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Original Research Article

Stock Market Development and Economic Growth in Nigeria and South Africa: Comparative Empirical Analysis

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Abstract

The study examines stock market development and economic growth in Nigeria and South Africa using quarterly time series data for the period 1995Q1 to 2015Q4 sourced from World Bank Indicators. The Johansen co-integration and Vector error correction mechanism were employed as estimation techniques. Stationarity test was conducted using the Augmented Dickey Fuller test. The stock market indicators used in this study were market capitalization, turnover ratio, and total value of shares traded ratio and inflation rates while real gross domestic product was used as a measure of economic growth. The study concludes that the South Africa stock market indicators on economic growth outperform that of Nigeria in the reference period. The study recommends the government of Nigeria should strengthen the institutional framework in order to enhance transactions in the stock market. The regulators of the Nigeria stock market should come up with policies to reduce likelihood of market frictions. This will enhance investors' confidence and trading activities. The study also recommends that Nigeria and South Africa should constantly encourage bilateral relations as they have a lot to benefit economically there from.

Keywords: Real Gross Domestic Product, Market capitalization, turnover ratio, total value of shares traded ratio and inflation rate.

JEL Classification Codes: O400, R580

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1. INTRODUCTION

Stock market plays an important role in the development of every country's economic financial system and serves as an avenue for financing projects and investments capable of providing job opportunities, reducing poverty and accelerating economic growth (Musa & Ibrahim, 2014). Stock market engenders the ability of investors to readily take advantage of investments by channeling investments resources to those aspects that are more profitable for the purpose of enhancing economic growth; and economic growth is an increase in the productive capacity of an economy. It implies a steady increase in the output level as a result of the employed factors of production.

Nigeria is an oil-rich based economy which had failed to diversify its economy due to political instability, corruption, inadequate infrastructure and poor macroeconomic management. South Africa unlike Nigeria appears to have a well-diversified economy with an abundant supply of natural resources; well-developed financial, legal, communications, energy and transport sectors and has a remarkable stock exchange that is highly rated in the world. The fact that the South African (Johannesburg) Stock Exchange was established in 1887 compared to the Nigerian Stock Exchange which was established in 1961 could have accounted for better performance over time. The two countries have over the years adopted various economic and financial reforms aimed at promoting economic growth and development (Ndako, 2010). None-the-less, the global economic challenges currently prevailing, it is essential to aptly undertake a comparative assessment of stock markets development and economic growth of these two emerging markets in the African continent, precisely Nigeria and South Africa. The outcome therefrom will be relevant for policy prescriptions and decision making by governments of both countries.

2. LITERATURE REVIEW

The stock market is a market where buyers and sellers meet to exchange unique intrinsic commodity such as shares and bonds for the aim of raising long-term capital for the modernization and expansion of projects by companies, governments and allied parastatals (Popoola, 2014). The stock market has a lot of indicators used to measure its performance which include market capitalization, total value of shares traded ratio and turnover ratio, amongst others. The depth and breadth of each of these stock markets differs from one country to another. Market capitalization measures the size of the stock market. It equals the value of listed domestic shares on domestic exchanges divided by gross domestic product (GDP). Turnover ratio is a measure of liquidity and measures the volume of domestic equities traded on domestic exchanges relative to the size of the market. Liquidity is the ease and speed with which economic agents are able to quickly buy and sell (transact) securities. Another measure of market liquidity is the share value traded ratio. It equals the value of the trades of domestic shares on the domestic exchanges divided by GDP. Inflation rate is one of the macroeconomic fundamentals that may affect economic activities, including stock market activities. This is why governments all over the world strive to reduce inflation rate to the barest through effective fiscal policy with a view to improving economic development and growth.

On the other hand, economic growth is an increase in a nation's goods and services produced within a country in a given period, usually a year (McGraw Hill dictionary of modern economies). There are different measures of economic growth; they include gross domestic product (GDP), real gross domestic product (RGDP), and gross domestic product per capita among others. Ibadin and Oladipupo (2015) posit that real gross domestic product is a proxy for economic growth because it is inflation – adjusted measure that reflects the value of

all goods and services produced in a given year. Expressed in base – year prices; the real GDP is preferred as a measure of economic growth in that it reduces distortions due to economic factors such as inflation and currency rate fluctuations; and it has a greater accuracy in expressing national economic performance than gross domestic product Ibadin and Oladipupo (2015).

In recognition of the acclaimed catalytic impact stock market development has on economic growth, plethora of studies have now focused on the relationship that subsists between it and economic growth in emerging markets; and there is disagreements amongst economists on the role of stock market in economic growth (Oke and Adeusi, 2012). Empirically, the relationship between stock market development and economic growth has been examined in Nigeria but with inconclusive results. Nyong (1997) examined the impact of certain stock market development indicators on economic growth in Nigeria using time series data from 1970 to 1994 with the use of an aggregate index for market capitalization. The author sought to ascertain the nexus between long-term economic growth and the Nigerian stock market development. A critical evaluation of the analysis indicates that four indicators of the stock market development ratios were used. The indicators encompass stock market capitalization to GDP, the total value of stock transactions to GDP, the value of equity transactions relative to GDP and listings of the marketable securities. The author further aggregated all the aforementioned four indicators into one composite index of stock market development and used as the principal component analysis. The overall result obtained show that the stock market development index negatively and insignificantly relates to long-run economic growth in Nigeria. Alajekwu and Achugbu (2012) investigated the effect of the stock market development on economic growth in

Nigeria from 1994 to 2008. They employed ordinary least squares regression method. In the study, the researchers used the rate of market capitalization as a proxy for the stock market size. The turnover ratio and value of traded stock were used as a proxy for the total market liquidity. The results indicated that the turnover ratio is strong and positively related with economic growth in Nigeria. It was observed that market capitalization ratio is weak and negatively correlated with economic growth. Similarly, market capitalization ratio and rate of turnover are strong and positively related. The authors further recommended that the government should encourage domestic investors so as to increase the rate of economic activities in the stock market. Osho (2014) examined the link between stock market development and economic growth of Nigeria using time series data from 1980 to 2010. Multiple regression method of ordinary least square was employed. He used market capitalization, the value of total shares traded ratio and turnover ratio as explanatory variables. The result showed that the stock market capitalization and the total value of shares traded ratio negatively affected gross domestic product, while the total turnover ratio assumes positive and statistically significant impact on the real gross domestic products (RGDP) under the reference period.

Similarly some studies have also examined the link between stock market development and economic growth in South Africa economy. Ndako (2010) examined the causal relationship between stock markets, banks and economic growth in South Africa using quarterly time series data from 1983:q1-2007:q4. The research used Vector Error Correction Model (VECM) based causality tests to establish a link between stock market development and economic growth. The outcome of the investigation suggests that in the long-run, there is evidence of bi-directional causality between stockmarket development and economic

growth. The stock markets variables used include Turnover Ratio (TR) and Value of shares Traded (VT). The results also indicated uni-directional causality from economic growth to stock market system. The research further used stock market variables of the Impulse response functions (IRFs) and Variance decompositions (VDCs), which indicated that stock market development has short-run impact on economic growth at the immediate year of initial shocks and VDCs shows that all the indicators for stock market development contain some useful information in predicting future path of economic growth. Chipaumire and Ngirande (2014) ascertained how stock market liquidity impact economic growth in South Africa. The paper reported positive relationship between turnover ratio and total volume of shares traded as indicators of stock market liquidity on the economic acceleration of South Africa during the reference period of 1995-2010. This is a suggestion that perhaps South Africa stock market capacity to positively influence the economic well-being may not be unconnected with sound macro-economic factors management in the reference period. Khetsi and Mongale (2015) investigated the impact of stock market on the economic growth of South Africa. They used unit root test, Johansen co-integration technique; Granger causality test, general impulse test and Vector error correction mechanism to analyze the data in the reference period 1971-2013 and finding indicate that stock

market development has a positive association with economic growth in South Africa. It can be inferred from the finding that indicators of stock market such as market capitalization, volume of trade and turnover ratio contributed to the economic performance of the country. However, there is need for further study in an inter-temporal dimension up to 2015 based on data stream availability.

3. METHODOLOGY

This study employed the longitudinal research design. The sample period of the study is 2008 – 2015. Consequently, time series data for the identified variables which include real gross domestic product (RGDP) used as a proxy for economic growth; market capitalization, total value of stocks traded ratio, turnover ratio, inflation rate were used. Data for this study were generated from World Bank indicators of various issues, particularly from 2008: q1 to 2015: q4. The study employs the co-integration test and Vector error correction mechanism to analyze the data. It also employs the Augmented Dickey Fuller test to test the stationarity property of the variables in the construct.

Model Specification

The deterministic form of the regression model employed in this study is:

Economic growth = F(mcap, tvstr, tr and infr). This is further stated in a stochastic form as follows:

Vector error correction model (VECM)

$$\begin{aligned}
 RGDP_t = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{t-i} + \beta_2 \sum_{i=1}^k \Delta MCAP_{t-i} + \beta_3 \sum_{i=1}^k \Delta TR_{t-i} \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{t-i} \\
 & + \beta_5 \sum_{i=1}^k \Delta INFR_{t-i} + \mu t \dots \dots \dots (1)
 \end{aligned}$$

$$\begin{aligned}
 MCAP_t = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{t-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{t-1} + \beta_3 \sum_{i=1}^k \Delta TR_{t-1} \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{t-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{t-1} \\
 & + \mu t \dots \dots \dots (2)
 \end{aligned}$$

$$\begin{aligned}
 TRt = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{t-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{t-1} + \beta_3 \sum_{i=1}^k \Delta TRt - 1 \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{t-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{t-1} \\
 & + \mu t \dots \dots \dots (3)
 \end{aligned}$$

$$\begin{aligned}
 TVSTRt = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{t-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{t-1} + \beta_3 \sum_{i=1}^k \Delta TRt - 1 \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{t-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{t-1} + \mu t \dots (4)
 \end{aligned}$$

$$\begin{aligned}
 INFRt = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{t-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{t-1} + \beta_3 \sum_{i=1}^k \Delta TRt - 1 \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{t-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{t-1} + \mu t \dots \dots (5)
 \end{aligned}$$

$$\begin{aligned}
 RGDP_{it} = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{it-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{it-1} + \beta_3 \sum_{i=1}^k \Delta TR_{it-1} \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{it-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{it-1} + \mu t \dots \dots \dots (6)
 \end{aligned}$$

$$\begin{aligned}
 MCAP_{it} = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{it-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{it-1} + \beta_3 \sum_{i=1}^k \Delta TR_{it-1} \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{it-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{it-1} + \mu t \dots (7)
 \end{aligned}$$

$$\begin{aligned}
 TRit = & \beta_0 + \beta_1 \sum_{i=1}^k \Delta RGDP_{it-1} + \beta_2 \sum_{i=1}^k \Delta MCAP_{it-1} + \beta_3 \sum_{i=1}^k \Delta TRit - 1 \\
 & + \beta_4 \sum_{i=1}^k \Delta TVSTR_{it-1} + \beta_5 \sum_{i=1}^k \Delta INFR_{it-1} + \mu t \dots (8)
 \end{aligned}$$

$$TVSTR_{it} = \beta_0 + \beta_1 \sum_{i-1}^k \Delta RGDP_{it-1} + \beta_2 \sum_{i-1}^k \Delta MCAP_{it-1} + \beta_3 \sum_{i-1}^k \Delta TR_{it-1} + \beta_4 \sum_{i-1}^k \Delta TVSTR_{it-1} + \beta_5 \sum_{i-1}^k \Delta INFR_{it-1} + \mu_{it} \dots \dots (9)$$

$$INFR_{it} = \beta_0 + \beta_1 \sum_{i-1}^k \Delta RGDP_{it-1} + \beta_2 \sum_{i-1}^k \Delta MCAP_{it-1} + \beta_3 \sum_{i-1}^k \Delta TR_{it-1} + \beta_4 \sum_{i-1}^k \Delta TVSTR_{it-1} + \beta_5 \sum_{i-1}^k \Delta INFR_{it-1} + \mu_{it} \dots \dots \dots (10)$$

Where

RGDP represents real gross domestic product

β_1 to β_4 represents coefficient of the parameters of estimation

MCAP represents market capitalization

TR represents turnover ratio

TVSTR represents total value of shares traded ratio

INFR represents core inflation rate.

4. ESTIMATION RESULTS AND DISCUSSION OF FINDINGS

The data used are analyzed using the stated relevant estimation methods. The analyses are done country by country. The empirical results are presented as follows:

Results for Nigeria

Summary of the unit root test at 5%

Table 1: Unit root test at level

Variables	ADF statistics	T-critical values	Remark
RGDPGR	-1.886346	-3.471693	Not stationary at level
MKTCAP	-2.835876	-3.471693	Not stationary at level
TVSTR	-2.132532	-3.471693	Not stationary at level
TR	--2.408302	-3.468459	Not stationary at level
INFR	-3.953255	-3.465548	Stationary at level

Source: Author’s computation from E-views 8.0 Version.

Table 2: Unit root test at first difference

Variables	ADF statistics	T-critical values	Remark
RGDPGR	-3.884754	-3.471693	Stationary at first difference
MKTCAP	-3.631894	-3.471693	Stationary at first difference
TVSTR	-4.716259	-3.468459	Stationary at first difference
TR	-3.621526	-3.468459	Stationary at first difference

Source: Author’s computation from E-views 8.0 Version.

In the table above, we present summary results of the unit root test at 5% using Nigerian data. The Augmented Dickey Fuller statistic result is compared against the Mckinnon critical values at 5%. The result shows that at 5% level, only INFR was

stationary while at first difference all the variables, RGDPGR, MKTCAP, TVSTR and TR were all stationary. This portends that there is absence of unit root effects in the variables, thus removing possible spuriousness.

Johansen Co-integration Test Results

Table 3: Co-integration Analysis – Unrestricted Co-integration Rank Test (Trace)

Hypothesis	Test statistics	Critical value at 5%	Maximum Eigenvalue	Critical values at 5%
R = 0	115.4321	69.81889	47.34630	33.87687
R ≤ 1	68.08581	47.85613	29.57200	27.58434
R ≤ 2	38.51381	29.79707	22.34797	21.13162
R ≤ 3	16.16584	15.49471	9.159904	14.26460
R ≤ 4	7.005940	3.8414	7.005940	3.841466

Source: computed from E-views 8.0 Version

A test of co-integration among variables using the Johansen’s Trace test and maximum Eigenvalue test above reveal that atleast three co-integrating equation exist among the variables of interest. Thus a meaningful long-run relationship exists among these variables. In other word, there is a long-run relationship between stock market development and economic growth in Nigeria.

Vector Error Correction Methodology (VECM) result

Existence of co-integration among these variables permits us to analyze a short-run dynamics of the model using a vector error correction methodology (VECM). Thus the VECM result is presented below:

Table 4: VECM Regression Equation

Variables	Coefficients	coint.Eq1
D (RGDPGR (-1))	0.373217	-0.182349
	(0.11071)	(0.04434)
	[3.37106]	[-4.11216]
D (RGDPGR (-2))	0.091377	
	(0.11251)	
	[0.81214]	

D(MKTCAP(-1))	0.017437	
	(0.03385)	
	[0.51515]	
D(MKTCAP(-2))	0.045496	
	(0.03480)	
	[1.30733]	
D(TR(-1))	-0.022954	
	(0.05233)	
	[-0.43861]	
D(TR(-2))	-0.05258	
	(0.05920)	
	[-0.88731]	
D(TVSTR(-1))	-0.062955	
	(0.18034)	
	[-0.34909]	
D(TVSTR(-2))	-0.160452	
	(0.16875)	
	[-0.95084]	
D(INFR(-1))	-0.010726	
	(0.02382)	
	[-0.45031]	
(INFR(-2))	-0.016332	S
	(0.02375)	
	[-0.68770]	
C	0.008725	

	(0.01615)	
	[0.54038]	

Source: computed from E-views 8.0 Version

The table above indicates that the optimum lag length suitable for use in the VECM analysis is 2 lags, following the selection criteria displayed. We therefore adopt a lag length of two in our VECM estimation. The vector error correction results obtained was quite good as the model of interest (first column) has an appropriately signed coefficient of co-integration equation which is statistically significantly at 5% level following the t-statistic value in parenthesis. It is an indication that short-run deviations from the inter-temporal equilibrium value of the model are corrected overtime. And the speed of adjustment per period of this short-run dynamic model to its long-run counterpart is barely 18% which may be considered as rather low. A one-period lag of real GDP growth is a significant positive driver of current real GDP growth while a two-period lag of same variable has no significant impact in the short run.

Market capitalization is positive and significant on the economic growth of Nigeria in the period observed. It implies that capitalization of the stock market which reflects size contributes in a significant measure to the economic performance in Nigeria. Our empirical finding is not consistent with research outcomes of Nyong (1997), Alajekwu and Achugbu (2012) and Osho (2014) which reported negative relationship between market capitalization and economic growth in Nigeria. The empirical result differentials may not be unconnected with the sample size, and estimation methods used in this study and

**South Africa Result
Summary of Unit Root Tests**

Table 5: Unit Root Test at Level

Variables	ADF test at 5%	Critical statistic value at 5%	Meaning
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the prior researches. Since this study made a positive association between market capitalization and economic growth, it suggests that this stock market indicator is a major driver of the performance of the economy.

A negative association exists between turnover ratio and economic growth of Nigeria. This finding does not support the endogenous growth theory which holds that economic growth is generated from within the system and not influenced by external forces. The study finding is consistent with Nyong (1997) but not consistent with the findings of Alajekwu and Achugu (2012) and Osho (2014). Furthermore, a negative association exists between total value of shares traded ratio and economic growth of Nigeria which is consistent with the findings of Nyong (1997) and Osho (2014) but not consistent with the finding of Alajekwu and Achugu (2012), wherein their studies point out that these stock market indicators fail to exert positive effect on the economic performance of Nigeria in the reference period. The implication is that these stock market indicators are not supporting the ease with which stocks of companies are traded on the floor of the exchange and thus decreases investments which would have caused positive result to the growth of the economy. The inflation rate (both one period and two period lags) exert negative effects on the economic performance of Nigeria in the reference period. The finding clearly portends that the rate of inflation has adverse correlation with stock market. This obviously necessitated the negative impact the rate of inflation has on the growth of the Nigerian economy in the period covered by this study.

RGDPGR	-4.225775	-3.471693	Stationary
MKTCAP	-3.651777	-3.471693	Stationary
TR	-3.718959	-3.471693	Stationary
TVSTR	-3.865373	-3.471693	Stationary
INFR	-3.802720	-3.4371693	Stationary

Source: Computed from E-view 8.0

The unit root test at level above shows that all the variables are stationary at 5% level. This portrays that the regression estimation arising therefrom is free from error.

Johansen Co-integration Test Results

Table 6: Co-integration Analysis – Unrestricted Co-integration Rank Test (Trace)

Hypothesis	Trace statistics	Critical value at 5%	Maximum Eigenvalue	Critical values at 5%
R = 0	100.8895	69.81889	44.95577	33.87687
R ≤ 1	55.93350	47.85613	23.23467	27.38434
R ≤ 2	32.69883	29.79707	15.74870	21.13162
R ≤ 3	16.95013	15.49471	12.64852	14.26460
R ≤ 4	4.301609	3.841466	4.301609	3.841466

Source: Computed from E-view 8.0

The trace statistic value shows that there are at least 5 co-integrating equation, while the maximum Eigen value shows that there are at least 2 co-integrating vector; this clearly implies that there exist a long-run relationship between stock market development and economic growth of South Africa.

Vector Error Correction Methodology (VECM) result

Existence of co-integration among these variables permits us to analyze a short-run dynamics of the model using a vector error correction methodology (VECM). Thus the VECM result is presented below:

Table 7: VECM Regression Equation

Variable	Coefficient	Coint.Eq I
D(RGDPGR(-1))	0.357032	-0.118452
	(0.14058)	(0.02833)
	[2.53962]	[-4.18104]
D(RGDPGR(-2))	0.016869	(0.1369)
	[0.12321]	

D(RMKTCAP(-1))	0.496788	
	(0.76400)	
	[0.65024]	
D(RMKTCAP(-2))	0.40068	
	(0.77905)	
	[0.51432]	
D(TR(-1))	0.400514	
	(0.48864)	
	[0.81965]	
D(TR(-2))	0.458567	
	(0.51495)	
	[0.89050]	
D(TVSTR(-1))	0.666791	
	(0.65962)	
	[1.01087]	
D(TVSTR(-2))	-0.371424	
	(0.67519)	
	[-0.55010]	
D(INFR(-1))	0.602365	
	(0.13207)	
	[4.56102]	
D(INFR(-2))	0.214743	
	(0.13721)	
	[1.56511]	
C	-0.007647	
	(0.01541)	

	[-0.49616]	
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Source: Computed from E-view 8.0

The one period lag of RGDPGR is observed to impact on its current position and is statistically significant in the short-run. Both one and two period lag of MKTCAP is seen to be driver of real gross domestic products and is statistically not significant at 5% level. Similarly, both the one and two period lag of TR are seen to positively influence RGDPGR in the short-run, though is not statistically significant at 5% level. TVSTR one period lag is observed to be significantly correlated with RGDPGR; both one and two period lag of INFR have short – run dynamic relationship with RGDPGR and are statistically significant at the 5% level.

The study reveals that stock market development indicators, viz-a-viz market capitalization, turnover ratio and total value of shares traded ratio exerted positive effects on the economic performance of South Africa in the period observed. The findings suggest that the size of the market (market capitalization) of South Africa bourse and the volume of trades (total volume of shares traded) as well as the ease with which shares of companies are sold and bought either during initial public offering (IPO) or over-the-counter (OTC) are positive towards engendering performance of the real gross domestic product (RGDP). These positive effects of the South Africa stock market development on the economic acceleration may not be unconnected with the relatively political stability, sound macroeconomic policies and possibly the level of the institutional framework. The findings obtained are quite in tandem with empirical research outcome of Ndako (2010); Chipaumire and Ngirande (2014); and Khetsi and Mongale (2015). Intriguingly, these authors reported a positive relationship between stock market and economic growth of South Africa within the inter-temporal periods. It explicitly connotes that stock market

indicators like market capitalization, turnover ratio and total value of shares traded are drivers of the economic growth of South Africa. The researchers' further surmise that the positive results obtained could be adduced to the diversification policy and economic reforms of the South African government. Additionally, economic theory and literature postulate that macroeconomic fundamentals are always inversely related with the stock market, hampering growth and development. The finding of this study concerning inflation rate reasonably proved contrary to expectations. For instance, inflation rate was observed to impact positively on the economic performance of South Africa in the reference period, meaning there are effective macroeconomic policies by the government.

Comparing the two countries (Nigeria and South Africa), the results are quite exhilarating. A careful assessment of Stock Africa stock market development indicators shows they outperform that of Nigerian bourse indicators. Possibly, this may be adduced to the fact that South Africa stock market had long been in operation before the Nigerian bourse. Another likely reason could be the presence of good governance practices, drastic reduction of malfeasances and other related stock market offenses capable of snowballing into imbalances within the South Africa stock market. The several reforms of the South Africa stock market and deliberate diversification policies initiation may also have accounted for the superior favourable effects of the stock market development on its economic growth. Though the two markets are emerging, Nigeria stock market size (market capitalization) is relatively small; liquidity trading is to an extent low, coupled with the poor macroeconomic management, corruption and slow diversification policies of successive regimes of governments and frictions like transaction costs and asymmetric information. These vagaries of factors adversely prevalent in the stock

market of Nigeria may be responsible for the economic retrogression over time given the somewhat empirical findings.

5. Conclusion and Recommendations

This study has comparatively analyzed the impact of stock market development on the economic growth of Nigeria and South Africa. Both Nigeria and South Africa stock markets are emerging markets and this forms the basis of comparatively analyzing them in this study. The need to also systematically assess the stock market development and economic growth of both countries in a comparative manner in the light of global economic distortions cannot be really over emphasized. Besides this, both countries have maintained political and economic cooperation over the years. The stock market indicators used in this study were market capitalization, turnover ratio, and total value of shares traded ratio and inflation rates while real gross domestic product was used as a measure of economic growth. The study concludes that the South Africa stock market indicators on economic growth outperform that of Nigeria in the reference period. The study recommends the government of Nigeria should strengthen the institutional framework in order to enhance transactions in the stock market. The regulators of the Nigeria stock market should come up with policies to reduce likelihood of market frictions. This will enhance investors' confidence and trading activities. The study also recommends that Nigeria and South Africa should constantly encourage bilateral relations as they have a lot to benefit economically there from.

REFERENCES

Alajekwu, U. B., & Achugbu, A. A. (2012). The role of stock market development on economic growth in Nigeria: A time series analysis. *African Research Review*, 5 (6), 215-230.

Chipaumire, G. & Ngirande, H.C. (2014). How stock market liquidity impact

economic growth in South Africa. *Journal of Economics*, 5(2), 175 – 192.

Ibadin, P.O. & Oladipupo, A.O. (2015). Indirect taxes and economic growth in Nigeria. *Journal of Accounting and Finance*. 24, 345 – 364.

IMF(2008). World economic outlook www.imf.org/external/pubs/ft/weo/2008/01/weodata/index.aspx

Khetsi, Q.S., & Mongale, I.P. (2015). The impact of capital markets on the economic growth in South Africa. *Journal of Governance and Regulation*, 4(1-1), 154-163.

Musa, S. U. & Ibrahim, M. (2014). Stock market development, foreign direct investment and macroeconomic stability: Evidence from Nigeria. *Research Journal of Finance and Accounting*, 5(18), 1-7.

Ndako, U. B. (2010). Financial development, economic growth and stock market volatility: " Evidence from Nigeria and South Africa (Doctoral dissertation, University of Leicester). Nigerian Experience. *Australian Journal of Business and Management Research*, 2(2), 20-30.

Nyong, M.O. (1997). Capital market development and long-run economic growth: Theory, evidence and analysis. *First Bank Review*, 4, 13 – 38.

Oke, M.O. & Adeusi, S.O. (2012). Impact of capital market reforms on economic growth: The Nigerian experience. *Australian Journal of Business and Management Research*, 2(2), 20 - 30

Osho, A.E. (2014). The role of stock market on Nigeria's economic development. *International Journal of Scientific and Research Publication*, 4(4), 1 – 13.

Popoola, O.T. (2014). The effects of stock market on economic growth and development of Nigeria. *Journal of*

