

Financial Liberalization and Economic Growth in Nigeria (1986-2018)

ILUGBUSI, Segun. B.

Department of Management and Entrepreneurship
College of Social and Management Sciences, Afe Babalola
University, Ado-Ekiti.

AKINDEJOYE, John A.

Department of Management and Entrepreneurship
College of Social and Management Sciences, Afe Babalola
University, Ado-Ekiti

AJALA, Rosemary B.

Department of Banking and Finance, The Federal
Polytechnic Ado Ekiti, Ekiti-State

OGUNDELE, Abiodun

Department of Banking and Finance
College of Social and Management Sciences, Afe Babalola
University, Ado-Ekiti

Abstract:- Several studies have emerged since the work of McKinnon and Shaw (1973) on the relationship between financial liberalization and economic growth. However, there is still dearth of literature in respect to the proxies employed for financial liberalization. As a result, this study investigated the effect of financial liberalization on economic growth in Nigeria covering a period of 33years spanning 1986 to 2018. Adopting McKinnon and Shaw hypothesis as the theoretical framework, economic growth was represented by gross domestic product (GDP), financial liberalization was represented by prime lending rate, saving deposit rate, exchange rate, credit to private sector and ratio of private investment to GDP. Data were sourced from CBN Statistical Bulletin and estimation done using ARDL bound test and Vector error correction mechanism. The study found that, financial liberalization has long and short run relationship with economic growth. Further findings also showed that prime lending rate had insignificant positive and credit to private sector had significant positive effects on economic growth. On the other hand, savings deposit rate, exchange rate and ratio of private investment to GDP have insignificant negative effects on economic growth. The study concluded that, financial liberalization has significant positive effect on economic growth with overriding effect from credit to private sector. Therefore, the study recommended among others that, government through the Central Bank of Nigeria should review the saving deposit rate upward in order to encourage increase of domestic savings by surplus sector of the economy. More importantly, policies that will encourage private sector investment should be looked into by government so as to further stimulate economic growth in Nigeria.

Keywords:- Financial Liberalization, Economic Growth, Credit To Private Sector, Prime Lending Rate.

I. INTRODUCTION

The argument for financial liberalization was brought to the brim light by the seminal work of McKinnon (1973) and Shaw (1973). These two scholars separately did a work on financial liberalization in relation to economic growth. They expressed that when financial market is liberalized by eliminating series of impediments or restrictions, economic growth would be enhanced. In their studies, they both found that, financial liberalization, through removal of government intervention in regulating interest rate and direction of credit could positively and significantly impact economic growth. This implies that, financial liberalization policies increase savings, leads to a more efficient allocation of resources, higher level of investment and economic growth (Khazri & Djelassi 2011). Ever since then, there have been numerous replicas of studies either from country specific or cross countries on financial liberalization. However, there have been no consensus and the research are still on going.

Despite the positive results found by the proponents, financial liberalization has been criticized on the ground that, it increases the risk of speculative attacks and country's exposure to international shocks and capital flight. For example, Gridlow (2001) as cited by Tswamuno, Parde and Wunnava (2007) says that "Developing countries in the 1980s and early 1990s had been led to believe that foreign investment in the form of equities and bonds traded on the local markets were more long term in nature than foreign bank lending they attracted in the 1970s. However, huge flight of capital from the emerging markets at times in recent years has exploded that myth." There was also argument that financial liberalization may increase the incidence of financial crises (Baldacci, De Mello & Inchauste Comboni, 2002). Further argument was that, information asymmetries which are endemic to financial markets and transactions in developing countries can be detrimental to liberalization and as such, it was contended that, emerging markets do not have the capability to assemble information relevant to financial transactions and thus cannot guarantee that capital will flow where its

marginal productivity exceeds opportunity cost compared to their developed counterparts

Although, scholars who advocated for financial liberalization argued that, financial liberalization would lead to a drop in the cost of debt and equity through integration of segmented markets. More importantly, they argued that, liberalization would result in an increase of stock liquidity. This implies that increased liquidity leads to further development of the underlying market as both local and foreign investors are assured of getting in and out of the market without much difficulties. Furthermore, the advocates argued that through financial liberalization, foreign investors pressure local institutions to adhere to international standards can improve local corporate governance and reduce the division between internal and external finance (Bekaert, Harvey & Lundblad, 2004; Henry, 2004; Levine & Zervos 1996)

Nigerian government is said to be pro-liberalization because of the adoption of series of reforms implemented both in the banking sector and financial market to ensure there is adequate growth in investment and savings needed for economic growth. For example, banking sector in Nigeria has undergone different reforms since the implementation of banking ordinance in 1952 and to strengthen the private sector by government, there was implementation of financial liberalization policy in 1986 as part of the Structural Adjustment Programme and adoption of this programme has led to the extinction of financial repressive policy (Obamuyi, 2010; Akingunola, Adeleke, Badejo & Salami. 2013).

Hence, this study acknowledged the fact that, there have been several studies on the relationship between financial liberalization and economic growth. However, the study observed that many studies did not use adequate proxies to represent financial liberalization. Studies were found mixing up proxies for financial development and financial deepening to represent financial liberalization. For example; Nwadiubu, Sergius and Onwuka (2014), Sulaiman, Oke and Azeez (2012) and Qazi and Shahiba (2013) employed M^2/GDP which is a measure of financial deepening and development. In addition, Akingunola, et al. (2013) also used ratio of liabilities to GDP to represent financial liberalization which as a matter of fact is a measure for financial development. However, since financial liberalization focuses on credit, interest rate, investment and easy access to financial services, this study therefore employed savings interest rate, lending interest rate, credit to private sector, private investment as proxies for financial liberalization. As a consequence, this study examined effects of financial liberalization on economic growth in Nigeria over a temporal period 1986 to 2018

II. LITERATURE REVIEW

Liberalization is seen as the “removal of controls”, that is when government and or authorities remove whatever restrictions and controls that have been previously placed on the financial sector of the economy. Financial liberalization became popularized in early 1970s due to the seminal work of McKinnon (1973) and Shaw (1973) since then, both developing and developed countries of the world have subscribed to it. They proposed that economic growth can be achieved when investment is encouraged and savings increased through financial liberalization.

Other authors also gave different definitions of financial liberalization. Johnston and Sundararajan (1999) defined financial liberalization as a set of policy and reforms designed to deregulate and change the operation of financial system and its structure with the view to achieving a free and fair market-oriented system within an appropriate regulatory framework. According to Obamuyi (2010), financial liberalization can be achieved in many forms such as "deregulating interest rates", eliminating or reducing credit controls, allowing free entry into the banking sector, commercial banks autonomy, allowing private ownership of banks, and reducing control of international capital flows.

Auerbach and Siddiki (2004) opined that financial liberalization is the removal of a set of restrictions in the financial sector in order to align it with that of the developed economies. Three principal types of financial liberalization have been given. The first type is explained under domestic financial sector reforms such as privatization and increases in credit extension to the private sector. The second is stock market liberalization which can occur when countries open up its stock markets to foreign investors, at the same time allowing domestic firms' access to international financial markets and the third is liberalization of the capital account. This describes a condition in which specific exchange rate for transactions of capital account are loosened (Bekaert & Harvey, 2003; Loots, 2003). It can also be explained where domestic firms are permitted to borrow funds from abroad (Schmukler & Vesperoni, 2006), and where reserve requirements are lowered (Kaminsky & Schmukler, 2008).

Jegede and Mokulolu (2004) noted that before the financial sector of Nigeria economy was liberalized, the country through government policies and the CBN had a firm control of every of its financial activities. After liberalization, following the introduction of SAP in August 1987, Nigeria released the control of interest rates. Credit allocation was promoted and encouraged to be market-based. This encouraged competition and efficiency. The motivation behind the adoption of SAP was the need to strengthen the economy for global competitiveness. Ikhida and Alawode (2001) noted that, the first reform which was the interest rate liberalization was implemented in order to give banks the freedom to charge market-based loan rates.

➤ *Overview of Financial Sector Reforms in Nigeria*

The Nigeria financial sector reform and policy formulation was first initiated in 1952 when banking ordinance was enacted. Since then, so many regimes of financial reform have graced the sector. Most of these reforms are motivated by developmental challenges of the system. The reform was used to achieve a goal of strengthened economy with global competitiveness.

Long before the popular Nigeria Financial Sector reform of 1987, government and the CBN had so much control of the banking sector. There were restrictions placed on entry into the banking industry, regulation of exchange rate, control of interest rates and other monetary policy instruments were directly used (Emenuga, 2005). This control was liberalized by the 1987 reform to allow an autonomous market-based exchange rate regime. This reform regime was characterized by so many inconsistent implementation channels that lead to discontinuation and reintroduction of some policy implementation channels. Government restricted bank licensing in 1991 and controlled interest rate, only to allow market forces determination of same in 1992 and 1993. (Omotar, 2007). The key elements of the 2004 banking reform policy include the following; Consolidation of banking institutions through mergers and acquisitions, Phased withdrawal of public sector funds from banks, Adoption of a risk focused, and a rule based regulatory framework, Adoption of zero tolerance in the regulatory framework, The automation process for reporting of returns, Strict enforcement for the contingency planning framework of systemic banking distress etc. (Okagbue & Aliko, 2005).

➤ *Issues on Nigeria Financial Sector Reform*

Soludo, 2007 categorically stated that the banking sector reform is needed to strengthening the financial sector of the economy in order for it to be able to strongly support government developmental plans for the future. As earlier stated, banks and the financial sector of the economy has been seriously affected by the inconsistency of the 1987 financial sector reforms. Hence, in order to stabilize the economy, some reforms were designed in the monetary policy for short goals and to introduce a financial sector that is market oriented. Below are brief explanations of the reforms:

➤ *Deregulation of Interest Rate*

In a bid to prepare the country and the financial sector for the SAP regime, deregulation of interest rate was partially introduced in January 1987, and it was fully implemented in August of same year, then, market determined interest rate was allowed. Deregulation of interest rate was intended to enable banks charge loan rates based on market. Banks were subsequently encouraged to pay interests on current account deposits in 1989. The CBN introduced a new system to indicate the desired direction of interest rates changes.

Credit Controls Rationalization: In 1985, specific credit distribution priority was set at 18 sectors of the economy. At the beginning of the SAP regime in 1987, priority was reduced to 2 (agriculture and manufacturing) and every other were non-priority. Some other measures were also introduced and enacted. Expectations were totally eliminated on bank credit expansion within the ceiling on bank, commercial and merchant banks were treated equally as regards liquidity ratios and credit ceiling.

➤ *Deposit Money Banks*

Soludo, in 2006 said it is the duty of Deposit money banks to promote economic growth through capital formation. To achieve this feat, a consolidation exercise of the Nigerian banking sector was initiated in mid-2004, the banks were asked to set on a minimum capital based of N25bn by the end of 2005 from an initial minimum of N2bn. After series of mergers and acquisitions, the number of banks from 89 in the country were reduced to 25 big banks.

III. THEORETICAL FRAMEWORK

This study adopted as its theoretical underpinning, financial liberalization theory as postulated by Mickinnon-Shaw hypothesis (1973) and new growth theory as postulated by Romer (1987). Mickinnon-Shaw hypothesis (1973) focused on how economy can achieve economic growth through financial liberalization, that is, a situation whereby financial repression is discarded and financial liberalization or freedom is accepted. The argument of these two scholars was that financial liberalization is essential for generating high savings and investment rate and that the subsequent real growth in the financial institutions provides domestic investors with the incentive to borrow and save, thus enabling them to accumulate more equity thereby lowering the cost of borrowing. Gibson and Tsakalos (1994) also argued that for financial markets to function efficiently and offer new opportunities for financing in the economy, financial liberalization is sacrosanct. This is possible when restriction to financial market are removed and allow the market forces of demand and supply to determine the interest rate or cost of funds in the market. More so, removal of restrictions to the entry and exit of companies within and outside of the country have a way of improving the capitalization of the financial market through which economic growth can be influenced. This theory complements the new growth theory as postulated by Romer (1987) which postulated that economic growth is primarily a result of endogenous factors and not external forces. It further holds that, economic growth can be achieved through investment in human capital, technological progress, innovation and knowledge. In addition, greater investment into research and development together with incentives for businesses and budding entrepreneurs. Hence, as one of endogenous factors, deliberate actions of the government to remove any restrictions that may hamper the growth of investment should be discouraged through financial liberalization.

IV. EMPIRICAL REVIEW

Igbinosa (2012) examined financial liberalization and economic growth in Nigeria covering a time period 1981 to 2009. Gross domestic product GDP was used as a proxy for economic growth while financial variables that were indicative of financial policy measures used in this study are interest rates (deposit and lending rates), money supply, credit allocation by banking sector to the domestic economy, foreign direct investment and market capitalization. Secondary data used in the study were obtained from World Bank data bases and were analyzed using ordinary least square (OLS). The study found significant positive relationship between financial development and economic growth especially the money supply but that of interest rate were negative and not significant

Sulaiman, Oke and Azeez (2012) empirically investigated the effect of financial liberalization on the economic growth in Nigeria spanning a period 1987 to 2009. The study proxied Gross Domestic Product as the dependent variable and the following macroeconomic variables; lending rate, exchange rate, inflation rate, financial deepening (M2/GDP) and degree of openness as its financial liberalization indices. Annual time series data were obtained from the Central Bank of Nigeria Statistical Bulletin from and estimated using Johansen Co-integration test and the Error Correction Mechanism. The study revealed an existence of a long-run equilibrium relationship among the variables. Further finding revealed that, financial liberalization has a growth-stimulating effect on Nigeria.

Akingunola, et al. (2013) investigated the relationship between financial liberalization and economic growth in Nigeria from 1976 to 2012. The financial liberalization was proxied by ratio of liquidity, that is liabilities to GDP, real interest rate, and total deposit while the economic growth was measured by the real GDP. Secondary data were sourced from CBN's Annual Statistical Bulletin. And it was analyzed using vector Error Correction. The study showed an insignificant negative effects of interest rate and total deposit on economic growth while ratio of deposit of liquidity liability was positive in relationship with economic growth. It was also found that, there exists a long run relationship between the two variables.

Oyovwi and Eshenake (2013) studied the effect of financial openness on economic growth in Nigeria over a time scope 1970 to 2010. Economic growth was proxied by GDP while financial openness was proxied by the ratio of M_2 to GDP, the ratio of total trade to GDP and investment to GDP as control variable. Adopting vector error correction technique as estimation method, the study showed that financial depth exerted a significant positive impact on economic growth.

Bashar and Khan (2013) evaluated the impact of liberalization on the country's economic growth in Bangladesh spanning in 1987 to 2013. The dependent variable was per capital GDP and gross investment as a

share of GDP, while the independent variables were Labour force as a share of population, secondary enrolment ration, trade openness indicator, real rate of interest and net capital inflows. Secondary data were sourced and estimated using cointegration and error correction method. The empirical results showed that financial liberalization policy variable (real interest rate) was negative and significant, implying that financial liberalization has significant negative effect on economic growth.

Owusu and Odhiambo (2013) carried out an empirical study on the relationship between financial liberalization and economic growth in Nigeria between 1969 to 2008. Economic growth which is the dependent variable was proxied by real GDP per capita and financial liberalization was proxied by an index calculated by using principal component analysis (PCA). Annual data were sourced and estimated using autoregressive distributed lag (ARDL)-bounds testing. The empirical findings showed that financial liberalization have a positive and significant effect on economic growth in Nigeria – both in the short run and in the long run.

Qazi and Shahida (2013) empirically investigated the impact of financial liberalization on economic growth in Pakistan between 1971 and 2007. Economic growth was proxied by real GDP per capita while financial development was proxied by financial development index. Using auto regressive distributed la estimation technique, the study revealed a clear evidence between the long-run growth and a number of financial liberalization indicators which confirmed the anticipations of the new growth theory. Their findings took cognizance of financial liberalization as a policy tool because of its possibility to promote economic growth

Nwadiubu, Sergius and Onwuka (2014) empirically examined the effect of financial liberalization on economic Growth in Nigeria for the period 1987 to 2012. Economic growth was proxied by GDP while inflation rate, degree of openness, exchange rate, lending rate and financial deepening measure were used as proxies for financial liberalization. Annual time series data were obtained from the Central Bank of Nigeria Statistical Bulletin and analyzed using Johansen Co-integration test and the Error Correction Mechanism (ECM). The study found existence of a long-run equilibrium relationship among the variables and co-integration equation at 5% significance level. Furthermore, except for financial deepening (FD), all the explanatory variables and their lagged values demonstrated positive relationship with GDP.

Orji et al. (2015) studied the effect of financial liberalization on economic growth in Nigeria from 1981 to 2012. Real exchange rate, real lending interest rate, private investment as ratio of GDP and financial liberalization index were proxies for financial while economic growth was proxied by gross domestic product. Time series data were sourced and estimate using ordinary least square and cointegration analysis. The study revealed that financial liberalization and private investment have significant

positive impact on economic growth in Nigeria. However, real lending rate proved to be negatively related to economic growth in Nigeria within the period under review.

Rayyanu (2015) empirically examined the effect of financial liberalization on economic growth in Nigeria between 1981 and 2012. The model was specified using real GDP in Naira as dependent variable to measure economic growth while financial liberalization was proxied with a measure of financial liberalization, exports and imports of goods and services (% of GDP) while external debt stock to GDP, government expenditure to GDP and investment measured by gross fixed capital formation to GDP were control variables used. Secondary data were sourced and analyzed using ARDL. The study shows that there is a long-term and short-term relationship between financial liberalization and real output.

V. METHODOLOGY

Based on the theoretical framework proposed in this study by McKinnon-Shaw hypothesis (1973) and endogenous growth theory, this study adopted Cobb Douglas production function for model the specification. However, measurement for economic growth for this study is real GDP, financial liberalization was proxied by savings deposit rate, lending rate, exchange rate, credit to private sector while ratio of private investment to GDP was used as control variable. Annual time series data spanning 1986 to 2018 were sourced from CBN Statistical Bulletins and CBN Annual Reports of various editions. Therefore, to specify the model for the study, Cobb Douglas production function is used and it states that, economic growth is a function of capital, labour and technology. This is stated as

$$Y = f(AL^\beta K^\alpha)$$

Where Y is the total output in a year, L is Labour, K is capital input, A = total factor productivity while α and β are the output elasticities of capital and labor, respectively. These values are constants determined by available technology. However, this model is therefore expanded to incorporate other factors that can increase the total output such as financial liberalization. Hence, the functional model is stated as

$$Y = f(L, K, FL)$$

In an expanded functional form, the study therefore incorporates financial liberalization proxies such as saving deposit rates, lending rates, exchange rates, foreign portfolio investment, domestic credit and ratio of private investment to GDP as control variable while and employed real GDP per capita as proxy for economic growth. The model is specified as follows

$$GDP = f(SDR, LDR, EXR, FPI, CPS, RPIG)$$

In a linearized form, the model is re-stated as

$$GDP_t = \beta_0 + \beta_1 SDR_t + \beta_2 LDR_t + \beta_3 EXR_t + \beta_4 CPS_t + \beta_5 RPIG_t + U_t$$

Specifying using vector auto correction mechanism, the model is re-stated as

$$GDP_t = \lambda_1 + \sum_{i=1}^{h+d} \delta_{11i} GDP_{t-1} + \sum_{j=1}^{l+d} \delta_{12i} SDR_{t-1} + \sum_{j=1}^{l+d} \delta_{13i} LDR_{t-1} + \sum_{j=1}^{l+d} \delta_{14i} EXR_{t-1} + \sum_{j=1}^{l+d} \delta_{15i} CPS_{t-1} + \sum_{j=1}^{l+d} \delta_{16i} RPIG_{t-1} + ECM(-1) + U_{1t}$$

Where: d is the maximum order of integration
 h and d are the optimal lag length, GDP= Gross domestic product, SDR= Savings deposit rate, LDR=Lending rate, EXR=Exchange rate, CPS= credit to private sector, RPIG=Ratio of private investment to GDP, ECM(-1)= Error correction mechanism, U= error term, $\delta_{11} \dots \dots \delta_{15}$ are short run Coefficients to be estimated

➤ *Estimation Technique*

The study employed Philip Peron unit root to test for the stationarity of the variables after which ARDL bound test and Vector error correction mechanism were estimated. Breusch Godfrey serial correlation LM test and Breusch pagan test were used to test the serial correlation and heteroscedasticity problems while normality test was done using Jargua Bera test.

VI. ANALYSIS AND INTERPRETATION OF DATA

➤ *Philip Perron Unit Root Test*

Whenever a time-series analysis is done, testing if the variables suffer from problems of unit root is usually the starting point. The reason for this is to show the direction for the analysis to follow. For this study, Philip Perron unit root test was used. The result is presented in Table 1, it revealed that, variables are integrated of difference order. As it is shown, LGDP, LDR, LEXR have no unit root at level, this means these variables are stationary and it can be used without differencing. However, LSDR, LCPS and RPIG have unit root at level, meaning they are non-stationary series. The study further test unit root using their first difference level and it was found that, the series became stationary at first difference I (1). Given that there are mixed of integration levels, the result therefore points to the use of Autoregressive Distributed Lag (ARDL) bound test as the appropriate method of analysis for co-integration

Lag length: 10	PP Unit Root Test (Intercept)				Integration level
	PP @ Level		PP @ First Difference		
	T-Statistic	Probability	T-Statistic	Probability	
LGDP	-3.3058	0.0230			I(0)
LSDR	-1.0467	0.7241	-5.4820	0.0001	I(1)
LDR	-5.0425	0.0003			I(0)
LEXR	-2.9984	0.0457			I(0)
LCPS	-1.5957	0.4731	-3.8829	0.0058	I(1)
RPIG	-1.1592	0.6795	-4.3457	0.0058	I(1)

Table 1:- PP Unit Root Test
Author’s Computation using E-views 9, 2020

Table 2 presents summary of co-integration result between financial liberalization and economic growth. The study employed auto regressive distributed lag bound test to examine the long run relationship between the variable of interest. ARDL co-integration test was found to be perfect for this purpose because of the level of integration of the variables. It was revealed that, the F-statistics of the Narayan test 17.56 is greater than the upper bound of 3.79 at 5% level of significant. This indicates an evidence of a long run relationship between financial liberalization and economic growth. Therefore, this study confirms that, financial liberalization and economic growth moves in a long run

Test Statistic	Value	K
F-statistic	17.56066	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.50%	2.96	4.18
1%	3.41	4.68

Table 2:- Summary of ARDL Bound Test for Cointegration
Author’s Computation using E-views 9, 2020

➤ *Effect of financial liberalization of economic growth*

In examining the effect of financial liberalization on economic growth in Nigeria, the study employed vector error correction as mechanism (VECM). The first step of this approach is the lag order selection that would be appropriate for the estimation. The result of the lag order selection from VAR environment is presented in Table 3. The result revealed that, estimation would be best effected using Akaike Information criteria at lag order 2 as it gives the least value. Hence, the VECM is estimated using lag 2.

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-18.77891	NA	0.291041	1.598639	1.876185	1.689113
1	39.12832	89.66281*	0.007426	-2.072795	-1.748991	-1.967243
2	41.62784	3.708970	0.006768*	-2.169538*	-1.799477*	-2.048908*

Table 3:- Lag Order Selection
Author’s Computation using E-views 9, 2020

Estimating vector error correction mechanism required that series must be co-integrated. This is evidence from the ARDL bound test which confirmed an existence of long run relationship between financial liberalization and economic growth. The lag selection has been done through Akaike information thereby selecting lag 2 for the estimation. Hence, the result of the VECM as presented in

Table 4 revealed that, the vector error correction mechanism of -11.12% is rightly signed and highly significant as the p-value of 0.0397 is below 5% level of significant. This implies that the speed of adjustment would be 11% annually. The coefficients of variable in the VAR revealed that at lag 2, gross domestic product of 0.0611 has a positive but insignificant effect on its own innovation. In

addition, the financial liberalization variables such as LDR of 0.0039, CPS of 0.2938 have positive effects on gross domestic products while SDR of -0.0930, EXR of -0.1575 and RPIG of -0.0089 have negative effects on gross domestic product. Checking the significant of each of the variables on gross domestic product, it was found that, only credit to private sector was significant at 5% while exchange rate was significant at 10% while other variables were insignificant at both 5% and 10% significant level. The implication of this is that, a unit increase in LDR and CPS would bring about an increase in gross domestic product while a unit increase in SDR, EXR and RPIG would bring about a reduction in gross domestic product.

Further findings in respect to the coefficient of determination R^2 showed that, 76% variation in gross domestic product is explained by the joint effects of explanatory variables while 24% can be explained by other variables not included in the model. The adjusted R^2 also confirmed the level of the relationship by recording 55.20% variation in dependent variable which implies that there is true relationship between the variables. The significant of the whole model also showed that, the model is significant with its corresponding probability value of 0.009 which indicates that the whole model is highly significant. Durbin Watson of 2.02 showed that the series are free from problem of auto correction. The whole results pointed to the fact that, there is a significant effect of financial liberalization on economic growth in Nigeria.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ECM(-1)	-0.111278	0.04941	-2.252153	0.0397
D(LGDP(-1))	0.968355	0.262674	3.686536	0.0022
D(LGDP(-2))	0.06119	0.217258	0.281649	0.7821
D(DLSDR(-1))	-0.025716	0.071194	-0.361204	0.723
D(DLSDR)	-0.09301	0.059831	-1.554544	0.1409
D(LDR(-1))	-0.003907	0.008485	-0.46047	0.6518
D(LDR(-2))	0.003903	0.006935	0.562789	0.5819
D(LEXR(-1))	0.155975	0.072403	2.154268	0.0479
D(LEXR(-2))	-0.157528	0.082417	-1.91135	0.0753
D(DLCPS(-1))	-0.047754	0.102792	-0.464576	0.6489
D(DLCPS(-2))	0.293852	0.116151	2.529909	0.0231
D(DRPIG(-1))	-0.032484	0.012548	-2.588776	0.0206
D(DRPIG(-2))	-0.00892	0.00947	-0.941859	0.3612
C	-0.008543	0.038937	-0.219415	0.8293
$R^2=0.7600$	Adj- $R^2=0.5520$	F-Stat=3.6549	P-value=0.009	D.W=2.0252

Table 4:- Summary of Vector error correction mechanism
Author's Computation using E-views 9, 2020

Table 5 presents result of diagnostic check on residuals, the study used Breusch Godfrey serial correlation, Breusch pagan test and normality test and it was found that series have no problems of auto correlation, or heteroscedasticity and the series are normally distributed.

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.1148	Prob. F(2,18)	0.8922
Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.5549	Prob. F(9,20)	0.8171
Jarque-bera	7.16814	Prob	0.2720

Table 5:- Summary Diagnostic Check on the Residuals
Author's Computation using E-views 9, 2020

VII. SUMMARY AND DISCUSSION OF FINDINGS

It has been established in the extant literature that financial liberalization is necessary for the growth of the economy. In addition, from the supply side, that is finance led growth theory, finance is said to lead growth which means, the lubricant of growth in an economy is the amount of funds or financial services that is available and accessible in the economy. This study had examined the effects of financial liberalization on economic growth in Nigeria covering a temporal period 1986 to 2018. The study proxied economic growth by gross domestic product and financial liberalization was proxied by savings deposit rate, lending rate, exchange rate, credit to private sector and ratio of private investment to GDP. Secondary data were sourced and analyzed using ARDL bound test and vector error correction mechanism. Findings revealed that, while lending rate and credit to private sector positively impacted on economic growth, savings deposit rate, exchange rate and ratio of private investment to GDP negatively impacted on economic growth. Further findings revealed that only credit to private sector and exchange rate significantly impacted on economic growth.

The findings of this study are in support of the financial liberalization theory which says that, repression of credit and interest hamper economic growth but when this is allowed to be dictated by the market prices it would bring about growth of the economy. From the result, it was found that lending rate and credit to private sector positively impacted on economic growth. Although, savings deposit rate, exchange rate and the investment level to GDP were at variance with the theoretical expectation. In addition, the result is also in line with the existing studies such as Igbinsosa (2012), Owusu and Odhiambo (2013), Qazi and Shahida (2013), Sulaiman and Oke (2012), and Rayyami (2015) that financial liberalization has positive effect on economic growth. On the other hand, the study is also at variance with that of Akinguola et al (2013), Bashar and Khan (2013), Orji et al (2015) that financial liberalization negatively affects economic growth.

VIII. CONCLUSION AND RECOMMENDATIONS

Having examined critically the effect of financial liberalization on economic growth, it is concluded that, financial liberalization has heterogenous effects on economic growth. This means, lending rate and credit to private sector which are the essential aspects of financial liberalization stimulate growth in the long run. Based on the findings, the study recommended that, government through the Central Bank of Nigeria should review the saving deposit rate upward so as to encourage savings by surplus sector of the economy. In addition, the private sector of the economy should be more encouraged through government policy so as to increase the level of their financial investments in order boost the level of economic growth in Nigeria. Lastly, government is encouraged to put up policies that would stabilize exchange rate in Nigeria as this will go a long way engendering economic growth in Nigeria

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