The Nigerian Capital Market-Growth Nexus: A Johansen System-VECM Approach

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Abstract

This study investigates the impact which capital market has on economic growth in Nigeria. The period which the study covers is from 1985 to 2018 .The dependent variable is economic growth proxied by Real Gross Domestic Product (RGDP), while the independent variables are *stock market turnover ratio (SMTOR), market capitalization (MCAP), financial deepening index-M2/GDP-(FINDEEP) and all-share index(ASI).* The results of the VECM indicated that *all the independent variables of interest (SMTOR, MCAP, FINDEEP, ASI) and their lags, in the short run, are not statistically significant with relation to economic growth in Nigeria for the period under study. In the long run, however, all the independent variables are statistically significant. SMTOR and MCAP have a t-statistics value of 7.25267 and 2.45105, which are positively significant. In the same vein, FINDEEP and ASI have t-statistics value of -8.24 and -9.05 which are negatively but statistically significant. ECM indicated that takes a 13.64% speed of adjusting or converging to bounce back to equilibrium in the long run in a situation of shock. The paper concludes that capital market has greatly helped in the growth of the Nigerian economy for the period under review. The study therefore recommends that regulators should ensure that investors' confidence are restored and sustained.*

Keywords: *Capital market, economic growth, VECM.*

1.0.Introduction

It is the objective of every government, developed or developing, to prioritize the well-being of its citizenry for a sustainable level of economic development as a matter of urgent national policy. In this growth process, accumulation of capital is an undeniable factor of which, finance is unarguably, a pivot, a core in generating this economic development. A sustainable economic development of any nation is assured, where a well-functioning financial system, of which the capital market is one, is in place. This is achieved through the development of the appropriate institutions and financial instruments considered as main drivers of the financial sector. Accordingly, Omankhanlen *et al*. (2022) noted that for any government to really reduce poverty in the economy, it needs massive investments in financial

development which facilitates the efficient allocation of resources through better knowledge of future productive investments.

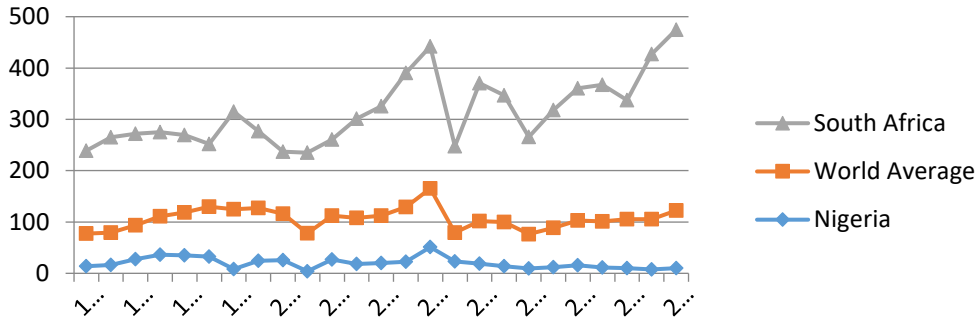
Attention on financial market of which capital market is one have been considerably given by contemporary finance and economic literature, due to the role it plays in providing equity capital for companies which helped them in achieving efficient debt-to-equity mix and thus mobilize resources for national growth (Ibekwe & Ogomegbunam, 2022). In their study, Omimakinde and Otite (2022) noted that one major goal of national policy in any type of economy is economic development through capital accumulation, but this can be greatly hindered by shortage of productive factors of which finance is central.

Levine (2004) stated succinctly that if our research makes us to understand the role which finance plays in economic growth, then it will have implications for policy formulation and thereby shape the future of policy-oriented research and this ultimately will influence the priority which advisors and policy makers attach in financial sector policies reforms. According to Alenoghena (2014), it is evidenced that capital market provides liquidity, reduces transaction costs, reduces information cost, makes resources available to investors, facilitates risk transfer, facilitate foreign financial inflow to the domestic economy, assists in price discovery, to mention but a few. In Nigeria, empirical evidence from Ibekwe and Ogomegbunam (2022); Omimakinde and Otite (2022); Ighoroje and Eloho (2022); Omankhanlen *et al*. (2022); Ashamu and Soyebo (2020); Ubesie and Ude (2019) among others, confirmed the finance-led growth hypothesis.

Since its inception in 1959 to the commencement of operations in 1961, the Nigerian capital market has undergone many reforms aimed at transforming it to global standard. Although the market has grown in leaps and bounds, it has not been able to muster the much needed capital formation of long -term fund for sustainable growth. Ighoroje and Eloho (2022) observed that a well-developed capital market is globally seen as a major catalyst for economic growth and its deepness smoothens the intermediation processes which ensure that the economic lending process boosts economic growth. They noted furthermore that the Nigerian capital market is confronted with high corruption index, lack of adequate skilled manpower, low capital base, cost ineffectiveness, and delay in payment of securities, operational inefficiency. According to Omimakinde and Otite (2022), a host of studies have identified various factors as barriers to the overall wellness of the Nigerian capital market such as: divestment by various foreign investors, high

production costs, lack of infrastructure, negative impacts of commercial banks, inability of the federal government to plot a bailout option, avalanche of private placements offers, regulating inconsistencies, pronouncements and pressure from banks, to mention but a few. The aftermath of the above negativities is shown in overall market capitalization by the Nigerian capital market as depicted in Figure1 below:

Figure 1
Market Capitalization of listed domestic companies(% of GDP)



Source: World Bank's World Development Index (WDI) metadata.

Thus, this paper seeks to validate the results so far obtained from the Nigerian researchers by objectively investigating the relationship between capital market development and economic growth. Following this introductory section are: the theoretical framework; empirical literature; methodology; data analysis and discussion of results; residual diagnostics tests as well as conclusions and recommendations

2.1. Empirical literature

Ibekwe and Ogomegbunam (2022) carried out an empirical assessment on how financial market and monetary policy impacted on the Nigerian economy. Annual secondary data over the period spanning 2002 to 2020 collected from the CBN Statistical Bulletin was used. The dependent variable was Gross Domestic Products (GDP), while the independent variables were money supply (M2), market capitalization (MCAP) and interest rate (IR). The Ordinary Least Squares (OLS) regression results showed that both MCAP and M2 were positively significant with

GDP. Omimakinde and Otite (2022) *empirically carried out a study to establish if any relationship exists between* capital market reform and the performance of the Nigerian economy. Annual secondary data over the period spanning 1981 to 2017 collected from the CBN Statistical Bulletin and also from the World Development Index (WDI) were used in this study. While, the dependent variable was Gross Domestic Product (GDP), the independent variables were market capitalization (MCA), value of transaction (VOT), all share index (ASI), number of deals (NOD), number of listed companies (NLS), interest rate (INT) and inflation rate (INF). The results of the OLS model showed that MCA and INT impact on GDP were positively significant, while NLS was negatively significant. Ighoroje and Eloho (2022) investigated the extent to which financial market operations have helped in the development of the Nigerian economy. Annual time series data from 2008 to 2020 collected from the CBN Statistical Bulletin was used in this research study. While the dependent variable was real gross domestic product (RGDP), the independent variables were market capitalization (MCA), turnover ratio (TUR), all share index (ASI), commercial paper (COP), bankers' acceptance (BAA) and Treasury Bills (TBL). The OLS regression results indicated that MCA and TBL are positively and statistically significant with RGDP, while ASI was negatively significant. Omankhanlen *et al.* (2022) empirically tested the impact which financial development has on the growth of the Nigerian economy. The study made used of secondarily sourced annual data collected from the CBN Statistical Bulletin between the years 1990 to 2019. The dependent variable was real gross domestic product (RGDP), while the independent variables were ratio of money supply to GDP (M2GDP) otherwise known as financial deepening, ratio of credit to private sector to GDP (CPSGDP) and market capitalization (MKTCAP). The results of the Autoregressive Distributed Lag (ARDL) regression analysis indicated that all shares index had a positive and significant relationship with GDP in Nigeria for the periods considered, numbers of deals and market capitalization relationship were positively insignificant, while volume of trade relationship was negatively insignificant.

Udo *et al.* (2021) empirically tested the impact which the development of the Nigerian capital markets has on the growth of the economy. The study made used of secondarily sourced annual time series data collected from the Central Bank of Nigeria (CBN) Statistical Bulletin between the years 1983 to 2016. The dependent variable was real gross domestic product (RGDP), while the independent variables were number of companies listed (NCE), all share index (ASI), numbers of listed securities (NLS), number of companies (NCE) and market capitalization (MCAP).

The regression results of the Autoregressive Distributed Lag (ARDL) model indicated that ASI and NLS had a negative and significant relationship with GDP in Nigeria for the periods considered.

Adoms *et al*. (2020) empirically carried out a study to verify the relationship, if any, that exists between capital market and the development of three Sub-Saharan African economies of Nigeria, South Africa and Kenya. Annual secondary data over the period spanning 1990 to 2018 collected from the CBN Statistical Bulletin and also from World Development Indicators (WDI). The dependent variable was human development index (HDI), while the independent variables were stock market capitalization (SMC), stock market turnover ratio (TR) and value of stock traded (VST). The results of the ARDL model showed that for SMC, VST and TR were statistically significant with HDI for Nigeria, South Africa and Kenya. Esian and Ebipre (2020) embarked on a research study to confirm if there is any relationship between capital market on economic growth in Nigeria. Secondary data obtained from Central Bank of Nigeria (CBN) Statistical Bulletin covering the period 1980 to 2016 was used. Real gross domestic product (RGDP) was dependent variable, while the independent variables were volume of shares traded (VST), market capitalization (MCAP), government capital expenditure on education (GCEE) and government expenditure on health (GCEH). The results of the Error Correction Model showed that MCAP and GECH positively and significantly affected economic growth in Nigeria, while VST negatively and significantly affected economic growth. Ashamu and Soyebo (2020) empirically tested the impact which the activities of the Nigerian stock markets have on the growth of the economy. The study made used of secondarily sourced annual data collected from the CBN Statistical Bulletin and also from the Fact books of the Nigerian Stock Exchange between the years 1985 to 2017. The dependent variable was gross domestic product (GDP), while the independent variables were all share index, volume of trade, numbers of deals and market capitalization. The results of the Error Correction Model (ECM) of regression analysis indicated that all shares index had a positive and significant relationship with GDP in Nigeria for the periods considered, numbers of deals and market capitalization relationship were positively insignificant, while volume of trade relationship was negatively insignificant.

Ubesie and Ude (2019) in their study looked at how the capital market responds to the output of Nigerian manufacturing sector. Secondarily sourced annual time series data collected from the 2016 CBN Statistical Bulletin was used. The dependent variable was output of manufacturing firms, while the independent

variables were all share index, total listed equities and market capitalization. The results of the Autoregressive Distributed Lag (ARDL) bounds testing model indicated that while market capitalization had a positive and significant relationship with output of manufacturing firms in Nigeria for the periods considered, all share index and total listed equities relationship were negatively insignificant. Eze *et al.* (2019) empirically carried out a study to establish if any relationship exists between stock market liquidity and the performance of the Nigerian manufacturing sector. Annual secondary data over the period spanning 1981 to 2017 collected from the CBN Statistical Bulletin and also from the Fact books of the Nigerian Stock Exchange. The dependent variable was manufacturing sector output, while the independent variables were market capitalization (stock market liquidity), all shares index, exchange rate, and interest rate. The results of the Autoregressive Distributed Lag (ARDL) model showed that market capitalization impact on manufacturing sector performance was positively insignificant, all shares index was positively significant, but interest rate and exchange rate were negatively insignificant.

Agu (2018) empirically appraised the relation between capital market development and economic growth in Nigeria. Using time series data over the period from1995 to 2016 which was analyzed with the OLS regression method, the result revealed that neither market capitalization, total new shares nor value of transaction impacted on Real Gross Domestic Product (GDP) in Nigeria. Obubu *et al.* (2018) investigated how all share index, number of equities and market capitalization impacted on gross domestic product of the Nigerian economy. Annual time series secondary data covering the periods from 1961 to 2017 was used in the study. The regression results indicated that while the all share index (ASI) and market capitalization (MC) were positively significant with GDP, the total number of listed equities (TNL) was negatively significant with GDP. Araoye *et al.* (2018) investigated the extent to which stock market development in Nigeria impacted on the growth of the economy. Using annual time series data from 1985 to 2014 which was analyzed with Vector Error Correction Model (VECM) of regression technique, the results indicated that none of the independent variables (real gross domestic product, market capitalization, market turnover, labour and capital) was significant and so the impact of stock market development on economic growth was insignificant.

2.2 Theoretical Framework:

The study is anchored on Efficient Market Hypothesis (EMH) which was first coined by the French mathematician, Louis Bachelier, in his 1900 dissertation titled "The Theory of Speculation". The theory states that all necessary and relevant information are already reflected in the prices of financial instruments and even where there is new information it is automatically reflected in the securities prices. As a result of the fact that any new information that will affect securities prices are immediately captured, no one market participant can outperform the market. The market is regarded as efficient because information which is costless is available to all participants in a random walk such that any one making extra profit than other rational profit maximizing investors is just by luck.

2.3. Research Gap.

Many research studies on capital market and economic growth have been carried out both in developed and developing economies as revealed by the extant literature. This work differs from others in that it used M2/GDP as a measure of financial deepening which scholars hardly use except Omankhanlen *et al.* (2022) who used M2/GDP as well as Ibekwe and Ogomegbunam (2022) who used M2. The result of this variable is contrary to these two previous authors' findings meaning there is room for other researchers to use this variable.

3.0 Methodology

The study carried out an empirical examination to verify if there is any relationship between the dependent variable, real gross domestic products (RGDP) and each of the independent variables, market capitalization (MCAP), stock market turnover ratio (SMTOR), all-share index (ASI) and financial deepening index (FINDEEP). Firstly, we discussed our data and then carried out some preliminary analyses like unit root and cointegration tests. Secondly we estimated the model along with diagnostic and robustness tests of the model. The study used annual time series secondary data from the Central Bank of Nigeria (CBN) Statistical Bulletin as well as from the World Development Index (WDI) covering the period between1985 and 2018.

3.1.1 Model specification.

A VAR system is made up of *n* variables, each one expressed as a linear function of *p* lags of itself as well as that of the other *n*– 1 variables, plus an error term. Thus, using our variables of interest, our VAR model can be specified as below:

$$LogRGDP_t = \beta o + \sum_{i=1}^{q} \pi_i \, logRGDP_{t-i} + \sum_{j=1}^{q} \pi_j \, logMCAP_{t-j} + \sum_{k=1}^{q} \pi_k \, logSMTOR_{t-k} + \sum_{l=1}^{q} \pi_l \, logASI_{t-l} + \sum_{m=1}^{q} \pi_m \, logFINDEEP_{t-m} + \mu_t \quad (1)$$

As stated earlier, one can observe that the dependent variable(RGDP), is a function of its lagged value and those of MCAP, SMTOR, ASI and FINDEEP with all the variables having equal or the same number of lags, q.

Where βo is the constant; $\pi_i, \pi_j, \pi_k, \pi_l$ and $\pi_m$are the short-run dynamic coefficients of the regressors. p is the optimum lag order of the independent variables and they are all equal in value. $\mu_t$is the white noise error term or the stochastic disturbance term which is serially uncorrelated disturbance with zero means and constant variance-covariance (Pesaran, 1995); t is the index of time.

The VAR equation above can be transformed to form a VECM specification as stated in equation 2 below:

$$\Delta LogRGDP_t = \beta o + \sum_{i=1}^{q-1} \pi_i \Delta \, logRGDP_{t-i} + \sum_{j=1}^{q-1} \pi_j \, \Delta logMCAP_{t-j} + \sum_{k=1}^{q-1} \pi_k \, \Delta logSMTOR_{t-k} + \sum_{l=1}^{q-1} \pi_l \, \Delta logASI_{t-l} + \sum_{m=1}^{q-1} \pi_m \Delta \, logFINDEEP_{t-m} + \gamma ECT_{t-1} + \mu_t \quad (2)$$

Where Δis the first order difference operator;q-1 is the optimum lag length of the VEC model which is the optimum lag of the VAR model minus 1 since VECM is a first differenced VAR. γ is the speed of adjustment parameter which is always negative in most cases but could be zero. At -1, γ signifies an instantaneous and perfect convergence to equilibrium while at 0 means that there is no convergence to equilibrium after the process had a shock. ECT_{t-1} is the error correction term/ equilibrium correction term which is the extracted residuals from the regression of the long-run model. From equations 1 and 2 above, one can notice that the VAR model is specified in levels, while the VEC model is specified at first difference. Specifying VAR in difference will lead to model misspecification.

4.0 Data Analysis and Discussion of Results.

4.1 Unit Roots Tests. It is a necessary condition for pre-testing for stationarity of the variables to be integrated of the same order of I(1) before the application of the VECM. Table 1 below shows the results of the tests statistics and their p-values in brackets. Both the Augmented Dickey Fuller (ADF) unit root tests and the Phillips Perron (PP) unit root tests indicated that RGDP, the dependent variable, as well as MCAP, SMTOR, ASI AND FINDEEP, the independent variables, are all I(1) stationary, that is, stationary after first differencing and this is very common with most finance and economics variables. Since most time series data in macroeconomics have unit roots and , therefore, are nonstationary, the trouble with such nonstationary data is that one can easily arrive at incorrect conclusions, if the standard ordinary least squares (OLS) regression procedures is applied (Bình, 2013)

Unit Roots Tests (5% is the preferred benchmark for significance level compared to 1% or 10%)

Philips Perron (PP) Trend and Intercept				**Augmented Dickey Fuller (ADF) Trend and Intercept**			
Variables / Models	**Level**	**First Difference**	**Order of Integration I(d)**	**Variables/ Models**	**First Difference**	**Order of Integration I(d)**	**Final Decision I(d)**
RGDP	0.500865 (0.9989)	-4.535724 (0.0053)	I(1)	0.500865 (0.9989)	-4.541321 (0.0052)	I(1)	I(1)
MCAP	-0.934877 (0.9396)	-4.586716 (0.0047)	I(1)	-0.688588 (0.9657)	-4.620969 (0.0043)	I(1)	I(1)
SMTOR	-2.093444 (0.5303)	-5.709989 (0.0003)	I(1)	-2.485899 (0.3319)	-1.873059 (0.6414)	I(1)	I(1)
ASI	-0.642934 (0.9693)	-4.987568 (0.0017)	I(1)	-0.818718 (0.9535)	-5.101123 (0.0021)	I(1)	I(1)
FINDEEP	-2.775891 (0.2155)	-5.786236 (0.0002)	I(1)	-2.908901 (0.1731)	-5.470515 (0.0005)	I(1)	I(1)

Source: Author's Computation Using Eviews 10+

4.2 Lag Length Selection.

According to Salisu (2012), selecting an optimal lag length that will result in white noise residuals is a very important stage before estimating the cointegrating vectors, since lag length significantly influences the outcome of our estimation. All the information criteria selected 3 lags except Schwarz-Bayesian Information Criterion (SBIC) which selected 1 lag. We, therefore, settle for 3 lags which the study used both for Johansen cointegration test and for our regression model (VECM).

Table 2: VAR Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1172.800	NA	6.89e+26	75.98712	76.21840	76.06251
1	-1028.376	232.9430	3.18e+23	68.28230	69.67003*	68.73467
2	-987.6350	52.56853	1.32e+23	67.26678	69.81095	68.09611
3	-948.6329	37.74399*	7.90e+22*	66.36341*	70.06403	67.56972*

* indicates lag order selected by the criterion

4.3 Cointegration Test

A cointegration test tells us that there exists a long run relationship between or among the variables and that they will not wander far apart away even though on the short run they exhibit random walk behaviour. Simply put, a cointegration is any linear combination of non-stationary time series that make them to be I(0) or stationary. Table 3 below show the two types of test statistics, the trace and the maximum eigenvalue statistics, which indicate that there are five(5) cointegrating equations each. We can now move on and estimate our vector error correction regression model.

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.838417	146.3264	69.81889	0.0000
At most 1 *	0.668590	91.64439	47.85613	0.0000
At most 2 *	0.648512	58.51238	29.79707	0.0000
At most 3 *	0.527730	27.14499	15.49471	0.0006
At most 4 *	0.143267	4.638878	3.841466	0.0312

Trace test indicates 5 cointegratingeqn(s) at the 0.05 level

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.838417	54.68202	33.87687	0.0001
At most 1 *	0.668590	33.13200	27.58434	0.0087
At most 2 *	0.648512	31.36739	21.13162	0.0013
At most 3 *	0.527730	22.50611	14.26460	0.0020
At most 4 *	0.143267	4.638878	3.841466	0.0312

Max-eigenvalue test indicates 5 cointegrating eqn(s) at the 0.05 level

4.4 Vector Error Correction Model(VECM) Estimation.

CointegratingEq:	CointEq1
LOG(RGDP(-1))	1.000000
LOG(SMTOR(-1))	0.423573 (0.05840) [7.25267]
LOG(MCAP(-1))	0.285005 (0.11628) [2.45105]
LOG(FINDEEP(-1))	-3.500182 (0.42501) [-8.23557]
LOG(ASI(-1))	-1.110693 (0.12269) [-9.05291]
C	6.468843

Error Correction:	D(LOG(RGDP))	D(LOG(SMTOR))	D(LOG(MCAP))	D(LOG(FINDEEP))	D(LOG(ASI))
CointEq1	-0.136434	-0.866948	0.138219	0.141793	0.251801
	(0.05818)	(0.29163)	(0.20903)	(0.10428)	(0.17620)
	[-2.34521]	[-2.97273]	[0.66123]	[1.35978]	[1.42903]

Source: Author's Computation Using Eviews 10+

The VECM output in Table 4 reported the variables (RGDP, SMTOR, MCAP, FINDEEP, ASI) in two lags instead of three lags as chosen in Table 3 which is one lag reduced. The reason is that a VECM is a differenced VAR and so must be estimated with a (k-1) lags for a VECM equation and not a k lags as shown in the VAR equation. In reading a regression result, a variable is considered significant when the value of the t-statistic is at least 2 or the p-value is at least 0.05. In Table 4 above, all the independent variables of interest (SMTOR, MCAP, FINDEEP, ASI) and their lags, in the short run, are not statistically significant with relation to economic growth in Nigeria for the period under study. In the long run, however, all the independent variables are statistically significant.

SMTOR has a t-statistics 7.25267 which is positively significant with RGDP. For the variable coefficient, a 1% changes in SMTOR leads to a 0.42% increase in RGDP all things being equal. This result is corroborated by that of Adoms *et al.* (2020), but contradicts those of Ighoroje and Eloho (2022) and Araoye *et al*. (2018). MCAP has a t-statistics value 2.45105 which is positively significant with RGDP. Again, a 1% changes in MCAP leads to a 0.28% increase in RGDP all things being equal. This result is corroborated by that of Ibekwe and Ogomegbunam (2022); Omimakinde and Otite (2022); Ighoroje and Eloho (2022); Esian and Ebipre (2020), but contradicts those of Ashamu and Soyebo (2020); Agu (2018); Araoye *et al*. (2018).

In the same vein, while FINDEEP has a t-statistics value of -8.24 which is negatively significant with RGDP. For the variable coefficient, a 1% changes in FINDEEP is associated with a 3.5% decrease in RGDP all things being equal. There is no result that supported this findings, but those that contradicts it are those of Omankhanlen *et al*. (2022) as well as Ibekwe and Ogomegbunam (2022). ASI has a t-statistics of -9.05 which are negatively, but statistically significant. Again, a 1% change in ASI is associated with a 1.11% decrease in RGDP all things being equal. This result is corroborated by that of Ighoroje and Eloho (2022); Udo *et al.* (2021) but contradicts those of Omimakinde and Otite (2022); Ubesie and Ude (2019); Eze *et al.* (2019*);* Obubu *et al.* (2018).

The error correction term, CointEq1, is also known as the speed of adjustment. Looking closely at CointEq1, the error correction term, for the first vector, rgdp, CointEq1 is negative (-0.136434) and statistically significant with a t-statistic value of -2.34521, which is usually the expected sign and value in empirical literature. This shows that the reversion to equilibrium is at an adjustment speed of 13.64%.

That is, the short run deviation from equilibrium is corrected in the correct period by an adjustment speed of 13.64%. This means that about 13.64% of departure from long-run equilibrium is corrected within one year period.

5.0 Residual Diagnostics Tests

The results from Table 6 and Table 7 show that there is no serial correlation and no problem of heteroskedasticity, since their p-values are clearly higher than 0.05. Since the p-value of the Jarque-Bera statistic is higher than 0.05 as shown in Table 8, the model is normally distributed. The Jarque-Bera statistic factor in the Skewness and the Kurtosis.

Table 6. VEC Residual Serial Correlation LM Tests

Lag	LRE* stat	Df	Prob.	Rao F-stat	Df	Prob.
1	15.79945	25	0.9207	0.499414	(25, 16.4)	0.9428
2	18.17764	25	0.8348	0.602231	(25, 16.4)	0.8768
3	42.26921	25	0.0168	2.329275	(25, 16.4)	0.0400

*Edgeworth expansion corrected likelihood ratio statistic.

Table 7. VEC Residual Heteroskedasticity Tests (Levels and Squares)

Joint test:

Chi-sq	Df	Prob.
334.5950	330	0.4192

Table 8. VEC Residual Normality Tests

Component	Skewness	Chi-sq	Df	Prob.*
1	0.306915	0.470983	1	0.4925
2	-0.304061	0.462265	1	0.4966
3	0.930521	4.329347	1	0.0375
4	-0.215705	0.232643	1	0.6296
5	0.673119	2.265449	1	0.1323
Joint		7.760687	5	0.1699

Component	Kurtosis	Chi-sq	Df	Prob.

1	2.858038	0.025192	1	0.8739
2	2.590721	0.209387	1	0.6472
3	3.656988	0.539541	1	0.4626
4	2.273926	0.658980	1	0.4169
5	2.999527	2.79E-07	1	0.9996
Joint		1.433100	5	0.9207

Component	Jarque-Bera	Df	Prob.
1	0.496175	2	0.7803
2	0.671652	2	0.7147
3	4.868888	2	0.0876
4	0.891623	2	0.6403
5	2.265449	2	0.3222
S.Joint	9.193786	10	0.5138

6.0 Conclusion and Recommendation

This study empirically investigates the impact which capital market has on economic growth in Nigeria over the periods from 1985 to 2018. The results of the VECM indicated that while none of the variables of interest is statistically significant on the short run, they are all statistically significant on the long run. With a CointEq1coefficient of 13.64% speed of adjusting or converging to equilibrium in the long run, we can confidently conclude that the Nigerian capital market has all it takes to contribute to economic growth for the period under review. The study, based on the results above, recommends that government should ensure that all bottlenecks towards an efficient and effective stock market should be identified and remove if the goal of finance-led growth is to be realized. Specifically identified is that:

1) Government should realize that the general economic environment affects the operation of the capital market and the capital market in turn affects economic performance. Hence sound macroeconomic variables like interest rate, inflation rate, exchange rate, among others should be in place.
2) Regulators should ensure that investors' (current and potential, local and foreign) confidence is sustained. This is a major reason for a low market capitalization in Nigeria when compared to countries like South Africa and

Egypt. There should be adherence to best global practice with respect to transparency and fairness in transaction dealing.

3) Technological innovations and human skills development has greatly helped most third world countries to compete favourably with the Western countries. Capital market operators should be abreast with these.

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