

# Financial deepening and economic growth: A nexus

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**Abiodun Babatunde Agbaje**

**ABSTRACT**

This study was conducted using time series data from the Central Bank of Nigeria's Statistical Bulletin. A model was created and the variables were subjected to a unit root test in which stationary were achieved at I(0) and I(1). The model was analyzed using Auto Regressive Distributed Lag (ARDL) including the Error Correction Model (ECM). Financial deepening is the term used to describe the increasing provision of financial services and developing financial markets within an economy. Financial deepening is associated with economic growth. While private-sector credit has no discernible effect on economic growth in Nigeria, the long- and short-term (ECM) findings showed that the money supply, stock market capitalization, financial saving, and bank liquid liabilities all have positive and significant effects on economic growth. The study's conclusions recommended that the authorities tasked with monetary regulation create and implement policies that will concentrate on deepening the financial sector and that financial institutions do everything in their power to increase the resources available to the private sector to support the real sector.

**Keywords:** Bank liquidity liabilities, Broad money supply, Economic growth, Financial deepening

**1. INTRODUCTION**

Financial deepening is the degree at which the financial institutions are discharging their obligations or delivering their financial services and products to their clients or customers. This has given many scholars a significant attention on working on the relationship that exists between financial deepening and economic growth. Financial deepening yields some significant results in both developing and developed nations at the same rate, this is due to the functions it is performing in increasing capital accumulation's rate (Familusi et al., 2024).

The financial system in any economy that comprises financial institutions with the primary function of effective and efficient provision of savings for investment is very significant for the economic growth of any nation. Hence, the financial system is being noticed as playing an important function in domestic advancement throughout the world (Deema and Buthiena, 2016). The true determinant of advancement in the economy is economic growth, as an increase in "gross domestic product (GDP) is a result of economic growth" (Adeniran and Sidiq, 2018). As opined by Nzotta and

Okereke, (2009), economic growth involves an increase in services, output, and jobs to improve the financial well-being of citizens.

Financial deepening refers to an increase in the economy supply of financial assets. As a result of the unarguable significance of the financial sector development for economic growth, the link that exists between economic growth and financial deepening has gotten greater attention in financial literature and as well, and being acknowledged widely (Jhingan, 2006). Financial deepening means that financial institutions will efficiently and effectively make use of, savings for investments as a result of financial intervention by improving the financial markets' competitive efficacy (Jhingan, 2006). It was asserted that financial deepening is a detailed process involving the intersection of primary and secondary markets as well as both financial instruments and retail markets (Ademola and Marshal, 2018).

This has been noticed as one of those strategies in which utilization can lead to an acceleration in the pace of Nigeria's economic growth and development (Odhiambo, 2005). The roles being played by financial deepening in improving the economy include the provision of the required capital and resource base undermining the promotion of credit investments and savings. Economic development and growth are the exclusive factors of every economy. Economic growth refers to the continuous process where the production capability and capacity of an economy increase over a certain time in achieving an increasing degree of public pay and yield (Arestis et al., 2001; Anachedo et al., 2021).

Financial deepening is important for economic growth because it enhances the conditions of the economy by creating a healthy and conducive environment for the financial stakeholders and players of the economy as well as extending its importance, invariably to the nonfinancial sector of the economy. This was corroborated by Nwanna and Chinwudu, (2016) that financial development is a way through which financial organizations of an economy try trying effectively and efficiently gather savings for the purposes of investment. Financial deepening, asserted by Ndebbio, (2004) helps increase the choices and provision of financial products and services that will come by the financial infrastructures.

Reformations of the financial sector have been a continuous exercise in the financial system of Nigeria. The apex bank in the country which is the Central Bank of Nigeria (CBN) has been putting more effort into ensuring that the financial sector in the country maintains a very considerable depth and remains liquid to be able to compete effectively and efficiently with the rest in the world financial market. These reformations were necessitated due to the reaction to the challenges being posed by developments in some of the systems like financial crisis, globalization, systemic crisis, and technological innovation (World Bank, 2012). The major sector of the economy that experienced these reforms most is the Banking sector.

Significantly, the reformation in the financial sector was developed purposely to maintain a stable, effective, and efficient financial structure. These reforms allow the banking sector to build the required stability in fostering economic growth of the country effectively and efficiently while at the same time keeping up with their obligations as financial intermediaries. These reforms always seek to act proactively to system strengthen, thereby there is a need for deepening the financial sector and repositioning the sector for growth and development as well as integration of the sector into the financial system in the world in tandem with best practices, internationally. Therefore, the study seeks to examine the impacts of financial deepening on economic growth in Nigeria.

### Problem Statement

Sizable attention is being given to examining the impacts of financial deepening on economic growth. The increasing significance of both banks and the stock market in the world of recent has necessitated new room for research into the link between financial deepening and economic growth (Adeniran et al., 2023). Most studies on financial deepening Al-faki, (2006), Iyoboyi, (2013), Jalilian and Kirkpatrick, (2015), have been concentrating on the banking sector and private sector credit all alone with little or no attention given to capital market and liquidity liabilities of banks because they play major roles in the economic growth of any country.

This research work therefore evaluates the impacts of financial deepening, represented by broad money supply, private sector credit, stock market capitalization, financial savings, and bank liquid liabilities on the economic growth of Nigeria represented by GDP. The objectives of this study are to ascertain if there is a significant relationship between financial deepening and economic growth in Nigeria, and to determine the significant impact of financial deepening on economic growth in Nigeria.

## Literature Review

### *Financial Deepening*

Financial deepening means the availability of more liquidity in the financial markets. It is the rapid increase in providing financial services, including an enlarged services choice being channeled to society at all levels. As opined by Ayoka et al., (2021), this is anchored on the belief that as more money in liquidity is available in an economy, the financial deepening is more and provides an enabling environment for continuous expansion and economic growth. This financial deepening is a major objective of reforming the financial sector in developing countries (Adeniran et al., 2024a).

Financial deepening means the growth in supplying financial assets in an economy (Adeniran et al., 2025). Financial deepening's major objective is the elimination of shortcomings emanating from shallow finance. The other objectives include but are not limited to increasing the ratio of private domestic savings to income, increasing the ratio of private domestic savings to income, increasing the monetary system size, generating opportunities for profit for investors, strengthening mobilization as well as allocation of savings to displace the fiscal process of relying on foreign assistance and inflation finance.

Most proxies used in empirical literature for financial deepening have been bank-based (like broad money supply, bank assets, credit to the private sector, and financial savings), capital market-based (such as stock market capitalization), and insurance-based (like insurance premium volume). The most widely used proxy is private-sector credit. As opined by Tadaro and Smith, (2005), private-sector credit is a good indicator of the level of financial inclusion and access.

### *Broad Money Supply*

Money is the combination of all liquid assets that is acceptable generally as a means of exchange and repayment of debt. The supply of money, as shown by Alenoghena et al., (2020) is the total of money in an economy at a particular period. As asserted by Owoye and Oikhenam, (2007), a broad money supply is what can be converted into cash easily with little or no loss. Money supply is one of the indicators of financial deepening, and measures as amount of money that is in circulation as a ratio of domestic product (GDP).

### *Private Sector Credit*

Credit is a key to economic growth, particularly for developing nations because it helps in lubricating their economy. Bank credit is the sum of money as well as funds being provided by deposit money banks to business organizations, individuals, and government for both investment and consumption purposes. Private sector credit refers to the domestic private credit by the deposit money banks to the real sector. In this study, this is measured as private credit to the real sector as a ratio of GDP.

### *Stock Market Capitalization*

The entire value of the size of the stock is referred to as market capitalization (Adewoyin, 2004). This is the size of firms and organizations that equate the share price of the market multiplied by the number of shares. It is the share price multiplied by number of shares. This can also be the multiplication of a company's shares with the price per share (Ghildiyal et al., 2015). In this study, this is measured as stock market capitalization as a ratio of GDP.

### *Financial Savings*

Savings are the part of disposable income that are not spent on the consumption of goods by consumers but invested in capital equipment. Savings create the formation of capital. Savings improve the maximum utilization of scarce resources that are available in a way that is efficient to solve inflation and unemployment problems among others. Financial savings, in this study, is measured as the amount of national savings as a ratio of GDP.

### *Bank Liquid Liabilities*

Bank liquid liabilities refer to that portion of liabilities of banks that can be converted easily into cash, or which are due within a relatively short period of time, specifically, within a year. Liquid liabilities serve as an important aspect of the balance sheet of banks because they represent the funds the banks must have to meet their obligations to both the creditors and depositors.

### *Economic Growth*

Economic growth as opined by Jinghan, (2004) signifies the increase in the standards of living of individuals with a reduction in inequalities in income. As asserted by economic growth is the steady augmentation of the productive capacity of a country. Economic growth serves as a pivotal factor for attaining an enhanced social welfare outcome that stands as the major aim of economic policies (Sanusi, 2010). The real GDP was used to measure the economic growth.

### **Theoretical Review**

In literature, many theories have been identified as regards the subject matter of this research work. Based on this, the researcher decided to review a few of such theories that are relevant to the study. Hence, the researcher limited the theories to the Schumpeterian growth theory, supply-leading hypothesis, demand-following hypothesis, and feedback hypothesis.

#### *The Schumpeterian Growth Theory*

This was developed in 1911 by Joseph Schumpeter, an economist. The theory brings out entrepreneurship, technology, and innovation as the major stimulus for long-term economic growth. It brings out the impression that the advancement in the financial sector solidified economic expansion and technology innovation (Adeniran et al., 2024b; Alpha et al., 2016). The theory was criticized for disregarding factors like human resources and human capital. Yet, the theory sheds light on financial progress and innovation's roles in economics.

#### *Supply Leading Hypothesis*

Another name for this is the finance-led growth hypothesis. This suggests that financial sector improvement as opined by Shittu, (2012) gets economic growth in modern capitalism. The theory proposes that both financial organizations and credit creation are key driving mechanisms for the growth of the economy (Ufoeze, 2018). This theory was criticized for risks like instability and crises from excessive finances. Yet, the theory gives perspective on finance' roles on the growth of the economy.

#### *Demand Following Hypothesis*

The other name for this is a growth-led hypothesis. This theory based its proposition on the fact that financial development is the growth's outcome in the real economy sector, in a situation where enterprises are leading, and finance is following (Albert et al., 2021). The theory argues that growth drives finance. The theory was criticized for ignoring the bi-directional causality possibility for considering the unidirectional causality possibility.

#### *Feedback Hypothesis*

This is otherwise called the stage of development theory. This theory suggests that the relationship between financial deepening and economic growth changes as the economy advances (Umar et al., 2021). This theory backs the bi-directional causality between finance and growth, thereby depicting a two-way relationship (Alenoghena et al., 2020). This shows a very dynamic link between financial deepening and the growth in the economy.

### **Theoretical Framework**

Based on the theories that have been reviewed above, the researcher has decided to anchor this study on the supply-leading hypothesis theory of the financial deepening and economic growth nexus. The theory asserted that financial deepening has a very positive impact on the growth of the economy.

### **Empirical Review**

Many studies by scholars have examined the impacts of financial deepening on countries' economic growth. The views are contrasting, and the different findings of the subject matter are reviewed below. In the work of Okoye and Ezema, (2021), using secondary data from the year 1986 to 2015 to determine the effect of financial deepening on economic growth of Nigeria, the ordinary least square (OLS) and co-integration were the estimation tools adopted. The findings revealed that there is the long-run relationship between

financial deepening and economic growth in Nigeria. The study recommends that to be able to increase savings, there must be financial reforms, an effective payment system, financial inclusion, and infrastructure development.

Ndako, (2017) examines the nexus between financial development, investment, and economic growth in Nigeria, using the Vector Auto Regression (VAR) and exogenous and endogenous con-integration. The finding revealed the long-run relationship between financial development, investment, and economic growth in Nigeria. Igwe et al., (2014) investigate the effect of financial deepening on India's economics growth by using the Auto Regressive Distributed Lag (ARDL). The study revealed that there exists a long-term relationship between financial deepening and economic growth. The study shows that financial deepening enhances economic growth both in the short run and long run and recommends an improvement in financial deepening.

Onwumere et al., (2012), using secondary data from 1970 to 2010, applying the Error Correction Model (ECM) and applying co-integration to determine the impact of financial intermediation on economic growth in Nigeria. The study revealed that financial intermediation significantly influences economic growth. Iyoboyi, (2013) investigated the impacts of financial deepening on Nigeria's economic growth. The study used the ratio of the broad money supply to GDP and the ratio of credit to the private sector to GDP as proxies for financial deepening. The study used the Error Correction Model (ECM) and revealed a positive and significant relationship between broad money supply and GDP while a negative (insignificant) relationship between private sector credit and economic growth.

Jalilian and Kirkpatrick, (2015), used indicators of the banking sector and stock market development to determine the effect of financial deepening on economic growth in Nigeria from 1981 to 2010. The study revealed a bi-directional causality relationship between financial deepening and economic growth. Al-faki, (2006) examined the effect of financial development on economic growth in Nigeria between 1980 and 2019 by using ordinary least square (OLS). The study used GDP as dependent variable. The findings revealed a positive and negative relationship between economic growth and the independent variables (real interest rate, saving, private sector credit).

The finding revealed that both real interest rate and saving had insignificant impact on economic growth, while credit to private sector had a positive significant impact on economic growth. The studies in Nigeria, majorly explored the relationship between financial deepening and economic growth with different outcomes. In addition, most of the studies based their study on financial aspects (bank-based) alone. However, this study examines the impacts of financial deepening on economic growth in Nigeria between 2000 and 2022, utilizing supplementary variables such as financial savings and bank liquid liabilities, to add more evidence to the established arguments.

## 2. METHODOLOGY

The research design adopted for this study is the quantitative ex-post facto. This was since the data used were secondary data Adeniran et al., (2024c), Adeniran and Tayo-Ladega, (2024), which were sourced from the Central Bank of Nigeria (CBN) Statistical Bulletin from year 2000 to the year 2022, spanning 23 years. The ex-post facto research design entails the analysis of data that have been collected already to determine the degree to which an event in the past influences the occurrence of the present event (Akintola et al., 2020). The variables collected are the Real Gross Domestic Product (RGDP). This represents the economic growth (dependent variable)-measured as GDP growth rate.

The independent variables collected are Broad Money Supply (BMS)-measures as broad money supply ratio of GDP, Private Sector Credit (CPS)-measures as private sector credit ratio of GDP, Stock Market Capitalization (SMC)-measures as stock market capitalization ratio of GDP, Financial Savings (FS)-measures as financial savings ratio of GDP, and Bank Liquid Liabilities (BLL)-measures as bank liquid liabilities ratio of GDP. The study examined the relationship between these variables and economic growth, making use of detailed financial data and economic data cutting across the examined years (2000 -2022).

The variables were subjected to a unit root test, specifically, using Augmented Dickey-Fuller (ADF) unit root test. The data were analyzed with the use of Auto Regressive Distributed Lag (ARDL) and the Error Correction Model (ECM) Estimation tools. The model utilized in this study was a modification to the model adopted by Ndebbio, (2004) they examined the effect of financial deepening on economic growth in Nigeria. The model stated that:

$$RGDP = f(MS \backslash GDP, CPS \backslash GDP, MC \backslash GDP, FSAV \backslash GDP, TOP, INFL)$$

Where:

$RGDP$  = "Real gross domestic product"

$MS \backslash GDP$  = "Money supply as a ratio of gross domestic product"

$CPS \backslash GDP$  = "Private sector credit as a ratio of gross domestic product"

$MC \backslash GDP$  = "Market capitalization as a ratio of gross domestic product"

$FSAV \backslash GDP$  = "Financial savings as a ratio of gross domestic product"

$TOP$  = "Trade openness"

$INFL$  = "Inflation rate"

$f$  = "Functional Notation"

This model was modified to suit the objectives of this study. Therefore, given us:

$GDPGR = f(BMS \backslash GDP, CPS \backslash GDP, SMC \backslash GDP, FS \backslash GDP, BLL \backslash GDP)$

Where:

$GDPGR$  = "Gross domestic product growth rate"

$BMS \backslash GDP$  = "Broad money supply ratio of gross domestic product"

$CPS \backslash GDP$  = "Private sector credit ratio of gross domestic product"

$MC \backslash GDP$  = "Stock market capitalization ratio of gross domestic product"

$FS \backslash GDP$  = "Financial savings ratio of gross domestic product"

$BLL \backslash GDP$  = "Bank liquid liabilities ratio of gross domestic product"

$f$  = "Functional Notation"

The mathematical model is stated thus:

$GDPGR = BMS \backslash GDP + CPS \backslash GDP + SMC \backslash GDP + FS \backslash GDP + BLL \backslash GDP$

Econometrically, it becomes:

$GDPGR_t = \beta_0 + \beta_1 BMSt \backslash GDP_t + \beta_2 CPSt \backslash GDP_t + \beta_3 SM Ct \backslash GDP_t + \beta_4 FSt \backslash GDP_t + \beta_5 BLLt \backslash GDP_t + ut$

Where:

$GDP_t$  = "Gross domestic product in time  $t$ "

$GDPGR_t$  = "Gross domestic product growth rate in time  $t$ "

$BMSt$  = "Broad money supply in time  $t$ "

$CPSt$  = "Private sector credit in time  $t$ "

$SM Ct$  = "Stock market capitalization in time  $t$ "

$FSt$  = "Financial savings in time  $t$ "

$BLLt$  = "Bank liquid liabilities in time  $t$ "

$ut$  = "Error term that captures other variables not included in the model"

$\beta_0$  = "Intercept"

$\beta_1 - \beta_5$  = "Coefficients of parameters to be estimated"

### 3. RESULTS AND DISCUSSION

This section of the research work involves the data analysis presentation, results, and discussion. The model was specifically designed to capture the variables for financial deepening (independent variable) and economic growth (dependent variable).

#### Unit Root Stationary Test

The study that involves time series models is majorly concerned with testing for the presence and absence of unit roots. The presence of unit roots means that the time series data is non-stationary. However, the absence of it means that the stochastic process is stationary. Most often, most time series data are non-stationary at some significant levels because some variables might be too small or too large to the extent that these variables will never return to the expected mean. Hence, the need to carry out unit root tests is inevitable when dealing with time series data. The unit root test is hereby presented in (Table 1).



**Table 1** Unit Root Test Result (Stationary Result)

Variables	Level	1st Difference	2nd Difference	Order of Integration
GDPGR	1.620413*	2.396842	-	I(0)
BMS\GDP	3.412367***	3.712989	-	I(0)
CPS\GDP	-2.971382*	-4.215687	-	I(0)
SMC\GDP	-2.718463	-3.659241**	-	I(1)
FS\GDP	-1.846935**	-2.936148	-	I(0)
BLL\GDP	4.613259***	5.374931	-	I(0)

Source: Researcher's Computation, 2024 (E-views 10)

(\*\*\*), (\*\*) and (\*) represent significance at 1%, 5%, and 10% levels of freedom respectively.

Based on the results from Table 1, the stationarity level of all the variables used in the model was performed by using the Augmented Dickey-Fuller (ADF) unit root test. The results revealed that the gross domestic product growth rate (GDPGR), broad money supply as a ratio of gross domestic product (BMS\GDP), private sector credit as a ratio of gross domestic product (CPS\GDP), financial savings as a ratio of gross domestic product (FS\GDP) and bank liquid liabilities as a ratio of gross domestic product (BLL\GDP) are stationary (no unit root) at the level  $I(0)$ , while stock market capitalization as a ratio of gross domestic product (SMC\GDP) was stationary at first difference  $I(1)$ . This leads to the adoption of Auto Regressive Distributed Lag (ADRL) to determine the co-integration by using the F-bound test as revealed in (Table 2).

### Co-integration Test

The Auto Regressive Distributed Lag (ARDL) estimates F-statistic which were given in Table 2 reveals that an F-statistic of 6.421010 exceeds the upper bound values at all the levels of significance (3.82, 4.21, and 5.36). Thus, there is a presence of co-integration, and this shows that there exists a stable long-run relationship between the independent variable which indicates financial deepening, and the GDP (dependent variable), an indicator of economic growth.

**Table 2** Co-Integration Results

Variables	F-Statistic	
GDPGR, BMS\GDP, CPS\GDP, SMC\GDP, FS\GDP, BLL\GDP	6.421020	
Critical Values	Lower	Upper
1%	3.21	3.82
5%	3.74	4.21
10%	4.85	5.36

Source: Researcher's Computation, 2024

### ARDL Long Run Estimates

As revealed in Table 3, the results show that broad money supply as a ratio of gross domestic product (BMS\GDP), stock market capitalization as a ratio of gross domestic product (SMC\GDP), financial savings as a ratio of gross domestic product (FS\GDP) and bank liquid liabilities as a ratio of gross domestic product (BLL\GDP) were all statistically significant. All these variables have p-values that are less than 0.05. This shows that these variables need to improve, to drive more amount of financial deepening needed for the growth of the economy. However, private sector credit as a ratio of gross domestic product (CPS\GDP) is not statistically significant to the GDP growth rate, because it has a p-value that is greater than 0.05.

In addition, these results imply that a unit increase in BMS\GDP will increase GDP growth rate by 3.64 units in the long run, a unit increase in CPS\GDP will induce GDPGR by 3.03 units, a unit increase in SMC\GDP will cause GDPGR to increase by 3.42 units in the long run, a unit increase in FS\GDP will induce 4.65 units increase in GDPGR, while a unit increase in BLL\GDP will make GDPGR to increase by 3.03 units in the long run. This implies that while variables BMS\GDP, SMC\GDP, FS\GDP, AND BLL\GDP have a

positive and significant impact on economic growth during the examined period, the variable CPS\GDP has an insignificant but positive impact on economic growth.

The R squared posits that about 74% of the variation in GDPGR is explained by the independent variables used in the model, while the rest 26% is accounted for by the error term. The Durbin-Watson result of 1.824662 indicates the absence of autocorrelation. The F-statistic is 8.523174, implying that the explanatory variables used in this research work have a significant impact on economic growth in Nigeria (Table 3).

**Table 3** ARDL Long Run Estimates

Long Run Coefficients				
Dependent Variable: GDPGR				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
BMS\GDP	3.642194	1.474297	2.470461	0.0034
CPS\GDP	2.176321	1.101579	1.975638	0.3061
SMC\GDP	3.419383	1.122608	3.045927	0.0021
FS\GDP	4.649137	1.079389	4.307195	0.0005
BLL\GDP	3.029153	1.015899	2.981746	0.0031
C	7.648253	1.406141	5.439180	0.0002
R-squared	0.742378	Durbin Watson stat		1.824662
Adjusted R-squared	0.739061			
F-Statistic	8.523174			
Prob (F-Statistic)	0.000000			

Source: Researcher's Computation, 2024 (E views 10)

#### ARDL Short Run Estimates

As revealed in Table 4, the value of error correction model ECT (-1) is negative and significant. The adjustment speed from the short-run equilibrium to the long-run equilibrium is measured by the ECT (-1) OF -0.293462. This shows that about 29% of the error is corrected in each period. Table 4 also reveals that in the short run, BMS\GDP, SMC\GDP, FS\GDP, and BLL\GDP have a positive and significant impact on economic growth.

However, variable CPS\GDP is not significant, which means it has no immediate effect on economic growth. The R squared shows the independent variable to account for 61% of the established variation in the dependent variable. The F-statistic is 6.568213, showing the significant impact of the explanatory variables used in this study, with Durbin Watson of 1.472896 showing the absence of autocorrelation.

**Table 4** ARDL Short Run Estimates

Short Run Dynamics				
Dependent Variable: GDPGR				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
BMS\GDP	2.946042	0.956974	3.078497	0.0000
CPS\GDP	1.973854	0.847953	2.327787	0.0702
SMC\GDP	3.268759	1.596038	2.048046	0.0030
FS\GDP	3.924953	2.463792	1.593054	0.0046
BLL\GDP	2.984268	1.789260	1.667878	0.0321
CointEq (-1)	-0.293462	0.247839	-1.184083	0.0214
R-squared	0.614239	Durbin Watson stat		1.472896



Adjusted R-squared	0.565484		
F-Statistic	6.568213		
Prob (F-Statistic)	0.000002		

Source: Researcher’s Computation, 2024 (E view, 10)

ARDL Model (Diagnostic Test)

The stand on the absence of autocorrelation is supported by the results in Table 5 since heteroskedasticity and Jargue-Bera tests are not significant at 5% level. They have values that are greater than 0.05 (0.3607, 0.6002) respectively.

Table 5 ARDL Model (Diagnostic Test)

	F-statistic	Prob.
Heteroskedasticity test	1.608654	0.3607
Jargue –Bera test	16.518150	0.6002

Source: Researcher’s Computation, 2024

4. CONCLUSION AND RECOMMENDATIONS

The study examined the impact of financial deepening on economic growth in Nigeria from the year 2000 to the year 2022. The indicators used to capture financial deepening are BMS\GDP, CPS\GDP, SMC\GDP, FS\GDP, and BLL\GDP in Nigeria. These variables except for CPS\GDP have a significant impact on economic growth in Nigeria. This study reveals that financial deepening has been making a significant contribution to the economic growth of Nigeria. Conclusively, financial deepening has an impact that is positive and significant on economic growth in Nigeria.

Arising from the above, the study recommends that the authorities saddled with monetary regulations should design and implement certain policies that will focus on a deepening of the financial sector. Financial institutions should try as much as possible to make more resources available to the private sector to help the real sector. There should be continuous introduction of new financial services and products that will help deepen of financial system.

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Author Contributions

ABA: Conceptualization, Introduction, Data gathering, Design, Visualization.

Informed consent

Not applicable.

Conflicts of interests

The authors declare that there are no conflicts of interests.

Ethical approval

Not applicable.

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**Data and materials availability**

All data associated with this study are present in the paper.

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