

ISRG Journal of Economics, Business & Management (ISRGJEBM)



ISRG PUBLISHERS

Abbreviated Key Title: Isg J Econ Bus Manag
ISSN: 2584-0916 (Online)

Journal homepage: <https://isrgpublishers.com/isrgjebm/>
Volume – II Issue-I (January- February) 2024
Frequency: Bimonthly



Financial Development and Economic Growth in Nigeria

OSAYI, Valentine Igbinedion, Ph.D^{1*}, DANJI, Godiya²

¹Lecturer, Department of Banking and Finance, Faculty of Management Sciences, Federal University Wukari, PMB 1020 Taraba State, Nigeria.

²Department of Banking and Finance, Faculty of Management Sciences, Federal University Wukari, Taraba State; Nigeria.

| Received: 03.02.2024 | Accepted: 07.02.2024 | Published: 22.02.2024

*Corresponding author: OSAYI, Valentine Igbinedion, Ph.D

Lecturer, Department of Banking and Finance, Faculty of Management Sciences, Federal University Wukari, PMB 1020 Taraba State, Nigeria.

Abstract

The study examined impact of financial development on economic growth in Nigeria from 1980-2020. The study decomposed financial development into three measurable variables as Financial Institution's Depth (FID), Financial Institution's Access (FIA) and Financial Institution's Efficiency (FIE) while economic growth was measured by Gross Domestic Product (GDP). The study utilized ex post facto research design with secondary data extracted from the Central Bank of Nigeria (CBN) Statistical bulletin for various years and International Monetary Fund (IMF) data base. The said data were analyzed by means of descriptive statistics and multiple regression analysis to provide summary statistics for the variables. The result revealed that financial institution's depth has a negative significant impact on economic growth in Nigeria with a probability value of 0.0305 and coefficient of -4169.955, financial institution's access also has positive and significant relationship with economic growth in Nigeria with a probability value of 0.000 and coefficient of 5967.794 while financial institution's efficiency does not impact on economic growth in Nigeria based a probability value of 0.59907 and coefficient of 74.75227. Flowing from the foregoing statistical findings, the study concluded that financial development has significant impact on economic growth in Nigeria. And the study therefore recommended that financial institutions should strive to enhance the financial depth and financial accessibility given that it positively impacts economic growth.

Key Words: Financial Development, Economic Growth, Financial Institution

Introduction

The relationship between financial development and economic growth has garnered significant scholarly and industry's expert's interest in recent times. The discourse revolves around two perspectives: one positing economic growth as an outcome of financial development, and the other asserting financial development as an outcome of economic growth. There exists a scholarly perspective that posits a mutually influential association between financial development and economic growth.

According to Jhingan (2005), economic growth can be characterized as a progressive and consistent transformation over an extended period, resulting from a broad-based rise in both savings and population rates. Also, Essien (2020) described economic growth as a rise in the capacity of an economy to generate goods and services, from one time to another. Economic growth can be measured using either nominal or real terms, with the latter being modified to account for inflation. In Essien's view, economic growth of any given culture can be influenced by three primary elements; which include the accumulation of capital stock, expansions in labour input (such as an increase in the number of workers or hours worked), and advancements in technology. According to Sudansu (2018), economic growth is defined as the increase in the quantity of goods and services generated per individual or per capita Gross Domestic Product (GDP) during a specific time frame. It denotes the annual growth rate of a nation's GDP or Gross National Product (GNP), expressed as a percentage. This phenomenon denotes a significant increase in the per capita national product over a specific time frame, wherein the rate of growth in total output surpasses the rate of population growth.

The financial system is often regarded as a pivotal driver that makes a significant contribution to the overall economic growth of any country, Nigeria inclusive. Notwithstanding these endeavours, the agricultural sector continues to exhibit low productivity, inadequate utilisation of resources, and restricted land allocation, mostly attributable to the nation's reliance on a mono-cultural economy centred on oil. According to Zuberu, Iliya, Salamatu, and Ramat (2017), prior to the discovery of oil reserves in commercial quantity in Nigeria, the agricultural sector constituted more than 60% of the country's Gross Domestic Product (GDP) and served as a significant contributor to its foreign exchange earnings.

According to Demirguc-Kunt and Levine (2008), the concept of financial development refers to the lack of both price and non-price obstacles to obtaining financial services. Claessens (2006), sees financial development as the provision of financial services that are of satisfactory quality and offered at reasonable costs. The determination of what constitutes satisfactory quality and reasonable costs should be based on an objective standard, taking into account both monetary and non-monetary expenses. The inclusive financial system encompasses three distinct dimensions that have been discovered. The dimensions under consideration in this study are banking penetration, availability of banking services, and usage. Banking penetration refers to the number of bank accounts as a proportion of the total population. Availability of banking services is measured by the number of bank branches per 1000 people. The usage component is assessed by examining bank credit and bank deposit as a percentage of GDP (Sarma, 2008). According to Kumar et al. (2005), enhanced availability of financial services offers advantages at both the individual and societal levels. Privately, individuals can experience benefits such as greater consumption options, the ability to choose between

immediate or delayed consumption, secure storage and accumulation of wealth, as well as expanded production capabilities.

Socially, these benefits manifest as increased national savings and an expanded production possibility frontier. Similarly, Adeniyi and Babatude (2013) expressed the viewpoint that enhanced availability of financial resources and services has been recognized as fundamental foundations that facilitate the reduction of poverty, generation of wealth, and advancement of economic growth. The rationale behind this phenomenon is rooted in the fact that the financial sector offers a structure that enables individuals from various income brackets to obtain liquidity, secure their funds, engage in electronic money transfers with family members and creditors, and mitigate their exposure to risk.

According to Sennuga et al. (2021), it is argued that a robust financial system plays a crucial role in promoting investment by effectively identifying and providing funding for viable business prospects. Additionally, such a system facilitates the mobilisation of savings, enables efficient trading activities, mitigates risks through hedging and diversification strategies, and facilitates the exchange of goods and services. Consequently, these factors contribute to the overall expansion of economic activities within a nation. A robust financial system plays a crucial role in stimulating investment by identifying and providing financial support to profitable business opportunities. It also facilitates the mobilisation of savings, enables efficient trading, facilitates risk hedging and diversification, and facilitates the exchange of commodities and services. These factors collectively contribute to enhanced resource allocation, expedited accumulation of both human and physical capital, and accelerated technological progress, thus resulting in economic growth. It is the light of the foregoing that the study seeks to comprehensively examine the correlation and the consequential effects of financial development on the growth of the Nigerian economy.

Conceptual Review

Economic Growth

Economic growth is defined as the augmentation in the monetary worth of products and services generated within an economy. This concept is typically quantified by the rate of expansion in Gross Domestic Product (GDP) (Adu& Pearce, 2013). According to Majib (2019), economic growth is defined as a rise in the quantity of goods and services generated per capita during a specific time frame. The standard method of measuring economic growth is by calculating the percentage rise in real gross domestic product (GDP), which accounts for the inflation-adjusted market value of goods and services produced during a specific period of time. According to Cinzia (2020), economic growth can be defined as the augmentation in the aggregate quantity of goods and services generated per capita within a certain nation over the course of a year. Additionally, it can be quantified using the metric of Gross Domestic Product (GDP).

According to Todoro and Smith (2011), economic growth can be described as a continuous and gradual progression in which the productive capacity of an economy is enhanced over a period of time, resulting in an increase in the overall level of national output and revenue. According to Jose (2021), economic growth is perceived as a manifestation of an escalation in both income levels and the production of products and services inside an economy. The term "economic growth" refers to the quantifiable rise in real

gross domestic product (GDP), typically measured on a per capita basis. According to Sayantani (2018), economic growth refers to the expansion of an economy's ability to generate products and services, when comparing different time periods. The measurement can be conducted in either nominal or real terms, with the latter being modified to account for inflation. In conventional practise, the quantification of overall economic expansion is often conducted through the utilisation of gross national product (GNP) or gross domestic product (GDP), but alternative indicators are occasionally employed. According to Madhuri (2017), the concept of economic growth can be described as the expansion of an economy's ability to generate products and services, when comparing two different historical periods. The measurement might be conducted either in nominal or real terms.

Similarly, Sovik (2020) conceptualises economic growth as the inherent ability of an economy to generate products and services throughout successive time periods. The measurement can be conducted using either nominal terms or inflation-adjusted real terms. In the realm of economic analysis, it is customary to employ GDP or GNP as a metric for assessing the progress of an economy.

Financial Development

Numerous researchers have endeavoured to conceptualise financial development from their respective perspectives. According to Obinna (2015), financial development can be described as the progression that encompasses the establishment and enlargement of financial institutions, instruments, and markets. This progression aids in facilitating investment and growth by enhancing the quantity, quality, and efficiency of financial intermediary services. According to Odo et al. (2015), financial development can be described as the progressive enhancement in the number, quality, and efficiency of financial intermediary services. This process encompasses the interplay of numerous activities and institutions that may be linked to the potential for economic expansion. Nouren (2009) provides a definition of financial development as encompassing the various policies, factors, and institutions that contribute to the facilitation of efficient intermediation and the functioning of successful financial markets. Financial development encompasses the enhancement of financial efficiency resulting from the expansion of financial transaction scale and the progression of financial industry upgrading, as stated by Zhao (2021). Financial sector development refers to the process by which financial instruments, markets, and intermediaries mitigate the impact of information, enforcement, and transactions costs. As a result, they are more effective in fulfilling the essential functions of the financial sector within the economy (World Bank Group, 2022). Financial development refers to the enhancements made in the generation of information regarding potential investments and the allocation of capital, as well as the monitoring of firms and the implementation of corporate governance. It also encompasses activities such as trading, diversification, and risk management, as well as the facilitation of savings mobilisation and pooling. Additionally, financial development aims to facilitate the exchange of goods and services (Murat et al., 2015).

According to Sennuga et al. (2021), a robust financial system plays a crucial role in promoting investment by effectively identifying and financing viable business prospects. Additionally, it facilitates the mobilisation of savings, enables efficient trading, mitigates and diversifies risks, and facilitates the exchange of goods and services. Consequently, these factors contribute to the overall expansion of economic activities within a nation. The financial sector is

commonly recognised for its role in facilitating the transfer of funds from surplus economic units to deficit economic units, thus contributing to the establishment of equilibrium.

Theoretical Review

The Supply Leading Theory

The supply-leading theory propounded by Schumpeter (1911) is based on the proposition that financial development precedes economic growth. The theory however presumes that the economy responds to growth in the real sector (production, purchase and flow of goods and services (like oil, bread and labour) within an economy) aided by financial development. The theory emphasizes on the creation of financial institutions and the supply of financial services in advance of the demand for them. According to Johnbosco (2018), the supply-leading theory underscores the efficacy of financial development through the availability of investment-accommodating interest rate, growth in monetary aggregates and improved credit rationing process in driving the process of growth in real sector of the economy. Ohwofasa and Aiyedogbon (2013) argued that the supply-leading theory centers on the assumption that well-functioning financial institutions have the capacity of driving total economic efficiency, create and expand liquidity, mobilize savings, enhance capital accumulation, transfer resources from non-growth sectors to the more modern growth inducing sectors, and also promote a competent entrepreneur response in these modern sectors of the economy.

These studies concluded that evolution of financial sector development and provision of financial intermediary services are crucial in promoting economic growth and the relationship is highly significant. Chee-KeongChoong and Sok-Gee Chan Chee-Keong and Sok-Gee (2017), concluded that evolution of financial sector development and provision of financial intermediary services are crucial in promoting economic growth and the relationship is highly significant. Xu (2000), tested the finance-led growth theory, by applying a vector-autoregressive approach to examine the effects of permanent financial development on output in 41 countries between 1960 and 1993. He concludes that "the results reject the hypothesis that financial development simply follows economic growth and has very little effect on it". Robinson in 1952 pioneered a contradictory view where he stated that financial development is dependent on growth that occurs in the economy. It was argued that, the supply-leading theory is fundamentally flawed and that relying on the supply leading theory alone does not create demand. It was assumed that the supply-leading theory holds that, increasing the supply of goods and services translate to economic growth. These studies concluded that evolution of financial sector development and provision of financial intermediary services are crucial in promoting economic growth and the relationship is highly significant.

The Demand-Following Theory

The demand-following theory also known as growth-led finance theory was credited to Robinson (1952) based on the proposition that financial development is a function of growth that occurs in the economy overtime. In his conclusion, Robinson (1952) claims that "By and large, it seems to be the case that where enterprise leads, finance follows." The demand-following theory proponents contend that the growth of the real sector encourages the growth of the financial sector since macroeconomic results have increased. Joseph Schumpeter (1912) postulated that financial development

drives technological innovation and consequently, the rate of economic growth.

Robinson (1952) claimed that “By and large, it seems to be the case that where enterprise leads, finance follows.” Roseline (2010), the concept of demand following theory assumes that when the productive capacity of the economy increases, it propels the financial institutions to meet the financial requests of the firms. According to the demand-following theory resource waste could result from the financial system's expansion at the expense of the industry. However, the best use of resources calls for concentrating on the real sector while it is still in its infancy, which opens doors for the financial sector's expansion.

Empirical Review

Several studies have attempted to investigate the influence of financial development on economic growth, yielding varied results. Ayewumi and Awani (2021) evaluated financial sector development indicators and economic growth: evidence from Nigeria from 1989 to 2018. The study sought to determine whether any of the financial sector development indicators has had an impact on the growth of the Nigerian economy for the period of the study. The study conducted preliminary tests, which revealed that all series were stationary at 1(1) according to the ADF test. Using the Johansen cointegration test and the pairwise granger causality test, the results showed that there is a unidirectional relationship between banking sector credit (% of GDP) and economic growth proxied by (RGDP), as well as between economic growth and broad money supply (% of GDP), and economic growth and private sector credit supply (% of GDP). However, no granger-causal relationship was observed for the remaining variables. The ECM result demonstrated that the model is correctly signed, indicating that all variables converge after a short-run disequilibrium. The post-diagnostic test confirmed these findings, leading us to conclude that there is a both a short and long-run relationship between financial sector development and economic growth.

In a study by Iwedi et al. (2021), which carried out investigation on the effects of the development of the financial sector on the economic growth of Nigeria by utilizing time series data covering a span of thirty-nine (39) years, from 1981 to 2020. In order to measure the progress of the financial sector, the study employed banking sector funding, market capitalization, and financial sector liquidity as proxies. Economic growth was represented by the real gross domestic product. The findings of the augmented Dickey-Fuller unit root test showed that the data series achieved stationarity after undergoing first differencing at the order of 1(1). The relative statistics of the estimated model revealed a positive and significant correlation between financial sector liquidity, measured as the ratio of M2 to GDP, and stock market capitalization to GDP, with Nigeria's economic growth (Real GDP). On the other hand, banking sector funding, measured as the ratio of credit to the private sector to GDP, exhibited a positive but not significant relationship with real GDP.

In their study, Sennuga et al. (2021) examined the impact of financial development on the ratio of economic domestic credit to the private sector to GDP. The independent variables considered were financial development indicators, while the dependent variable was the yearly growth rate of gross domestic product. Using multiple regression technique, the findings of the study suggest that there is a positive but not statistically significant

relationship between two variables, namely the real interest rate and gross domestic savings, and the dependent variable, which is the annual growth rate of GDP in Nigeria. These conclusions were drawn based on the analysis of time series data spanning from 1980 to 2019. The study specifically examined the impact of the real interest rate, the ratio of gross domestic savings to GDP, and the ratio of annual growth rate on the dependent variable. The findings indicate a positive relationship between the real interest rate and domestic lending to the private sector and the dependent variable, which is the yearly growth rate of GDP. The findings indicate a positive correlation between gross domestic savings and domestic credit to the private sector when considered together, as well as a positive relationship between domestic credit to the private sector and the dependent variable.

Ikubor (2020) investigated the impact of financial sector development on economic growth in Nigeria from 1981 to 2017. The study employed Principal Component Analysis (PCA) techniques and ARDL. The findings reflected a positive and direct relationship between financial sector development and economic growth in Nigeria. The results of the Granger causality analysis indicated that economic growth serves as the cause for financial development. Moreover, the analysis also revealed that the bank sector, as a component of the financial sector, has a causal effect on the performance of the stock market in Nigeria.

In their empirical analysis, Mohamed and Abdelkader (2017) examined the relationship between financial development and economic growth from 1981 to 2014. The study employed a vector autoregression (VAR) technique, specifically utilising the Johansen tests for cointegration and vector error correction model (VECM). The findings indicate that the domestic credit shock, referred to exerts a substantial adverse impact on the trajectory of economic growth.

In a study conducted by Eugene (2016), an empirical investigation was undertaken to analyse the correlation between the development of financial intermediaries and economic growth in Nigeria from 1981 to 2011. The auto-regressive distributed lag (ARDL) approach was employed for co-integration analysis. The findings indicate that there is no significant negative association between the development of financial intermediaries and economic growth in Nigeria in the long run, while in the short run, the relationship is strongly negative. The findings indicate that there is correlation between financial development and economic growth in Nigeria.

The study conducted by Odo et al. (2015) examined the correlation between financial development and economic growth in Nigeria during the period spanning from 1980 to 2013. The research included cointegration techniques and a vector error correction model. The research findings indicate that the relationship between the ratio of broad money supply to GDP and economic growth in Nigeria during the specified period is positive, but lacks statistical significance. The ratio of domestic credit to private sector to GDP has a favourable but negligible impact on economic growth in Nigeria. The Granger Causality test was performed, revealing the existence of a causal relationship from the ratio of domestic credit to the private sector to the growth rate of GDP. The findings of this study indicate a substantial and enduring association between financial development and economic growth in Nigeria within the observed time frame.

Ganepola and Jayasinghe (2023) conducted a study on the Impact of Financial Sector Development on Economic Growth: Evidence from Sri Lanka. The study used Autoregressive Distribution Lag

(ARDL) bounds testing approach to identify the existence of short- and long-run relationships. The study relies on quarterly data from 2002 to 2020. Findings reveal that there exists a long-run relationship between financial sector variables and economic growth.

Methodology

Research Design

The study adopted the ex-post facto research design to empirically analyse the impact of financial development on economic growth in Nigeria. The choice of the research design was followed by the systematic empirical inquiry in which the scientist does not have direct control of independent variables because their manifestations has already occurred or because they are inherently not manipulated (Akuezuiro, 1990) as in Odo et al., (2015). The study employed the secondary data sources which were extracted from International Monetary Fund (IMF) database and the Central Bank of Nigeria (CBN) statistical Bulletin.

Model Specification

Having reviewed some relevant literature that are concerned; therefore, the following model was adopted and adapted from Reem (2019) in order to suit the purpose of this study. The functional form of the model model is hereby formulated below:

$$GDP = f(FID, FIA, FIE) \dots\dots\dots (1)$$

The mathematical expression of this model is in Equation (2) which can be rewritten in Econometric linear form thus:

$$GDP_{it} = \beta_0 + \beta_1 FID_{it} + \beta_2 FIA_{it} + \beta_3 FIE_{it} + \mu \dots\dots\dots (2)$$

Where;

GDP = Gross domestic product

FID= Financial institution's depth

FIA= Financial institution's access

FIE= Financial institution's efficiency

β_0 =Regression constant

β_1, β_2 and β_3 =Unknown parameters or coefficient

μ = Error term

Analytical Techniques

The study used descriptive statistics, the Augmented Dickey-fuller root test to determine the nature and stationarity of the series respectively. Johansen Multivariate Cointegration Test was conducted to identify long-run relationships between non-stationary time series variables. To provides a framework for understanding how variables move together in the long term, even if they appear to be drifting apart in the short term. The ordinary Least Square regression technique was applied to determine the relationship between the dependent and independent variables of the study with the aid of econometric view (E-views) to generate the estimation result. The Ordinary Least Square (OLS) technique was employed because of its BLUE (Best Linear Unbiased Estimator) characteristic. The Ordinary Least Square (OLS) linear regression model regresses three measures of financial development (independent variables) against an index of GDP (dependent variable).

Table 1: Descriptive Statistics of Variables

Variables	Mean	Std. Dev	Max	Min.	Skewness	Kurtosis	Jarque-Bera Values
GDP (₦)	189.389	170.583	574.180	27.750	0.835	2.174	5.79 (P V=0.000)
FID (%)	0.048	0.010	0.069	0.032	0.564	2.228	3.12 (P-V=0.000)
FIA (%)	0.074	0.032	0.134	0.043	0.799	1.808	6.62 (P-V=0.000)
FIE (%)	0.517	0.075	0.643	0.387	-0.112	1.702	2.89 (P-V=0.000)

Source: Researcher's compilation (2024)

Where: GDP= Gross domestic product, FID= Financial institution's depth, FIE= Financial institution's efficiency and FIA= Financial institution's access.

Table1 presents a range of essential descriptive statistics pertaining to the dependent variable - economic growth, which is characterized by gross domestic product (GDP). These statistics include the mean, maximum mean, standard deviation, skewness, kurtosis, and Jarque-Bera. The explanatory variables in this study are financial institution's access (FIA), financial institution's depth (FID), and financial institution's efficiency (FIE), which are proxies for financial development.

The observations in Table indicate that three of the four variables have a positive skewness, which implies that the observed values of the variables have a long tail to the right, while the negative skewness indicates a tail to the left. As per the probability GDP, FID, FIA, and FIE, the JarqueBera test reveals that these variables are not normally distributed, as the p-values are less than 0.05. Furthermore, the skewness (different from zero) and kurtosis (greater than 3) of these variables demonstrate that they are not normally distributed.

The table illustrates that the GDP exhibits a range of values spanning from 27.750 billion to 574.1800 billion. The mean

average value of GDP is calculated to be 189.3893 billion, while the standard deviation suggests that the country experienced a significant 170% variability in the GDP from the maximum mean return in the reference period. Notably, Nigeria observed its highest GDP in 2014 at 574.18, while the lowest GDP was recorded in 1999 at 27.75. The positive skewness of GDP, with a value of 0.8355, indicates that it is not symmetrical around its mean. The large standard deviation of 170.583 further supports the notion that GDP values are dispersed considerably around the mean. The positive degree of departure from the mean of the distribution is indicative of a consistent increase in GDP from 1980 to 2020. Additionally, the kurtosis, which stands at 2.1741, is greater than the normal or standard value of 2. Therefore, the degree of peakedness within the period under study is normally distributed, as most of the values cluster around the mean. Notably, the standard deviation of 170.583, highlights that the values are widely dispersed around the mean.

The financial institution depth mean stands at 0.048, equivalent to 4.8%. Notably, in 2008, the financial depth reached its peak at 0.069, while its lowest point was recorded in 1991 at 0.032. The standard deviation of FID, at 0.010, indicates that there is a wide dispersion of values from the mean. The table of FID presents a positive skewness of 0.564, signifying that the distribution's

deviation degree from the mean is positive. The kurtosis, at 2.228, is less than the normal value, implying that the peakedness degree within the study period is not normally distributed. During the period of study, the mean of financial institution access was observed to be 0.074, indicating a level of financial access of 7.4%. Notably, the highest value of financial institution access was recorded in 2016, while the lowest value was observed in 1991, with corresponding figures of 0.134 and 0.043 respectively. Analysis of the skewness of FIA revealed a positive value of 0.799, reflecting a consistent increase in FIA from 1981 to 2019. However, the kurtosis of 1.808 suggests that the degree of peakedness within the period of study is not normally distributed, with most values clustering around the mean.

Lastly, the standard deviation of 0.032 indicates that the values of FIA are widely dispersed. For the present study, the mean of FIE was calculated to be 0.517. Notably, the highest value was recorded in the year 2019, while the lowest was observed in 1995, where the corresponding values were 0.643 and 0.387, respectively. Furthermore, the analysis revealed a negative skewness of -0.112, indicating that the degree of deviation from the mean of the distribution was negative. Consequently, the findings suggest that there was an inconsistent increase in FIE values from 1980 to 2020. Moreover, the computed kurtosis of 1.702 implies that the degree of peakedness of FIE values was not normally distributed, as most of the observations were clustered around the mean. Finally, the standard deviation of FIE values was calculated to be 0.075, signifying that the values were widely dispersed.

Unit Root Test Analysis

The Augmented Dickey Fuller unit root test statistics results for the variables are shown in the table below:

Table 2: Augmented Dickey Fuller Unit Root Test Analysis

Variables	t-Statistics	Prob.	
GDP	-4.7987	0.0004	Stationary at first difference
FID	-6.6148	0.0000	Stationary at first difference
FIA	-4.4475	0.0011	Stationary at first difference
FIE	-5.5263	0.0001	Stationary at first difference

Source: Researcher's computation, (2024) from E-view Version 9

In the Augmented Dickey Fuller (ADF) Unit Root Test Analysis presented in Table 2, the stationarity of various time series data sets was examined. The GDP series, with a t-statistic of -4.7987 and a p-value of 0.0004, was found to be stationary at the first difference. Similarly, the FID series, registering a t-statistic of -6.6148 and a p-value of 0.0000, was determined to be stationary at the first difference. The FIA series, yielding a t-statistic of -4.4475 and a p-value of 0.0011, also achieved stationarity at the first difference. Lastly, the FIE series, with a t-statistic of -5.5263 and a p-value of 0.0001, was confirmed to be stationary at the first difference. These findings underscore the stationarity of the data sets post their first difference, setting a robust foundation for subsequent time series econometric analyses.

Regression Analysis

Table 3: Regression Results

Variables	Coefficient	OLS Regression		
		Z	P> z	
Constants	-93.80830	-1.15	0.2557	
FID	-4169.955	-2.25	0.0305**	
FIA	5967.794	9.79	0.0000*	
FIE	74.75227	0.54	0.5907	
R ²		0.896756		
Adjusted R ²		0.888153		
F-statistics		104.2299		
Prob(F-statistic)		0.000000		

Source: Author's computation, 2024 with E-views 9 output.

Table 3 exhibits the comprehensive Adjusted R-squared value of 0.8881. R-squared, commonly referred to as the coefficient of determination, delineates the portion of the dependent variable's variability that is accounted for by the autonomous variables within the regression paradigm. In this instance, the adjusted R-squared value of 0.8881 explicates that a proximate 88.81% of the variability in the economic growth (GDP) can be explicated by the model specification variables (financial institution depth, financial institution access, and financial institution efficiency).

Moreover, the R-squared value of 0.8967 indicates a substantial level of explanatory ability. This implies that there exist other factors beyond those considered in the model that are likely to influence Nigeria's economic growth. Nevertheless, the variables within the model collectively account for approximately 89.67% of the GDP variability.

Concerning the F-statistics test, it is employed to assess the adequacy of the model employed. In this instance, the test yields a value of 104.2299. The associated probability value for this test is 0.0000. Since the probability value of 0.0000 is below the conventional threshold of 0.05, the study concludes that the model is appropriate for explaining the relationship, and there is statistically significant evidence to suggest that at financial development has a significant impact on economic growth in Nigeria.

Discussion of Findings

The outcomes of the study add to the depth of literature on financial development and economic growth in Nigeria. Although the efficacy of financial institutions does not exert a significant impact on the GDP, the profundity and accessibility of financial institutions do considerably influence the GDP. These results underscore the significance of the accessibility of financial institutions in augmenting the economic growth of Nigeria. Consequently, financial institutions ought to endeavor to become more accessible, which can lead to an escalation in the economic growth of Nigeria.

The regression analysis results provide intriguing insights into the impact of financial depth on GDP. The negative coefficient value of -4169.955 for financial institution's depth suggests an inverse relationship with GDP. Specifically, for every unit increase in

financial institution's depth, the GDP decreases by 4169.95. The statistical significance of this impact ($\beta = -4169.955$, $p > 0.0305$) underscores its importance and implies that the impact is not due to random chance.

This negative impact of financial institution's depth on GDP might seem counterintuitive at first, as one might expect that a deeper financial system would facilitate economic activities and, in turn, boost GDP. However, it's possible that in the context of the studied region or country, an overly deep financial system might lead to over-leveraging, speculative bubbles, or misallocation of resources, all of which can have detrimental effects on the real economy.

The findings of this study resonate with the works of Isiaka, Isiaka, Isiaka, and Adenubi (2021); Le, Ho, and Vu (2019); and Adenuga and Omotosho (2020). These researchers also identified a significant impact of financial institution's depth on economic growth, further validating the results of the study.

Conclusion and Recommendations

Based on the results of the linear regression analysis, the study concludes that financial development significantly impacts on economic growth in Nigeria. This discovery underscores the notion that the degree of financial development in Nigerian economy plays a critical role in fostering economic growth in Nigeria, thereby suggesting that an increase in the depth of financial institutions has a statistically significant impact on the growth of Nigerian economy. Consequently, the study asserts that financial development has a significant impact on economic growth in Nigeria.

Based on the findings of the study, the following recommendations were made:

- i. Financial institutions are developed if they are characterised by increased depth. Therefore, The Nigerian government through the Central bank of Nigeria (CBN) should improve the depth of the financial sector in order that more funds are made available to channel towards the growth of the economy.
- ii. Financial regulators should implement measures aimed at improving the accessibility of financial institutions in Nigeria through the promotion of heightened levels of bank deposits, loans and mobile accounts per 1000 adult individuals within the population. In addition, the financial institution's authorities should endeavour to establish agent-based banking and other cost-effective delivery channels to effectively increase its influence on economic growth in Nigeria.
- iii. Promoting efficiency in the financial sector should be one of financial institution's major role so as to ensure appropriate allocation of economic resources to the most productive investment unit for a stronger economic growth and development.

References

1. Adeniyi, O. A., & Babatunde, S. O. (2013). Financial depth, financial access and economic growth in Nigeria. *Journal of Monetary and Economic Integration*, 12(2), fhal-02507411f.
2. Audu, N. Pelesai, Okumoko, & Tubo Pearce (2013). Financial development and economic growth in

- Nigeria. *European Journal of Business Management*, 5(19): 1-12.
3. Ayewumi, E. F., & Awani, A. M. (2021). Financial Sector Development Indicators and Economic Growth: Evidence from Nigeria. *Dutse International Journal of Social and Economic Research*, 6(3), 21-38.
4. Chee-Keong, C. & Sok-Gee, C. (2017). Financial development and economic growth: A review. *African Journal of Business Management*, 5 (6), 2017-2027.
5. Claessens, S. (2006). Access to Financial Services: A Review of the Issues and Public Policy Objectives. *Oxford University Press*.
6. Demircuc-Kunt, A. & Levine, R. (2008). Finance, financial sector policies and long-run growth. Washington DC, Commission on Growth and Development, World Bank.
7. Essien (2020). Determinant of economic growth: A Macroecometric approach. *International Journal of Innovative Finance and Economic Research* 5(1), 22-33.
8. Eugene, I. (2016). Impact of financial development on economic growth in Nigeria. *Journal of Economics*, 4(4): 26. doi: 3390/economies4040026.
9. Ganepola, S., & Jayasinghe, P. (2023). Impact of financial sector development on economic growth: Evidence from Sri Lanka. *Vidyodaya Journal of Management*, 9(II), 28-56. University of Sri Jayawardenepura. <https://doi.org/10.31357/vjm.v9iII.6587>
10. Ikubor, J. O. (2020). Financial sector development and economic growth in Nigeria (1981-2017). *IOSR Journal of Economics and Finance (IOSR-JEF)*, 11(3 Ser. VIII), 01-16. e-ISSN: 2321-5933, p-ISSN: 2321-5925. DOI: 10.9790/5933-1103080116. Retrieved from www.iosrjournals.org
11. Iwedi, M., Barisua, S. P., & Zaagha, A. S. (2021). A re-examination of the nexus between financial sector development and economic growth in Nigeria. *Contemporary Journal of Banking and Finance*, 2(2), 32. ISSN: 5381-5923 (Print); ISSN: 75633 -8431 (Online). Impact factor: 0.00. Available at www.cirdjournal.com/index.php/cjbf/index.
12. Jhinghan M.L (2005). *Economics of Development and Planning*, 38th edition, New Delhi Vikas Publishing House PVT Ltd.
13. Mohamed, A. & Abdelkader, A. (2017). Financial development and economic growth: The Empirical Evidence of the Southern Mediterranean Countries. *International Journal of Economics and Financial Issues*, 7(3), 196-209.
14. Murat, G. (2015). Financial development and energy consumption in Turkey: Empirical Evidence from Cointegration and Causality Tests. *Handbook of Research on Behavioral Finance and Investment Strategies*
15. Nouran A. (2009). The causality between financial development and economic growth in Kenya. *MPRA paper* 49, 262, University library of Munich, Germany.
16. Obinna, F. E. (2015). Financial Development in Developing Countries. Masters Theses. Eastern Illinois University.
17. Odo, S. I., Eze, O. R. & Ogbonna, S. O. (2015). Implications financial development on economic

growth in Nigeria: Vector Error Correction Model. *International Research Journal of Finance and Economics*. (140), 95-111.

18. Reem, A.L.(2019).EssayonFinancialDevelopmentandEconomic Growth.UniversityofPortsmouth.
19. Robinson, J. (1952). *The rate of interest and other essays*. London: Macmillan.
20. Sarma M, Pais J (2008) Financial inclusion and development: a cross country analysis. *Indian council for research on international economic relations*
21. Schumpeter, J (1911). *The Theory of Economic Development*, Transaction Publishers, New Brunswick, New Jersey.
22. Sennuga, M. A., Adenaike, A. S., Adedayo, T. G. &Sennuga, S. O. (2021). Financial development and economic growth in Nigeria: The Case Study of Nigeria. *Int. J. Business Management*. 04(04), 21-39.
23. Sovik,Y.(2020) The Rationale for Central Bank Liquidity Insurance and Liquidity Regulation. *Revista Espacios* 40(38).
24. Todaro,M.P.&Smith,S.C.(2011)EconomicDevelopment. PearsonUK.
25. Zhao, W. (2021).Financial globalization and the development of China's economy.*Handbook of Research on institutional, economic, and social impacts of globalization and liberalization*.doi/org/ 0.4018/978-1-7998-4459-4.ch013.