Impact of Global Financial Crisis on the Performance of Nigerian Stock Exchange

Molokwu Ifeoma Mirian*
Department of Accounting, Anambra state Polytechnic, Mgbakwu, Nigeria

Abstract: This research investigates the impact of the global financial crisis on the performance of Nigerian stock market from 2004 to 2013. The main aim of the research was to examine the impact of global financial crisis on the performance of the N.S.E. Data for this research was sourced from a secondary source. The data were statistically analyzed using descriptive analysis and Kruskal-Wallis H test statistical tools. The analysis showed that Global Financial Crisis has no significant effect on Market Capitalization, value and volume of shares traded on the floor of the N.S.E. From the analysis, the researcher concludes that Global Financial Crisis has no significant effect on market capitalization, value of shares traded and the volume of shares traded in Nigerian stock exchange.

Keywords: Performance, Crisis, Market, Capitalization, Stock, Financial, Exchange, Global, etc.

INTRODUCTION

As the world renowned economists independently and jointly reveal their country's survival plans, policies and programs, it has shown that the continued reign and existence of capitalist ideology is seriously threatened. Unfortunately, the crisis is further complicated by issues of global concern like climatic changes.

Nigerian economy is not left out in the crisis. This had necessitated the continuous reforms of the Nigerian Stock Market. Some authors have defined the financial crisis in various ways. The CBN defined it as a situation where financial institutions or assets suddenly lose a large part of their value. Fortes [2] defined it "as a sharp change in prices that leads to distress among Financial Market participants". The crisis can be in form of banking crisis, speculative bubble, international financial crisis or economic crisis.

Aim of the Study

The main aim of this research work is to determine the impact of global financial crisis on the performance of Nigerian stock exchange.

RESEARCH HYPOTHESIS

H1: The global financial crisis has no significant effect on the market capitalization of Nigerian stock exchange.

H2: The global financial crisis has no significant effect on the value of shares traded on the floor of Nigerian stock exchange.

H3: There is no significant relationship between global financial crisis and the volume of shares traded on the floor of Nigeria stock exchange.

REVIEW OF RELATED LITERATURES

Effect of the financial crisis on the Nigerian economy

The effect of the financial crisis which began in United States of America (USA) on emerging markets was wide ranging and was both internally and externally induced Nijathaworn [3]. The initial financial crisis had affected mainly US and Europe. However, due to the connectivity of the financial system also known as "contagion effect" most countries were affected. Like other African countries, the Nigeria economy was initially perceived as being isolated from the financial crisis. The total share of stock market...
capitalization stood at only 1.81 percent of the global market Sanusi [4]. However the effects began to show up by the end of March 2008 with the Crash in the capital market.

Based on the nature of "the Nigerian economy, the global financial crisis had an impact on the foreign exchange market. This was attributed to the divestment and repatriation of capital and dividend by foreign investors thereby increasing the demand for foreign currencies. This further led to a depletion of the external reserves. The implication for the Nigerian economy was borne by the various sectors of the economy. Aluko [5] Firstly, the Nigerian stock market witnessed a continuous drop in the All share index and volume of traded securities. Secondly, the banking sub-sector was affected by a credit contraction as most foreign banks reduced their credit lines, exchange rate exposure arid the continuous decline in the NSE eroded their profitability. Thirdly, the decline in the revenue receipts by the three tiers of government, leading to a contraction in the fiscal sector. The contraction of the fiscal sector led to a crowding-out of the private sector credit, which in turn affected the real sector. Based on the assessment conducted by the Ministerial Conference on Financial Crisis [6], the financial sector has been in receipt of US $15.73 billion in portfolio flows in 2007 alone. With the emergence of the global financial crisis, foreign investors began to withdraw holdings in the capital market which in turn led to capital flight. The withdrawals of portfolio holdings, led to significant volatility and a sharp decline in stock prices across the Nigeria stock market.

Prior to global crisis, stock prices had appreciated though without any correlation with market fundamentals between 2002 and 2008, when the Nigerian stock market capitalization rose to a peak of N12.6 trillion in March, 2008. The boom led to an investment rush by all classes of society. Bank customers took loans to invest in stocks of their banks. The withdrawal of funds by the foreign investors led to huge decline of most stock prices as supply exceeded demand and this resulted in market capitalization worth mere N4.5 trillion in March 2009. Financial markets worldwide reflect ongoing pressures amidst a deepening economic downturn. In spite of existing polices, the Global Financial system remains under intense stress. Moreover, economic crisis has clearly manifested in Nigerian economy, with the nation facing an underlying economic crisis characterized by structural imbalances, market distortions, poor infrastructure and weak public institutions Iregbu [7].

This observation was made at a national policy symposium in Abuja with the theme "Making sense of the Global economic crisis - Taking lessons and avoiding the wrong lesson for sustainable growth to 2020" According to the executive Director of African institute for Applied Economic (AIAE) Eboh [8], the transmission Channel of the Nigerian Economy is generally two fold, namely, the contagion effects and second round effects. Through the contagion effects, the Nigerian stock exchange (NSE) lost large volumes of foreign portfolio investments on the other hand, the second round effects manifested through the sharp drop in the international price of crude oil, the loss of foreign direct investment, trade credit, remittances and other financial flows including foreign aids. It is interesting to note that the various stress tests conducted by the major banks and financial institutions prior to the crisis period had revealed that banks were well capitalized to deal with any shocks. Such stress tests as it appeared were based on the very benign data of the period of the great moderation and did not properly capture and reflect the reality Haldene [9].

There is also little systematic evidence that financial opening raises welfare indirectly by promoting collateral reforms of economic institutions or polices. At the same time, opening the financial account does appear to raise the frequency of economic crisis. The evidence appears to favour a hierarchy of capital flow. While the liberalization of equity flows seem to enhance growth prospects, the evidence of the liberalization of debt flows is beneficial.

There was a sudden rush for bank credit, from the various sectors of the economy and there were perceptions of credit crunch for almost similar reasons, other companies also had a large resort to bank credit. Reflecting on these factors, growth in non food bank credits accelerated to around 30% by October, 2008. Nonetheless, there was perception that there were credit crunch during the period which could be attributed to a large decline in non bank sources of funding.

The influence of interest rates on the speculative component of asset prices is unclear from both a theoretical and empirical perspective Kohn [10]. In the context of the current global financial crisis, with deleterious impact on growth and employment and significant fiscal costs, the issue of relationship between monetary policy and asset prices needs to be revisited It can be argued that the output losses of the preemptive monetary action might have been lower than the cost that had been materialized from a non responsive monetary policy. At least, a tighter monetary policy could have reduced the amplitude of asset price movements. As asset price bubbles are typically associated with strong growth in bank credit to certain sector such as real estate and stock markets, preemptive monetary actions could be reinforced by raising risk weights and provisioning norms for sectors witnessing very high credit actions to be both monetary and regulatory actions to be taken in tandem, it is important that both functions rest with the central banks. In the contest, the recent trend of bifurcation of monetary policy responsibility from regulatory responsibility appears to be unhelpful Moham [11]. On

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balance, it appears that preemptive and calibrated monetary and regulatory measures would be better than an initial monetary policy response. Such an approach can help in mitigating the amplitude of the bubble in both the upswing and downswing of the cycle and contribute to both macro economic and financial stability. This view seems to be gaining ground. As the International Monetary Fund (IMF) in its recent assessment notes Central Bank should adopt a broader macro-providential view, taking into account in their decisions, asset price movements, credit booms, leverage, and the build up of systemic risk. The timing and nature of pre-emptive policy responses to large imbalance and large capital flows need to be re-examined, Adrian & Shin [12].

It thus appears that the sharp swings in monetary policy, especially periods of prolonged accommodation, in the advanced economies are the underlying causes of the ongoing Global Financial Crisis while until recently, the "great moderation since the early 1990s - reduction in inflation and Deduction in growth volatility had been attributed, in part to the rule-based monetary policy. It now appears that volatility in monetary policy can also have the side effect of creating too much volatility in financial markets and financial prices, which can then potentially feed into the real economy with dangerous consequences, as indicated by the ongoing global financial crisis.

A legion of both policy makers and scholars are analyzing the causes of the crisis and finding both immediate and long term solutions, on why the Nigeria financial sector has been able to weather crisis relatively well, the analysis of our policy responses and finally, some implications of its long lasting effects. Stock market crash can increase adverse selection and moral hazard problems in financial markets because it leads to a large decline in the market value of firms’ net worth. (Note that this decline in assets values could occur either because of expectations of lower future income streams from these assets or because of a rise in market interest rates which lower the present discounted value of future income streams).

In addition, the decline in corporate net worth as a result of stock market decline increases moral hazard incentives for borrowing firms to make risky investments because these firms now have less to lose if the investment go sour. Because borrowers have increased incentives to engage in moral hazards and lenders are now less protected against the consequences of adverse selection, the stock market decline leads to decrease in lending and a decline in economic activities.

Bernanke & GeiHer [13] posited that the existing survey of credit view, an important transmission mechanism of monetary policy, a rise in interest rates and therefore in households and firms interest payment decrease firms cash flows, which causes deterioration in their balance sheets. As a result, adverse selection and moral hazard problem become more severe in lending and economic activity. This is an additional reason why sharp increase in interest rates can be an important factor leading to financial crises.

Negative shots at bank can take several forms. We have already seen how increase in interest rates, stock market crash and anticipated decline in inflation (for developed countries ) or an unanticipated depreciation or devaluation (for developing countries with debt denominated in foreign currencies) can cause a deterioration in non financial firms balance sheets and make it less likely that they can pay back their loans. Thus these factors can help precipitate sharp increase in loan losses which increase the probability of bank insolvency Greenspan [14].

Roubini [15] blamed the political leaders who facilitated the Global Financial Crisis, surrendering to the "logic" of the unregulated market and stated that United States had broken from a fiscal stand point. The trillions of dollar in excess expenditures as planned by the policy makers would inevitably require massive borrowing from foreign countries who themselves are in need of their own stimulus deficit spending. The only way the US will be able to attract foreign credit in this context is through much higher interest rates.

This will adversely affect private borrowing, investment and ultimately defeat the purpose of stimulus spending. The other alternative is to simply print money, and produce the inflationary hell that now exists in Nigeria. The last panel to work on the Nigerian Capital market was the 1996, Panel on the Review of the Nigerian Capital market (Odife Panel). The panel, like the other three before it, recommended the establishment of more stock exchanges in addition to the Nigerian Stock Exchange. In direct response to the threat of monopoly, the Odife Panel recommended a multi-exchange format to engender competition and more rapid development. It went further to recommend a New National Stock Exchange with on line trading facilities, giving simultaneous and equal access to trading to all Nigerians.

Essentially, the level of national economic development and the extent to which most economic activities can effectively rely on the safety of capital market are major indicators of a healthy balance between a sound financial system and macro economic stability Ude & Shaibu [16]. It is in the light of these assumptions that the capital market reformed several roles and functions.

Poor investment education has a major part to play in this behavior. However, the situation remains a circular one: investors are not parting with their stockholding because of their philosophy of buying for keeps. This results in few stocks in the market float and
agencies shallowness in the market Osaze [17]. Besides, with so few securities in the market, investors find it difficult to replenish their portfolios if they sell, since few are parting with their holdings.

Relative strength analysis, levy [18] suggests that some individual stock or group of stocks have relative strengths, that their prices consistently rise in a bull market relatively faster than other stocks and also fall faster in a bear market, hence their high risks. These stocks can be identified by their high rates of return or by their higher prices relative to the industry’s market average. When identified, possible profits can be earned from relative strength ranking of stocks. Example, Nestle Shares can so affect the Stock Market.

THE STOCK MARKET

The stock market is the market in which shares of publicly held companies are issued and traded either through exchanges or over the counter. It is also known as equity market. The stock market is one of the most vital components of a free market economy, as it provides companies with access to capital in exchange for giving investors a slice of ownership in the company. The stock market makes it possible to grow small initial sums of money into large ones, and to become wealthy without taking the risk of starting a business or making sacrifices that often accompany a high paying career, Kazanjian [19] The stock market makes investors participate in the financial achievements of the companies whose shares they hold. When companies are profitable, stock market investors make money through the dividends the companies’ payout and by selling appreciated stocks at a profit called a capital gain. The downside is that investors can lose money if the companies whose stocks they hold lose value, and the investor sells the stock at a loss. The stock market can be divided into two main segments; the primary market and the secondary market. The primary market is where new issues or shares are first sold through Initial Public Offer (IPO) while secondary market is the market for trading on securities earlier issued in the primary market.

METHODOLOGY

Method of data collection

The population of this study consists of all listed companies on Nigerian Stock Exchange. Secondary source of data collection was adopted in the study. Data was sourced from the Annual Reports of Nigerian Stock Exchange (N. S. E. Fact Book).

This study focused on the Nigerian Stock Exchange with particular interest on market capitalization, value of shares traded, volume of shares traded, It covers a ten year period spanning from (2004-2013).

Method of data analysis

The descriptive method of data analysis will be used to analyze data to determine their mean, standard deviation, SEM, etc.

The data for this study will be analyzed, using Kruskal-Wallis statistical test to determine the significance of all variables used for this study using AnalyStat Statistical tool.

Hypothesis: Kruskal-Wallis statistical tool was used to validate the hypothesis

Decision rule

We would accept the null hypotheses if the significant value is greater than 0.05 significant level, otherwise, accept the alternative hypothesis.

DATA ANALYSIS AND RESULTS

Analysis on determining whether Global Financial Crisis has Effect on Market Capitalization of the Nigerian Stock Exchange

H1: The Global Financial Crisis has no significant effect on the market capitalization

<table>
<thead>
<tr>
<th>Table-1: Market capitalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.112</td>
</tr>
<tr>
<td>2.9</td>
</tr>
<tr>
<td>5.12</td>
</tr>
<tr>
<td>13.295</td>
</tr>
</tbody>
</table>

Table-2: Data summary table

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>5.8568</td>
<td>8.295</td>
<td>13.52</td>
</tr>
<tr>
<td>SD</td>
<td>5.1198</td>
<td>1.789</td>
<td>4.3209</td>
</tr>
<tr>
<td>SEM</td>
<td>2.5599</td>
<td>0.8945</td>
<td>2.1604</td>
</tr>
<tr>
<td>95% CI of mean</td>
<td>(-2.29) - (-14.0)</td>
<td>(-7.78) - (24.37)</td>
<td>(6.64) - (20.4)</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Researcher 2018

The above table depicts that the market capitalization of Nigerian Stock Exchange attained its highest mean of 8.29 during the crisis period, the standard deviation reached its highest of 5.12 in the Pre-Crisis, while the structural equation model SEM reached its highest of 2.56 during the Pre-Crisis period.

Kruskal-Wallis H test
Statistical significance: false.
P-value = 0.0958
Calculated H Value = 4.6909
Critical Chi sq. Value = 5.9915

From the above analysis, it revealed a Critical Chi-Square value of 5.9915, Calculated H Value of 4.6909 and a P-Value of 0.0958 which is above the 0.05 significant level. This means that Global Financial Crisis has no significant effect on Market Capitalization of the Nigerian Stock Exchange.

H2: The global financial crisis has no significant effect on the value of shares traded on the floor of Nigerian stock exchange.

Table-3: Value of shares traded on the floor of N.S.E.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0.225</td>
<td>2.4</td>
<td>0.797</td>
</tr>
<tr>
<td>0.262</td>
<td>0.685</td>
<td>0.634</td>
</tr>
<tr>
<td>0.470</td>
<td>0.657</td>
<td></td>
</tr>
<tr>
<td>2.10</td>
<td>1.04</td>
<td></td>
</tr>
</tbody>
</table>


The above table shows that the value of shares traded on the floor of the Nigerian Stock Exchange attained its highest mean of 1.54 during the crisis period, the standard deviation reached its highest of 1.21 during the crisis period, while the structural equation model SEM reached its highest of 0.61 during the Crisis period.

Kruskal-Wallis H test
Statistical significance: false.
P-value = 0.2455
Calculated H Value = 2.8091

From the above analysis, it revealed a Critical Chi-Square value of 5.9915, Calculated H Value of 2.8091 and a P-Value of 0.2455 which is above the 0.05 significant level. This means that Global Financial Crisis has no significant effect on the value of shares traded on the floor of Nigerian Stock Exchange.

H3: Global financial crisis has no significant effect on the volume of shares traded on the Nigerian Stock Exchange.
Table-5: Volume of shares traded on the Nigerian Stock Exchange from 2004 - 2013

<table>
<thead>
<tr>
<th></th>
<th>Pre Crisis (N Billion)</th>
<th>During Crisis (N Billion)</th>
<th>Post Crisis (N Billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2007</td>
<td>19.2</td>
<td>193.14</td>
<td>93.34</td>
</tr>
<tr>
<td>2008-2009</td>
<td>26.7</td>
<td>102.85</td>
<td>89.58</td>
</tr>
<tr>
<td>2010-2013</td>
<td>36.7</td>
<td>89.15</td>
<td></td>
</tr>
<tr>
<td>2010-2013</td>
<td>138.1</td>
<td>106.54</td>
<td></td>
</tr>
</tbody>
</table>


Table-6: Data summary table

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>55.175</td>
<td>147.995</td>
<td>94.6525</td>
</tr>
<tr>
<td>SD</td>
<td>55.7462</td>
<td>63.8447</td>
<td>8.1454</td>
</tr>
<tr>
<td>SEM</td>
<td>27.8731</td>
<td>31.9223</td>
<td>4.0727</td>
</tr>
<tr>
<td>95% CI of mean</td>
<td>(-33.53) - (148.00)</td>
<td>(-425.63) - (1721.62)</td>
<td>(81.69) - (107.61)</td>
</tr>
<tr>
<td>N</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Researcher 2018

The above table shows that the volume of shares traded on the floor of the Nigerian Stock Exchange attained its highest mean of 148.00 during the crisis period, the standard deviation reached its highest of 63.84 during the crisis period, while the structural equation model SEM reached its highest of 31.92 during the Crisis period.

Kruskal-Wallis H test
Statistical significance: false.
P-value = 0.1894
Calculated H Value = 3.3273
Critical Chi sq. Value = 5.9915

From the above analysis, it revealed a Critical Chi-Square value of 5.9915, Calculated H Value of 3.3273 and a P-Value of 0.1894 which is above the 0.05 significant level. This means that Global Financial Crisis has no significant effect on the volume of shares traded on the floor of Nigerian Stock Exchange.

CONCLUSION

From the above investigation, the result of the study which assessed the three stated crisis periods (Pre-Crisis, During-Crisis and Post-Crisis) found that global financial crisis has no significant effect on the market capitalization, value of shares traded and volume of shares traded on the Nigerian Stock Exchange. It was also observed that the highest volume of shares traded on the floor of N. S.E. in a year was occurred during the global financial crisis.

If global financial crisis has no significant effect on the three tested factors, then this creates room for further study on global financial crisis to determines areas or factors it affects in an economy.

REFERENCES