
Impact of Globalization on Performance of Nigeria Capital Market

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The Nigerian capital market in recent past have been rattled with global financial crisis due the integration of countries, people, businesses and markets around the world with the aim of executing trade without difficulty or barrier; but has also brought remarkable progress in terms of increase in capital base, fund accessibility and economic growth. However, dimension of growth in the Nigerian market is enshroud in the midst of globalisation and capitalisation of the financial sector and as such filtering the exact impact of globalisation became compelling. This study examines the impact of globalization on the performance of the Nigerian capital market using a time series secondary data obtained from records of Central Bank of Nigeria and Nigeria Stock Exchange fact-book for 35 years (1980-2014) such that globalisation was proxy by external reserves (ER), exchange rate (EXR), balance of trade (BOT), foreign direct investment (FDI), interest rate (INT) and international oil prices (PO) while the market performance was measured by capitalization (MCAP). Stationarity, serial/auto correlation tests and Causality tests were carried out while Error Correction Model was used to determine the impact of globalisation on performance. Generally, the study finds that globalisation exerts a significant impact on performance of the Nigerian capital, but in specific terms, a unit change in (BOT) and (FDI) will increase the performance of the Nigerian capital market by 21% and 37% respectively while (INT) has a negative impact (-0.87) on the market performance as (EXR) and (ER) reveals no significant impact. Further results show that all the variables are stationary at level, absence of serial/auto correlation and lack of heteroskedasticity. However, a unidirectional relationship exist between (INT) and (MCAP), no relationship with (EXR) but causal relationship exist between (ER and (PO) and between (BOT and EXR). The study recommends that the Nigerian government should implement sound economic policies that would attract (FDI) foreign investors into Nigerian capital market, and maintain favourable (BOT), promote non oil export and put interest rate at constant check. These will strengthen the Nigerian capital market to confront the threats posed by globalization and grow out of the current global financial crisis.

Keywords: Globalisation, Performance, Capital Market, Foreign Direct Investment and Economic Growth

INTRODUCTION

The relevance of capital market to any economy cannot be over-emphasized as it serves as engine of economic growth and development through financial intermediation just as oxygen is to the human body. For sustainable growth and development, funds must be effectively mobilized and allocated to enable the economy and businesses harness both material and human resources optimally. This scenario was aptly captured by (Akingunola, Adekunle and Ojodu, 2012) as they pointed out that in the absence of capital resources for industries faced with growing product demands capable of increasing productivity, the rate of economic growth tends to suffer since long term capital for new projects financing, expansion, modernization and diversification will be adversely affected. No wonder why one of the key determinants of the overall growth of an economy is how efficiently the capital market performs its functions of capital allocation.

On one side, Alile (1996) and Soyode (1990) noted that the deregulation of the financial sector, globalization of financial markets around the world and the privatization exercise have significantly contributed to the growth of the capital market in Nigeria. However, this growth is characterized by complexities arising from trends in globalization and increased variety of new instruments being traded; equity options, bonds, forward and future contracts as well as derivatives of various forms.

Conversely, globalization is multidimensional and has become a reality covering virtually every sector from the local economy to the global financial markets (Lawal, 2006). It refers to integration of countries, people, businesses and markets around the world with the aim of executing trade without difficulty or barrier. The influence of globalization since 1980s through inter-linkages of the capital markets, gradual removal of capital inflow barriers and the implementation of more flexible exchange rate mechanism in developed as well as emerging economies, created a systematic interdependency between and within the capital and foreign exchange markets (Aydemir and Demirhan, 2009). Owing to this interdependency and linkages, the 2006 global financial crisis spread like a wild fire from the United States to Europe and then to other parts of the world. Soros (2009) reported that globally, credit related losses and new capital raised by banks due to the financial crisis amounted to about \$600billion and \$430billion respectively; simultaneously, stock markets around the world crumbled and many currencies drastically depreciated. The consequences of the global downturns did not exempt the Nigerian capital market which collapsed by 70% in 2008-2009 but steadily increased by almost 50% annually between 2010 and 2014. Furthermore, its currency (naira) trended slightly downward during the period averaging around N125 per US\$ from 2006-2008 but depreciated to an average of N250 per US\$ in 2014.

The impact of globalization on Nigeria's capital market development cannot be underestimated as pointed out by Adegbite (2007) to have helped to promote trade, exchange and specialization as well as allowed capital to move freely into African countries, particularly to countries where maximum returns can be obtained. Such free movement of capital provides relief to investors to have access to funds beyond their countries of domicile investment. Globalization is expected to lead to reduced cost of capital. This is possible through the removal of monopoly power in the hands of few local providers of funds, who would usually have

demanded a high premium for parting with their funds (Ndanusa, 2004).

Hence, the cost of capital to the user is reduced as the rent that accrues to domestic suppliers of capital is also reduced. With increasing globalization and level of economic development, a country is able to channel capital into the most useful projects. Globalization brings about trans-border flow of technology, value creation, increased productivity and transforms the capital market for corporate control and it enhances a country's ability to invest and conduct business throughout the world in a way that is beneficial to themselves but results in the exploitation of labourers, environmental degradation, increase in poverty, lower standards of health care and education, destabilization of economies, privatization of public institutions, industrial deregulation, human rights abuses, loss of cultural values, ripping of capital market gains and general chaos worldwide

The trouble with the current discourse on globalization is that it confuses ends with means. A truly development-oriented strategy requires a shift in emphasis and globalization has been viewed not as an ultimate goal but as an instrument for achieving economic growth and development. No country has developed successfully by turning its back on international trade and long term capital flows and it is equally true that no country has developed simply by opening to foreign trade and investment (Eze, 2001). Hence, Yamazawa (2000) asserts that no developing economy can develop within its protected wall. Globalization imposes on every economy the pressure to become competitive, market-driven and liberalized with adequate infrastructural and institutional framework put in place. These objectives are realised through interaction of the demand and supply forces in the capital market. It was not surprising therefore when Ezike (2009) concludes that the globalization of financial market means gains for private capital which can now flow freely around the world in search of highest returns via the capital market.

Obademi (2013) observes that the issue of financial globalization has been on the front burner in recent times due to the most recent global financial crisis which started in 2008 and traceable to corporate irresponsibility on the part of some financial sector players in developed countries especially United States of America. Consequently, it becomes imperative for operators and regulators of the Nigerian capital market to be alert and active to manage the possible effects of the contagion that wrecked a number of economies and businesses; as well as the transfer of financial crisis from one country to another.

Hence, there is no doubt that if properly managed, financial globalization has inherent benefits to the Nigerian capital market. These benefits include the opportunity for people in different countries to own financial assets denominated in foreign currency home and abroad; enhancement of international trade and global economic growth; possible reduction in global poverty especially for the developing countries, economies of scale in production competitiveness, increased management capabilities and possibility of increased labour mobility among others (Ezike, 2009). Notwithstanding the great benefits accruing from financial globalization, its costs can be devastating on the capital market. These costs include volatility of capital market operations and indices; transfer of financial crisis from one country to another; loss of independence in capital market policy making; massive outflow of capital from a country whenever confidence and expectation of investors concerning a given economy are shaken and high inequality in growth rate among countries (Adegbite, 2007).

Ndanusa (2004) argued that uncertainties in the capital market are bound to increase as the market becomes increasingly more complex in the wake of globalization, advances in information technology and the development of new instruments. These however should not impede optimum performance of the capital market as such inevitable dynamics are expected to be effectively addressed by a competent

and efficient regulatory framework. The deterioration in the external environment could impact on investments within the market as global inflationary trends now transcends jurisdictional boundaries and could lead to slowdown in economic activities which may in turn impact on the profitability of quoted companies with international linkages. The Nigerian Naira (N) is dominantly linked to the US dollar (\$) and consequently, excessive movements in exchange rates and capital flows had frequently led to exchange rate crisis. This has invariably affected the comparative international value of stock yields, which had generally dwindled significantly especially in the absence of currency hedging in Nigeria. What then is the place of globalisation in performance assessment of the Nigeria capital market?

Moreover, integration of the Nigerian capital market into the world financial markets has touched exchange rate, international oil price, flow of foreign direct investment into the country, external reserves, the balance of trade position and the prevailing interest rates since these variables are anchored on the direction of the global market. Although, these variables have fluctuated over years, but it is surprising to note that the lacklustre and dismal performance of the capital market (influenced by these variables) became highly noticeable, almost unbearable and coincide with the global crisis period and by analogy, globalisation seems culpable for this discouraging and demoralising outlook. Additionally, inferences without embedded statistical foundation in this respect are almost non-existent and unacceptable. For instance, a perusal of studies on the capital market indices and globalization in Nigeria: including (Asobie, 2001; Ndanusa, 2004; Adegbite, 2007; Ezike, 2009; Lawal, 2006; Mbutor, 2010; Obademi, 2010; Akingunola et al, 2012; Olatunji and Falabi, 2014) to mention just a few reveal that none had quantitatively measured the symbiotic relationship that exists between the capital market performance and globalization. This study therefore became imperative because it

establishes statistically the connection between the variables with a view to assist all the stakeholders including regulatory authorities, the government, stock brokers and the business community in decision making and policy direction.

LITERATURE REVIEW

Conceptual Issues

Financial market provides an avenue for investors in real assets to meet savers at the least cost possible (Obademi, 2010). It is a veritable medium for the exchange of financial assets, securities and as well as capital formation. Financial market can be broadly categorized into money market and capital market. The money market is a market where short term financial instruments (treasury bills, treasury certificates, commercial papers, bankers' acceptance, certificate of deposit, repurchase agreement, agency securities) are traded thereby facilitating the borrowing and investing in money for a period of less than or up to one year. The capital market on the other hand is a market for trading in long term financial instruments usually for a period of more than one year. The providers of funds in the capital market include individuals, unit trusts, development banks and institutional investors such as insurance companies and pension funds. Users of capital market funds basically are governments and companies; while capital market intermediaries include issuing houses, stock broking firms, registrars and audit firms (Bodie, Kane and Marcus, 2004). In Nigeria, the capital market is regulated by the Nigerian Stock Exchange, the Securities and Exchange Commission, Chartered Institute of Stockbrokers, the Corporate Affairs Commission and the Central Bank of Nigeria while major capital market instruments traded in Nigeria are corporate shares and bonds and government bonds.

Globalization

Globalization is about freedom; freedom of capital, goods, services and productive capacities across

national boundaries. According to Adegbite (2007:289),

“globalization is the enhanced integration of world economic activity

where such activity consists of increased cross national flows of a greater

variety of goods and services, more extensive cross border flows of short

-term and long-term capital and an increasingly dense and complex network

of transnational production networks involving multinational enterprises as

well as independent supplier companies”.

Although, Rugiero (1997) perceived globalization as a borderless economy, since the modern world made possible by the revolutions in communications technology, Ezike (2009) posits that the most challenging development in world history today is globalization. Hence, globalisation also embraces the creation of a global market place in which free market investment flows, trade and information are coordinated and integrated Obademi (2013). Thus, the global integration of the capitalist economy and the enhanced competition for markets has led to the quest by African economies to globally integrate their operations as well as their sourcing of foreign exchange but with attendant consequences.

Concept of Performance and its relation to Nigerian Capital Market

Generally, performance can be described as the result of activities of an organization or person over a given period of time. It is a measurement of outcomes with a view to ascertain the effectiveness and efficiency of all inputs that led to the outcome. In order to measure the growth and performance of the Nigerian capital market, certain indices are theoretically adopted. These include; the market capitalization, all share index, turnover ratio, market domination, liquidity and number of listed companies and securities (Akingunola et al, 2012).

The market capitalization (also called stock market size) is a unique index which represents the total value of all listed shares. In terms of economic significance, the assumption is that market size and the ability to mobilize capital and diversify risk are positively correlated and contribute to economic growth. As at the end of 2014, Nigeria's total market capitalization stood at N16.88 trillion (NSE, 2014). According to Adeyemi (1998), a number of factors account for low capitalization of the Nigerian capital market. These factors include; high cost of public quotation, the interest rate structure in the past which favoured debt financing over equity financing, reluctance to dilute ownership and control through public quotation, poor macro-economic indicators discourage foreign direct investment and stringent requirement for listing on the Exchange.

All-share Index measures the daily movement of stock prices listed on the floor of the Exchange. It also indicates investor's confidence in the economy by their buy/sell activities. The greater the activity in the stock market arising from large volumes of stock changing hands in the buy/ sell transactions, the more positive the performance of the economy (Olowe, Matthew and Fasina, 2011). The All Share Index of the Nigerian capital market at the end of 2014 stood at 34,657 (Thirty four thousand, six hundred and fifty seven) (NSE, 2014).

Turnover ratio is a performance measurement used in comparing market liquidity and level of transaction costs (Akingunola et al, 2012). This ratio equals the total value of shares traded on the stock market divided by market capitalization. It is also a measure of the value of securities transactions relative to the size of the securities market.

Market domination or concentration measures the level of domination of the market by a few enterprises. The significance of concentration as a measure of performance of stock market is because of the adverse effect it may have on the liquidity of the market. The share of market capitalization

accounted for by the 10 largest stocks often measures the degree of market concentration. In Nigeria, (NSE, report of 2010) pointed out that a few companies dominate the market; the market capitalization of the top ten equities listed on the Nigerian Stock Exchange accounted for about 40 percent (40%) of the total stock market capitalization in 2010.

Liquidity refers to the ease at which securities are bought and sold by investors and participants of the capital market. Akingunola, et al (2012) posited that liquidity is an important indicator of stock market development because it signifies how the market efficiently allocates capital, thus enhancing sustainable economic growth. This is possible through the ability of the investors to quickly and cheaply alter their portfolio thereby reducing the riskiness of their investment and facilitating investments in projects that are more profitable though with a long gestation period.

The number of listed companies in the Nigerian capital market as at the end of 2014 stood at 192 while number of listed securities stood at 280 (NSE, 2014). In effect, the Nigerian capital market provides greater option to investors in terms of choice of equities than most African markets do. Over the years, the Nigerian stock market witnessed growth of equity listings especially in the 1990s. This was attributable to economic policies put in place by the government notable among which was privatization of public enterprises. Also, the establishment of Second-tier Securities Market (SSM) allowed small/medium-sized enterprises to participate in the capital market.

Theoretical Framework

Economic theory suggests that there exists a relationship between capital market development and globalization. In this study, the free market theory and the theory of financial liberalization were adopted for the purpose of investigating this relationship.

The free market system has been widely observed as a major impetus for economic development. This market system which is synonymous with *laissez-faire* capitalism was first advocated by Smith (1776). He said that the system operated as if everyone were guided by the unseen force (invisible hand) and that personal and societal benefits were the reasons behind production of goods and services. Corroborating this postulation, Stiglitz (1994) suggests that the central message of the free market system is that if economic activities are carried out only by private enterprises in competitive markets and the rights to productive resources and the pursuit of self interest in production and consumption are duly respected, the free market system will be an efficient system for resources allocation. A free and un-impeded mechanism of market forces would engender Pareto-optimality in the allocation of resources. Thus, Stiglitz (1994) opines that free markets lead to efficient outcomes. All that government needs to do to promote growth is abstain from market control so that forces of demand and supply will determine the market prices. The basic idea behind the free market system is to get the prices right without interference.

McKinon (1973) and Shaw (1973) proposed the theory of financial liberalization; pointing out that financial liberalization is capable of exerting a positive effect on growth rates as interest rate levels rise towards their competitive market equilibrium, while resources are efficiently allocated. Hence, allowing interest rates to increase while eliminating controls could stimulate a higher level of savings, promote foreign portfolio investment and consequently increase the financial intermediation process. Reinhart and Tokatlidis (2003) observe that financial liberalization produces higher savings which ultimately fosters economic development through changes in quality and quantity of investment. A primary premise behind the call for financial liberalization has been that an increase in real interest rates (particularly the rate of deposit) will increase the level of savings which will in turn

increase the supply of credit, increase the level of investments in the financial market, improve the flow of capital into the economy and hoping that this will eventually lead to a higher rate of growth (Fry, 1995).

Empirical Evidence

Interconnectivity between globalization and the capital market has been addressed in the literature by a number of studies. Shahira (2002) studied the impact of globalization on Egyptian capital market and finds that Egypt's economic reforms as well as privatization programs had a positive impact on the growth of its capital market. Furthermore, the study found that the Egyptian Stock Exchange embarked on an aggressive modernization plan which not only sets Egypt to be one of the leading markets in the Middle East North Africa region but also prepares the Exchange for the globalization era. Feridun, Olusi and Folorunsho (2006) analyzed the impact of globalization on economic development of Nigeria. Secondary data covering 1986 till 2003 was used while Error Correction Model was used to measure trade openness (globalization) and economic growth. The study reveals that trade openness had significant positive effect on economic growth in the country such that Nigeria could benefit more from globalization if its economy could fully integrate with the rest of the world but with removal of all barriers to trade and movement of capital.

Mbutor (2010) examined the influence of the exchange rate volatility on stock prices and lending behaviour of banks in Nigeria using data from the CBN monetary survey. Vector Auto Regression model was used in data analysis and the results showed that exchange rate volatility and equity price fluctuations affected the behaviour of banks in Nigeria; although the effects were insignificant but the fluctuation of stock index caused the naira to depreciate with no reverse causality. Furthermore, the study revealed that changes in volume of bank loans also led to equity price fluctuations and no evidence of reverse causality was discovered.

Ogbadu and Ameh (2012) investigated the co-integration between globalization and the extent of Nigeria participation in international marketing and finds that no co-integration exists between globalization and Nigeria's involvement in international marketing. In other words, Nigeria is less integrated with the rest of the world in terms of global marketing, hence inhibiting her from tapping from the numerous benefits attached to globalization. The study thus suggested that for Nigeria to be linked to global marketing systems there is need to develop programmes and implement strong and stable political, social, economic strategies.

Akingunola, et al (2012) measured the impact of interest rate, inflation rate and exchange rate on Nigerian capital market growth; using All Share Index as a proxy for the capital market between 1985-2005. The result of the Ordinary least square regression analysis revealed that a percentage increase in interest rate will bring about adverse effect on the capital market and recommends that interest rates and other macro economic variables must be put to check in order to enable the capital market take full advantage of various opportunities.

Zubair (2013) investigated the causal relationship between stock market index and exchange rate in Nigeria before and during the global financial crisis. Using monthly data for the period 2001-2011, results of the study showed that the Nigerian capital market is inefficient and not guided by fundamental frameworks due to the absence of linkage between All Share Index and Exchange Rate. Mlambo, Maredza and Sibanda (2013) studied the effects of exchange rate volatility on the South-African stock market using monthly data for the period 2000-2010. Generalized AutoRegressive Conditional Heteroscedascity (GARCH) model was used in establishing a relationship and a weak relationship was found between currency volatility and stock market. The study recommended that since the

South African stock market was not exposed to the negative effects of currency volatility, government can use exchange rate as a policy to attract foreign portfolio investment.

In a study conducted by Ugwu and Njoku (2014) on the imperatives of globalization on Nigeria's economic growth using data from 1980 to 2013, it was found that export, total trade, balance of trade, foreign direct investment played major impacts on Nigeria's economic growth with import having no significant effect on the Nigerian economy. The study recommended that Nigeria should implement strong macroeconomic and structural policies to be able to reap the gains of globalizations with the need for government to diversify from mono-cultural dependency of oil production to agricultural production which will help the country to achieve high export potentials, increase profitability resulting from economies of large scale production and location economies.

As Ezike (2009) noted the absence of timely effective intervention by government, the crisis which rocked the global economy has impeded the rapid and smooth development of Nigeria's capital market, thus, making the nation witness longstanding economic problems such as; high unemployment rate and balance of payment deficit. One might be tempted to ask if the economy was free of these imbalances before the crisis. What is certain is that the economic and social impact of the global financial crisis is enormous. It has damaged global markets and economies around the world such as the industrialized economies, the newly industrializing economies of East Asia and China, Latin American, the Middle-East and African economies (Oyesola, 2010).

Although the global financial crisis has affected both poor and rich nations, the severity of the impact on individual countries varied according to their economic, social, political and cultural settings. In the last three decades, the Nigerian capital market

represents a small proportion of the national economy. The market capitalization ratio to GDP for the period 1980 – 1999 stood at an average of less than 10 per cent except in few years (Zubair, 2013). However, from 2004, the performance of the market rose significantly from 18 per cent to 64 per cent in 2007 before it declined drastically to 40 per cent in 2008. It thereafter increased slightly in 2011 to 45 per cent (Nigerian Stock Exchange (NSE), 2011). Thereafter, the performance has been on the declining side amidst the restructuring in the financial institutions (capitalisation). The situation is worsened by fraudulent business activities reported in the market. Determining the exact impact globalisation has on capital market performance in Nigeria is therefore a scholarship coming at the appropriate time than never.

The extent to which globalisation impacts on any economy depends on its level of integration into the global economy which is measured using a number of indices including; Participation in International Trade (PIT), Participation in International Capital Market (PICM), Penetration of Foreign Capital into Domestic Economy (PFCDE) and Real Interest Parity (RIP) (Adegbite, 2007).

Participation in international trade is the ratio of the value of imports and exports of a given country to its gross domestic product and measures the extent to which a country has been participating in international capital markets either as a source or a recipient of capital (Akingunola et al, 2012). Penetration of foreign capital into domestic economy describes the extent to which foreign capital penetrates into that economy and it is measured as a ratio of the foreign capital to the gross domestic product. The higher the ratio, the more globalized the economy. Real interest parity measures a country's real rate of interest to the world's rate of interest. Adegbite (2007) observed that in fully integrated capital markets, investors are indifferent as to whether they invest in any form of asset in one country or the other, because real

interest rates equality is supposed to hold when capital moves freely across borders.

From the foregoing, it would be observed that the issue of globalization has come to stay and thus revolves around every economy in the world. It is therefore germane that studies like this are brought to the fore with a view to establishing policy direction for policy makers. The observable gap is such that the scope of the study is larger covering 1980-2014 while the variables covered are more than any of the previous studies.

METHODOLOGY

Model Specification

In order to measure the influence of globalization on the Nigerian capital market, this study adapted the model of Ugwu and Njoku (2014) which measured the imperatives of globalization on Nigeria's economic growth. In their study, Gross Domestic Product was used to proxy economic growth while import, export, total trade, foreign direct investment and balance of trade were used to measure globalization. However, for the purpose of this study, macro-economic variables adopted include: Market Capitalization, Exchange Rate (EXR); Interest Rate (INT), International Price of Oil (PO), Balance of Trade (BOT), External Reserves (ER) and Foreign Direct Investment (FDI). The classical multiple linear regression analysis of the ordinary least square (OLS) is the estimation technique employed to determine the influence of globalization on the Nigerian capital market. While market capitalization (performance) is the dependent variable, globalisation (proxy by international price of oil, balance of trade, external reserves, interest rate, exchange rate and foreign direct investment) represent the independent variables. The natural logarithm model was used to take care of possible outliers in some of the variables and for proper interpretation of the coefficients of the variables with regard to the elasticity and/or of growth rates.

The model in functional form is stated as:

$$MCAP = f(FDI, PO, EXR, INT, BOT, ER) \quad (i)$$

Where

MCAP	=	Market Capitalization;
FDI	=	Foreign Direct Investment;
PO	=	International Price of Oil;
EXR	=	Exchange Rate;
INT	=	Interest Rate;
BOT	=	Balance of Trade; and
ER	=	External Reserves

Equation (i) above can be written in econometric form using natural logarithm as:

$$\text{LOGMCAP}_t = b_0 + b_1 \text{LOGFDI}_t + b_2 \text{LOGPO}_t + b_3 \text{LOGEXR}_t + b_4 \text{LOGINT}_t + b_5 \text{LOGBOT}_t + b_6 \text{LOGBOT}_t + \varepsilon_t \quad (ii)$$

Where

B_{1-6} stand for coefficients of independent variables and ε_t represents error term in period t

These variables are in secondary data form and were obtained from the Central Bank of Nigeria statistical bulletin, Organization of the Petroleum Exporting Countries (OPEC) Annual Statistical Bulletin and Nigeria Stock Exchange. Annual data frequency was adopted for data collection period covering 35 five (35) years (1980-2014).

Data Diagnostic Tests

Due to the adoption of classical linear regression model, multi-collinearity test, auto/serial correlation test and heteroskedasticity test are carried out to ensure that estimates (results) generated are best, linear and unbiased. In addition, because the data is time series, normality test, stationarity test and co-integration test are conducted.

This study also adopted the use of Durbin-Watson statistics to determine the existence or otherwise of serial or auto correlation in the error terms of the model used because the presence of serial

correlation violates the assumption of classical linear regression model which requires that the error term must be normally distributed with zero mean and constant variance, and as such, the error term of the current year must not be related or influenced by that of the preceding year.

Also examined in this study is the presence of homoscedasticity (unequal spread of error term variance) to avoid misleading conclusions or inferences.

Furthermore, the Augmented Dickey-Fuller (ADF) Stationarity test statistic was conducted to establish stationarity of otherwise of the variables used. However, ensuring that variables are stationary is not an end in itself; but it also requires that variables (using time series data) are co-integrated. The reason for this is because regressing one time series variable on one or more time series variables can give unreliable or spurious results and the only way to guard against this is to ensure the co-integration of the variables. An extension to the co-integration test is the Error Correction Model which satisfies whether there is a long term or equilibrium relationship between each of the independent variables and the dependent variable. The Granger causality test was also conducted to determine whether or not there exists a unidirectional or bidirectional relationship between each pair of variables. Finally, the ordinary least square (OLS) estimate of the co-integrated variables was conducted.

RESULTS PRESENTATION

The empirical results are presented the tables that follows while the findings were also discussed.

Table 1 reveals the result of the multi-collinearity test (whether there is an almost perfect relationship among the independent variables which occurs when any independent variable has a correlation coefficient of almost 1 with other independent variables). A diagonal look at the table shows that no independent variable exhibits this feature with any of the other variables. Thus, the classical linear regression assumption of no multi-collinearity was met.

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Table 1: Result of the Multi-Collinearity Test

VARIABLES	EXR	ER	FDI	INT	PO	BOT
EXR	1.000	0.720	0.812	0.039	0.743	0.827
ER	0.72	1.000	0.774	-0.469	0.881	0.790
FDI	0.811	0.774	1.000	-0.083	0.867	0.878
INT	0.039	-0.469	-0.083	1.000	-0.399	-0.103
PO	0.743	0.881	0.867	-0.399	1.000	0.843
BOT	0.827	0.790	0.878	-0.103	0.843	1.000

Source: Authors' computation, (2016)

Table 2: Result of White Heteroskedasticity Test

H₀: There is no presence of heteroscedasticity in the variables

F-statistic	0.161	Prob. F(1,25)	0.692
Obs*R-squared	0.172	Prob. Chi-Square(1)	0.678

Source: Authors' computation, (2016)

** 5% level of significance

Table 2 shows the result of heteroskedasticity test (that is, unequal spread of error term variance) with the null hypothesis suggesting no presence of such.

Table 4: Augmented Dickey-Fuller Stationarity test

Variables	ADF t-statistics (Intercept)		ADF t-statistics (Trend and Intercept)	
	Level	1 st Difference	Level	1 st Difference
MCAP	-0.687	-4.283	-1.980	-4.243
(Prob. value)	0.834	0.003**	0.586	0.013**
EXR	-2.563	-5.183	-1.902	-5.524
(Prob. value)	0.113	0.000**	0.626	0.000**
ER	-1.470	-6.227	-3.197	-6.242
(Prob. value)	0.533	0.000**	0.106	0.000**
FDI	-2.445	-9.536	-2.939	-9.413
(Prob. value)	0.139	0.000**	0.170	0.000**
PO	-0.393	-5.190	-1.952	-5.301
(Prob. value)	0.897	0.000**	0.600	0.001**
INT	-2.669	-5.099	-3.551	-6.396
(Prob. value)	0.092	0.000**	0.054	0.000**
BOT	-2.209	-6.338	-2.107	-6.836
(Prob. value)	0.208	0.000**	0.517	0.000**

Source: Authors' computation, (2016).

** 5% level of significance

The probability value of 0.692 indicates the acceptance of the null hypothesis, implying the error term of the variances are equally spread (homoskedasticity). Thus, there is an assurance that estimates (results) generated are best, linear and unbiased.

Table 3: Breusch-Godfrey Test for Serial Correlation

H₀: There is no presence of serial correlation

F-statistic	1.150	Prob. F(1,20)	0.296
Obs*R-squared	1.522	Prob. Chi-Square(1)	0.217

Source: Authors' computation, (2016).

** 5% level of significance

The Breusch-Godfrey test for serial correlation shown in table 3 is a cross validation of the Durbin-Watson value revealed in table 6. With a null hypothesis stating that there is no serial correlation, the probability value of 0.296 suggests the acceptance of the null hypothesis, hence, buttressing the outcome of the Durbin-Watson figure obtained in table 6.

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The ADF result in table 4 shows that none of the variables was stationary at level stage at 5% significance level. The variables had to be differenced at least once before they could reach stationarity (whether at intercept or at both trend and intercept). The implication of the differencing is that the non-stationarity of a variable at level stage

does not pose a threat because it is believed that stationarity of a variable could be met when it is differenced at the first or second level. However, it is required that a co-integration test is carried out to see the long run relationship of these variables and this is shown in table 5.

The result of the co-integration test in table 5 reveals that there is at least one co-integrating variable, hence, it could be concluded that in the long run, there won't be any disequilibrium.

The estimates obtained from table 6 suggest that the coefficient of the ECM obtained is properly signed. Therefore, the estimate obtained from the aggregate model informs our knowledge of how soon the Nigerian Capital Market is able to go back to equilibrium once affected by globalization.

From this empirical standpoint, it is manifest that the Nigerian capital market is able to significantly get

Table 5: Co-integration Test of Variables

Variables	Trace statistics	P-value
LMCAP	-5.876	0.040**
LEXR	-4.369	0.326
LFDI	-6.844	0.007**
LINT	-5.464	0.077
LER	-3.170	0.809
LPO	-3.568	0.654
LBOT	-4.992	0.000**

Source: Authors' computation, (2016). ** 5% level of significance

**Table 6: Error Correction Model (ECM) Result
Dependent Variable: D(LMCAP)
Method: Least Squares**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LMCAP(-1),1)	0.312	0.191	1.636	0.130
D(LEXR(-1),1)	-0.315	0.212	-1.488	0.165
D(LER(-1),1)	0.029	0.102	0.284	0.782
D(LINT(-1),1)	-0.876	0.454	-1.932	0.040
D(LPO(-1),1)	-0.163	0.282	-0.577	0.576
D(LBOT(-1),1)	0.208	0.112	1.854	0.041
D(LFDI(-1),1)	0.374	0.162	2.306	0.042
ECM(-1)	-0.124	0.208	-4.918	0.000
C	0.323	0.094	3.427	0.005
R-squared	0.802	Mean dependent var	0.298	
Adjusted R-squared	0.551	S.D. dependent var	0.307	
S.E. of regression	0.206	Akaike info criterion	-0.033	
Sum squared resid	0.465	Schwarz criterion	0.693	
Log likelihood	15.430	Hannan-Quinn criter.	0.176	
F-statistic	3.191	Durbin-Watson stat	2.369	
Prob(F-statistic)	0.029			

Source: Authors' computation, (2016).

** 5% level of significance

back to equilibrium at the rate of 12.3 percent if affected by globalization. This suggests that once the Nigerian capital market is affected by economic shock, it slowly and significantly adjusts back to equilibrium if all globalization variables (exchange rate, external reserves, foreign direct investment as well as international price of oil, interest rate and balance of trade) were considered.

Furthermore, the explanatory powers of the model in table 6 are relatively substantial. With coefficient of determination (R^2) being 0.80, it indicates that the explanatory variables (globalisation) substantially account for 80 percent of the variation in the performance of the Nigerian capital market while the probability value of the F-statistic was also found to be significant at 5percent level of significance. The adjusted R squared (0.551) measures the degree of relationship if the basic population of the variables were to be used. That is, it gives the percentage of variation explained by only those independent variables that in reality affect the dependent variable. (-0.033) value of Akaike info criterion (which measures the quality of each model relative to each of the other models) suggests that less than 1% of the embedded information in the model is lost and this can be said to be adequately reasonable.

The analysis in table 6 further suggests that only the coefficients obtained for balance of trade (0.208), interest rate (-0.876) and foreign direct investment (0.374) are statistically significant at 5% alpha level. Specifically, the coefficients of balance of trade and foreign direct investment indicate that a percentage increase in the two variables will positively influence market capitalization significantly by 21% and 37% respectively at 5percent level of significance. Conversely, the coefficient of interest rate (-0.8764) moves in an opposite direction with market capitalization which by inference means that as interest rate rises, market capitalisation / capital market performance reduces by 87.6%. These results are consistent with the findings of Akingunola, et al (2012) and Ugwu and Njoku (2014) which revealed that in order to enable the capital market to take full

advantage of the various opportunities and cope with challenges, interest rates must be properly put at check while maintaining a favourable balance of trade and attracting huge foreign capital.

The results of pair-wise causality in table 7 show that not all paired variables have a directional relationship. The null hypothesis of no directional relationship between balance of trade and exchange rate is rejected, which implies that both variables have a causal relationship in the long run at 5% level of significance. Also, the null hypothesis of no mutual relationship between price of oil and external reserves is rejected indicating that the two variables have a causal relationship at 5% alpha level. This implies that as price of oil rises, so also will the external reserves of the country rise.

The results however show that other variables either have a unidirectional or no directional relationship. Those with unidirectional relationship suggest that at 5% alpha level, only one of the paired variables has a causal relationship with the other in the long run while those with no directional relationship implies that the paired variables do not have any causal relationship in the long run at 5% alpha level. For instance, table 7 reveals that interest rate and market capitalization have a unidirectional relationship with the result of the hypothesis suggesting that market capitalization will affect interest rate in the long run. However, the result of exchange rate and market capitalization paired causality shows that none of the variables will affect each other in the long run, hence, no directional relationship.

CONCLUSION AND RECOMMENDATIONS

From the analysis carried out and the findings of the study, it can be concluded as follows:

- (i) Globalisation has a positive impact on the performance of the Nigerian capital market such that the market would quickly return to equilibrium at the rate of 12% if affected by globalization variables.

Table 7: Pair-wise Granger Causality Test Results

Null Hypothesis:	Obs	F-Statistic	Prob.
LEXR does not Granger Cause LMCAP LMCAP does not Granger Cause LEXR	31	3.185 1.587	0.062 0.228
LER does not Granger Cause LMCAP LMCAP does not Granger Cause LER	31	0.244 5.783	0.786 0.010
LFDI does not Granger Cause LMCAP LMCAP does not Granger Cause LFDI	31	0.212 1.838	0.811 0.184
LINT does not Granger Cause LMCAP LMCAP does not Granger Cause LINT	31	1.672 3.955	0.212 0.035
LPO does not Granger Cause LMCAP LMCAP does not Granger Cause LPO	31	0.050 2.926	0.951 0.076
LBOT does not Granger Cause LMCAP LMCAP does not Granger Cause LBOT	31	0.010 7.797	0.990 0.003
LER does not Granger Cause LEXR LEXR does not Granger Cause LER	31	0.507 3.422	0.610 0.052
LFDI does not Granger Cause LEXR LEXR does not Granger Cause LFDI	31	1.138 0.981	0.339 0.392
LINT does not Granger Cause LEXR LEXR does not Granger Cause LINT	31	0.096 3.373	0.909 0.054
LPO does not Granger Cause LEXR LEXR does not Granger Cause LPO	31	2.521 2.914	0.104 0.076
LBOT does not Granger Cause LEXR LEXR does not Granger Cause LBOT	31	4.4 3.713	0.025 0.042
LFDI does not Granger Cause LER LER does not Granger Cause LFDI	31	2.332 3.691	0.122 0.042
LINT does not Granger Cause LER LER does not Granger Cause LINT	31	0.986 2.173	0.390 0.139
LPO does not Granger Cause LER LER does not Granger Cause LPO	31	3.645 3.925	0.044 0.036
LBOT does not Granger Cause LER LER does not Granger Cause LBOT	31	9.953 1.331	0.000 0.286
LINT does not Granger Cause LFDI LFDI does not Granger Cause LINT	31	0.784 4.612	0.469 0.022
LPO does not Granger Cause LFDI LFDI does not Granger Cause LPO	31	3.456 0.331	0.050 0.722
LBOT does not Granger Cause LFDI LFDI does not Granger Cause LBOT	31	0.967 0.405	0.397 0.672
LPO does not Granger Cause LINT LINT does not Granger Cause LPO	31	4.042 0.021	0.033 0.979
LBOT does not Granger Cause LINT LINT does not Granger Cause LBOT	31	3.033 1.523	0.069 0.241
LBOT does not Granger Cause LPO LPO does not Granger Cause LBOT	31	0.995 0.145	0.386 0.866

Source: Authors' computation, (2016).

(ii) Three independent variables (foreign direct investment, interest rate and balance of trade) were found to be significantly influencing the dependent variable (market capitalization). Both foreign direct investment and balance of trade have a positive significant impact while the coefficient of interest rate shows a negative significant impact. Other explanatory variables such as price of oil, external reserves and exchange rate were found to be insignificant in the predicting the performance of Nigerian capital market.

The study thus suggests that government should strive at keeping the interest rate low, promote exportation and attract foreign direct investment all with a view to improve performance of the capital market. The study further recommends that the Nigerian government should implement sound macro-economic policies required to gain confidence of investors in order to improve the performances of the capital market. There is also the need for the Nigerian economy to be diversified from the mono-product dependency of oil to other key sectors like agriculture, tourism, and information and communication technology. This would bring about the incorporation and listing of more companies into the Nigerian capital market, thus enhancing its capitalisation status. Key infrastructure such as transportation, communication and steady power should also be put in place to attract foreign investments into the economy while favourable economic policies, political stability and adequate security are also indispensable for the Nigerian capital market to overcome the challenges of globalization.

REFERENCES

Adegbite, E. (2007). "Essentials of Money and Banking". Lagos: Chumek Ventures.

Adeyemi, K.S. (1998). Option for Effective Development of Nigeria Capital Market. A one day seminar organized by Nigeria Economic Society at the Institute of International Affairs, Lagos, 21st January 1998.

Akingunola, R.O., Adekunle, O.A. & Ojodu, H. (2012). Impact of interest rate on capital market growth in Nigeria. *Universal Journal of Management and Social Science*: 2(11), 1-24.

Alile, H.I. (1984). "The Nigerian Stock Exchange: Historical Perspective, Operations and Contributions to Economic Development", CBN Bullion, Silver Jubilee edition II (65-66).

Alile, Hayford (1996): "Dismantling Barrier of Foreign Capital Inflows" *The Business Time of Nigeria* 14th April, page 5.

Asobie, H.A. (2001). Globalization: A view from the South. In Erinosho, L., Akindele, R.A. & Obasi, N. (eds.) *Annals of the Social Science Academy of Nigeria*: 2(13).

Aydemir, O. & Demirhan, E. (2009). The Relationship Between Stock Returns and Exchange Rates: evidence from Turkey. *International Research Journal of Finance and Economics* 23:207-215.

Bodie, Z., Kane, A. & Marcus, A.J. (2004). "Essentials of Investments". New York: McGraw-Hill.

Central Bank of Nigeria (2013). *Statistical Bulletin and Annual Reports*.

Davidon, R. And Mackinnon, J.C. (1993). "Estimation and Inference in Econometrics". New York: Oxford University Press.

Eze, E. (2001). An Overview of the World Trade Organization. A paper presented at WTO meeting on Trade Integration in Africa, 15-17 April, 2001, Johannesburg.

Ezike, E. (2009). "International Business Finance and Management". Lagos: Concept Management Series.

Feridun, M., Olusi, J.O. & Folorunso, B.A. (2006). Analyzing the Impact of Globalization on Economic Development in Developing Economies: An Application of Error Correction Modelling (ECM) to Nigeria. *Applied Econometrics and International Development*: 6(3):173182.

Fry M.J. (1995). *Money, Interest and Banking in Economic Development*. Baltimore: John Hopkins University Press

Gujarati, D.N., Porter, D.C. & Gunasekar, S. (2012). "Basic Econometrics": 5th edition, New Delhi: Tata Mc Graw Hill. <http://garj.org/garjbb/index.htm>.

International Monetary Fund (IMF) (2012). *World Economic Outlook: Growth Resuming, Dangers Remain* 2012. Washington DC.

Lawal, G. (2006). Globalization and Development: The implications for the African Economy, *Humanities and Social Sciences Journal* 1(1): 65-78.

Levine, R. & Sara, Z. (1996). *Stock Market Development and Long-Run Economic Growth*. The World Bank Review: 10(2).

Mbutor, M.O. (2010). Exchange Rate Volatility, Stock Price Fluctuations and the Lending Behaviour of Banks in Nigeria. *Journal of Economics and International Finance*: 2(11), 251-260. Available online at <http://www.academicjournals.org/JEIF>

McKinnon, R. I. (1973). *Money and Capital in Economic Development*. Washington DC: Brookings Institution.

Mlambo, C., Maredza, A. & Sibanda, K. (2013). Effects of Exchange Rate Volatility on the Stock Market: A Case Study of South Africa. *Mediterranean Journal of Social Sciences*: 4(14): 561-570.

Ndanusa, S.A. (2004). Managing Uncertainties in the Nigerian Capital Market: (In Showcasing the Nigerian Finance and Banking Industry). Lagos: Somfay Nigeria Ltd.

Nigerian Stock Exchange (2013). *Market Recapitalisation and Outlook for 2014*.

Obadan, M.I. (2008). Economic globalization, markets and national development: how sensibly do the poor countries (Nigeria included) stand? 98th Inaugural lecture series, University of Benin, Benin city, Nigeria.

Obademi, O. (2010). "Money, Banking and the Economy". 1st edition, Ibadan: Excellent Virtues Publishers

Obademi, O. (2013). "Management of Financial Institutions". 1st edition, Ibadan: Excellent Virtues Publishers

Ogbadu, E.E. & Ameh, A.A. (2011). Globalization and Nigeria's Involvement in International Marketing. *Kuwait Chapter of Arabian Journal of Business and Management Review*: 2(1), 44-58.

Olatunji, A. & Falabi, M.O. (2014). Globalization, Tourism and Sustainable Development in Nigeria. *Ilorin Journal of Business and Social Sciences*: 16(1), 213-228

Olowe, O., Matthew, O. & Fasina, F. (2011). Knowledge Management, Information Management and learning management. *Universal Journal of Management and Social Science*: 2(11), 1-24.

Oludoyi, S.B., Agama, J.E. & Olu, J.F. (2013). The Impact of Financing on Employment Generation in Nigeria. *Centrepoint Journal (Humanities edition)*: 16(2): 323-344.

Oyesola, B. (2010). Global economic meltdown and its implications for Nigeria. A paper Presented at a Seminar. Department of Finance, University of Lagos, Akoka.

Rugiero, R. (1997). Globalization in the 21st century. A paper Delivered by World Trade Organization (WTO) Director -General at the 2nd Benz Inter services, Berlin.

Shahira, A.S. (2002). The impact of globalization on capital markets: the Egyptian case. Retrieved on 10th March, 2015 from www.google.com/globalizationandcapitalmarket/Egyptiancase

Shaw, E. S. (1973). *Financial Deepening in Economic Development*. New York: Oxford University Press.

Smith, A. (1776). *Wealth of the Nations*. New York: Bantan books.

Soros, G. (2009). *The Crash of 2008 and what it means: The New Paradigm for Financial Markets*. Public Affairs, New York.

Soyode, A. (1990). The role of capital in economic development. *Security Market Journal Nigeria*: 2(6).

Stiglitz, J.E. (1994). *The Role of the State in Financial Markets: Proceedings of the World*.

Ugwu, K.E. & Njoku, C.O. (2014). Imperatives of Globalization on Economic Growth of Emerging Economies: Evidence from Nigeria. *International Research Journal of Social Science and Management*: 3(12) 8-17.

Verbeek, M. (2004). "A Guide to Modern Econometrics". 2nd edition, John Wiley and Sons Ltd: England.

World Bank (2010). *Global Monitoring Report and Africa's Infrastructure: a Time for Transformation 2010: the MDGs After the Crisis*. Washington DC.

Yamazawa (2000). A Cursory Look at Globalization and World economy. A paper presented at a Conference on Africa and its Diaspora. 10-12 July, 2000. Brussels.

Zubair, A. (2013). Causal relationship between stock market index and exchange rate: Evidence from Nigeria. *CBN Journal of Applied Statistics*: 4(2), 87-110.

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