

Financial Sector Development And Performance Of The Nigerian Economy

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Abstract: *The study used time series data from the years 1988 to 2023 to assess financial sector development and performance in the Nigerian economy (35 years). The unit root test is used in the study to ascertain the status of the variables. In order to create both short- and long-term dynamic interactions between the endogenous and exogenous variables, it also makes use of the statistical techniques of Johansson co-integration and error correction model (ECM). According to the results, the total number of banks (TNB), the general money supply (MGR), and the interest rate all had two negative effects on how well the Nigerian economy performed throughout the observation period although these effects were statistically insignificant. Although the associations are statistically significant in the short run, bank deposits and credit have a beneficial impact on economic growth. The study comes to the conclusion that specific financial sector characteristics help Nigeria's economy flourish. According to the report, the Central Bank of Nigeria should boost the financial sector by developing suitable monetary and regulatory policies that support banks' ability to provide financial intermediation services and, eventually, contribute to Nigeria's economic growth.*

Keywords: Financial sector development, bank credit, bank Deposit, interest rate, performance and economic growth.

1.1 Introduction

It is impossible to overstate the importance of the financial sector as a key engine of the Nigerian economy. Over time, it has persisted in fostering financial intermediation both inside and outside the borders of the country. The level of financial sector development heavily influences the amount of investments and capital accumulations in an economy. In order to ensure the overall performance of the economy, successive Nigerian government regimes have implemented policies designed to promote the ongoing development and improvement of the financial sector.

The financial sector of any economy in the world plays a vital role in the development and growth of the economy. The development of this sector determines how it will be able to effectively and efficiently discharge its major role of mobilizing fund from the surplus sector to the deficit sector of the economy. This sector has helped in facilitating the business transactions and economic development (Aderibigbe 2024). A well developed financial system performs several critical functions to enhance the efficiency of intermediation by reducing information, transaction and monitoring costs. If a financial system is well developed, it will enhance investment by identifying and funding good business opportunities, mobilizes savings, enables the trading, hedging and diversification of risk and facilitates the exchange of goods and services. All these result in a more efficient allocation of resources, rapid accumulation of physical and human capital, and faster technological progress, which in turn results in economic growth.

The opposite has actually happened. According to Lawrence, Moni, and Elkhomun (2024), the adoption of financially repressive policies, political corruption/poor macroeconomic management, bank malfeasance, which led to insolvencies, low saving rates, and inadequate resource allocation, have all contributed to the financial system, and particularly the financial sector, continuing to be underdeveloped to a large extent. They contend that the impact of underdevelopment has made it difficult for the Nigerian economy to spur economic growth and lessen poverty. A well-developed financial sector should encourage sufficient fund mobilisation from the surplus to the deficit units of the economy, reduce information asymmetry, transaction costs, agency costs, and monitoring costs, and on the whole promote good corporate governance, maximise the wealth of the shareholders, and serve as a major driver of the overall economy whether in developed or developing countries. According to Olusegun, Ganiyu, and Oluseyi (2023), a well-developed financial system will increase investment by spotting and funding lucrative business opportunities, mobilising savings, enabling trading, risk hedging, and risk diversification, as well as facilitating the exchange of goods and services. They also stress how these factors promote technical advancement, a more effective use of resources, a rapid buildup of human and physical capital, and economic prosperity. However, empirical research on the relationship between the expansion of the financial sector and economic growth using a variety of metrics over time has generated conflicting findings (Aigbovo & Osamwonyi, 2023). Therefore, by concentrating explicitly on the financial development and its effect on economic growth in African society, particularly in Nigeria, this study added to the conversation. The research questions contain the research issue of the study that results from the aforementioned backdrop.

1.2 Statement of the Problem

The Nigerian financial sector, like those of many other less developed countries, was highly regulated leading to financial disintermediation which retarded the growth of the economy. The link between the financial sector and the growth of the economy has been weak. The real sector of the economy, most especially the high priority sectors which are also said to be economic growth drivers are not effectively and efficiently serviced by the financial sector. The financial institutions are declaring billions of profit but yet the real sector continues to weak thereby reducing the productivity level of the economy. Most of the participants in the financial sector are folding up due to the inability to get loan from the financial institutions or the cost of borrowing was too outrageous. The Nigerian banks have concentrated on short term lending as against the long term investment which should have formed the bedrock of a virile economic transformation. Since the adoption of the Structural Adjustment Programme, in an attempt to quicken the recovery of the economy from its deteriorating conditions, a great deal of interest has been shown in the activities and development in the financial sector. This is so because the restructuring of this sector was a central component of the SAP reform.

1.3 Research Question

The following research questions are posed to guide the study

- i. What are the effects of total number of banks and the performance of the Nigerian economy?
- ii. to what extent does monetary policy have effect on the performance of the Nigerian economy?
- iii. how does bank deposits have effect on the performance of the Nigerian economy?

1.4 Objectives of the Study

The main objective of this study was to examine determinants of financial system development and performance of the Nigerian economy. The specific objectives are to:

- i. ascertain the effects of total numbers of banks on the performance of the Nigerian economy;
- ii. investigate the effect of monetary policy on the performance of the Nigerian economy;
- iii. determine the extent to which bank deposit have effect on the performance of the Nigerian economy.

1.5 Hypotheses for the Study

H01: total number of banks has no significant effect on the performance of the Nigerian economy;

H02: monetary policy has no significant effect on the performance of the Nigerian economy;

H03: bank deposit has no significant effect on the performance of the Nigerian economy;

2.0 Literature Review

2.1 Theoretical Exposition

The Robert Solow neo-classical theory of growth serves as the foundation for the current investigation.

The relative role of capital investment and savings in fostering economic growth is repeatedly hammered home in Solow's (1956) growth theory. He argued that if society saved or used some of its resources to build for the future, it could increase or constrict the economy's performance in terms of growth and development. This theory has a strong connection to the topic at hand because banks are known for providing financial intermediation services by moving surplus from one unit to another that is in deficit. Through increasing credit creation, capital accumulation, and investment, both developed and emerging countries' economies perform better. Goldsmith (2019) makes additional contributions to Solow's neo-classical growth theory (2016). He places emphasis on the conversion of short-term financial instruments into long-term ones as well as the potential for long-term finance to spur economic growth. According to Goldsmith (1969), who bases his argument on the Harrod-Domar framework, the financial system can produce liquidity if there are surplus savers individuals who save more than they invest—and borrowers who want to invest more than they save so that the surplus can be transferred to investors via financial instruments. The purpose of banks is primarily capital accumulation and allocation, which subsequently influences the level of investments. Investments are known to have an impact on the actual gross domestic product of a country, thus there is a connection between this idea and the subject under investigation.

2.2 Empirical Review

Whether an economy is developing or emerging, like Nigeria, the financial sector, which is a component of the financial system, is essential to its efficient operation. Given the relative significance of a developed financial sector and the variety of issues it faces,

numerous scholars have kept track of how it affects an economy's performance. There are conflicting findings in certain research that looked at the empirical link between the growth of the financial sector and the health of a nation's economy.

Aigbovo and Osamwonyi (2023) used explanatory variables like total asset of deposit money banks to GDP, private sector credit to GDP, and liquidity liability ratio of banks to determine the relationship between the development of the financial sector and economic growth in Nigeria between 1981 and 2011. While the other variables were significant and positive, the banks' liquidity liability ratio was in the negative. They also discover a one-way causal relationship between the expansion of the financial sector and economic growth.

Ali (2022) used the granger causality test and the ordinary least square (OLS) method to analyse the relationship between the growth of the financial sector and economic growth in Lebanon from 1992 to 2011. They discover a one-way causal relationship between financial sector indicators including deposit growth and credit to the local private sector and economic growth. The size, effectiveness, and concentration of the financial sector, as well as bank lending to the private sector, were reported to have a major impact on economic growth.

Chinaemerem and Chigbu (2022) investigated the impact of financial sector development variables on economic growth in Nigeria from 1960 to 2008 with the use of granger causality test, co-integration and error correction method (ECM). They employ two indicators of financial sector development such as money supply (MS) and credit to private sector (CPS). The empirical result indicates that money supply (MS) and credit to private sector (CPS) were positively related to economic growth of Nigeria in the period observed. Similarly, the Johansen and Granger causality test point out that money supply and credit to private sector were cointegrated with GDP while granger test shows that all the independent variables actually granger cause GDP and GDP granger causes other variables in Nigeria.

Using multivariate vector autoregressive (VAR) models based on two of the three indicators of financial sector development bank credit to the private sector and liquidity Ndako (2010) investigated the long-run causality between financial sector development and economic growth in Nigeria from 1961 to 2007. The use of bank credit to the private sector produced the likelihood of a one-way causal relationship between economic growth and financial sector development, while the usage of liquid liabilities revealed a two-way causal relationship between financial sector development and economic growth.

Using the ratio of liquidity liability to GDP ($M2/GDP$), real interest rate ($INTR$), and ratio of credit to private sector to GDP (CP/GDP), Olusegun et al. (2013) assess the effect of financial sector expansion on the growth of the Nigerian economy ($RGDP$). The regression analysis was conducted using the Ordinary Least Square (OLS) approach. Only the real interest rate was found to be negatively connected, according to the empirical finding. With real GDP, all the explanatory factors were statistically negligible.

Lawrence (2021) use ordinary least square (OLS) regression, unit root test, and cointegration technique to empirically assess the expansion of the financial sector and the economy in Nigeria. The findings indicate that Nigeria's economic growth is positively impacted by the expansion of the financial system. It should be emphasised that the approach employed in the empirical investigations mentioned above has both advantages and disadvantages. Essentially, only dynamic relationships or influences between variables in an econometric construct make use of either estimation technique. They are employed despite the fact that variables in a model are integrated in varying levels and orders, which is one of their weaknesses. This study aims to address this obvious limitation by utilising the Johansen and Juselius cointegration and the parsimonious error correction mechanism (ECM) estimation techniques. In order to provide empirical validation of the relationships between financial sector development variables and economic growth in Nigeria, this paper builds on earlier studies in the temporal dimension and examines additional variables, including bank deposits, the total number of banks listed, and others not previously used by earlier studies.

2.3 Financial Sector Development

The financial system of each country is made up of banks, which are important entities. They specialise in financial intermediation; in contrast to the capital market, banks typically engage in short-term lending, if only to safeguard depositors' money and prevent an asset-liability mismatch. From nation to nation and author to author, the notion and definition of a bank differ. However, according to the Business Dictionary, a bank is an organisation that has been given permission by the government to collect deposits, pay interest, clear checks, provide loans, serve as a middleman in financial transactions, and offer other financial services to its clients. According to Wikipedia, a bank is a type of financial institution that lends money to borrowers in order to establish credit and record the resulting deposit on the bank's balance sheet. Particularly in Nigeria, the financial sector might be characterised as having oligopolistic features. Every government's actions in every country should have a favourable impact on the economy and its long-term growth. This is so because every sector of an economy must perform well for macroeconomic growth to be achieved. The objectives are to reduce unemployment, boost output, improve industrial capacity utilisation, and raise citizens' standards of living. A country experiences economic growth when its production possibility frontier (PPF) moves outside of its borders. An important

goal of government is economic growth, which is the expansion in the output of products and services. This growth results in higher per capita income and living standards. According to Bencivenga and Smith (2011), economic growth will increase if more savings are directed toward high-productivity activities while lowering the risk related to liquidity needs. Long-term economic growth is a gradual and steady shift brought on by an overall rise in population and savings rates (Jhingan, 2015). According to Olusegun et al. (2013), it is a rise in a nation's rate of production of goods and services over a specific time period. They clarify that the rise in the volume of goods and services produced in a nation serves as a gauge of economic growth. Jhingan (2023) makes the argument that an economy is regarded to be expanding when it raises the production of more goods and services in relation to this. According to this definition, economic growth is defined as an increase in the net national product over a specific time period (Dewett, 2005). Economic growth, according to Todare and Smith (2006), is a constant process through which the economy's productive capacity is increased through time to result in rising levels of national production and revenue.

According to Jhingan (2016), economic growth is defined as a gain in output, and it is correlated with a quantitatively sustained increase in a country's per capita income or output, as well as growth in its labour force, consumption, capital, and volume of trade. The primary indicators of economic growth include high rates of per capita income or production growth, high rates of productivity, rapid structural change, and global movements of capital, products, and labour (Ochejele, 2017). Gross Domestic Product is another way to gauge economic growth (GDP). Through the process of financial intermediation, the financial sector contributes significantly to economic growth and development, according to Sanusi (2021). He emphasises that many economists agree that the financial system, which primarily consists of banks, creates connections between the various economic sectors and promotes high levels of specialisation, expertise, and economies of scale. It also creates an environment that is favourable for the implementation of a variety of government economic policies aimed at achieving non-inflationary growth, exchange rate stability, balance of payment equilibrium, and high levels of employment. Indeed, the growth of the financial industry is frequently cited in the literature as being the main factor behind the expansion of the financial industry. The development of the financial sector includes all the formal and unofficial wholesale, retail, and other economic entities that provide financial services to consumers, businesses, and other financial organisations (Osuji & Chigbu, 2012). The growth of the financial sector is said to comprise everything from banks, stock exchanges, and insurers to credit unions, microfinance institutions, and money lenders, according to the Financial Sector Team of the Department for International Development (2004). In this regard, Liang and Reichert (2017) point out that the direct cause of endogenous financial development is economic expansion. The overall demand for goods and services rises as an economy develops; to increase output, producers must look for effective capital-raising strategies, while consumers will seek out more effective ways to increase their rates of return on savings; as a result, a more effective financial market is needed (Osuji & Chigbu, 2012). It is in the light of the above, that this study evaluates the critical role the financial sector plays in the growth of the Nigerian economy.

The financial sector development through financial intermediation refers to the process through which financial institutions transfer financial resources from surplus units of the economy to deficit units. However, for financial institutions to perform this role very well, they have to be developed in terms of liquidity, assortment of financial assets and efficiency in credit allocation. Rajan and Zingales (2022) stated strongly that a developed financial sector should mirror the ease with which entrepreneurs with viable project proposals can obtain financial resources, as well as the assurance with which investors expect satisfactory returns. The system should also be able to measure, segment, and spread difficult risks, allowing them rest where they can best be borne and all these should be able to be done at lowest cost possible. Following all these, more savings, investments and high productivity will be guaranteed, thereby leading to economic growth. Lately, the Central Bank of Nigeria implemented a financial sector consolidation and recapitalization policy directed towards raising the capital base of financial institutions for effective intermediation.

2.4 Performance of the Financial Sector

The financial sector is the hub of productive activity of an economy as it performs the vital role of intermediation, provider of payment services and the fulcrum of monetary policy implementation. Financial systems have long been identified as a sector that has an important role to play in the development of any economy. The financial sector has been described to be a catalyst of economic growth if it is developed and healthy (Adeoye, 2017). The reforms in the financial sector has enhanced the capacity of the market to provide windows of opportunities where large scale investors can raise funds to finance long-term projects and it has also lead to increase in employment opportunities as a result of increase in number of branches of banks. Through financial intermediation functions of the financial institutions, savers are linked up. The financial sector as a prime mover of economic development, mobilizes savings from surplus to deficit economic units. This has helped in the productivity of any economy. The efficiency and effectiveness of financial intermediation is a subject of the level of the financial systems development.

The financial system is dominated by banks which concentrated on short term lending as against the long-term investment. Financial sectors reduce information and transaction costs in the economy. This facilitates more exchange of goods and services thereby allowing greater specification and productivity in the economy. The financial intermediaries can reduce information costs by acquiring and comparing information about many competing investment opportunities on behalf of all their savers, thereby ensuring

that capital is efficiently allocated. Financial sectors provide risk management services and reduce risks involved in financial transactions. When financial institutions combine savings, they also ensure that each individual get his money back whenever needed. By investing in projects, they facilitate risk diversification, which increases returns and encourages more savings.

2.5 Economic Growth

Economic growth can be seen as the rise in the size of an economy to produce goods and services over a period of time. It is brought about by the increase in the productive capacity of a country. According to Antwi, Mills and Zhao, (2013), economic growth can be seen as the growth in a nation's real gross domestic product (an increase in a nation's output of goods and services) or the physical expansion of the nation's economy. Kanu and Ozurumba, (2013) view economic growth as a positive change in the output of a nation's manufacturing goods and services which stretch over a certain period of time. Being an aggregate measure of total economic production of a country, it therefore represents the market value of all final goods and services including personal consumption, private inventories, government purchases, paid-in construction costs as well as foreign trade balances. The most conventional measure of economic growth is the Real Gross Domestic Product (RGDP) which is considered as the widest indicator of economic output and growth. It is designed to measure the value of production of those activities which falls within the borderline of the national accounting system. GDP measures economic growth in monetary terms. GDP can be expressed either in nominal terms which include inflation or in real terms which makes adjustments for inflation. Short term GDP represents the annual percentage change in real national output, while Long term GDP represents the increase in trend or potential GDP. In comparative studies involving different countries of different population sizes, GDP per capita is commonly used

3.0 Methodology

3.1 Research Design/Method of Data Collection and Analysis

This study's main objective was to analyse the impact of the financial sector's growth and performance on the Nigerian economy. The researchers took an annual data set covering the years 1988 to 2023 from the Central Bank of Nigeria Statistical Bulletin's various issues and used it for an econometric study. This type of direct physical method for gathering data is impervious to modification and massaging, which are frequently used by researchers to gather primary data. The reason for choosing this time frame is that the Nigerian government implemented various reforms during this time to reposition the financial sector. The error correction model is a statistical technique used in this investigation (ECM). Since estimating regressions utilising non-stationary variables based on ordinary least square could result in erroneous and inconsistent findings, stationary tests are carried out before the model is estimated to test for its stochastic features (Aiyedogbon, 2022). In this study, the Augmented Dickey-Fuller (ADF) test is used to look into the stationarity characteristics of the time series data. If the ADF test statistic exceeds the critical value, the null hypothesis of the presence of unit roots is rejected in favour of the alternative; otherwise, the test fails to reject the null hypothesis at the 5% level of significance. The Johansen and Juselius (2018) method is used to determine whether there are any long-term associations between the variables.

3.2 Empirical Model Specification

The model employed in this study follows Aigbovo and Osamwonyi (2023). The model they employed was: $RGDP = F(PSC, BLL, BA)$ (1) Equation (1) was expressed in its econometric form as follows:

$$RGDP = \beta_0 + \beta_1 PSC + \beta_2 BLL + \beta_3 BA + U_t \dots \dots \dots (2)$$

Where: RGDP = Real Gross Domestic Product

PSC= Private Sector Credit/GDP ratio

BLL = liquid liability ratio of banks

BA = Total asset of deposit money banks/GDP ratio (size of the financial sector/GDP)

U_t = Stochastic error term. The model above is used with a modification and is expressed in a deterministic form as:

$$GDPGR = F(TNB, BC/GDP, BD/GDP \text{ and } INTR). \text{ It is stated in its econometric form as: } GDPGR_t = \beta_0 + \beta_1 BC_t + \beta_2 TNB_t + \beta_3 BD_t + \beta_4 INTR_t + \beta_5 M2GR_t + u_t$$

Where:

β_1 - β_5 are coefficients of parameters to be estimated.

GDPGR_t= represents gross domestic product growth rate, and is the endogenous variable,

BC = Total bank credit to the private sector.

TNB = Total no of banks listed in Nigeria,

BD= Total Bank deposit.

INTR = Interest rates charged by banks. Here, prime lending rate is used for operationalization.

M2GR = Broad money supply growth rate.

ut = is the error term

t = represents the time period

β_0 = the intercept term

An apriori expectation in this study is $\beta_1 - \beta_3$,

$\beta_5 > 0$, $\beta_4 < 0$. This suggests that, with the exception of the interest rate, which is projected to have a negative relationship with the GDP growth rate over the time, the collection of explanatory factors will be positively correlated. In other words, from the perspective of current theories, it is anticipated that an increase in the broad money supply growth rate, bank deposits, bank loans to clients, and the number of listed banks will lead to economic growth. However, according to theory, an increase in interest rates (also known as lending rates) should have the opposite effect on economic growth.

4.0 Data Presentation and Analysis

4.1 Descriptive Statistics

The econometric findings of the time series used in this study are reported in this section. Using ordinary least squares, the model's long-run estimation is carried out. Then, for the purpose of detrending, the unit root test of all the variables is performed. Then, the long-run and short-run relationships between the variables are constructed using the Johansonco-integration and parsimonious error correction model. The data used are supplied here for the purpose of justifying the empirical analysis of this study.

Table 1: Ordinary Least Squares Regression Results Should the Long-Run Relationships between Financial Sector Development Variables and Performance

Dependent Variable: GDPGR

Method: Least Squares

Date: 08/12/24

Time: 05:50 Sample (adjusted): 1988-2023

Included observations: 35 after adjustments

Convergence achieved after 99 iterations

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	2.97E+08	7.08E+09	0.041997	0.9670
BC	0.435154	0.586730	0.741660	0.4679
BD	0.898498	0.925905	0.970399	0.3447
TNB	-24837.28	27322.40	0.909045	0.3753
M2GR	505.0524	24358.55	0.020734	0.9837

INTR	-60070.94	79524.61	-0.755376	0.4598
AR(1)	0.996974	0.073931	13.48520	0.0000
R-Square	0.983561	Mean dependent var		12845242
Adjusted R-Squared	0.978081	S.D. dependent var		13305590
S.E. Regression	1969883.	Akaike info criterion		32.05634
Sum Squared resid	6.98E+13	Schwarz criterion		32.39763
Long Likelihood	-393.7043	Hannan-Quinn criter		32.15100
F-statistic	179.4935	Durbin-Watson stat		2.094036
Prob (F-statistic)	0.000000			

Inverted AR Roots 1.00

E-views 9.0

Output Using the updated coefficient of determination, we can see from the table above that the model projected that the systematic variation in the dependent variable, GDPGR, would be roughly 98%, with the stochastic error term accounting for the remaining 2%. It implies that the performance of the Nigerian economy is affected throughout time by the growth of the financial sector. All of the explanations taken together are statistically significant at the 99% level, as shown by the F-Statistic value of 179.49. It shows how well the model fits the data. Although they are not statistically significant at the 95% level as indicated above, the individual coefficients demonstrate that a unit change in bank credit (BC), bank deposits (BD), and broad money supply growth rate (M2GR) improves the performance of the Nigerian economy. Similar to how a change in the total number of banks (TNB) or the interest rate (INTR) results in a decline in the long-term performance of the Nigerian economy. Additionally, the time series data does not exhibit serial autocorrelation, as indicated by the Durbin-Watson statistic value of 2.094.

Table 2: Summary of the unit root test at 5%

Variables	ADF statistics	T-critical values	Remark
GDPGR	4.099169	3.632896	Stationary at first differences
BC	3.897496	-3.644963	Stationary at level
BD	4.783864	-.3.690814	Stationary at first difference
TNB	4.591243	-3.612199	Stationary at first difference
M2GR	4.426211	-3.632896	Stationary at level
INTR	5.468652	3.603202	Stationary at level

Source: Authors Computation 2024

We summarise the findings of the unit root test at 5% in table 2 above. Bank credit (BC), the broad money supply growth rate (M2GR), and interest rates (INTR) remain stationary at these levels, according to the ADF results that compare them to the Mckinnon critical values at 5%. The first difference is stationary for the gross domestic product growth rate (GDPGR), bank deposits (BD), and total number of banks (TNB). We proceed to conduct the co-integration test based on the Johansen co-integration procedures and assess whether a long-run stable relationship exists among the variables because all of the time series employed in this study are stationary. The results of the co-integration test are presented on table 3 below:

Table 3: Johansen co-integration test results

Date: 08/10/24 Time: 05:46

Sample (adjusted): 1988-2023

Included observations: 24 after adjustments

Trend assumption: Linear deterministic trend

Series: GDPGR BC BD TNB M2GR INTR

Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.958425	154.3679	95.75366	0.0000
At most 1 *	0.801470	78.04172	69.81889	0.0095
At most 2	0.594629	39.23811	47.85613	0.2509
At most 3	0.307917	17.56727	29.79707	0.5981
At most 4	0.274225	8.734101	15.49471	0.3906
At most 5	0.042478	1.041747	3.841466	0.3074

Trace test indicates 2 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.958425	154.3679	95.75366	0.0000
At most 1 *	0.801470	78.04172	69.81889	0.0095
At most 2	0.594629	39.23811	47.85613	0.2509
At most 3	0.307917	17.56727	29.79707	0.5981
At most 4	0.274225	8.734101	15.49471	0.3906
At most 5	0.042478	1.041747	3.841466	0.3074

Max-eigenvalue test indicates 2 cointegratingeqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

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

The results from the preceding table show that there are at least two co-integrating factors in the relationship between the gross domestic product growth rate and the independent variables, according to both the trace and maximal eigen value statistics. This shows that the growth of the financial industry and the health of the Nigerian economy are related over the long term.

Parsimonious ECM

The parsimonious ECM allows restricted number of parameter estimates into our model. The ECM has been lauded for combining short-run dynamics with long-run equilibrium in a broad macro econometrics framework (Iyoha, 2006). In this study, the ECM is estimated using the first difference of the variables. The results are contained on table 4 below:

Parsimonious ECM

Result Dependent Variable: DGDPR

Method: Least Squares Date: 08/10/24

Time: 06:16 Sample (adjusted): 1988-2023

Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	319070.7	374250.9	0.852558	0.4073
DBC	2.080804	0.617331	3.370647	0.0042*
DBC(-1)	3.932022	0.903694	4.351057	0.0006*
DBD	2.805630	0.780699	3.593741	0.0027*
DBD(-1)	-6.666240	1.488322	-4.479031	0.0004*
DTNB	-27424.11	18846.16	-1.455157	0.1662
DM2GR	-4997.172	18815.67	-0.265586	0.7942
DINTR	-64799.32	58858.26	-1.100939	0.2883
ECM(-1)	-0.269206	0.156300	-1.722363	0.0056*
R-squared	0.752582	Mean dependent var		1608113
Adjusted R-squared	0.620626	S.D. dependent var		2148865
S.E. of regression	1323557.	Akaike info criterion		31.30954
2.63E+13	Schwarz criterion		31.75131	Sum squared resid
Log likelihood	-366.7145	Hannan-Quinn criter.		31.42674
5.703283	Durbin-Watson stat		2.281734	F-statistic
Prob(F-statistic)	0.001912			

Source: E-view 9.0

Key: * indicates statistical significant at 1% level. The table above presents the Parsimonious ECM result.

The included regressors together account for around 75% of the variation in the dependent variable, GDPGR, according to the R-Squared value of 0.75. The systematic variation is estimated to be 6 2% by the corrected coefficient of determination, leaving the remaining percentage due to the 2 stochastic error term unaccounted for. R and its adjusted counterpart demonstrate the robustness of the calculated model. The alternative hypothesis, which specifies a systematic relationship between the dependent variable and all of the included regressors and the overall goodness of fit of the model, is accepted at a 1% significant level according to the F-

statistics at 5.70 with $P = 0.001$. We look at the calculated coefficients to see how each independent variable affects the dependent variable. As seen, TNB has a negative coefficient (-2.74), although at the 5% level, it is statistically insignificant ($P = 0.16$). At the 1% level, BC is statistically significant ($P = 0.004$) and has a positive coefficient (2.08). A bank credit DBC (-1), with a one-period lag, has a positive coefficient of 3.93 and is statistically significant at the 1% level ($P=0.0006$). At the 1% level, bank deposits (BD) are statistically significant ($P = 0.0027$) and have a positive coefficient (2.80). Although statistically significant at the 1% level ($P = 0.0004$), DBD (-1) has a negative coefficient, meaning that it lowers the growth rate of the gross domestic product (-6.66) one period after bank deposits. At the 5% level, the growth rate of the money supply has a negative coefficient (- 4997.17) and is statistically insignificant ($P=0.79$). The interest rate shows a similar negative coefficient (-64799.32) and is statistically unimportant at the 5% level ($P=0.28$). It is statistically significant at 1% ($P = 0.0056$) that the ECM Coefficient is negative (- 0.2692). As a result, the ECM coefficient might act as error equilibrium. The long-run equilibrium between DGDPR and the regressors can be restored at a rate of 26.92% according to the ECM value of 0.2692. Finally, the absence of first-order serial dependence is demonstrated by the Durbin-Watson statistic, calculated at 2.28 and almost equivalent to 2.

4.2 Discussion of Findings

The research yielded the following conclusions: Both a long-term steady relationship and a short-term dynamic relationship exist between the growth of the financial sector and economic expansion. This outcome is in line with the findings of Aigbovo and Osanwonyi (2023) and Lawrence et al (2014). According to the various indices used to analyse the growth and performance of the financial sector in Nigeria, interest rates have a detrimental effect on the country's economy, however the relationship is not statistically significant in either the short- or long-term temporal dimensions. This outcome is consistent with Adekunle (2023) and meets the study's a priori expectations. It implies that the Central Bank of Nigeria's (CBN) interest rate policy is unfavourable to the financial intermediation role of credit extension from the financial sector's surplus units to its deficit units and, as a result, has a negative influence on the performance of the Nigerian economy.

Total Number of Banks (TNB), a measure of the size of the financial sector in Nigeria, shows that neither the short-term nor the long-term connections have a favourable effect on economic growth. This is not in line with the study's a priori assertions. The outcome implies that additional reengineering is required to improve access to financial services and resilience against any outside shocks in order to foster the performance of the Nigerian economy rather than only relying on reconsolidations or mergers and acquisitions. The performance of the Nigerian economy during the examined period is positively and statistically related to bank credit, which represents banks' core/liquid assets and portrays the availability of credit to potential investors.

Similar to this, there is a positive and statistically significant association between bank credit with a one-period lag and economic performance. Only in the short run is there a positive and statistically significant correlation between bank loans (with its one period lag) and economic growth. Although the association is positive over the long term, it is not statistically significant. The outcome is in line with what this study's a priori predictions were. Numerous earlier studies that focused on the empirical side have attested to the strong impact of this financial sector index on economic growth and development (Narcis, Ebrahim& Mahdi, 2024).

Although the long-term link is positive and statistically significant, bank deposits (BD) and their one-period lag have a positive and significant impact on the gross domestic product growth rate in the short run. The results are inconsistent with Ang but disagree with Aigbovo and Osanwonyi (2023). This has the implication that deposits made by bank customers increase the liquidity of banks, increase their asset base and profitability, and, assuming the financial sector's strong credit management policies, ultimately boost the economy. The growth rate of the money supply has a conflicting effect on how the economy is doing. The affect is detrimental in the near term, but beneficial in the long term. However, neither the short-term nor the long-term associations are statistically significant. This shows that monetary policy influences economic growth favourably over the long term.

5.0 Conclusion and Recommendations

5.1 Conclusion

Using data from the years 1988 to 2023, this study empirically analysed financial sector development and performance in the Nigerian economy. To establish both the short-run and long-run correlations, it used the co-integration technique and the error corrective model (ECM). The economy is impacted negatively by financial sector development measures like interest rates and the total number of banks, but favourably by indicators like bank credit and deposits. Consequently, the study comes to the conclusion that the increase of specific financial sector variables, such as bank credit and bank deposits, encourages the expansion of the Nigerian economy.

5.2 Recommendations

On the basis of the foregoing conclusion, it is recommended that:

- i. financial reconsolidation and reengineering be done in order to optimise the size of the existing banks that are currently operating in Nigeria and to increase their operational efficiency with a view to enhancing the performance of the economy.
- ii. in order to enable financial institutions to efficiently perform their job as financial intermediaries and, as a result, make a financial contribution to the expansion of the Nigerian economy, the monetary authority, the Central Bank of Nigeria, should establish sound monetary and regulatory policies.

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