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EFFECT OF NON-OIL SECTOR FINANCING ON ECONOMIC GROWTH IN NIGERIA 2008-2022

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Abstract

The study examined the effect of non-oil sector financing on economic growth in Nigeria between 2008 and 2022. Non-oil export financing to manufacturing and agricultural sectors were used and economic growth was proxy by GDP. With Ex post facto research design, the study utilized secondary data econometrics in a regression. Quarterly data for the study were obtained from the Central Bank of Nigeria statistical bulletin. Data collected were analysed using the unit root test, cointegration, vector error correction model and walt test. The result of cointegration showed a long run relationship among the variables and the Walt test also showed that agricultural sector financing has significant effect on economic growth in Nigeria, while manufacturing sector financing also had a significant effect on economic growth in Nigeria. It was recommended that the Central Bank of Nigeria should encourage local farmers by directing the supply of bank lending at lower lending rate to rural areas. Also, government and manufacturers should work together to jump- start manufacturing output in order to generate a corresponding increase in economic growth. This can be achieved through the provision of conducive macro-economic environment and appropriate investment incentives.

Keywords: Non-oil Sector Financing, Agricultural Sector, Manufacturing Sector, Economic Growth, Nigeria.

Introduction

One of the greatest desires of every nation is to build a resilient economic system that is self-sustaining, highly competitive, and externally visible. As a result, no matter how developed a country is, she must have to seek the assistance of other countries. This justifies the reason why different countries of the world engage in one form of trading activity or the other. Before Nigeria gained her independence in 1960, her economy was mainly dominated by trade and export since there was no viable industrial sector that was able to sustain the Nigerian economy. This therefore suggests that export is important for the survival of every economy even when all

activities fail. However, from 1963 to 1964, the non-oil sector (agricultural and manufacturing) then served as both the mainstay of the Nigerian economy and the greatest foreign exchange earner as it contributed about 65% of the nation's aggregate income (Bakari, & Mohamed, 2018).

The Ministry of Finance, Budget and Planning (2020) stressed that the reasons why the diversification of the Nigerian economy is imperative is made more manifest from the consultative forum of the Minister of Finance, Budget and Planning and the Organized Private Sector held on 10th July, 2020 concerning the impact of Global pandemic caused by COVID'19 on the implementation of the national budget. The forum highlighted that the over dependence on crude oil prices made the Nigerian economy to be more susceptible to recent global economic shock caused by the Covid'19 Pandemic (Ideh, Okolo, & Emengini, 2021). In this light, the non-oil sector has contributed immensely to the growth of the Nigerian economy, efforts must be made to consider those factors that may either inhibit or improve non-oil sector's export growth with sustainable financing. Apparently, the Central Bank of Nigeria cash reserve ratio policy has disable banks to give out more loans. The policy of loan to deposit of 65% has also reduce the access of loan in the banks due to high interest rate (Oyebowale, 2019).

According to Zayone, Henneberry, and Radmehr (2020), the different sectors in Nigeria which are faced with the problem of accessibility to funds, even the financial sector reform of the Structural Adjustment programme (SAP) in 1986, which was meant to correct the structural imbalance in the economy and liberalize the financial systems, did not achieve the expected results. This study becomes imperative because deposit money banks in Nigeria need to understand how to manage these huge assets in terms of their loans and advances so as to energize the economy on the path to growth. Economic growth is total market value of domestically produced goods and services in a nation usually in a year. It is measured by total value of domestically produced goods and services in a nation, per capita income of all citizens living in a nation and the standard of living of citizens in an area or nation. Economic growth of a nation is mostly weighted by total value of domestically produced goods and services known as Gross Domestic Product (GDP). In Nigeria, GDP per annum at current market prices was N89,044 Billion in year 2014 as against N94,144.96 Billion and N101,489.49 Billion in year 2015 and 2016 respectively ((Igwe, et al, 2015)).

The study intends to fill the identified gaps by examining the real sectors (manufacturing, agricultural) in financing and economic growth in Nigeria from 2008 to 2021. This is because it was within this period that banks contributed immensely to the growth of Nigerian economy through the issuance of credits to the economy as a result of increase in the asset base, capital base and number of banks as well as branch network. Therefore, this study intends to examine the effect of non-oil export financing on Economic Growth in Nigeria. The study will test the following hypotheses:

Ho_1 Non-oil export from the agricultural sector does not have significant effect on economic growth.

Ho_2 Non-oil export from the manufacturing sector does not have significant effect on economic growth.

Literature Review

Concept of Non-oil Export Financing

Non-oil exports financing, simply expressed, are items financed other than crude oil (petroleum products) that are sold in the foreign exchange market only to generate cash. Farm products exports, construction and manufacturing exports, solid mineral exports, and place in the international appear to be the four primary parts of Nigeria's non-exports industry. Agricultural commodities, goods produced, solid minerals, entertainment and vacation services, and other non-oil export commodities are limitless (Abogan, Akinola, & Baruwa, 2014).

Non-oil export financing is the credit or loan and advances given to a non-oil export by the bank or any financial institution which may be pledged with collateral security. Interests are paid on the amount borrowed or lent in accordance with loan agreement between the customer and the banker. Yakubu and Affoi (2014) opines that credit implies a promise by one party to pay another the money borrowed or goods and services received.

Timsina (2017) defined non-oil export financing as the aggregate amount of funds provided by commercial banks to individuals, business organizations and government. Hence, this study operationally defines bank credit as a promise by a customer (debtor) to pay a bank (lender) the

money borrowed. The credit includes DMBs' credits to governments, core private sectors, other private sectors and individuals.

Non-oil export financing is the amount of interest paid per unit of time expressed as a percentage of the amount borrowed. The cost of borrowing money, measured in naira, per year per naira, borrowed, is the interest rate. Interest rates differ mainly in term/maturity. When maturity and liquidity together with other factors are considered, many different financial instruments and so many different interest rates will emerge (Anyanwu, 1997). Interest rates can either be nominal or real.

Concept Economic Growth

Economic growth is increase in the total value of domestically produced goods and services in a nation. Adewuyi and Olowookere (2011) defined economic growth as the process by which domestic income or output is increased. Okwo, et al (2012) viewed economic growth as the process by which national income or output is increased. Therefore, an economy is said to be growing if there is a sustainable increase in the actual output of goods and services per head. Kira (2013) defines economic growth as total market value of all final goods and services produced within the country in a given period of time (normally one year).

Yakubu and Affoi (2014) view economic growth as a sustained increase in the actual output of goods and services per head. Ismaila and Imoughele (2015) opine that economic growth is the quantity of goods and services produced in a nation and it is mostly measured by real GDP. Olokoyo (2012) define economic growth as positive change in the national income or level of domestically produced of goods and services of a nation over time. Hence, this study operationally defines economic growth as total market value of domestically produced goods and services in a nation usually in a year. This is because a nation's commodities consist of both domestic and foreign produced goods and services known as Gross National Product (GNP).

Empirical Review

Using data from 1980 to 2017, Zayone, Henneberry, and Radmehr (2020) looked examined how agricultural, manufacturing, and mineral exports affected Angola's economic growth. The impacts of sectorial exports on economic growth are calculated using the ARDL model. While exports from all three sectors (manufacturing, mineral, and non-mineral) have propelled Angola's

economic growth in the long run, only non-manufacturing (agricultural and mineral) exports have driven its growth in the short run, according to the estimation results. In addition, mineral exports drove long-term growth while agricultural exports drove short-term growth in non-export GDP.

Similarly, Osabohien, et al (2019) examined the association between agricultural export and Nigeria's economic growth using the Autoregressive Distribution Lag (ARDL) approach. Food products, inflation, foreign investment, labour force, and real gross domestic product per capital growth rate are all variables of interest. Agricultural exports have a considerable impact on Economic development in Nigeria, according to the study. As a result, I lobbied for a larger production base.

Sayedia and Ringimb (2019) examined the effect of non-oil financing by Deposits Money Banks' (DMBs) on economic growth in Nigeria from 1981 to 2016. The population of study was 64 DMBs that includes 45 defunct and 19 existing DMBs operating in the Nigeria banking industry as at December, 2016. The entire population constitute the sample frame for the study and tool for analysis is regression. The study found that estimated coefficient Beta values of the DMBs' lending and DMBs' lending rate fall within lower and upper boundary of confident interval at 95%. This means bank lending affects the economic growth of Nigeria. The regression results indicated that DMBs' lending has positive and significant effect on economic growth. But DMBs' lending rate has positive and insignificant effect on economic growth. The results of this study have both theoretical and practical implications to economy of Nigeria. Thus, this study recommends that the management of DMBs should encourage their banks to increase bank lending to key sectors of economy that will use it in productive ventures, thereby boosting the economic growth of Nigeria. The reason is that one percent increase in DMBs' lending will significantly increase the economic growth of Nigeria for the periods of study. However, the study covers the entire bank lending but this study only look at the sectorial bank lending,

Nwogo and Oriji (2019) examined the impact of industrialization on the growth of the Nigerian economy. The specific objectives of the study were to determine the impact of manufacturing sector output on economic growth in Nigeria, to find out the impact of crude petroleum and natural gas output on Nigerian economic output, and to investigate the impact of solid mineral mining output on economic growth in Nigeria. The study adopted the ex-post facto research

design based on its efficacy in facilitating the projection of future outcomes with past occurrences. The dependent variable was real gross domestic product (RGDP) while the independent variables were the manufacturing sector contribution to the gross domestic product (MSO), crude petroleum and natural gas output (CPNGO), solid mineral mining output (SMMO), and real exchange rate (REXR); data analysis was done using the vector error correction and system equation estimation technique. The study found that there is a positive and significant impact of the manufacturing sector output, crude petroleum and natural gas output, and solid mineral and mining output on the real gross domestic product; also a long-run relationship was found to exist among the variables used. The study therefore recommends that: there is need for Government to, as a matter of urgency develop stimulants for the manufacturing sector and manufacturers in form of tax incentives and credit facilities, this will strategically reposition the manufacturing sector in driving economic growth in Nigeria; Government should try a balance of attention in terms of policies and capital investments between the petroleum industry and the solid mineral mining industry in order to harness the rich abundance of wealth in the solid mineral industry.; and there is need for the immediate implementation of the petroleum industry bill which will unbundle the NNPC and create efficient commercial units to fully carry on crude petroleum and natural gas business. However, the study did an exploratory research which different from this research.

Awad and Al Karaki (2019) examined the impact of bank lending on economic growth in Palestine. The study employs the Augmented Dickey-Fuller to test for stationarity in the time series, The Johansen co-integration, Vector Autoregressive Model and Vector Error Correction Model are employed to identify the long-run and short-run dynamics among the variables, and Granger causality test in order to determine the direction of causality. The study found that a long run relationship exists among the variables and insignificant short run relationship. Also, the study findings show that there is unidirectional causality and runs from GDP to bank lending. The insignificant contribution of bank lending to GDP is attributed to the fact that banks are not highly interested in lending to the production sector of the economy due to the high level of risk. However, the variables used in Palatine is not applicable from the variables used in Nigeria.

Oyebowale (2019) investigated the influence of growth in loan-to-deposit ratio, growth in inflation, growth in broad money and growth in bank capital on growth in commercial bank

lending in Nigeria for the longitudinal period 1961 to 2016. The data for loan to deposit and bank capital were obtained from CBN statistical bulletins, data were obtained from World Bank. The data were computed to growth form by the researcher in order to capture how growth in bank lending is influenced by the regressors. The study found a long-run unidirectional causality running from growth in bank lending to growth in loan-to-deposit ratio in Nigeria. Also, short-run bidirectional causality exists between growth in loan-to-deposit ratio and growth in bank lending in Nigeria, and a short-run unidirectional causality running from growth in broad money to growth in bank lending. Thus, the results indicate that growth in inflation and growth in loan-to-deposit ratio are long-run determinants of bank lending in Nigeria. Concurrently, this paper argues that growth in broad money and growth in bank capital are not long-run determinants of bank lending in Nigeria.

Binuomote, et al (2019) examined the relationships between agricultural export and economic growth in Nigeria employing the vector autoregressive (VAR) impulse response function analysis technique. Nigeria's annual time series data on economic growth (proxied as real gross domestic product), gross domestic capital formation, real exchange rate, and agricultural exports to other countries were employed in the study. The data which spanned the period of 1980 to 2015 were sourced from FAOSTAT database of the Food and Agricultural Organization of the United Nations, Central Bank of Nigeria online Statistical database and the World Bank. Results show that agricultural export has a positive and significant effect on economic growth in Nigeria. The influence of the shock or innovation of agricultural export to economic growth is almost doubled in the long run as compared to that of short run. The shock of real effective exchange rate on economic growth in the long run is far stronger than the innovation in the short run. It will therefore be a suitable measure to increase agricultural export and real exchange rate to accelerate the economic growth of the nation in the long run. However, the study only looked at loan to Agric sector which is different from the present study.

Akinwale (2018) examined the relationship between bank lending rate and economic growth in Nigeria. It has generated intense debate and findings have been inconclusive. More so, bank lending rate has constituted serious limitation to the attainment of sustainable development and economic growth of the developing countries, Nigeria’s inclusive. Hence, the need for further investigation becomes imperative. This study examined the relationship between bank lending

and economic growth in Nigeria between 1980 and 2016. Data sourced from the various issues of Central Bank of Nigeria Statistical Bulletin was analysed through Dynamic Ordinary Least estimation technique. Data treatment was done through stationarity and cointegration tests. The unit root test showed that the variables were integrated at order on I (0) except rate of bank lending, inflation and real exchange were integrated at order on 1(1). The result of cointegrated showed a long run relationship among the variables. The Results proved that a unit percent decrease in bank lending rate will bring about 118% increase in economic growth. Furthermore, the findings of Greenwood and Jovanovic Hypothesis established that as bank lending rate decreased, economic growth tend to increase and it is statistically significant at 1% level. The study concluded that a decreased in bank lending rate increased economic growth during the study period. Therefore, policy that will reduced bank lending rate should be put in place so as to boost economic growth in Nigeria. However, the data used for lending was only applicable to credit to public sector.

Agbanike, et al (2018) examined the impact of bank lending on economic growth, using a unique sector-level bank lending and output data sets on the Nigerian economy over the period 1981–2014, They specifically ascertain whether different sector-level bank lending impact on Nigeria's economic growth differently. Due to the perceived interrelationships among the sectors, we adopt a seemingly unrelated regression (SUR) equations model consisting of five single equations. The Model was fitted using the SUR estimator. Empirically, they found strong evidence that bank lending to agriculture, industry, real estate and construction and commercial sectors has exerted significant positive impact on economic growth real gross domestic product of the respective sectors, thus lending credence to the finance-led-growth hypothesis" in those sectors. Our study further provides evidence that sector-level bank lending impact on Nigeria's economic growth differently. The highest impact of bank lending is in the agriculture sector, followed by commercial sector, then industrial sector and real estate and construction. However, bank lending does not have any significant impact on economic growth in the service sector. By utilizing sector-level bank lending and output data in our analysis, this study addressed important gap in the relevant literature. It is important for banks to recognize this existence of sectoral differences and to have a proper understanding of sectoral characteristics and therefore, tailor their lending activities in response to sectoral needs. This is critical, especially in our situation where from our analysis, bank lending to agriculture with the highest tendency to impact on

economic growth was only about 3% of total bank credits during the period covered by the study whereas, bank lending to the service sector (including government services) with no significant impact on economic growth was about 53% of total bank credit.

Paavo (2017) investigated the impact of commercial banks to development on economic growth in Namibia. Using quarterly data on GDP as well as various commercial banks development indicators, covering the period March 2005 to December 2016, the study employed the Auto-Regression Distributive Lag (ARDL) methodology in determining existence of the short-run and long-run relationships. Furthermore, the study employed the Granger causality test in determining the causal relationship between banking sector development and economic growth. From the ARDL results, the study concluded that there is existence of a positive short-run relationship between banking sector development and GDP growth, channelled through net interest income and funding liabilities of banks. The causality test indicated a bi-directional causality between economic growth and the banking sector development, entailing that development of the banking sector would enhance GDP growth and vice versa. The study thus concluded that, commercial banks development has an impact on economic growth in Namibia and recommends for reforms in the banking industry to ensure increased lending in order to support the economy. However, the variables used in Namibia is not applicable from the variables used in Nigeria.

Theoretical Framework

Wicksell Theory of Lending and Economic Growth

As posited by Weise (2006) this theory was postulated by a Swedish economist called Knut Wicksell in 1901 with strong influence from the quantity theory of money. Wicksell based his theory on a comparison of the marginal product of capital with the cost of borrowing money. The theory therefore took a monetary approach to economic growth.

Wicksell (1901) argued that if the interest rate of borrowing money was below the natural rate of return on capital, entrepreneurs would borrow at the money rate to purchase capital goods. This would lead to increased demand for all types of resources and, in turn, their prices. Conversely, if the interest rate of borrowing money was above the natural rate of return on capital, entrepreneurs would sell the capital goods and hold money. This would lead to a higher demand

for money and in turn the cost of borrowing. He connected the rate of interest with the production gap and represented the variance between what ought to be produced and what is produced.

This theory is important to this study since it give a direct connection between the demand for and the cost of money and output in a country. It shows how interest rates affect borrowing, which in turn affects the purchase of capital goods and how production is affected. If interest rates are higher than the natural rate of return, borrowing will reduce thereby reducing economic growth as a result of low investment. On the contrary, if the rate of interest is lower that the natural rate of return, then more borrowing will take place and this will spur economic growth through more investment (Weise, 2006).

Theory of Bank-Based Financial System

The theory of bank-based financial system stresses the positive role of banks in development and growth, and, also, emphasizes the drawbacks of market-based financial systems. The theory opines that banks can finance development more effectively than markets in developing economies, and, in the case of state-owned banks, market failures can be overcome and allocation of savings can be undertaken strategically. In a way those banks that are not impeded by regulatory restrictions, can exploit economies of scale and scope in information gathering and processing (Levine, 2002) In fact, bank-based financial systems are in a much better position than market-based systems to address agency problems and short-termism (Schultz, 1889; Singh, 1997). In particular, the free-rider problem inherent in atomistic markets in acquiring information about firms is emphasized by Schultz (1989). But well-developed markets quickly reveal information to investors at large and thereby dissuading individual investors from devoting resources toward researching firms. Thus, banks can make investments without revealing their decisions immediately in public markets and this creates incentives for them to research firms, managers, and market conditions with positive ramifications on resource allocation and growth. Additionally, Rajan, and Zingales (1999) stress that powerful banks with close affinity to firms may be more effective at exerting pressure on firms to re-pay their debts than atomistic markets.

The bank-based theorist also stresses the shortcomings of market-based systems by asserting that it reveals information publicly, thereby reducing incentives for investors to seek and acquire information. Information asymmetries are thus emphasized, more so in market- based rather than

in bank-based financial systems (Igwe, et al, 2015). Thus, distortions that emanate from asymmetric information can be alleviated by banks through forming long-run relationships with firms, and, through monitoring, to contain moral hazard. As a result, bank-based arrangements can produce better improvement in resource allocation and corporate governance than market-based institutions (Iwuoha & Awoke, 2018).

Thus, this study will support Wicksell Theory of Lending following theory for the reason that banks are part and parcel member of financial institutions that assist investors with credit facilities for economic growth.

Methodology

The research design for this study was based on the Ex-po facto research design. Ex-po facto design involves describing the relationship between the past factors on the present trend or occurrence. Manufacturing and agricultural sector financing was used to assess the effect of non-oil sector financing on economic growth in Nigeria. In carrying out this study, secondary data were used for analysis in this study. Secondary data were sourced from Central Bank Statistical Bulletin 2022. Time series quarterly data will be extracted from the CBN Statistical Bulletin related to sectorial lending and Gross Domestic Product. Thus, the study adopted the error correction model.

Model Specification

This study employed time series data for the under study, a period of 13 years. The following model was estimated

$GDP = F(BLA, BLM)$ ..... (1)

$GDP_t = \beta 0_t + \beta 1 BLA_t + \beta 2 BLM_t + e_t$ ..... (2)

Where:

GDP = Gross Domestic Product (dependent variable)

$\beta 0$ = Constant term

$\beta 1$ = Coefficient of the parameter estimates

The explanatory variable are:

BLA = Bank lending rate to agricultural sector (independent variable)

BLM = Bank lending rate to manufacturing sector (independent variable)

α0= Constant term

α1 = Coefficient of the parameter estimates

e = Error Term

Specifying equation (3) in an ECM form, we have:

$$\Delta GDP_t = \mu + \alpha_1 GDP_{t-1} + \alpha_2 BLA_{t-1} + \alpha_3 BLM_{t-1} + + \sum_{i=1}^{p-1} \lambda_1 \Delta GDP_{t-i} + \sum_{i=0}^{q-1} \lambda_2 BLA + \sum_{i=0}^{q-1} \lambda_3 \Delta BLM_{t-1} + \varepsilon_t \text{---------- (3)}$$

Where; δ is the speed of adjustment parameter; ECTt-1 (which is the lagged Error Correction Term) is the residual obtained from the long run estimation. The coefficient (δ) is expected to be less than one, negative and statistically significant. The negative sign of the ECTt-1 term indicates long-run convergence of the model to equilibrium; as well as explaining the proportion and the time it takes for the disequilibrium to be corrected in order to return the disturbed system to equilibrium. The magnitude of the coefficient measures the speed of adjustment.

Results and Discussions

The study examined effect of non-oil sector financing on economic growth in Nigeria with non-oil sector financing as the independent variable and economic growth as the dependent variable. Non-oil sector financing to manufacturing sector and agricultural sector were employed as proxies for the independent variable and gross domestic product as proxy for the dependent variable.

Table 4.1: Descriptive Analysis

	GDP	*BLM*	*BLA*
Mean	17174619	1314822.	313996.2
Median	18998342	1087403.	316364.0
Maximum	54612264	2565488.	673193.0
Minimum	28662.47	295589.6	49393.40
Std. Dev.	13072196	646397.1	191931.2
Observations	55	55	55

Source: E-Views 10, 2023

The descriptive statistics test provides brief descriptive coefficients that summarize the data set used in this study. It is a representation of the entire population of the study. The descriptive statistics is broken down into measures of central tendency and measures of variability or spread. The descriptive statistics shows the mean, maximum, minimum, standard deviation, Jarque-Bera, skewness and kurtosis with one fifty-five (55) observations of the variables used in the study. The mean describes the average value of the series and the standard deviation measures the deviation of the data from the average.

Gross domestic product (GDP) has a Mean of 17174 with Standard Deviation of 13072196. It also has Skewness of 0.144061 with Kurtosis of 2.641706. In a like manner, bank lending to manufacturing has a mean of 1314822. with standard deviation of 646397.1 It also has a Skewness of 0.250845 with Kurtosis of .825751. Bank lending to agriculture has a mean of 313996.2 with standard deviation of 191931.2 It also has a Skewness of 0.144616 with Kurtosis of 1.628031.

The maximum and minimum value of the variables are as follows: GDP has a maximum of 54612264 and minimum of 28662.47. BLM has maximum of 2565488 with minimum of 295589.6. BLA has maximum of 673193.0 with minimum of 49393.40. This implies that, the data are normally distributed.

Table 4.2: Unit Root Test

The presence of unit root in the underlying series points to the fact that there is non-stationarity in that series. If the series are non-stationary, using standard econometric techniques can point to misleading results, so standard economic theory requires the variables to be stationary.

Summary of Unit Root Test Results

Variables	*ADF Test Statistic*	*Order of Integration*
GDP	-8.122098 (-3.562669)	*I(1)*
BLM	-7.052418 (-3.557472)	*I(1)*
BLA	-8.646152 (-3.557472)	*I(0)*

Source: Source: E-Views 10, 2023

From the Table above, it was discovered that GDP was found stationary at first difference, that is, at order I(1). This means that their ADF test statistic were found greater than their critical values. BLM was found stationary at first difference, that is, at order I(1). This means that their ADF test statistic were found greater than their critical values. However, BLA was found stationary at levels at order I(0) as also shown in Table. Since the variables were found stationary at different orders (mixed orders), the ARDL approach to co-integration was applied to examine the long run relationship among the variables.

Table 4.3: Cointegration Test

D(GDP)	*4.542851*	*0.438781*
	(0.12643)	(0.20771)
D(BLM)	0.051591	-0.239498
	(0.05305)	(0.08715)
D(BLA)	0.026881	-0.039713
	(0.01625)	(0.02669)

Source: Source: E-Views 10, 2023

Cointegration is the statistical implication of the existence of a long-run relationship between economic variables. The test stipulates that if variables are integrated of the same order, a linear combination of the variables will be integrated of that same order. The idea behind cointegration analysis is that, although time series variables may tend to trend up and down over time, groups of variables may drift together. If there is some tendency for some linear relationships to hold among a set of variables over long periods of time, then cointegration analysis helps us discover it. If the variables are integrated of different orders, however, there is some linear combination of the two series that is stationary. In other words, instead of being I(1), the linear combination is I(0).

Table 4.5: VECM Results

ECM Regression
Case 2: Restricted Constant and No Trend

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	-0.424291	0.168445	-2.518868	0.0399
D(GDP(-2))	-0.535694	0.123295	-4.344803	0.0034
D(GDP(-3))	-0.250800	0.126158	-1.987984	0.0871
D(BLM)	0.017843	0.029424	0.606412	0.5634
D(BLM(-1))	-0.082440	0.039339	-2.095612	0.0744
D(BLM(-2))	-0.240825	0.047080	-5.115216	0.0014
D(BLM(-3))	-0.141471	0.044471	-3.181157	0.0155
D(BLA)	0.023233	0.000455	0.455322	0.3445
D(BLA (-1))	0.335531	0.335669	-1.964562	0.0033
D(BLA(-2))	0.452252	0.124666	-3.455466	0.0111
D(BLA (-3))	0.344555	0.000071	-4.567777	0.0002
ECT(-1)*	-0.415160	0.086532	-4.797717	0.0000

R-squared	0.946581	Mean dependent var	0.177968
Adjusted R-squared	0.873738	S.D. dependent var	0.096364
S.E. of regression	0.034241	Akaike info criterion	-3.623515
Sum squared resid	0.012897	Schwarz criterion	-2.855612
Log likelihood	64.91746	Hannan-Quinn criter.	-3.395177
Durbin-Watson stat	1.923325		

Source: Source: E-Views 10, 2023

As expected, the lagged error correction term is negative, less than unity and statistically significant at 5 percent. The coefficient revealed that once there is disequilibrium in the system, it takes an average (slow) speed of 41.51% to adjust itself back towards long-run equilibrium level. Thus, showing that a highly significant lagged error correction terms proves the existence of long-run relationship between the variables and its ability to adjust from dis-equilibrium state towards equilibrium level.

The coefficient of determination (R-square), which was used to measure the goodness of fit of the estimated model, indicates that the model is reasonably fit in prediction. It showed that 94.65 percent changes in economic growth were collectively due to non-oil sector financing to manufacturing and non-oil sector financing to Agriculture, while 5.3% unaccounted variations was captured by the white noise error term.

Wald Test for Testing Individual Variables

Table 4.6: H_{01}: Non-oil sector financing to agricultural sector does not have significant effect on economic growth.

Test Statistic	Value	Df	Probability
t-statistic	3.042579	72	0.0033
F-statistic	9.257287	(1, 72)	0.0033
Chi-square	9.257287	1	0.0023

***Source:* Source: E-Views 10, 2023**

From the Wald test used for testing the effect of non-oil sector financing to agricultural sector, it was evident that non-oil sector financing to agricultural sector had a significant effect on economic growth with a p-value of 0.0033 which agrees with the regression p-value. This signifies that non-oil sector financing to agricultural sector has an effect on economic growth in Nigeria. Therefore, the study rejected the null hypothesis which states that non-oil sector financing to agricultural sector has no significant effect on economic growth in Nigeria thereby accepting the alternative hypothesis.

Table 4.7: H_{02}: Non-oil sector financing to manufacturing sector does not have significant effect on economic growth.

Test Statistic	Value	Df	Probability
t-statistic	-2.720595	72	0.0082
F-statistic	7.401640	(1, 72)	0.0082
Chi-square	7.401640	1	0.0065

***Source:* Source: E-Views 10, 2023**

From the Wald test used for testing the effect of non-oil sector financing to manufacturing sector, it was evident that non-oil sector financing to manufacturing sector had a significant effect on economic growth with a p-value of 0.0082 which agrees with the regression p-value. This signifies that non-oil sector financing to manufacturing sector has an effect on economic growth in Nigeria. Therefore, the study rejected the null hypothesis which states that non-oil sector

financing to manufacturing sector has no significant effect on economic growth in Nigeria thereby accepting the alternative hypothesis.

Discussion of Findings

The analysis also indicates that a non-oil sector financing rate has statistically significant effect on economic growth in Nigeria. Thus, the lending rate encourages investment and economic growth in view of the link between non-oil sector financing and economic growth.

Based on the findings, the study rejects the null hypothesis. However, non-oil sector financing to agricultural sector had a significant effect on economic growth at 5% significant level, indicating that increase in bank lending to agricultural sector will automatically increase economic growth in Nigeria. Therefore, research works such as: Sayedia and Ringimb (2019), Oyebowale (2019) and Binuomote, Lukman and Olawuyi (2019), all support the findings of this study.

Non-oil sector financing to manufacturing sector had a significant effect on economic growth which signifies that increase in bank lending to manufacturing sector will have an increase on economic growth in Nigeria. This finding is in relation to the findings of Nwogo and Oriji (2019), Akinwale (2018) and Paavo (2017). Therefore, the null hypothesis was rejected.

Conclusion and Recommendations

The Nigerian deposit money banks remain dominant in the banking system in terms of their shares of total assets and deposit liabilities. Their total loans and advances, a major component of total credits to the private sector are still on the increase in spite of the major constraints posted by the government regulations, institutional constraints and other macro-economic factors. The study concluded that, both government and deposit money banks should be mindful of the facts that the environments in which they operate are important factors in the bank performance which will enhance economic growth. Based on the findings and conclusions from this study, the following recommendations are as follows;

i. Government and manufacturers should work together to jump- start manufacturing output in order to generate a corresponding increase in economic growth. This can be achieved through the provision of conducive macro-economic environment and appropriate investment incentives, as well as encouraging investment-friendly lending and borrowing by the financial institutions.

ii. For Nigeria to experience favourable Agricultural Sector, the Central Bank of Nigeria should encourage local farmers by directing the supply of bank lending at lower lending rate to rural areas. This will increase the investors of agricultural production in the country for self-sufficiency, exportation of the agro-commodities and economic growth of the country at large.

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