An Empirical Analysis of the Effect of Stock Market Crisis on Economic Growth: The Nigerian Case

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Abstract: Stock market crashes are social phenomena where external economic events combine with crowd behavior and psychology in a positive feedback loop where selling by some market participants drives more market participants to sell. This study empirically established the relationship between stock market crisis and Nigeria's economic growth and also showed the relationship between stock market price crash and the crisis itself. In this light, this paper examined the interactive influence of movements in the major indicators of the performance of the Nigerian Stock Exchange Market such as the Market Capitalization (MK), All Share Index (ASI), Number of Deals (NOD), Volume and Value of Stock (VV), Total Number of New Issues (TNI) and Inflation (INFR) on the Nigerian Gross Domestic Product (GDP) using data from 1985-2009. To achieve the two objectives stated above, the Ordinary Least Square (OLS) method was employed. To correct for the OLS result biasness the log was applied to GDP and MK and also AR(1) was introduced to the first model. The result shows that stock market crisis has a highly significant effect on Nigeria's economic growth. The result also shows a significant relationship between stock market price crash and the market crisis itself. It is therefore recommended that in the face of the ongoing crisis in the global stock market, the Nigerian stock market authorities should aim at making the market meet a world class standard. Also, all the sectors of the economy should act in a collaborative manner such that optimum benefits can be realized from their economic activities in the Nigeria market even in the hub of global crisis.

Keywords: stock market crashes; value of stock; Nigerian stock exchange market

JEL Classification: C 52; G 11; G 32

1. Introduction

The stock market is an organized market where brokers meet to buy and sell stocks and shares. The stock market or equity or capital market is a public market (a loose network of economic transactions, not a physical facility or discrete entity) for the trading of company stock and derivatives at an agreed price, there are securities listed on a stock exchange as well as those only traded privately. The stock market

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is the aspect of the financial system which mobilizes and channels long term funds for economic growth. According to the Stock Market Investing Guide (2010), the irony of stock market is that companies live and die by their stock price, yet for the most part they don't actively participate in investing and in trading their stocks within the market.

There are factors that can affect the happenings in the stock market namely, global events, 'interest rates and inflation', human nature, company news and trends. Firstly, the major global events throughout the world can have an impact on stock prices and political unrest influence investor's confidence, which will have impact on what they do with their money. Changes in value of foreign currency will also affect foreign market which in turn will affect stock markets in the world. The global financial crisis has impact in various other sectors. The fact that a lot of Nigerian banks have taken foreign facilities to bolster their operations here cannot be discountenanced. These lines will no longer be available as the crisis bites harder. It will mean a drying up of credit for these banks. The banks will therefore be a lot more cautious in terms of businesses to which loans are extended, hence projects with long incubation periods are usually the first to suffer.

Secondly, interest rates and inflation tend to work in tandem. When they rise, investors often become more conservative in their approach. Instead of purchasing high risk, high reward stocks, they shift their focus to safer vehicles such as government-based securities. This portends that if interest rates are high, stock prices generally go down, because if people can make a decent amount of money, by keeping their money in banks, or buying bonds, they feel like they should not take the risk in the stock market. Among the largest forces that affect stock prices are inflation, interest rates, bonds, commodities and currencies. It is a common notion that when inflation rises, market shares and bond prices tend to fall because the purchasing power of payments is eroded. While Nigeria's inflation has largely trended within the double-digits band, the CBN is actively seeking to bring it down to single digits through its inflation targeting mechanism. And any changes in interest rates will have a definite impact on yields and alter trading patterns. It added that currency risk affects both investors and issuers to varying degrees, while issuers are exposed to the risk of a devaluation of its local currency, investors on the other hand are exposed to the risk of appreciation of the issuer's currency. With this in mind, stock prices should rise with falling interest rates because it becomes cheaper for companies to finance projects and operations that are funded through borrowing. Lower borrowing costs allow higher earnings which increase the perceived value of a stock.

Thirdly, as always, any understanding of markets begins with the familiar human traits of greed and fear along with perceptions of supply, demand, risk and value. The emphasis is on perceptions, where group and individual perceptions usually differ. Investors can be depended upon to seek the largest return for the least

amount of risk. Markets, representing group behavior, can be depended upon to over react to almost any new information. The subsequent price rebound or relaxation makes it appear that initial responses are much to do about nothing. But no, group perceptions simply oscillate between extremes and prices follow. It is clear that the general market, as reflected in the major averages, impacts more than half of a stock's price, while earnings account for most of the rest. However, human beings naturally react to rumors and gossip which have an impact on the stock market. If a rumor spread that a company is experiencing financial difficulty or facing a product recall, investors will quickly unload the company's stock. If a company's stock is suddenly hyped by a so called stock expert, investors will flock to it, and the price will soar.

Generally speaking, crashes usually occur under the following conditions: a prolonged period of rising stock prices and excessive economic optimism, a market where price-earning (P/E) ratio exceed long term averages and an extensive use of margin debt and leverage by market participants. There is no numerically specific definition of stock market crash but the term commonly applies to steep double-digit percentage losses in a stock market index over a period of prices decline. Bear markets are periods of declining stock market prices that are measured in months or years. While crashes are often associated with bear markets, they do not necessarily go hand in hand. Stock market crash can be catastrophic. In the history of stock trading, stock market crash has been a repetitive issue. A sudden drastic fall of stock prices not only creates agonies and anxieties among the investors and financial analysts but also it largely affects diverse economic factors. A prolonged tenure of rise in stock price can suddenly lead to a stock market crash, this happens after reaching the economic optimism. Psychology of the shareholders changes and a massive change in the crowd behavior become prominent during a market crash. A stock market boom can come to an end with a market crash. So, it is prudent to keep an eye on the market trends.

In Nigeria, the stock market, before the recent crash happened to be one of the most profitable investment havens in the economy (George, 2008). It accumulated about ₦12.6 trillion (about $84 billion) around first quarter of 2008. Public and private sectors trooped to the market to raise fund. The global economic meltdown and other peculiarities have seen the capitalization eroded about ₦5.14 trillion ($36 billion) in the fourth quarter of 2009 (Aluko, 2008). The crash saw share indices cascading from 31450.78 to 23206.23 points for the same period. This crash has led to the 'opening of cans and worms and black boxes'. The negative complexion of the global economic downturn and other intrinsic factors on the capital market and the attendant effects on banks and other market players would have been curtailed if there had been discipline, ethical practices and diversification of the market. From the foregoing, the main research question of this study is stated thus: What are the general effects of the stock market crisis on Nigeria's economy? It is

the quest of providing an answer to the question posed above and giving further clarification with empirical evidence on the issue that primarily necessitated this study. Thus, the paper is focused on providing empirical findings on the relationship between stock market crisis and Nigeria's economic growth and the effect of decline in stock market prices on transactions in the stock market. This paper has five sections. Following this introductory section is the literature review in section 2. The theoretical foundation, empirical model and estimation technique are provided in section 3. Section 4 covers the results from the estimation process and discussion, while the last section is the conclusion.

2. Literature Review

A stock market crash is a sudden dramatic decline of stock prices across a significant cross-section of a stock market, resulting in a significant loss of paper wealth. Paper wealth means wealth as measured by monetary value as reflected in the price of assets. In the concept of stock market, an investor owns shares in a company and the worth or value of that investment increases, then the paper wealth of that investor is said to have increased. Crashes are driven by panic as much as underlining economic factors. They often follow stock market bubbles. Stock market crashes are social phenomena where external economic events combine with crowd behavior and psychology in a positive feedback loop where selling by some market participants drives more market participants to sell.

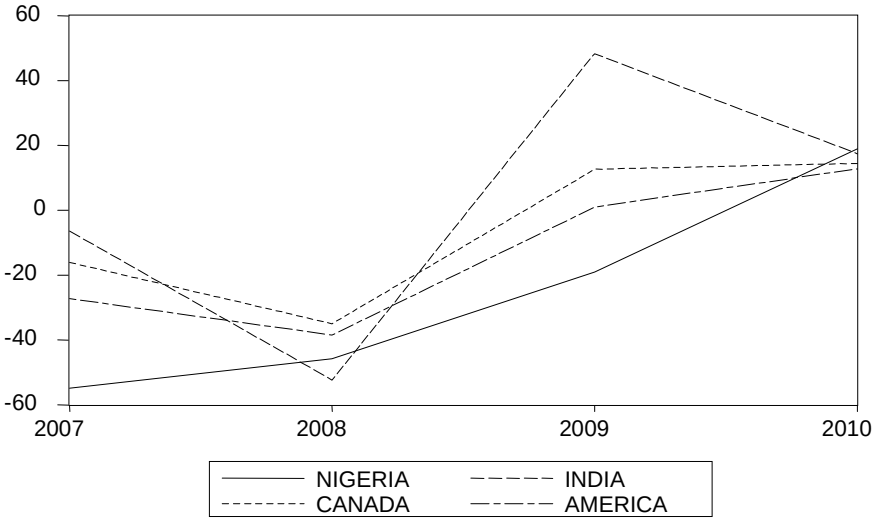
The recent global economic crisis with its roots in banking i.e. the sub-prime mortgage crisis, which commenced in the United States in 2007, soon resonated in other sectors of its financial system, and the economy, at large. It spread quickly to the developed economies in Europe, including the United Kingdom, and Asia with Japan becoming well affected. The emerging economies were not isolated. A transmission channel of the Global financial crisis, which has been referred to as the "Globalized Synchronizes Slowdown" is the stock market. In the case of the Nigerian stock market, following initial relative insulation, the speed of contagion and response was comparatively slower. However, the effects began to manifest in the first quarter of 2008. All markets indicators both around the world stock market not leaving out Nigeria's stock market commenced a downward spiral, and had a negative market growth which ensued (Sere-Ejembi, 2008.)

According to Olisaemeka, (2009), The meltdown of the Nigerian Stock Market was characterized by the crash of the market capitalization from a record of ₦ 13.5million in early 2008 to less than ₦ 4.5trillion in the corresponding period of 2009. This has manifested into the following cost and consequences: first, there was Loss of confidence in the Nigerian economy , as many investors prefer to convert their naira to foreign currencies, especially the dollar and hold them through their domiciliary account. This has in part led to the worsening exchange

rate against the naira currency. Secondly, there were mega losses by investors in the stock market whose total losses were not below two third of their investment before the meltdown , In other words, investors now have less than one third of the value of their investments before the free for all fall. Also, there was overexposure of investors and stock broking firms to banks. The market meltdown has also led to credit crunch in the economy as banks do not have enough to lend to the productive sector leading to high interest rate. Given that, interest rate cost of fund to manufacturers is a very significant component of cost of production; this translates to higher prices of goods and services, leading to inflation.

2.1 World Stock Market Review of 2010

The analysis made by Peninsula Asset management and Investment Company Limited shows the year 2010 returns of major stock exchange (in local currencies) for equity markets around the world. Summarily, the average country saw a major equity market index gain of 15.33% in 2010. Sri Lanka stock market gained the most at 96.01%, while Bermuda decline the most at -97.87%. Six other countries along with Sri Lanka gained more than 50% in 2010 namely Bangladesh (82.79%), Estonia (72.62%), Ukraine (70.20%), Peru (64.99%), Lithuania (56.49%) and Argentina (51.83%). Looking at just the G-7 countries, Germany did the best at 16.06%, followed by Canada 14.45%, US 12.87% and the UK 9%. The three other G-7 countries (France, Japan and Italy) all declined in the year. Of the BRICs, Russia gained the most at 22.70%, followed by India 17.43%, Brazil 1.04% and China -14.31%. The analysis further shows that Kenya was the best performing in Africa for 2010 financial year with a gain of 36.5%, followed by Ghana with a gain of 35.9%, Morocco 22.1%, Tunisia came forth with a gain of 19.1% while Nigeria was the fifth performing market in Africa with a gain of 18.9%.



This graph was constructed using the E-views software package and the figures for 2007-2010 for the Nigerian market, and figures gotten from world stock markets.

Note: The graph above shows global stock market performance four countries from when the global financial crisis started. This explains that in year 2007, Nigeria, US, Canada and India's stock market made a loss of 54.84%, 27.26%, 16.11%, and 6.44% respectively. In 2008, they also made a loss of 45.77%, 38.49%, 35.03%, and 52.45% respectively. In 2009, Nigeria Stock Market made a loss of 19.00% while US, Canada and India made a gain of 0.96%, 12.62%, 48.25% respectively. In 2010, the stock market of these four countries made a gain of 18.93%, 12,78%, 14.45%and 17.43% which indicates for all active stock markets that activities in the Global Stock market has improved.

3. Theoretical Foundation and Model Formulation

3.1 Theoretical Foundation of Stock Markets

3.1.1 Efficient Market Theory and the Stock Market Crisis

Efficient market hypothesis is a theory that suggests that it is not possible to beat the market because other reason that stock market efficiency propels existing share prices to assimilate every time and display all the appropriate data. This means that the stocks are always traded at their fair values on stock exchanges and so it is not possible for the investors to either buy undervalued stocks or sell stock prices at a higher value.

According to Grantham (2011), "the incredibly inaccurate efficient market theory caused a lethally dangerous combination of asset bubbles, lax controls, pernicious incentives and wickedly complicated instruments that led to our current plight". The EMH originally put forth by Fama (1970) states that the prices of securities reflect all known information that impacts their value. There are many definitions of EMH depending on the amount of information assumed, example, whether it is past prices, publicly available information, inside information etc. but no matter what definition is used, the hypothesis does not claim that the market price is always right. On the contrary, EMH implies that the prices in the market are mostly 'wrong in the sense if we were given all present and future information, the true rational price would always differ from the current market price'. Nevertheless, the EMH does imply that at any given moment, it is not easily determined whether the market prices are too high or too low. In other words, there are good economic reasons why prices are where they are, despite the fact that subsequent history may show these prices are terribly wrong. Whether the EMH is true or not, does not excuse the CEOs of the failed financial firms or the regulators for failing to that the risks that subprime mortgage-backed securities posed to the financial stability of the economy (Siegel, 2009).

3.1.2 Efficient Market Hypothesis and the Market

Some wrongly describe the EMH as meaning that the market prices are always right since it incorporates the forces of knowledgeable actors or the "wisdom of crowds", but if that were the case, the EMH would have been dismissed as false as soon as it was put forth as a theory of markets. There have been hundreds of bull and bear markets throughout history, and prices of securities at the bottom and top of these markets have been demonstrably wrong on the basis of future information. In fact, the internet and technology bubble of the 1999-2000 was a far more persuasive episode of "incorrect prices than the financial crisis"

Speculative bubbles are an obvious anomaly, in that the market often appears to be driven by buyers operating on irrational exuberance, who take little notice of underlying value. These bubbles are typically followed by overreaction of frantic selling, allowing shrewd investors to buy stocks at bargain prices. Rational investors have difficulty, profiting by shorting irrational bubbles because as John Keynes commented, "market can remain irrational far longer than you or I can remain solvent". Sudden market crashes as happened on 'Black Monday' in 1987 are mysterious from the perspective of efficient markets, but allowed as a rare statistical event under the weak-form of efficient market hypothesis (Siegel,2009).

3.1.3 Wealth Effect and Stock Market Crisis

As cited in the website (www.oppapers.com), The 'Wealth effect' refers to the propensity of people to spend more if they have more assets. The premise is that when the value of equities rise so does our wealth and disposable income, thus we feel more comfortable about spending. The wealth effect has helped power the U.S economy over 1999 and part of 2000, but what happens to the economy if the market tanks? The Federal Reserve has reported that every $1billion increase in the value of equities, Americans will spend an additional $40million a year. The wealth effect has become a growing concern because more and more people are investing; furthermore, the Federal Reserve has very little direct control over stock prices. When it comes to spending money, consumers take all their financial resources into consideration, from their income to their home. When an asset surges in value for a sustained period of time, such as the stock market in the 1990s, people feel flush and are willing to spend some additional money, perhaps by buying a fancy car or by taking a more expensive vacation. A good number of Wall Street analysts blame the wealth effect for today's negative savings rate.

The wealth effect from fluctuations in stock prices is another argument for why stock prices may lead the economy activity. Since, fluctuations in stock prices have a direct effect on aggregate spending; the economic can be predicted from the stock market. When the stock market is rising, investors are wealthier and spend more. As a result, the economy expands. On the other hand, if stock prices are declining, investors are less wealthy and spend less, these results in slow economic growth. Another possible explanation for why stock prices force economic activity is that the stock market is forward-looking. If investors are truly forward-looking, then stock prices reflect expectation about future economic activity. If a recession is anticipated, for e.g. then stock prices reflect these by reducing in prices. Likewise, in Nigeria and in relation to the crisis in the stock market, this crisis has devalued the shares and thus leading to a decrease in the wealth effect. Investors wealth effect has decreased because of the devaluation in shares, thus, investors in Nigeria prefer now to invest their money in real estate properties and oil industries rather than in shares due to decline in prices.

3.2 Model Specification and Estimation Technique

The main aim of this study was to examine the effect of the stock market crisis in the growth process of Nigerian economy. Thus, the model assumes an underlying relationship between some macroeconomic variables that can influence the economic growth of a nation measured as Gross Domestic Product (GDP). With regards to the merits of the Ordinary Least Square (OLS) modeling method, the multiple linear regression analysis was used with the dependent variable as Gross Domestic Product while the explanatory variables were Market Capitalization, All

Share Index, Volume and Value of Stocks, Number of Deals, and Inflation Rate. This paper therefore presents a model below relating *GDP* to some other macroeconomic variables.

$$GDP = f(MK, ASI, VV, NOD, INFR, U) \quad (1)$$

The explicit form of Equation 1 is represented as follows:

$$GDP = \beta_0 + \beta_1 MC + \beta_2 ASI + \beta_3 VV + \beta_4 NOD + + \beta_5 INFR + \mu_t \quad (2)$$

Where:

GDP= Gross domestic product

MK= Market capitalization

ASI= All Share index

VV= Volume and value of stocks

NOD= Number of deals

INFR= Inflation rate

μ_t= Error term

β_0= Constant term

β_1, β_2, β_3, β_4 and β_5 are regression coefficients.

To test the existence of a significant relationship among the variables expressed in equation 2, the null and alternative hypotheses are stated as follows:

H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$

(Stock market crisis does not have a significant effect on Nigeria's economic growth).

H_1: $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq 0$

(Stock market crisis has a significant effect on Nigeria's economic growth).

On the basis of a priori specification;

$\beta GDP/\beta MK > 0$: There is a direct relationship between GDP and Market capitalization. A growth in MK is indicative of greater financial interest of the populace in the real sector, which will serve to boost GDP.

$\beta GDP/\beta ASI > 0$: There is a direct relationship between GDP and All share index. When the level of activities in the stock market is high, people will rather invest more in the real sector and as a result increases the GDP.

$\beta GDP/\beta INFR < 0$: There is a negative relationship between GDP and inflation rate; inflation is the general increase in the prices of goods so when inflation rate is high,

goods will become expensive, likewise stocks, people will buy less and this indirectly reduces the GDP.

βGDP/βVV>0: There is a direct relationship between GDP and the volume of value of stocks. When there is a large volume of stocks in the market and at a cheaper price with high returns, people will rush and buy these stocks and also the high value in stocks will make investors buy more, so this will affect the GDP positively.

βGDP/βNOD>0: There is a positive relationship. When the number of profitable deals in the real sector is high, it means people are buying and this will make d GDP positive.

4. Estimation and Discussion of Results

The paper employed the use of econometric tools in the analyses of the variables shown in the model. The data used in the estimation for the paper were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin for the period 1985 – 2009. The E-views package was used in the estimation process and results are presented in tables. The variables were taken in their log form to bring them to a comparative level.

4.1 Empirical Results

First running the regression using these variables at levels gave result that was not BLUE (best, Linear, Unbiased Estimator) and could not be relied upon. Hence, the variables are logged to bring them to comparative level. After logging the variables, there was presence of autocorrelation. To correct for this, the AR (1) is introduced. The result is presented in table 1.

Table 1. Regression (OLS) Result for variables for period 1985 - 2009

Dependent variable logGdp			
Independent Var.	Coefficient	T-stat	Probability
CONSTANT	12.12804	(64.52303)	0.00000
LOGMK	0.113900	(3.406922)***	0.0034
ASI	-2.16	(3.379544)***	0.0036
NOD	-1.16	(-2.571535)**	0.0198
VV	9.23	(3.022668)***	0.0077
INFR	-0.001027	(-1.375431)	0.1869
	R^2=0.983, Adjusted R^2= 0.977	F-stat=16.4625, Prob(F-stat)=0.0000	DurbinWatson=4.62

***, ** = 1% and 5% level of significance respectively, GDP = gross domestic product, MK = market capitalization, ASI = all share index (12 months average),

NOD = Number of deals, VV= Volume and value of shares, and INFR = inflation rate,

4.2. Discussion of Results

There is a positive relationship between market capitalization and the Gross Domestic Product of Nigeria. A unit increase in the market capitalization results in an increase in Gross Domestic Product by 11.39%. The implication of this is that the economy responds favorably to measures taken to increase the total market value of companies quoted on the Nigerian stock exchange. The market capitalization shows the level of capitalization on the stock exchange and this is the investors' perception of the market, it is affected among others by trading volume and the total value of amount traded on the stock market. There has been a rapid rise in the amount of MK over the years and this indicates that the populace has grown interests in the securities listed on the stock market, so more securities were sold which means more profit for Nigerian stock exchange, firms that sold these securities and for Nigeria as a country and this led to the positive effect on the GDP of Nigeria. Also, the overall market size is positively correlated with the ability to mobilize capital and diversify risk on economy-wide basis.

There is a negative relationship between all share index and Gross domestic product of Nigeria. This implies that the level of activity whether productive or non-productive on the stock exchange does not affect GDP because the prices of stocks moves in tandem with market capitalization and how investors demand for stocks, although looking at this result using the T-stat, we say it is significant, this can be so because ASI does not directly relate to GDP but it directly relates to Mk (which directly relates to GDP). The Nigerian stock exchange uses all share index that considers an aggregate of the market capitalization of all equities listed on the market and traded.

There is a negative relationship between number of deals in the stock market and Gross domestic growth of Nigeria. A 100% increase in NOD will reduce the GDP by 116%, and because of this gap, it won't be wise for the Nigerian government to use NOD to measure her performance and her economic growth due to the present cause of the crisis in the stock market. This implies that the number of deals, each listed company made in general on the Nigerian stock exchange reduced because of decrease in prices of the shares listed, low return on these shares etc and there was not enough profit to be added to the national income of Nigeria. So whether the number of transactions that have taken place in the stock market has increased or not, it will not affect GDP rather it will affect the ASI and MK.

There is a positive relationship between volume and value of shares and the Gross domestic product of Nigeria. This implies that the economy responds favorably to

the measures taken to increase the transactions in the stock market , it also implies that value of shares are high and it will add to the profit of the stock market which adds to the economic income of Nigeria. We can see that the volume and value of shares compared to Gross domestic products have increased over the years. This also means that the government can use and rely on the total transactions because it is high and productive at the Nigerian stock market to measure her performance and economic growth in this present era of the crisis at the stock market.

There is a negative relationship between inflation rate and Gross domestic product of Nigeria. When inflation rate is high, the general prices of goods and services will increase and this will make people buy fewer goods with more money. This thereby reduces the amount they can safe because they would want to buy their basic needs. Moreover, when people don't have enough money to provide for their basic needs, they will not bother investing the money they get, so this as a result will affect the buying of securities at the stock market thereby reducing it. An increase in demand will increase the price of a share and also a decrease in demand will lower the price of a share. With high inflation rate, the prices of shares tend to fall. When securities are quoted with their prices higher, it will attract investors, but when prices of securities fall, securities will not be demanded, according to investors, the returns on this securities will be low and this will make the profit of organizations reduce because the prices are low, and when this is so, the income of the country will reduce, so inflation rate has no impact on GDP. This implies that when inflation rises, market share prices tend to fall because the purchasing power of payments is eroded, so also, the number of investments in the stock market reduces which in the long run will reduce income of Nigeria on the part of the stock market contribution to her economic growth. The government cannot rely on rising inflation rate to measure her performance.

The Durbin-Watson statistics is used to test for the presence of autocorrelation in the variables. D.W calculated is equal to 4.62, which is strong enough. The F-statistics is used as measure for the overall significance of the model. Since the F-statistics is significant, the null hypothesis which states that stock market crisis do not have a significant effect on Nigeria's economic growth is rejected and the alternative hypothesis accepted. We therefore conclude from our regression analysis that the stock market crisis has significant effect on Nigeria's economic growth.

5. Conclusion

History has shown that prices of shares and other assets is an important part of the dynamics of economic activity and can influence or be an indicator of social mood. An economy where the stock market is on the rise is considered to be an up- and coming economy. The smooth functioning of the activities in any stock market is expected to facilitate economic growth, result in lower costs and reduce enterprise risk and promotes the production of goods and services as well as employment. This expectation motivated this paper. The paper employed econometric tools to analyze time series data sourced from CBN Statistical Bulletin (1985 – 2009) after reviewing the theoretical background on stock market effectiveness and crisis.

The results from the econometric analyses show that market capitalization, volume and value of shares in the Nigerian stock exchange has a direct relationship with gross domestic product. So with this, the Nigerian government can rely on market capitalization, volume and value of shares to promote her economic growth. Also, all share index, number of deals and inflation rate has a negative impact on the general national income of Nigeria. These may have been caused by erosion in the purchasing power of investors due to the high inflation rates, and loss of confidence by investors who were disappointed about the decrease in share prices. From the results, we can infer that stock market crisis has a significant effect on Nigeria's economic growth. This is indicative that its side effect on Nigeria's economy is negative but there could be a way out depending on the way Nigerian investors utilize the available economic opportunities and how the regulators of the Nigerian stock exchange make beneficial decisions in this present state of the crisis. This paper therefore recommends that the NSE should put in place newly-redesigned processes to ensure that market operators conform to minimum technology standards as part of their registration. Existing operators must comply within specified time period. Equally important is access to timely pricing information and analytics. To this end, the NSE should improve its current software to ensure that its analytics/systems provide timely and transparent pricing information to all stakeholders to increase transactions at the NSE. The stock market regulatory authorities need to speedily stimulate, revitalize and boost local investor confidence. This will deepen the market and as a result give a solid ground to market capitalization, all share index, and volume and value of shares. Moreso, the Security and Exchange Commission should explore the framework for the operation of inter-dealer brokers to facilitate price discovery by market participants and investors as a means of increasing market depth and liquidity.

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