

# **The Influence of Financial Sector Development and Financial Deepening on Economic Growth: Empirical evidence from Nigeria**

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**Abstract:** *The study examined the influence of financial sector development, financial deepening on economic growth: Empirical evidence from Nigeria (1981-2018). The study used ARDL model for the analysis for robust policy recommendations. The results showed that the financial sector development indicators have long run relationship with economic growth. Capital market indicator has direct relationship with economic growth rate. The ratio of total savings to gross domestic product and insurance indicator exhibit similar characteristics. This study recommends that the Government should re-engineer the insurance sub-sector and reinvigorate the money and capital markets for optimal development to accelerate financial development and economic growth.*

**Keywords:** *ARDL, Development, Financial Deepening, Growth rate, Market capitalization*

**JEL Classification:** *C22, C32, C51, E27, H63, H81*

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## **I. Introduction**

Financial sector development and financial deepening are absolutely necessary for improvements in the functioning of the financial system. They enhance increased access to financial intermediation, greater diversification opportunities, improved information quality, liquidity management and better incentives for prudent lending and monitoring (Yakubu & Affoi, 2014; Akinlo & Egbetunde, 2010; Okodu and Ewetan, 2013, Ewetan & Ike, 2015; Oladipo, 2013). The essence of financial sector is to mop up funds and channel same in the form of credits, loans or invested capital to business sectors that most need these funds for investments. With the recent global financial crisis, most countries appear to have recognized the role of financial sector development in sustaining economic growth. Most affected economies had a fall in stocks and commodities prices with consequent decline in the total market capitalization. The global financial crisis which led to economic meltdown of most countries attracted several bail out of the financial sector by the governments of the affected countries with the intention that when the financial sector is resuscitated it will translate into reviving the economy and stimulate growth.

Financial development has a significant contribution to growth, is key to poverty alleviation and is associated with immense improvements in income distribution (World Bank, 2001). The development (liberalization) of the financial sector in Nigeria was a fundamental part of the Structural Adjustment Programme (SAP), a programme which was introduced by the federal government in July 1986 (Soludo, 2004). Ewetan and Ike (2015) asserted that financial sector development is an important activity in the economy because it allows effective funds to be channeled from people who might otherwise not put them to productive use to people who will ultimately put the funds to productive uses. In line with the assumption that financial sector plays an important role in financing the real sector. Savings mobilization at the gross- roots level has been discouraged by the unrealistic requirements by many banks for accounting opening, creating huge challenge to credit for the real sector of the economy.

Previous studies on financial sector development and economic growth such as, Akpansung & Babalola (2009), Adelakun ( 2010), (George Adu, Marbuah & Mensah 2013), Nwosu and Metu (2015) and Oluitan (2012) used multiple money market indicators measures at the expense of capital market variable to measure the impact of financial sector development on economic growth in Nigeria, while this study would combine money market and capital market indicators, savings and insurance indicator as well as financial deepening indicator to examine the linkages between financial sector development, financial deepening and economic growth in Nigeria. The main objective of this study is to examine the influence of financial sector development, financial deepening and economic growth in Nigeria. The null hypothesis generated for testing

states that: there is no relationship between Financial development indicators and financial deepening indicators and economic growth rate in Nigeria.

## **II. Materials and Methods**

There are four vital components of a financial system, namely: financial institutions, financial markets, the regulatory authorities and financial instruments. The Nigeria financial system include banks, capital markets, insurance, Pension asset managers and other financial institutions with the central bank as the apex institution According to Central Bank of Nigeria (2009) at the end of 2008, there were 805 financial institutions in Nigeria including banks. The banking subsector includes deposit money banks, microfinance banks, primary mortgage institutions, trustees and trust companies. Deposit money (commercial) banks are the dominant operators in the industries; they are the largest in terms of size and profitability. These are currently 24 of such banks in Nigeria. Micro finance are banks are financial institutions established to provide credit, banking and other financial services to designated convenient areas or communities. Currently, there are 757 microfinance banks in Nigeria. The micro-finance banks are established to provide financial access to the poor who are traditionally not served by the conventional financial institutions, this is because the formal financial system provides services to about 20 percent of economically active population, the other eighty (80) percent are excluded from access to financial services, (CBN, 2008). Primary mortgage institutions also known as savings and loans companies are specialized institutions which collect household savings and originate mortgage loans. There are currently about 90 primary mortgage institutions in Nigeria. Trustee and Trust companies are typically sub-sect of banks. They provide funds and management services for organizations or individuals who set up trust funds.

Bureau de changes were established in Nigeria in 1989. These are companies that carry out foreign exchange business on small scale basis. At the end of 2008, there were 126 licensed Bureau de change in Nigeria, (CBN 2009). Development Finance Institutions (DFIs) are usually government owned financial institutions established to finance certain developmental programmes of the government usually in agriculture, commerce, manufacturing, industrial sectors, etc. There are six Development finance institutions in Nigeria. Insurance companies represent the second largest sector in the Nigeria financial services industry. There are over a hundred insurance companies operating in Nigeria. The minimum capital requirement is N2 billion for life Insurance Companies and N8 billion for companies that provides non-life insurance. Insurance brokers also fall under this group. These companies are registered with the National Insurance Corporation of Nigeria (NICON). Insurance agents are representatives of Insurance companies on commission. There are over 500 registered insurance agents in Nigeria. The pension fund managers were established for employees in Nigeria as a contributory pension scheme for payment of retirement benefits of employees to whom the scheme applies.

The Nigerian financial system could be examined under the formal and informal sectors. The informal sector includes the local money lenders, the cooperatives and a battery of savings associations. The formal financial system includes financial institutions, money and capital market institutions regulated by various authorities. Other distinct sub-sectors in the Nigerian financial system are banking, insurance, capital markets, investment management, and regulatory institutes. The functions of the financial system include the following: Savings function, Wealth function, Liquidity function, Credit function, Payment function, Risk protection function and Policy function. The existence of a relationship between finance and growth seems widely reviewed in the following: Supply – Leading Hypothesis, Demand – Following Hypothesis, and Bi-directional Causality hypothesis. There are various theories and hypothesis used to explain economic growth such as Classical growth theory, Neoclassical growth theory, Endogenous growth theory, Complementary hypothesis, Financial repression hypothesis, the Complementary Hypothesis etc

### **Empirical Literature Review**

Kagochi (2013), investigated the relationship between the development of financial market and economic growth in Kenya during 1970-2008 using an expanded neoclassical growth model. The findings suggest that development of the financial sector, especially the size of banking sector, leads to enhanced economic growth. Nkoro (2013) examined the financial sector development-economic growth nexus in Nigeria with annual dataset covering the period, 1980-2000. The co integration/ Error Correction Mechanism (ECM) adopted showed that there is a positive effect of financial sector development on economic growth in Nigeria.

George et al. (2013), asserted that financial sector development impact positively or negatively on economic growth depending on the indicator used to proxy for financial development. Nwosu and Metu (2015) used one compound of financial sector to analysis the impact of financial development and economic growth in Nigeria, financial deepening measured by  $M_2$  plus net domestic credit and trade liberalization (openness) measured by import and exports supported by Mckinnon 1973, financial liberalism and Gross domestic product proxied as Economic growth as dependent variable. Financial development has a positive impact on economic growth. Emeh and Chigbu (2014) examine the impact of capital market on economic growth in Nigeria using time series research design, utilizing regression analysis data method incorporating multivariate co-integration and error correction. The of finding is that two variable exhibit positive while two exhibit inverse and

statistically significant relationship with economic growth. The second view maintains that it is economic growth that leads to the development of the financial sector (demand-following response). The empirical work, which is associated with this view includes studies by (Waqabaca 2004; Odhiambo 2004; Sunde, 2012; Wadud, 2005).

Kagochi (2013) carried out an assessment of the relationship between financial development, economic growth and poverty in Kenya for the 1997-2012 period. The variables used included broad money supply M3, credit to private sector, bank deposits, stock market capitalization, stock market turnover and volume of stocks traded. The study used OLS method under the PARARCH model. The findings show that some financial development variables such as M3 and credit to the private sector did not lead to growth while bank deposits did during the period of the study.

Akinlo et.al (2010) examines the long run and causal relationship between financial development and economic growth for ten countries in sub-Saharan Africa using the vector error correction model (VECM). The study finds that financial development is cointegrated with economic growth in the selected ten countries in sub-Saharan Africa. However, bidirectional relationship between financial development and economic growth was found in Kenya, Chad, South Africa, Sierra Leone and Swaziland.

### Gaps in Literature

From the reviewed work, the summary of the major gaps in literature include the following:

- Some of the reviewed studies were carried out in other countries of the world as seen in Waqabaca 2004; Odhiambo 2004; Sunde 2012; Kagochi (2013); Wadud 2005; thereby creating a geographic gap. There is absolute need to study the Nigerian scenario.
- Also some of the reviewed studies used OLS, ECM and VECM, respectively as witnessed in Akinlo et.al (2010); Waiyaki (2013), Kagochi (2013) providing gap in the methodology used. This study uses ARDL.
- The current study updated the following [Emeh and Chigbu (2014) and Nkoro (2013)] to 2019.

### III. Methodology

#### Theoretical Framework

Following the review of the finance – growth literature, the theoretical framework used to capture financial sector development, financial deepening and economic growth is based on the endogenous growth model that is growth within the model. Endogenous growth model demonstrates that capital accumulation can increase the long run rate of economic growth (Pagano 1993). However, to permit capital accumulation it is necessary to increase the savings ratios and thus, a well-functioning financial system encourages investment, promotes technological innovation that ultimately lead to economic growth through savings. To capture the potential effect of financial development on economic growth, we consider the simplest endogenous growth model: the ‘AK’ model, where aggregate output is a linear function of the aggregate capital stock.

$$Y_t = AK_t \dots \dots \dots (1)$$

Where

$Y_t$  = output at time t

A = total factor productivity

$K_t$  = real capital stock.

According to Balago 2014, the efficiency of financial intermediation requires the combination of money market indicators and capital market indicators as measures of financial sector development on economic growth in Nigeria. In line with theoretical framework, economic growth is expressed as a function of financial intermediation ( $F_t$ ) and a set of control variables ( $Z_t$ ).

$$Y_t = f(F_t, Z_t) \dots \dots \dots (2)$$

$Y_t$  = Is the growth rate of gross domestic product

$F_t$  = Is the financial intermediation indicators

$Z_t$  = Is the set of other growth determinant

#### Model Specifications

The study adopted Balago (2014) model with light modifications, that studied financial sector development and economic growth in Nigeria, for the sample period of 1990-2009, from the theoretical basis. The argument is that the use of one component of the financial sector variable like money market indicators or capital market indicators as a representative of the entire financial development is inadequate and inappropriate, because the essence of the financial sector which is that of intermediation cannot solely performed effectively by only one subsector of the financial system like capital market variable neither can it be handled by money market variable alone. An effective financial intermediation will require the collective contribution of the various subsector of the financial system that is money market variable and capital market variable, banking and insurance subsectors (Balago, 2014). This is main knowledge gap this study tries to bridge. In line with this proposition, money and capital market indicators, financial deepening indicator, savings and insurance

indicators were used to analyze the linkages of financial sector development to economic growth in Nigeria. The functional form of the model is stated below

$$GDPGR = f(VMMI, MCAP, FINDI, TS\_GDP, INSINCOME) \dots \dots \dots (3)$$

Where

GDPGR = Gross Domestic Product (GDP), annual growth rate. Gross Domestic Growth Rate is measured by the current year gross domestic product minus the previous year gross domestic product divide by the previous year gross domestic product multiplied by one hundred, is used to proxy for economic growth.

VMMI = Total volume of Money Market Instruments.

MCAP = The total NSE Market capitalization contribution to Gross Domestic Product. Market capitalization is computed as share price multiplied by total number of shares outstanding divided by GDP.

FINDI = The Financial deepening indicator captured by the ratio of credit to private sector to GDP

TS\_GDP = Total Savings as Ratio to GDP

INSINCOME = Total Insurance Income

f = Functional relationship

Modeling ARDL

In its basic form, an ARDL regression model is specify thus:

$$\Delta y_t = \alpha_0 + \beta_i y_{t-1} + \lambda_k \sum_{k=1}^k \Delta SR_{k,t-1} + \sigma_k \sum_{k=1}^k LR_{k,t-1} + \mu_t \dots \dots \dots (4)$$

Where:  $\Delta$  denotes first difference of variable,  $\mu_t$  is a random "disturbance" term,  $y_t$  is the dependent variable, while SR is the short-run dynamics of explanatory variables, LR is the long-run dynamics of the explanatory variables.  $\beta, \lambda$  and  $\sigma$  are the parameters to be estimated;  $\alpha_0$  is the constant parameter (Bahmani-Oskooee. & Fariditavana. 2016)

From equation (2), the ARDL equation for this study is thus:

$$\Delta GDPGR_t = \alpha_0 + \beta_i GDPGR_{t-1} + \lambda_k \sum_{k=1}^k \Delta SR_{k,t-1} + \sigma_k \sum_{k=1}^k LR_{k,t-1} + \mu_t \dots \dots \dots (5)$$

The ARDL representation of the macroeconomic relationship between the selected variables can be constructed from equation (3) as:

$$\Delta GDPGR_t = \alpha_0 + \beta_1 GDPGR_{t-1} + \lambda_1 VMMI_{t-1} + \lambda_2 MCAP_{t-1} + \lambda_3 FINDI_{t-1} + \lambda_4 TS\_GDP_{t-1} + \lambda_5 INSINCOME_{t-1} + \delta_1 \sum \Delta VMMI_{t-1} + \delta_2 \sum \Delta MCAP_{t-1} + \delta_3 \sum \Delta FINDI_{t-1} + \delta_4 \sum \Delta TS\_GDP_{t-1} + \delta_5 \sum \Delta INSINCOME_{t-1} + ECM_{t-1} + \eta_t \dots (6)$$

The above functional equation was broadened to capture more capital market and money market variables, financial deepening indicator, the ratio of total savings to GDP and the insurance variable.

Sources of Data

This study relied on annual time series data of the relevant variables obtained from Central Bank of Nigeria (CBN) Annual Statistical Bulletin from 1981 to 2018 in order to investigate in detail the influence of financial sector development and financial deepening on economic growth in Nigeria as it relates to the present financial challenges of the 21<sup>st</sup> century. The rationale for this range of period relates to the fact that the period witnessed financial deregulation with phenomena reforms, money market variations, stock market crash and financial crises, consolidation, recapitalization, acquisition and merger policy, to the present period. Again, full data for 2019 were not readily available at the time of this write-up, hence, the data range stopped at 2018. The Pesaran et al (2001) methodology was used to obtain the group unit root test while the Bounds testing was used to ascertain co-integration between the regressand and the regressors in the model.

#### IV. Results and Discussion

Descriptive Statistics

The descriptive statistics of the data in Table 1 below reveal some underlying features. The table shows that the average annual GDP growth rate (GDPGR) 3.175 for the period under review. The maximum and minimum values of the variable suggest that there is a wide margin. This is confirmed by the high standard deviation value of 5.538 which indicates that many of the values are highly dispersed from the mean. The Jarque-Bera (J-B) value is highly significant at the 1 percent level indicating that the density function of the series is not normally distributed. The null hypothesis of the J-B test is that the variable is normally distributed; hence we reject the null hypothesis and accept the alternative hypothesis that the series is non-normally distributed. The skewness is negative at 0.87 and indicates that the GDPGR for greater part of the period lies to the left of (are less than) the mean value. The kurtosis value is high at 4.54 and indicates the presence of extreme values in the data.

**Table 1: Summary of Descriptive Statistics**

	GDPGR	VMMI	MCAP	TS_GDP	FINDI	INSINCOME
Mean	3.175088	2428.799	5049.940	9.058315	11.05262	81530.71
Median	4.212993	457.5349	386.1500	8.705203	8.209316	20188.97
Maximum	15.32916	12382.05	21904.04	23.24536	20.77330	270633.5
Minimum	-13.12788	11.70350	5.000000	3.335644	5.917270	205.0860
Std. Dev.	5.538472	3671.165	7235.740	3.757264	5.377672	101859.2
Skewness	-0.870060	1.558668	1.127328	1.500473	0.875430	0.875390
Kurtosis	4.539815	4.192481	2.731859	6.762277	1.962942	2.022386
Jarque-Bera	8.548490	17.63801	8.162669	36.67065	6.556586	6.366520
Probability	0.013923	0.000148	0.016885	0.000000	0.037693	0.041450

Source: Authors' Computation using E-views

Group Unit Root Test:

All the variables however became stationary after taking their second difference using Pesaran and Shin W-Statistics at 1 percent critical values as shown in Table 2 below.

**Table 2: Group Unit Root Test**

Method							Statistic	Prob.**
Im, Pesaran and Shin W-stat							1.99787	0.9771
** Probabilities are computed assuming asymptotic normality								
Intermediate ADF test results								
							Max	
Series	t-Stat	Prob.	E(t)	E(Var)	Lag	Lag	Obs	
GDPGR	-3.0615	0.0387	-1.520	0.814	1	1	36	
VMMI	0.3902	0.9798	-1.520	0.814	1	1	36	
MCAP	0.7843	0.9924	-1.520	0.814	1	1	36	
TS_GDP	-2.0940	0.2481	-1.520	0.814	1	1	36	
FINDI	-1.0554	0.7225	-1.520	0.814	1	1	36	
INSINCOME	0.3345	0.9770	-1.520	0.814	1	1	36	
Average	-0.7836		-1.520	0.814				

Source: Authors' work using E-views

Johansen Co-Integration Test

Trace Statistics test indicates 4 cointegrating equations at the 0.05 level and Max-eigenvalue Statistics test indicates 2 cointegrating equations at the 0.05 level as shown in Table 3 below.

**Table 3: Johansen Co-Integration Test Results  
Unrestricted Cointegration Rank Test (Trace)**

Hypothesized	Trace		0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.844229	170.5277	95.75366	0.0000
At most 1 *	0.700504	103.5903	69.81889	0.0000
At most 2 *	0.514571	60.18671	47.85613	0.0023
At most 3 *	0.469522	34.16872	29.79707	0.0147
At most 4	0.266983	11.34556	15.49471	0.1911
At most 5	0.004557	0.164426	3.841466	0.6851

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized	Max-Eigen		0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.844229	66.93737	40.07757	0.0000
At most 1 *	0.700504	43.40359	33.87687	0.0027
At most 2	0.514571	26.01799	27.58434	0.0782
At most 3 *	0.469522	22.82316	21.13162	0.0286
At most 4	0.266983	11.18113	14.26460	0.1454

At most 5	0.004557	0.164426	3.841466	0.6851
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\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Source: Authors' Computation using E-views

ARDL Bounds Test

The result from the Auto-regressive distributed lag bounds test suggests the existence of a long run co-integrating relationship among the variables used in the model. This decision is reached by observing that the null hypothesis of no co-integrating equation is rejected since the values of F-statistics is higher than their respective critical upper bound values at the levels of significance as shown in Table 4 below

**Table 4: ARDL Bounds T**

Date: 08/26/19 Time: 16:23

Sample: 2 38

Included observations: 37

Null Hypothesis: No long-run relationships exist

Test Statistic	Value	K
F-statistic	5.689975	5

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.5%	2.96	4.18
1%	3.41	4.68

Test Equation:

Dependent Variable: D(GDPGR)

Method: Least Squares

Date: 08/26/19 Time: 16:23

Sample: 2 38

Included observations: 37

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.063783	3.729415	-0.017103	0.9865
VMMI(-1)	-0.000899	0.000410	-2.192683	0.0456
MCAP(-1)	7.09E-05	0.000416	0.170575	0.8657
TS_GDP(-1)	-0.026600	0.324671	-0.081929	0.9352
FINDI(-1)	0.320075	0.635034	0.504027	0.6179
INSINCOME(-1)	-1.04E-04	4.58E-05	-2.270742	0.0751
GDPGR(-1)	-0.526638	0.140702	-3.742942	0.0008
R-squared	0.649803	Mean dependent var		0.407166
Adjusted R-squared	0.519763	S.D. dependent var		4.841511
S.E. of regression	4.276555	Akaike info criterion		5.912830
Sum squared resid	548.6677	Schwarz criterion		6.217599
Log likelihood	-102.3874	Hannan-Quinn criter.		6.020276
F-statistic	2.689975	Durbin-Watson stat		2.145368
Prob(F-statistic)	0.032844			

Source: Authors' Computation using E-views

**Table 5: ARDL Cointegrating and Long-Run Form**

Cointegrating Form
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Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(VMMI)	-0.000885	0.000429	-2.062937	0.0471
D(MCAP)	0.000066	0.000405	0.162616	0.8719
D(TS_GDP)	0.121215	0.308230	0.393262	0.6969
D(FINDI)	-0.608061	0.589495	-1.031495	0.3106
D(INSINCOME)	0.000078	0.000035	2.228571	0.0364
CointEq(-1)	-0.573967	0.139965	-4.100799	0.0003
Cointeq = GDPGR - (-0.0027*VMMI + 0.0001*MCAP + 0.2112*TS_GDP				
-1.0594*FINDI + 0.0002*INSINCOME + 9.0262 )				
Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
VMMI	-0.002716	0.001203	-2.257689	0.0442
MCAP	0.000115	0.000708	0.161950	0.8724
TS_GDP	0.211188	0.543586	0.388509	0.7004
FINDI	-1.059401	1.038597	-1.020030	0.3159
INSINCOME	0.000202	0.000074	2.729730	0.0254
C	9.026164	6.177019	1.461249	0.1543

Source: Authors' Computation using E-views

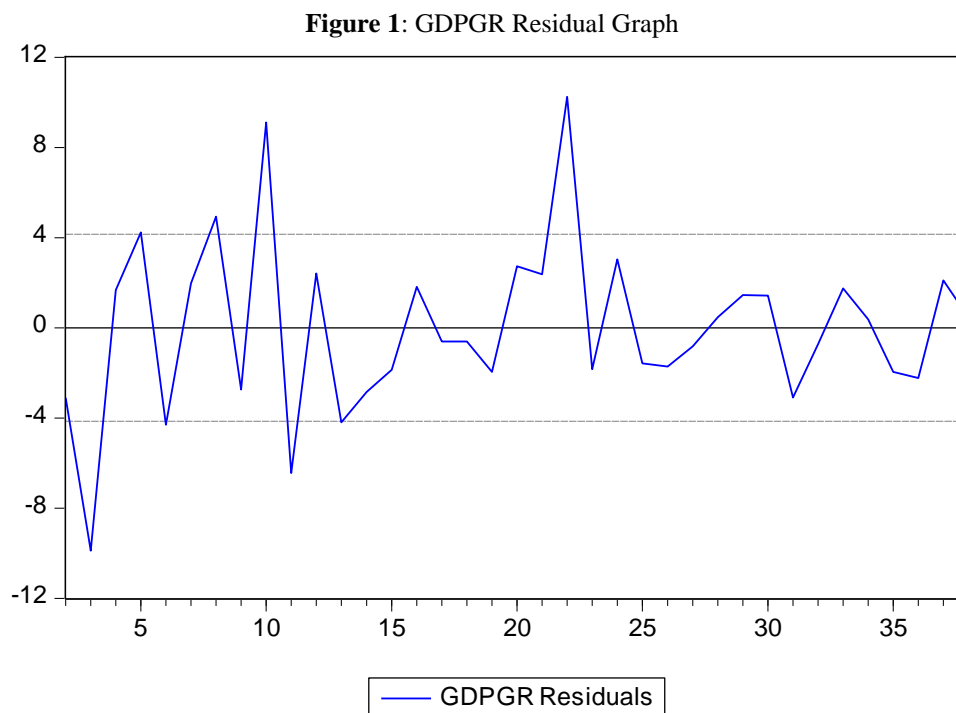
The above result shows the existence of a positive long run relationship between market capitalization, ratio of total savings to GDP, insurance income and economic growth rate. Total volume of money market instruments and financial deepening indicator however showed negative relationship with economic growth rate. Financial deepening indicator captured by FINDI is shown to positively contribute to economic growth rate on the short-run and negative on the long-run. Perhaps, the fluctuations in the money market and its adverse consequence on credits during the period under review could be attributed to this result. Judging by the values of the t-statistic of the explanatory variables of the model and their corresponding probabilities, it can be inferred that only volume of money market instruments(VMMI) and insurance income (INSINCOME) are statistically significant determinant of economic growth rate in the model at 10 percent level of significance while the other variables are shown to be statistically insignificant within the model. Hence at 10% level of significance, the null hypothesis is rejected meaning that the values of money market instruments(VMMI) and insurance income (INSINCOME) from the period of 1981 to 2018 have an impact on economic growth rate (GDPGR).

The result also shows that  $R^2$  in this model and its adjusted counterpart is about 64.98% and 51.97 percent respectively. This means that about 52 percent of the variations in economic growth rate (GDPGR) are explained by variations in the explanatory variables. This implies that the unexplained variation in the model is just about 48 percent. The value of the F-statistic which is a measure of the significance of  $R^2$  for the model is reasonably high at about 2.69, and also statistically significant even at the 1 percent level. Based on this, we therefore accept the hypothesis that all slope coefficients in the model are simultaneously significantly different from zero and as such the overall model is significant in explaining the changes in economic growth rate (GDPGR) over the sample period. Finally, the Durbin-Watson statistic of about 2.145 is sufficiently close enough to the value of 2 for us to conclude that serial correlation is absent from the model.

Bases for Cointegration: If the computed F-statistic exceeds the upper critical bounds value, then the  $H_0$  is rejected. If the F-statistic falls into the bounds, then the test becomes inconclusive. Lastly, if the F-statistic is below the lower critical bounds value, it implies no cointegration (Narayan 2005), (Ohiomu and Oluyemi, 2018). Here the computed F-value is greater than the upper bound which supports cointegration. Similarly, a significant negative coefficient for  $ECM_{t-1}$  not only supports cointegration but the size of coefficient measures the speed of convergence towards equilibrium at 57.4%. Cointegration is supported by both the F test and  $ECM_t$ .

1

The Residual Graph of the GDPGR is as shown on figure 1 below:



Source: Authors' Work using E-views

#### Policy Implications

Most empirical studies are carried out to provide policy implications to policy makers. Thus for this study, the result obtained from the ARDL Bounds test was used as a guard. The result shows that the coefficient of market capitalization and financial deepening indicator have positive effects on economic growth rate. This implies that these variables contribute to the economic growth in Nigeria. However, the volume of money market instruments did not perform as expected on the short run and long run, perhaps, due to variations in the money market and economic fluctuations. Hence policies should be made towards the development and stability of the money market and the entire financial system to enhance economic performance. Expectedly, the coefficients of market capitalization, insurance income and the ratio of total savings to GDP have positive effects on economic growth rate. This implies that these variables are determinants of economic growth in Nigeria. Hence efforts should be geared to reinvigorate the money and capital markets and re-engineer to insurance sub sector for optimal development. Savings habits and mobilization should be encouraged and the financial institutions should be well established and strengthened, as advocated by Phelps and Caldor, to achieve the desired objectives. Thus, these findings show that there is a significant relationship between financial sector development, financial deepening and economic growth in Nigeria.

## V. Summary, Recommendation and Conclusion

### Summary of the Study

This study examined the influence of financial sector development, financial deepening and economic growth in Nigeria for the period 1981 to 2018. Financial sector development, its challenges as well as the capital market deepening with a review of the past and current trends were examined. The results showed that the variables analyzed influenced economic growth rate during the period under review. The results of the analysis show the existence of a positive long run relationship between market capitalization, ratio of total savings to GDP, insurance income and economic growth rate. Total volume of money market instruments and financial deepening indicator however showed negative relationship with economic growth rate. Financial deepening indicator captured by FINDI is shown to positively contribute to economic growth rate on the short-run and negative on the long-run due to fluctuations in the money market and its adverse consequence on credits during the period under review. This calls for further research

### Recommendations

Based on the empirical findings obtained in this study, the following recommendations have been made:

- The monetary and regulatory authorities should reinvigorate the money and capital markets for optimal development to improve economic growth in the country.



- The government should re-engineer the insurance sub-sector in view of the high potential to accelerate financial development and economic growth. The National Insurance Commission should strengthen supervision and regulation as well as the institutional framework for effectiveness and efficiency.
- Government should encourage savings habits and mobilization since the ratio of total savings to GDP contributed immensely to economic growth. The financial institutions should be well established and strengthened for sustainable national development in Nigeria
- The financial institutions should streamline and liberalize the credit process to customers to lubricate the economy and encourage investments for economic growth. This was confirmed by the empirical evidence from the results obtained.

## Conclusion

The influence of financial sector development, financial deepening and economic growth in Nigeria for the period 1981 to 2018 was examined in this study. Review of the financial sector development showed signs of underdevelopment while the money and capital markets witnessed fluctuations with ripples effects on the economy. Financial deepening needs further attention to resolve the challenges of credits to private sectors. The insurance sub-sector with high potential need further re-engineering for optimal development. In this study, an empirical analysis was also carried out to determine the influence of the targeted variables on economic growth in Nigeria. The findings showed that market capitalization, ratio of total savings to GDP, insurance income positively impacted on economic growth rate. Total volume of money market instruments and financial deepening indicator however showed negative relationship with economic growth rate. It is therefore evident that there is need to reinvigorate both the money and capital markets while the insurance sub-sector should be re-engineered for optimal development achieve the desired objectives. Savings mobilization should be encouraged for capital formation and investment purposes to accelerate the country's economic growth and sustained development.

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