In other words, only about 33.2% variation in Nigerian stock market performance is attributed to other variables other than credit crisis. However, the p - value (0.009) and t-statistic (4.019) suggest a significant relationship. This implies that currency crisis has a significant relationship with the Nigeria stock market at 5% level of statistical significance.

In testing the third hypothesis, which states that liquidity crisis has no significant impact on the Nigerian stock market for the period of 2008 to 2014; data on liquidity crisis measured by external reserve were regressed with data on Nigerian stock market measured by market capitalization. The result obtained is presented in the table below.

Table 3: Impact of liquidity crisis and Nigerian stock market

Variable	Beta	R Squared	t	Sig.
EXTREV	-0.926	0.857	6.312	0.000

Source: SPSS Version 17 Window Output

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The analysis as shown in Table 3 above, revealed a correlation coefficient (R) of -0.926 which is very high but negative. This suggests that there is a negative relationship between liquidity crisis and the Nigerian stock market. The coefficient of determination (R^2) of 0.857 suggests that about 85.7% of the variance in Nigerian stock market performance is associated with variation in liquidity crisis. In other words, only about 14.3% variation in Nigerian stock market performance is attributed to other variables other than liquidity crisis. However, the p - value (0.000) and t-statistic (6.312) suggest a significant impact. This implies that liquidity crisis has a significant impact on the Nigeria stock market at 5% level of statistical significance.

In testing the fourth hypothesis, which states that foreign investment crisis has no significant relationship with the Nigerian stock market for the period of 2008 to 2014; data on foreign investment crisis measured by foreign direct investment were regressed with data on Nigerian stock market measured by market capitalization. The result obtained is presented in the table below.

Table 4: Foreign investment crisis and Nigerian stock market

Variable	Beta	R Squared	t	Sig.
EXTREV	-0.637	0.406	2.001	0.011

Source: SPSS Version 17 Window Output

The analysis as shown in Table 3 above, revealed a correlation coefficient (R) of -0.926 which is very high but negative. This suggests that there is a negative relationship between foreign investment crisis and the Nigerian stock market. The coefficient of determination (R^2) of 0.406 suggests that about 40.6% of the variance in Nigerian stock market performance is associated with variation in foreign investment crisis. In other words, about 59.4% variation in Nigerian stock market performance is attributed to other variables other than foreign investment crisis. However, the p - value (0.011) and t-statistic (2.001) suggest a significant relationship. This implies that foreign investment crisis has a significant relationship with the Nigeria stock market at 5% level of statistical significance.

Conclusion and Recommendations

The financial crisis ravaging the global economy is naturally a serious cause for concern to policy makers. The ripple effect has led to job losses, speculative burbles in stock markets and commodities markets, reduction in manufacturing as consumption and demand continues to fall. It is already causing a considerable slowdown even in most developed countries.

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This study has demonstrated that the global financial crisis has a significant impact on the Nigerian stock market. Our findings agree with prior research of Igbal (2010) who reported that global economic meltdown has badly affected foreign direct investment, portfolio investment and exports of developing nations. Osaze (2010) also concurred with the result of our study. He revealed that market capitalization has been reduced from over N10.18 trillion to N5.2 trillion and a market index from 5799 points to 22000 points by October 2009 and a flight of foreign portfolio investment; stock and shares were no longer collaterisable. But Yakubu and Akerele (2012) and Jenrola and Daisi (2012) failed to provide supportive evidence to our study. Yakubu and Akerele (2012) found that the global financial crisis has no significant impact on the Nigerian stock exchange and Jenrola and Daisi (2012) reported that the Nigerian stock exchange downfall is not attributed to global financial crisis but the instability of macroeconomic variables. Based on the above, the following recommendations were made.

(1) Mergers and acquisition should be encouraged so as to increase the capital base of stock market participants. With this arrangement, stock market participants will be able to absolve shocks from economic meltdown.

(2) The government should implement discriminatory income tax policy for companies quoted in the Nigerian stock market. This is to motivate them participate in the stock exchange market.

(3) The Central Bank of Nigeria (CBN), Securities and Exchange Commission (SEC), and other relevant regulatory authorities should use the financial stress index (FSI) as proposed by IIIing and Liu (2006) to indicate early signals of financial crisis and guiding against such early enough.

References

Agbonifoh, B.A & Evbayiro-Osagie, E. I. (2011). The global financial crisis and the Nigerian stock market crisis: shareholders' response. *Nigerian Academy of Management Journal*, 5(1); 73-84.

Ajakaiye, B. & Fakiyesi, A. (2009). The impact of global financial crisis on Sub-Sahara Africa. *International Development Working Paper No. 15.*

Dornbush, R., Park, Y.C & Claessens, C. (2000). How it spreads and how it can be stopped. *World Bank Research Observer,* 15(2); 177-197.

Igbal, B. A. (2010). Global financial crisis: causes, emerging trends and strategy. *Business Review,* 5(2); 35-50.

Copyright © IAARR, 2007-2016: www.afrrevjo.net
Indexed African Journals Online: www.ajo.info

Jenrola, O. A. & Daisi, O. R. (2012). The implication of global financial crisis on the Nigerian capital market performance: An Empirical Investigation (2000-2008). *European Journal of Humanities and Social Sciences,* 16 (1); 803-819.

Oluseyi, B. (2008). Averting financial crisis in Nigeria. *Daily Punch Newspaper* of 13th November.

Osaze, E. B. (2009). Quo vadis Nigeria in the global financial meltdown. Being a paper presented to the University of Ibadan Alumni Association, Edo State Branch at the University of Benin on 5th December.

Soludo, C. C. (2009). Global financial and economic crisis: how vulnerable is Nigeria. Retrieved on 18th June 2015 from www.cenbank.org.

Tella, S. A. (2009). The global economic crisis and Nigerian stock market: issues on contagion. *Nigerian Journal of Securities and Finance,* 14 (1); 101-116.

Udeme, E & Onuba, I (2009). Global financial crisis: keeping the Nigerian stock market viable. *Daily Punch Newspaper* of 5th January.

Ujunwa, A., Salami O. P. & Umar, H. A. (2011). The global financial crisis: Realities and implication for the Nigerian capital market. *American Journal of Social and Management Sciences*, 2 (3); 341-347.

Yakubu, Z. & Akerele, A. O. (2012). An analysis of the impact of global financial crisis on the Nigeria stock exchange. *Current Research Journal of Social Sciences,* 4 (6); 369-399.

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