X - RAYING THE IMPACT OF DOMESTIC AND GLOBAL FACTORS ON STOCK RETURN VOLATILITY IN THE NIGERIAN STOCK MARKET

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Abstract:

The study evaluated the impact of domestic and global macroeconomic variables in explaining the movement of returns in the Nigerian stock market.

It is an attempt to contribute to the unending search for relationship between stock market and macroeconomic variables on one hand and their volatilities. GARCH and VAR models were utilized to assess the impact of consumer price index, exchange rate, interest rate, money supply (M1 AND M2), industrial production index, federal funds rate and 6-month LIBOR on stock prices in Nigerian stock market. The empirical results revealed that the macroeconomic variables are significant in explaining movements in the stock prices and its volatility. Specifically it was confirmed that both the global and domestic factors are important in explaining the relationship between the stock returns and volatility implying that the Nigerian stock market is partially integrated debunking the controversy about which is more relevance-global or domestic factors.

Keywords: Macroeconomic Variables, Garch, Var, Stock Market

Introduction

The controversies surrounding the argument between the domestic and global macroeconomic variables as regards which impact stock returns more prompted this research. Economists and policy makers have been concerned with the causes of stock market return volatility. Despite the existence of a large and growing literature, scholars have continued the search for variables that affect stock returns and their volatility, because theoretical and empirical work on the subject is yet to produce a consensus. The growing globalization of financial markets and adoption of more flexible monetary and exchange regimes may explain the extensive search on the linkages between stock market behaviour and macroeconomic variables. Also the recent global financial turmoil must have been an added impetus because it is assumed that global transmission of stock prices can have an impact in the real economy even in remote countries. The importance of the stock market in any economy can be seen in its vital role in assessing economic conditions. The stock market basically serves a vital role of mobilizing individual resources and channelling same to investors. Stock markets are conceived to be development- oriented. They enable firms to acquire the much needed capital quickly, and by so doing helps in facilitating capital allocation, investment, and growth. It also assists in reducing investment risks due to the ease with which equities are traded, and play crucial role in helping to determine the level of economic activities in most economies (Yartey and Adjasi, (2007). Financial markets in most of the developing counties have grown rapidly throughout the last decades due to various factors such as deregulation, globalization and advances in information technology. During this period, financial markets all over the world have also witnessed growing integration among themselves. Based on this, the relevance of market integration has come to form the underlying focus in studies investigating the relationship between macroeconomic variables and stock returns. Market integration refers to a situation where there are no impediments such as legal restrictions, transaction costs, taxes and tariffs against the trade in foreign assets or the mobility of portfolio equity flows. Several previous studies have argued that the presence of strong economic ties and policy coordination among respective countries can indirectly link their stock prices over time. Besides that, development of stock markets enhances the degree of integration among them (Masih and Masih, 2002 and Choudhry et al., 2007). Integration among stock markets has grasped considerable attention of both the policy-makers and finance specialists. Stock market integration is vital for several reasons:

- it provides further opportunities in risk sharing among integrated markets.
- it contributes to financial stability by enhancing competition and efficiency in allocation of resources.
- it reduces the cost of capital and price volatility among integrated markets (Tai, 2007).
- it induces market discipline and encourages the adoption of new technology and payment systems to achieve cost effective intermediation services.
- it fosters country's financial sector to emerge as a regional or an international financial center.
- it plays important role in promoting domestic savings, investment and could positively affect total factor productivity and economic growth (Levine, 2001).

In contradiction, some studies argue that stock market integration could pose a major risk of contagion which was evident in the case of the Asian crisis of 1997 (Tai, 2007).

There are two trends in the literature concerning the level of market integration paradigm. The two contrasting/ diverging points of view concerning the level of market integration are the "generally integrated market" advocates and the "complete market segmentation" school of thought. The basis of the argument is deciding which is more relevant –the country or global factors in impacting stock market returns. While the "generally integrated market" advocates assert that since markets are generally more integrated, global risk factors are more important in explaining returns volatility than domestic factors. Contrarily, proponents of complete market segmentation lay emphasis on the overriding role of domestic macroeconomic variables in the study of return volatility. The advocates of these two schools of thought have focused their studies on developed countries. The few empirical studies carried out on the level of integration on developing/emerging markets revealed a divergent view from these two schools thereby leading to the emergence of a third theoretical paradigm. This new paradigm rather provided evidence that stocks markets are only partially integrated which was evident in the case of the Asian crisis of 1997 (Tai, 2007). It then quickly becomes apparent that these markets are neither perfectly segmented nor perfectly integrated. Therefore any attempt to inquire about the role of macro-economic variables on these markets based on the two extreme diverging paradigms would produce non-decisive results. Thus a third research strand requires that such markets be examined with both domestic and global factors The study therefore considers the relevance of macro-economic variables on stock market returns based on partial integration context. In effect, this study aims at identifying the effects of both domestic and global factors on Nigeria

- a developing country. As Ross (1989) pinioned, volatility is directly linked to the rate of information flow, where positive and negative macro-economic stocks may be transmitted differently. Literature indicates that where volatility clustering is persistent, this may signify that the market is inefficient and may leave room for possibility of arbitrage. The significance of this study lies on its importance and applicability for risk management and portfolio diversification strategies by both domestic and foreign investors.

The rest of the paper is organized as follows. Section II reviews the literature on stock market integration. Section I11 describes the data employed with the methodology used for the empirical analysis. Empirical results are presented in section 1V. Finally, Section V presents the Summary and concludes.

Literature Review

A significant number of researches have been conducted on the issue of stock market integration. In this regard, Claessens (1993) also discusses the concept of markets' integration and explains that integration moves in a reverse direction with diversification. That is, if markets are fully integrated with each other, then the risk premiums will be equal across markets and, hence, there will be no benefit from diversification. He also explains that market integration is closely related to the level of barriers in the market considered, so the higher the barriers, the lower the market integration and the higher the benefit of diversification. From this argument, it may be inferred that the higher diversification benefit to international portfolios, which is attributed to the low correlation between emerging markets and mature markets, stems from the higher barriers to the free flow of funds and may explain the recent increase in correlation between the performance of emerging markets and mature markets. That is, with the continuing lowering of barriers in emerging markets, markets are getting closer to full integration with developed markets and, hence, the diversification benefit from investing in those markets diminishes. Other researchers such as Yang et al. (2003), Narayan et al. (2004), Febrian and Herwany (2007) and Choudhry et al. (2007) use different cointegration approaches to measure stock market integration among several Asian markets. They reported mixed results regarding the existence of integration among these markets and linkages between these markets and developed markets such as the US and Japan.

Studies that have investigated the role of global factors on stock returns include Ferson and Harvey, 1994; Dumas and Solnim 1995; and Harvey, 1995. In the same vein, some researchers have also documented evidence about the role of domestic macro-economic

variables; for instance Chen et al 1986; Fama 1990; Jorion 1991; Ely and Robinson, 1997. Popular variables considered in the integrated market approach include changes in expected inflation, real interest rates, industrial production and term structure risk while the segmented proponents employed factors like interest rate, industrial production index, inflation etc. Testing for the relationship between returns in the emerging markets, Harvey (1995) utilized a set of global variables such as world GDP, world oil prices and trade weighted exchange rate. Results of his study suggests that standard global asset pricing models, which assumes complete integration of capital markets fails to examine the cross section of average returns in emerging markets. Using liberalization dates, Bekaert and Harvey (1997) demonstrated the behaviour of volatility in emerging markets. The study reveals that capital market liberalization often increase the correlation between market returns and the world market but do not drive up market volatility.

Advocates of complete market segmentation, in their analysis emphasized the role of domestic macro-economic variables, for instance, Chen et al 1986; Fama 1990; Jorion 1991; and Ely and Robinson, 1997. These authors conducted studies on the role of domestic macro-economic variables. Studying whether innovations in macro-economic variables affect stock returns, Chen, Roll and Ross (1986) provided evidence that the spread between long and short run interest rates, unexpected and expected inflation, industrial production and the spread between high and low grade bonds systematically affect the stock market returns. Fama (1990) proved that there is a correlation between the U.S stock and its aggregate real activity, while Ely and Robinson (1997) concluded that stocks do maintain the value.

Objectives Of Study:

(a) To determine if each macroeconomic variable is important in explaining the returns in the Nigerian stock market.

(b) To determine if past volatilities in the variables impact on the conditional variance of the equities.

Materials and Methods:

The study utilizes yearly returns on stock index. The year-end closing values of All-Share Index were obtained from the Nigerian Stock Exchange "Factbook" from 1985 to 2010, a period of 26 years. The domestic macroeconomic variables used for the study include the Consumer Price Index (CPI), Exchange Rate (EXR), Interest Rate (INTR), Money Supply

(M1 and M2); while the 6- month LIBOR (LIB) and Federal Funds rate (FFR) are used as global indicators. Data for the global factors are obtained from the web page on online database of Yahoo Finance.

Since the study, in particular, seeks to determine if the mean effects and volatility shocks of these macroeconomic variables are transmitted to the Nigerian Stock market and the persistency if any, the GARCH (1, 1) and Vector Autoregressive (VAR) models shall be used in the study. Moreover, various descriptive statistics like the mean, variance, standard deviation, kurtosis and skewness will be used to assess the distributional properties of the returns.

GARCH (1, 1) model requires that the variables used for the study be stationary. The data was therefore subjected to the Dickey-Fuller 'Unit Root' test for stationarity. The tests of hypotheses are at 5% level of significance. The GARCH (1, 1) model is divided into two parts. The first part is the estimation of an AR(1) model for the mean equation using the dependent variable (Index Returns) together with the conditional variance equation which consists of the squared error and the variance terms only. The equations are given by:

$$\Delta \log(ASI_t) = \beta_o + \beta_1 \Delta \log(ASI_t(-1)) + U_t; \quad t = 1, 2, ..., 26. \tag{1}$$

$$\sigma_t^2 = \alpha_o + \alpha_1 U_{t-1}^2 + \beta \sigma_{t-1}^2 \quad t = 1, 2, ..., 26. \tag{2}$$

The second part consist of the estimation of the AR(1) model together with the predictors (Exchange and Interest Rates, Consumer Price Index, 6-Month LIBOR, Federal Funds Rate and Money Supply) in the conditional mean equation and the conditional variance equation that also contains the same predictors. The equations are given as:

$$\Delta \log(ASI_t) = \delta_o + \delta_1 \Delta \log(ASI_t(-1)) + \delta_2 \Delta \log(M1_t) + \delta_3 \Delta \log(M2_t) + \delta_4 \log(CPI_t) + \delta_5 \Delta(LIB_t) + \delta_6 \Delta(FFR_t) + \delta_7 \Delta(INTR_t) + \delta_8 \Delta(IPI_t) + \delta_9 \Delta(EXR_t) + e_t \quad t = 1, 2, ..., 26. \tag{3}$$

$$\sigma_t^2 = \varphi_o + \varphi_1 e_{t-1}^2 + \phi \sigma_{t-1}^2 + \gamma_1 \Delta \log(M1_t) + \gamma_2 \Delta \log(M2_t) + \gamma_3 \log(CPI_t) + \gamma_4 \Delta(LIB_t) + \gamma_5 \Delta(FFR_t) + \gamma_6 \Delta(INTR_t) + \gamma_7 \Delta(IPI_t) + \gamma_8 \Delta(EXR_t) \quad t = 1, 2, ..., 26 \tag{4}$$

While the VAR model is estimated by:

$$\begin{bmatrix} \Delta\log(ASI_t) \\ \Delta\log(M1_t) \\ \Delta\log(M2_t) \\ \log(CPI_t) \\ \Delta(LIB_t) \\ \Delta(FFR_t) \\ \Delta(INTR_t) \\ \Delta(IPI_t) \\ \Delta(EXR_t) \end{bmatrix} = \begin{bmatrix} \delta_{10} \\ \delta_{20} \\ \delta_{30} \\ \delta_{40} \\ \delta_{50} \\ \delta_{60} \\ \delta_{70} \\ \delta_{80} \\ \delta_{90} \end{bmatrix} + \begin{bmatrix} \beta_{11} & \beta_{12} & \beta_{13} & \beta_{14} & \beta_{15} & \beta_{16} & \beta_{17} & \beta_{18} & \beta_{19} \\ \beta_{21} & \beta_{22} & \beta_{23} & \beta_{24} & \beta_{25} & \beta_{26} & \beta_{27} & \beta_{28} & \beta_{29} \\ \beta_{31} & \beta_{32} & \beta_{33} & \beta_{34} & \beta_{35} & \beta_{36} & \beta_{37} & \beta_{38} & \beta_{39} \\ \beta_{41} & \beta_{42} & \beta_{43} & \beta_{44} & \beta_{45} & \beta_{46} & \beta_{47} & \beta_{48} & \beta_{49} \\ \beta_{51} & \beta_{52} & \beta_{53} & \beta_{54} & \beta_{55} & \beta_{56} & \beta_{57} & \beta_{58} & \beta_{59} \\ \beta_{61} & \beta_{62} & \beta_{63} & \beta_{64} & \beta_{65} & \beta_{66} & \beta_{67} & \beta_{68} & \beta_{69} \\ \beta_{71} & \beta_{72} & \beta_{73} & \beta_{74} & \beta_{75} & \beta_{76} & \beta_{77} & \beta_{78} & \beta_{79} \\ \beta_{81} & \beta_{82} & \beta_{83} & \beta_{84} & \beta_{85} & \beta_{86} & \beta_{87} & \beta_{88} & \beta_{89} \\ \beta_{91} & \beta_{92} & \beta_{93} & \beta_{94} & \beta_{95} & \beta_{96} & \beta_{97} & \beta_{98} & \beta_{99} \end{bmatrix} \begin{bmatrix} \Delta\log(ASI_{t-1}) \\ \Delta\log(M1_{t-1}) \\ \Delta\log(M2_{t-1}) \\ \log(CPI_{t-1}) \\ \Delta(LIB_{t-1}) \\ \Delta(FFR_{t-1}) \\ \Delta(INTR_{t-1}) \\ \Delta(IPI_{t-1}) \\ \Delta(EXR_{t-1}) \end{bmatrix} = \begin{bmatrix} U_{1t} \\ U_{2t} \\ U_{3t} \\ U_{4t} \\ U_{5t} \\ U_{6t} \\ U_{7t} \\ U_{8t} \\ U_{9t} \end{bmatrix}$$

$t = 1, 2, ..., 26.$

Table 1: ADF-Fuller (Stationarity) test for variables

Variables	ADF-statistics	Critical value	Decision rule
ASI	-3.283817 (0.0034)	-3.737853 -2.991878 -2.635542	Stationary at log difference
M1	-4.066552 (0.0005)*	-3.737853 -2.991878 -2.635542	Stationary at log difference
M2	-6.954733 (0.0000)*	-3.737853 -2.991878 -2.635542	Stationary at log difference
CPI	-3.163115 (0.0043)	-3.737853 -2.991878 -2.635542	Stationary at log difference
LIB	-4.297539 (0.0006)*	-3.737853 -2.991878 -2.635542	Stationary at 1st difference
FFR	-4.429519 (0.0004)	-3.737853 -2.991878 -2.635542	Stationary at 1st difference
INTR	-5.866217 (0.0000)*	-3.737853 -2.991878 -2.635542	Stationary at 1st difference
IPI	-5.587462 (0.0000)*	-3.737853 -2.991878 -2.635542	Stationary at 1st difference
EXR	-4.374728 (0.0002)	-3.737853 -2.991878 -2.635542	Stationary at 1st difference

*shows significance at 5%, **

The stationarity test showed that ASI, M1, M2 AND CPI were stationary at their log difference, while LIB, FFR, INTR, IPI and EXR were stationary at their first differences.

Next, the Granger-Causality is performed. In a VAR model, it is usually difficult to see which sets of variables have significant effects on each dependent variable and which do not. In order to address this issue, tests are carried out that restrict all the lags of a particular variable to zero (Brooks, 2008: 297). In this study, such tests will answer such questions as:

(a) Does the first lag of ASI_t explain current $M1_{t?}$

(b) Does the first lag of ASI_t explain current $M2_t$?

(c) Does the first lag of $M1_t$ explain current ASI_t?

(d) Does the first lag of $M1_t$ explain current $M2_{t?}$ etc.

The answers to these questions are usually given by carrying out the Granger-Causaulity tests. The results of the tests gave the following:

1. None of the eight variables granger-cause ASI, M2 and EXR.
2. CPI is granger-caused by ASI, FFR and LIB.
3. FFRis granger-caused by IPI and LIB.
4. INTR is granger-caused by FFR and LIB.
5. M1 is granger-caused by INTR.
6. There is a bi-directional causality between IPI and LIB.

Empirical results.

The estimation results are shown in Tables 1 to 5.

Table 2: Mean effects of the macroeconomic variables on stock returns

	Coefficient	Std. Error	z-statistics
Past returns (ASI (-1)	0.543195*	0.124331	4.368952
Money Supply (M1)	-0.797665	0.572996	-1.392096
Money Supply (M2)	1.608957	0.727209	2.212510
Consumer Price Index (CPI)	-0.067422	0.029859	2.258011
LIBOR (LIB)	-0.621130*	0.145473	-4.269722
Federal Funds Rate (FFR)	0.685122*	0.145741	4.700962
Interest rate (INTR)	-0.020437	0.008470	-2.412979
Industrial Production (IPI)	0.007025*	0.001853	3.791659
Exchange Rate (EXR)	0.002654	0.001893	1.401632
C	0.138202	0.115247	1.199181
R^2	0.695622		

Note : *shows significance at 5% level

Table 2 gives the result of the mean effects of the macroeconomic variables on stock returns. The results indicate that lag return (ASI(-1) is positive and significant in explaining current returns. The money supply (M1) and (M2) are negative and positive respectively but both are insignificant meaning that they do not impact on the returns. The Nigerian stock market therefore does not react to monetary news. This is in agreement with some previous studies which show a contradictory relationship between money supply and stock prices with some reporting positive or negative relationship. For example Errunza and Hogan (1998) indicate that money supply volatility does grange cause return volatility for Germany and France but not for Italy, Netherlands, United Kingdom, Switzerland and Belgium. Consumer price index (CPI) is negative and insignificant. Interest rate (INTR) and Exchange rate (EXR) have negative and positive coefficients respectively and are insignificant. Therefore they are not predicting factors in returns of the stock market. The coefficient of LIBOR is negative but significant while that of the Federal Funds Rate is positive and significant. Implicitly, it shows that the global factors impact the Nigerian stock market positively. This result suggests that the Nigerian stock market is interacting with the global economy. The coefficient of the industrial production is positive and significant. This suggests that the Nigeria stock market responds to real activity news. Nishat and Shaheen (2004) infer that in emerging markets, industrial production is the largest positive determinant of stock prices in Pakistan, as well as

bilateral Granger cause between industrial production and stock prices. The industrial production index is typically used as a proxy for the level of real economic activity. It is theoretically shown that the industrial production increases during economic expansion and decreases during a recession, and thus a change in industrial production would signal a change in economy. The productive capacity of an economy indeed rises during economic growth, which in turn contributes to the ability of firms to generate cash flows. That is why the industrial production would be expected to act beneficially on expected future cash flows, hence a positive relationship between real economy and stock prices exist. Furthermore, the volatility of stock returns increases during economic contractions and decreases during recoveries

Table 3: Conditional Variance Equation

	Coefficient	Std. Error	z-statistics
Money Supply (M1)	-0.017510	0.140587	-0.124546
Money Supply (M2)	-0.017386	0.152890	-0.113718
Consumer Price Index (CPI)	-0.000882	0.006760	-0.130408
LIBOR (LIB)	-0.003663	0.029693	-0.123367
Federal Funds Rate (FFR)	-0.003085	0.030359	-0.101607
Interest rate (INTR)	0.000 732	0.001567	0.046745
Industrial Production (IPI)	-0.000259	0.000676	-0.383076
Exchange Rate (EXR)	-0.000231*	1.51E-06	-1.525115
C	0.023812		
ARCH + GARCH terms	0.57		

Note:*shows significance at 5% level

Table 3 measure the effects of the global and domestic/local variables on the conditional variance equations of the stock market. It will show the significance of past volatilities or standard residuals in each macroeconomic variable on the conditional variance of the equity returns. The results indicate that the estimated coefficients of money supply (M1and M2), Consumer price index (CPI), LIBOR (LIB), Federal Funds Rate (FFR), IPI are all negative and insignificant in explaining volatility in the Nigerian stock market. However, Exchange rate is the only variable that exhibits a significance effect on stock market volatility. It then follows that increases in exchange rate volatilities automatically increases the volatility in Nigerian stock market.This is consistent with some previous studies. Kasman (2003) and

Kandir (2008) indicate a positive significant relationship between stock prices and exchange rate while Adam and Tweneboah (2008) report a negative significant relationship, still yet Abugri (2008) documented a negative but insignificant relationship between currency basket used as a proxy for exchange rate. There is no strong evidence to conclude whether the relationship between exchange rate and stock returns are positive or negative. That is, there are various evidences supporting both. There is no theoretical consensus neither on the existence of relationship between stock prices and exchange rates or on the direction of the relationship. A rising stock market leads to the appreciation of domestic currency through direct and indirect channels. A rise in prices encourages investors to buy more domestic assets simultaneously selling foreign assets to obtain domestic currency indispensable for buying new domestic stocks. The described shifts in demand and supply of currencies cause domestic currency appreciation. The indirect channel grounds in the following causality chain. An increase in domestic assets prices results in growth of wealth that leads investors to increase their demand for money, which in turn raises domestic interest rates. Higher interest rates attract foreign capital and initiate an increase in foreign demand for domestic currency and its subsequent appreciation Stavarek, (2004). Neither the ARCH nor GARCH effect is significant in the variance equation.

Table 4: Vector Autoregressive Estimates

F-Statistics	1.190947		
R^2	0.433623		
	Coefficient	Std. Error	z-statistics
Past returns (ASI (-1)	0.322088*	-0.29368	1.09673
Money Supply (M1)	0.788111	-1.17604	0.67014
Money Supply (M2)	-0.904586	-1.5021	-0.60221
Consumer Price Index (CPI)	-0.079157	-0.05178	-1.52875
LIBOR (LIB)	0.146051	-0.235	0.62150
Federal Funds Rate (FFR)	-0.104746	-0.23931	-0.43771
Interest rate (INTR)	-0.003093	-0.01683	-0.18379
Industrial Production (IPI)	-0.005861	-0.00802	-0.73074
Exchange Rate (EXR)	0.009199	-0.00478	1.92290

From the VAR results, only the exchange rate coefficient is significant meaning that it is the only variable that explains stock prices performance.

Table 5: Summary Statistics of returns

Mean	0.011542
Medium	0.605635
Maximum	0.579902
Minimum	127.3
Std. Dev.	14.03683
Skewness	1.629414
Kurtosis	5.619658
Jarque-Bera	18.93945
P-value	0.0000
Observations	26

Table 5 provides the result of the descriptive statistics for judging the distributional properties of the Nigerian stock returns. From the results it can be seen that there is a wide gap between maximum (5.79902) and minimum (1.273). The implication of this is that there is a high variability of price change in the Nigerian stock market. Similarly, the high standard deviation with respect to the mean indicates a high volatility in the market and how risky the market is. Positive skewness shows that the stock return distribution is skewed to the right of its mean and has a long right tail. The interpretation of this is that the stock market large positive returns tend to occur more often than large negative ones. The distribution of the returns deviates from normality as can be seen from the excess kurtosis which is 5.619. Accordingly, the distribution of Nigerian stock return series is non- symmetric. In other words, the stock returns distribution is asymmetric to the right with a few extreme and positive values. The data sets have a distinct peak near the mean, decline rapidly and have heavy long tails and are therefore leptokurtic because the kurtosis exceeds 3 which is the value for a normal distribution.

Summary and conclusion

Motivated by the controversies between which of the two groups of factors that impact more on stock returns, the author tried to use Nigeria as a case study to test the impact of these variables and contribute to the on-going debate. Moreover, since most of the previous

studies have dealt mainly with the developed markets, Nigeria a developing/emerging country was judged suitable for the research. The study therefore used two models –the GARCH and VAR to investigate the relevance of the domestic and global factors on Nigerian stock market. The domestic macroeconomic variables utilized for this study include:

Consumer price index (CPI), Exchange rate (EXR), Interest Rate (INTR), Money Supply (M1and M2), while the 6-month LIBOR (LIB), Federal Funds Rate (FFR) stand for the global factors. The empirical result reported that both the global and domestic factors are important in explaining the relationship between the stock returns and volatility. The two global factors LIBOR (LIB) and Federal Funds Rate (FFR) in the model also accounted for changes in the returns in the mean result. From the results, the first lag of ASI, M2, FFR and IPI are positively significant in the mean equation. Worthy of note is the fact that Nigerian Stock Exchange (NSE) past returns depicted as lagged returns in the GARCH model are positive and significant .The implication of this is that they are capable of explaining current returns showing that there is a correlation between past and current stock returns and of course with future volatility. Conclusively, it be adduced that the macroeconomic variables affect stock returns asymmetrically. This is because stock returns respond to new information in the market.

It is worth highlighting that with regard to the skewness and the kurtosis statistics of the stock returns, it can be concluded that the distribution of stock returns departs from normal distribution. Generally speaking Nigerian stock return time series are characterized by some "stylized fact" such as fat tails, high peakness (excess kurtosis), skewness and volatility clustering. Conclusively, it can be submitted that the Nigerian stock market responds to shocks arising from the effects of the global and country/local factors. These macroeconomic variables are significant in explaining the movement of returns Furthermore the controversy surrounding the supremacy between global and domestic/local factors have now been settled. This research however has proved that the relationship between stock returns and macroeconomic factors is better estimated using the partial integration paradigm.

The researcher is therefore of the opinion that stability is necessary for the market. To achieve this, policy makers should do all that is possible to maintain a stable economic environment under which the market can thrive and encourage confidence for investors. The market as much as possible should be efficient where information can be available to all and sundry and thereby eliminate all attendant problems.

Finally, notice is taken of the fact that the results of the study may be inconsistent as regards stability when judged with the results of the previous studies due to differences between the macroeconomic factors used, the period covered, the research methodology employed and the countries examined. However the results have its merit

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