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### FINANCIAL INTERMEDIATION AND NIGERIAN ECONOMIC **GROWTH**

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### **ABSTRACT**

This study empirically examined the influence of financial intermediation on the economic growth in Nigeria, by using eight selected financial intermediaries in the category of international authorization in Nigeria. This study adopted an ex-post facto research design since data were collected from secondary sources through the World Bank Development indicator and the National Bureau of Statistics for the periods 2011 to 2020. Financial intermediation was measured by using bank deposits, loans, and bank liquidity reserves, whereas Nigerian economic growth was measured by Nigerian GDP. The study applied OLS in its analysis to ascertain the influence of financial intermediation on Nigeria economic growth. The outcomes of the report demonstrated that credit and government expenditure have enhanced Nigeria economic growth, while customers' deposits and liquidity reserve did not enhance Nigeria economic growth. The research paper recommended that financial intermediaries should improve their support for micro, small and medium enterprises (MSME) and real sectors of the economy to enhance Nigeria economic growth. Regulatory authorities should formulate policies to encourage financial intermediaries to lower their lending rates to nurture the productive sector of the economy to do better. Nigeria government to provide basic infrastructures such as adequate electricity supplies, provision of enough security personnel, good road networks to help banks to minimize amounts spent on providing an alternative source of power and securities for their branches. The government needs to improve spending on capital expenditure rather than spending on recurrent expenditure to stimulate economic growth. Government should provide an enabling environment for its citizenry to embark on businesses that will stimulate economic growth.

**Keywords:** Economic growth, Financial intermediation, Gross domestic product, Liquidity reserves.

Word count: 255

#### 1.0 INTRODUCTION

The value of economic expansion cannot be overemphasized. Economic development is one of the macroeconomic objectives of every economy. Hence, nations, every year, measure their economic development using the annual growth rate of the real gross domestic product as an indicator to measure this economic objective. To this end, numerous studies have been

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undertaken to recognize the drivers of economic development in Nigeria and beyond. The outcomes of these experiments have severally identified financial mediation as a mechanism for development. Financial mediation is the procedure where financial intermediaries receive cash from the public as deposits and transform them into loanable funds (Agbada & Osuji, 2013). This implies that the financial intermediation process helps to turn deposit obligations from surplus economic components to the bank's major interest earner, loans & advances to the deficit parts of the economy. Particularly, the finance literature has discovered that the availability of financial factors goes a long way in describing the sustainable development of a nation. That is, the availability and access to funds for investment is an essential element in inspiring growth in any economy (Sanusi, 2002). Accordingly, the will of advancement of every economy is hinged on the financial system. The financial organization helps to improve the production capacity of a nation outwards. Therefore, effective utilization of funds and access to credit are important to kick-start the economic growth of a nation.

Sufficient financing is partly an important determining factor of economic development. This finance is essential to different individuals, organizations, and economic agents to serve different purposes. Similarly, financial services are important for the expansion of infrastructural amenities and the advancement of investment opportunities. Consequently, the development of functioning financial organizations such as investment banks, banks of industry, agricultural development banks, commercial banks, mortgage banks, and at times stock exchange is significant. The intermediary role of these financial organizations improves the supply of funds from depositors to debtors/borrowers. Therefore, before the evolution of financial intermediation, a system of un-intermediated or direct financing was a usual practice. During this period, economic mediators/agents who crave to invest more than their financial capability, the source for financial assistance by borrowing from affluent people around them with a promise to pay in a future date (Manasseh, Okoh, Abada, Ogbuabor, Alio, Lawal, Nwakoby, & Asogwa, 2021).

Finance has been recognized as the fundamental prerequisite for input factor in economic growth and considered as an engine of development in any economy (Onoh, 2002). In economy identical to ours, which is in an urgency to grow notwithstanding serious limitations, much consideration is then placed on the financial organization and its mechanisms for the mobilization of resources for economic growth (Ogiriki & Andabai, 2014). The economic agents that are responsible for such transmissions are so-called financial intermediaries and the procedure through which it is done is called financial intermediation (Umoh, 2005). Ogiriki and Andabai (2014) stated that financial intermediaries have become engines of expansion through the process of financial intermediation. Okereke (2005) established that channelling money from surplus units to deficit units of the economy would stimulate innovation though it is risky.

The financial organization plays a crucial role in making depositors' funds liquid, as it invests a percentage of the money into illiquid long-term investments. Additionally, Levine (1997) elucidates that economic expansion is carefully related to the liquidity function of financial organizations. The connection arises since some high return projects entail commitment into a long-term capital, but depositors do not like to surrender control of their savings for lengthy periods. As experimental evidence connecting liquidity provision and economic growth, Levine (1997) observed that separating the liquidity role from other financial roles performed

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by banks was established to be tough. Nzotta (2004) postulated that the banking segment is the leading segment in the Nigerian financial service industry. He stated that it is the liveliest section and whatsoever hitches it passes through affects the economy significantly. Mostly, the activities of financial intermediaries influence the stability and soundness of the financial system. Therefore, the special attention is given to them by the supervisory authorities (Umoh, 2005).

Experiments by Beck, Levine, & Loayza (2000), and Levine, & Zervos (1998) restated that effective and dynamic banks speed up economic growth. Hence, sustainable financial institutions are vital to stimulating economic activities. An effective and highly intermediation structure is critical for a strong economy since the action of banks influences every citizen immediately or ultimately in an economy (Ngwu, 2006). Large-scale production and specialization of labour can only work if an effective and extremely developed financial organization exists for payments of goods, services, whether they are required in production or offered for sale (Uremadu, 2000). Additionally, business organizations can simply pay for capital goods, such as equipment and machinery only if the essential procedures, instruments, and institutions have been founded to make savings available for such investments. In the absence of banks, too many investments are self-funded which result in the slowdown cycle of production (Bencivenga & Smith, 1991). This might result to problems of protracted delays between investment expenditure and receipts of profit from the capital. Consequently, the effective intermediary function of the banking system helps an economy to cut down a fraction of its savings held in the form of ineffective liquid assets and to avoid misallocations of capital. Inline with the above discussion, this study empirically examines the degree to which Financial Intermediation affects Nigeria economic growth.

The major objective of the study is to consider the effect of financial intermediation on Nigerian economic growth.

The specific objectives are to:

- 1. Examine the impact of deposits on Nigerian economic growth.
- 2. Analyze the influence of Credits on Nigerian economic growth.
- 3. Examine the effect of liquidity reserve on Nigerian economic growth.
- 4. Evaluate the influence of government expenditure on Nigerian economic growth.

#### 2.0 REVIEW OF RELATED LITERATURE

### 2.1 Deposit

Deposit is an economic term that means money kept at a bank. A deposit is a business deal including a transfer of money to another party for safekeeping. However, the deposit can be referred to as part of the money used as collateral or security for the delivery of a good.

A deposit is cash that is kept in a bank's account or savings account, mainly a sum which will be left there for some time.

#### 2.2 Credits

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The term credit is used particularly to describe the faith placed by a lender (the creditor) in a borrower (the debtor) by offering a loan mostly in a form of money, securities, or goods to debtors. Basically, when a loan is created, the lender is said to have offered credit to the borrower, and he automatically accepts the credit of the borrower. Credit is a contract between two parties, where the lender or creditor supplies money, securities, goods or services in return for agreed payments in by the borrower or debtor (Onyeagocha, 2001).

Loans are usually repaid according to pre-approved terms of the agreement as specified in the repayment schedule which states the principal amount and interest that is due during the tenor of the loan. If a loan is repayable on request by a lender, it is called a "demand loan". If a loan is repayable on equal monthly instalments (EMI), it is stated as an instalment loan. If repayable in a lump sum at the loan's expiration (maturity) date, it is a time loan. Banks further classify their loans according to assets financed, such as consumer loans for consumer items. Others are industrial, construction, commercial, mortgage or personal. Also, loan categorization can be secured or unsecured subject to being backed by Collateral (Ozurumba, 2016).

In its common term a loan is a written or oral agreement for an interim allocation of a property (typically cash) from its owner or lender to a borrower who agrees to repay it according to terms and conditions of the agreement, generally with interest for its usage. Though, in the banking environment, a loan is considered as money that is borrowed from a lending institution or a government agency and paid back at a future date (Ozurumba, 2016). A loan is a money that a bank lends to a borrower for use of a credit facility on the condition that the borrower would pay it back with interest to a bank at an agreed future date (Onyiriuba, 2009).

### 2.3 Liquidity Reserves

Liquidity reserves result from a conscious act, that is, planned risk retention as opposed to unplanned risk retention when risk is retained by default (Vaughan, 2003)

Liquidity reserve is setting aside cash, or resources that are easily converted into cash into a special account, which must not be given out as credit to banks' customers but must be made available to meet banks' obligations to their depositors. That is, banks set aside funds, to meet their depositors' demands on withdrawals of their money.

#### 2.4 Government Expenditure

Government performs two roles- security/protection and provisions of some public goods, services. The security or protection role consists of the establishment of rule of law and execution of property rights. This assists to reduce risks of criminality, safeguarding life and property, and the country from external aggression. Under the provisions of public goods are roads, defence, power, health, and education (Abdullah, 2000 and Al-Yousif, 2000). Money spent on these is known as government expenditure.

### 2.5 Gross Domestic Product (GDP)

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Gross domestic product (GDP) is a pointer to economic activity. It measures the entire value of final goods, services that are recently produced within geographical boundaries of countries over the course of the year (O'Neill, 2014).

GDP assesses the economic value of final goods and services, that is, those that are purchased by the final consumer, produced in a country in a given period (i.e., in a quarter or a year). It sums all the output made within the borders of a country. GDP comprised goods and services created for sales in markets and include some non-market productions, such as education or defence provided by the government (Callen, 2008).

### 3.0 THEORETICAL REVIEW

### 3.1 Theory of Financial Intermediation

The theory, according to Allen and Santomero (1998), is meant for organizations that accept deposits, issue insurance policies and channel funds to firms. The theory asserts that the growth of intermediation tends to lead to the advancement of financial markets; the development of the financial sector leads to the expansion of the economy. Banks have been since earliest times, receiving deposits from households and giving loans to economic agents that require capital. The economic agents invest cash in economic activities that generate revenues and enhance economic growth. Financial intermediation theory totally excludes the traditional Arrow-Debreu model of resource distribution. This model declares that households and firms relate through markets and financial intermediations play no role. According to the theory, markets are complete and perfect. Distribution of resources is therefore effective and there is no room for intermediaries to enhance wellbeing. Furthermore, the Modigliani-Miller theorem is relevant in this context as it affirms that financial arrangement does not make a difference, as households can create portfolios to offset any situation taken by an intermediary, thus intermediation would not create value (Fama, 1980). Allen and Santomero (1998), in their point of view, stated that financial markets permit an effective allocation and financial intermediations have no role to play is obviously at odds with what is noted in practice. This theory is important because it was based on financial intermediation.

### 3.2 Empirical Review

Manasseh, Okoh, Abada, Ogbuabor, Alio, Lawal, Nwakoby, & Asogwa (2021) investigated the impact of financial intermediation on economic growth in Nigeria. Data was sourced from the Nigerian Bureau of Statistics and World Bank Development indicator from 1994: Q1 to 2018: Q4 was used for analysis, and the Ordinary Least Squares (OLS) technique was adopted for the evaluation of the hypotheses. Per-capita GDP was utilized in measuring economic growth, while bank credit, bank liquidity reserves and bank deposits are to measure financial intermediation. Further examination revealed that deposit is positively and significantly connected to Per-capita GDP, implying that a rise in bank deposits gives about 0.244193 rises in economic growth. The research work further noted that bank credit affected economic growth positively. Though, the effect was discovered to be inconsequential. The study also observed bank liquidity reserve asserts substantial and positive effects on economic growth. Subsequently, the study recommended good policy reforms that might

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stimulate the efficiency and growth of banks which serve as a crucial factor for economic expansion in Nigeria.

John and Nwekemezie (2019) investigated the effect of financial intermediation on economic development in Nigeria. The data is from 1986 to 2017. The data were obtained from the Central Bank of Nigeria Statistical Bulletin, World Bank (World Development Indicators) and International Monetary Fund (World Economic Outlook). The study focused on money supply, credit to the private sector and lending rate to measure explanatory variables, while the unemployment rate and real GDP were used to measure dependent variables. The autoregressive distributed lag (ARDL) method was used to analyze the data. Findings indicated that credit to the private sector did not really impact positively on economic development. This might be because of the exorbitant lending rate. The exorbitant lending rate is unfavourable to the growth of the economy. Therefore, the study suggested that the regulatory authority should formulate policies that would force banks to reduce their lending rates to nurture the real sectors of the economy to achieve better.

Usman, Alimi and Onayemi (2018) examined the effect of bank intermediation activities on economic growth in Nigeria. The study adopted secondary data obtained from the Central Bank of Nigeria Statistical Bulletins from 1983 to 2014. OLS results revealed that loans and advances, and money supply have a positive effects on economic growth. The Cointegration result showed the existence of a long-run correlation between variables. The study established that financial mediation by banks has a significant influence on economic growth in Nigeria.

Markjackson, Timinipre, Nelson, and Okoyan (2017) examined the impact of financial intermediation on economic growth in Nigeria. The research adopted secondary data obtained from the Central Bank of Nigeria Statistical bulletin from 1992 to 2015. The study employed the Engle-Granger Representative Theorem of Error Correction to analyze functional correlation. The findings revealed that loans and advances to the agriculture sector, manufacturing sector, forestry, fisheries, and commercial bank credit to small scale enterprises have a significant impact on economic growth in Nigeria. The study recommended that banks should be more effective in mobilizing and distributing funds to entrepreneurs in the real sector. The consequence of this is that supervisory authorities should continuously take measures to liberalize the financial structure to avoid shock in the system.

Oluwasogo, Princess, Oluwatoyin and Folasade (2017) investigated the effect of financial intermediation on economic growth in Nigeria. The period covered was from 1980 to 2014. The study adopted the Johansen cointegration test and Error Correction Model. The study revealed that financial intermediation has a long-time relationship with economic growth.

Gisanabagabo and Ngalawa (2016) examined the probable cointegration and causal connection between financial intermediation and economic growth in Rwanda. Quarterly data covering 1966: Q1 to 2010: Q4 was utilized. A Structural Vector Autoregressive model was used to evaluate short-run dynamics between variables used. Results revealed evidence of a cointegrating correlation between financial intermediation and economic growth.

Olowofeso, Adeleke and Udoji (2015) investigated the influence of private sector credit on economic growth in Nigeria. The study used the Gregory and Hansen (1996) cointegration

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test. The technique employed quarterly data covering 2000: Q1 to 2014: Q4, while the fully adjusted Ordinary Least Square method was utilized to assess model coefficients. The study discovered a cointegrating correlation between a dependent variable and explanatory variables. There is a significant influence of private sector credit on output, while improved key lending rate prevented growth. Based on the financial mediation roles of financial institutions, the paper encourages efforts of the Central Bank of Nigeria (CBN) to foster a sound and real sector friendly financial system.

Nwanne (2015) evaluated the effects of the cost of financial intermediation on economic growth in Nigeria. The study used OLS regression analysis. The co-integration test suggested a long-run association between the cost of financial intermediation and economic growth in Nigeria. The study revealed that credit has a significant effect on economic growth in Nigeria. The interest rate has a significant influence on the development of the Nigerian economy. Also, the level of total deposit over the years has impacted negatively on economic growth in Nigeria. The study suggested that inappropriate management of cost financial intermediation may have triggered numerous macroeconomic outcomes to the Nigerian economy. Therefore, the question of how the interest rate, total loan, and deposit relate to economic growth is of great interest to Nigerian economic performance. The study suggested that the Nigerian government should ensure that appropriate regulations and control are in place to guide the cost of financial intermediation to attain a good and sound financial system.

Nwite (2014) examined the effect of financial intermediation on economic growth in Nigeria. The study adopted the Ordinary Least Square method. The study showed that interest rate margin affected economic growth in Nigeria significantly. Credit to the private sector significantly affected the growth of the Nigerian economy positively. The lending rate over the years impacted economic growth in Nigeria negatively. According to the study, proper management of financial intermediaries will assist the economy to grow. This implies a positive impact of financial intermediation on economic growth in Nigeria. The study suggested that the Nigerian government should carry out a section analysis of the real sector of the economy with a view to getting a better understanding of the reversed correlation between loans to the private sector and economic performance through financial intermediation.

Ogege and Boloupremo (2014) examined the effect of sectoral credit allocation by deposit money banks on accelerating GDP growth in Nigeria. The research adopted time-series data from 1973-to 2011. Engle-Granger Representation Theorem of Error correction was used for data analysis. The study recommended that credit to the production sector has a significant effect on the development rate of Nigeria while general commerce, other sectors and services have an unimportant and negative connection with GDP in Nigeria. The study ended by stating that commercial banks should be effective in credit allocation to speed up growth.

Emecheta and Ibe (2014) investigated the role of bank credit on economic growth in Nigeria. The data covered periods of 1960-2011. The study adopted GDP to measure economic growth. The finding showed that there is a direct connection between economic development and credit.

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Ogiriki and Andabai (2014) considered the correlation between financial intermediation and economic growth in Nigeria. The study used secondary data covering (1988-2013). The data were obtained from the CBN statistical bulletin and the National Bureau of Statistics. The study suggested that regulatory authorities properly regulate and control the activities of intermediaries to achieve a sound financial system in the country. The research concluded regulatory authorities should checkmate banks from having excess liquidity to prevent inflation in the economy.

Agbada and Osuji (2013) investigated the correlation between financial intermediation and economic growth in Nigeria. The study adopted time-series data from 1981-to 2011. A multiple regression model to estimate variables was utilized. The finding showed that there is a significant correlation between demand deposit and output.

Adekunle, Salami and Adedipe (2013) examined the influence of financial development on economic growth in Nigeria. The aim of the study was to establish the role the banking system is performing towards the economic fortune of Nigeria. OLS was used to analyze data. The results showed that the explanatory variables are not significant. Additional results revealed that the real interest rate was negatively associated with growth.

Shittu (2012) examined the impact of financial intermediation on economic growth in Nigeria. The study used the proportion of money supply/nominal gross domestic product and credit to private sector/nominal gross domestic product as a measurement of real GDP. Financial intermediation as a substitution for economic development. The result revealed that money was more prominent to economic development than credit to the private sector. Further outcomes from the study showed that the last ten years saw the highest level of loans to the private sector but had the most awful annual manufacturing growth.

Ogwumike and Salisu (2009) studied short-time, long-time and causal connections between financial development and economic growth in Nigeria. The data used is from 1975 to 2008. The study adopted the Bound test approach and discovered a positive long-time relationship between financial development and economic growth in Nigeria. Financial intermediation, stock market, credit to private segment and financial reforms exercise positive impact on economic growth significantly. The study suggested that proper macro-economic and regulatory policies would promote the expansion of the Nigerian financial institutions if followed by the appropriate authority.

Badun (2006) evaluated the relationship between financial intermediation and economic growth. The review revealed fairly a few unanswered issues on empirical research, which triggers scepticism in prioritizing financial sector policies to bring about economic growth.

### 4.0 CONCEPTUAL FRAMEWORK

The explanatory variable, Financial intermediation, is measured by deposits (D), credits (C), liquidity reserves (LR), government expenditure (GE). While dependent variable, economic growth, is measured by gross domestic product.

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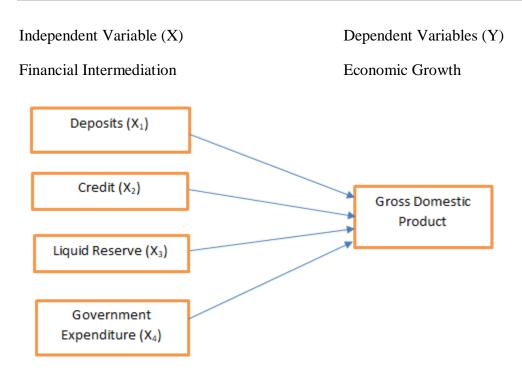


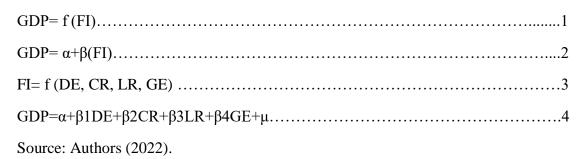
Figure 1: Framework for studying financial intermediation and Nigerian economic growth.

Source: Authors (2022).

### 5.0 METHODOLOGY

The investigation adopted an ex-post facto research design. Secondary data which were obtained from banks' annual reports and the Central Bank of Nigeria's statistical bulletin were adopted. The population of the work comprises Access Bank Plc., FBN Holdings Plc., First City Monument Bank Limited, Guaranty Trust Bank Plc., UBN Plc., and UBA Plc., which are six (6) of the eight (8) banks categorized as international authorization in Nigeria to represent all financial institutions in Nigeria. The study is from 2011- to 2020. The dependent variable, which is economic growth, is measured by gross domestic product (GDP). While the independent variable, Nigeria economic growth, is measured in relation to deposits, credits, liquidity reserve, and government expenditure. Descriptive and inferential statistics (OLS) were used for data analysis.

#### MODEL SPECIFICATION



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#### Where:

GDP is a gross domestic product.

 $\alpha$ . is the estimated value of the dependent variable when other variables are zero or regression intercept.

DE is the number of customers' deposits in each bank.

CR is the total of credit availed to customers by each bank.

LR is the sum of cash each bank reserves.

GE is the amount spent by the Nigerian government through the Central Bank of Nigeria.

 $\beta$ 1- $\beta$ 4 is the coefficient of independent variables.

 $\mu$  is the error term.

### 6.0 RESULT AND DISCUSSION OF FINDINGS

### **6.1 Descriptive Statistics of Variables**

This section reports the result of the descriptive statistics of the variables. As reported in Table 1, variables: GDP, GE, LR, DE and CR were used in achieving the study objective. The result of descriptive statistics shows that 105000000 was the average of GDP during the trial period, 5929681.0 was the average of government expenditure, 12761041 was the average of liquidity reserve, 1947313.0 was the average of customers' deposits in each bank and 1183732 was the average of credit availed to customers by each bank. GDP was normally distributed with Jarque-Bera statistics of 4.1777 and a p-value of 0.1238. Similarly, CR exhibited normality at a 5% level of significance. GE, LR and DE were not normally distributed with a statistically significant Jarque Bera. All variables exhibited positive skewness and the kurtosis distribution of variables indicated that GDP, GE and CR were platykurtic, while DE and LR were leptokurtic distribution.

**Table 1: Descriptive Statistics** 

	GDP	GE	LR	DE	CR
Mean	105000000	5929681.	12761041	1947313.	1183732.
Median	98876550	4805605.	11100455	1650726.	1054248.
Maximum	154000000	9736530.	25123200	5676011.	3218107.
Minimum	63713400	4199860.	8763500.	410683.0	158565.0
Std. Dev.	29242244	2037720.	4427042.	1294833.	713490.6
Skewness	0.333799	0.917850	2.108530	1.017069	0.657774
Kurtosis	1.893024	2.238269	6.385076	3.564965	2.811655

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Jarque-Bera	4.177710	9.875064	73.10584	11.14227	4.415357
Probability	0.123829	0.007172	0.000000	0.003806	0.109956
Observations	60	60	60	60	60

Source: E-view Version 10.0 2022

#### **6.2 Correlation Matrix**

The essence of the correlation analysis prior to model estimation is to identify likely causes of multicollinearity among independent variables. The variable with a high degree of correlation coefficient tends to exhibit a tendency of multicollinearity. The result of correlation analysis indicates that independent variables exhibited significant correlation with the dependent variables. However, a weak significant correlation was observed between GE and DE with a coefficient of 0.4392. Also, a weak correlation coefficient was observed between GE and CR with a coefficient of 0.3492. In the same vein, LR reported a weak correlation with CR and finally, DE and CR had a weak correlation with a coefficient of 0.3306. This implies less likelihood of encountering multicollinearity problems which may understate or overstate the standard errors and thereby lead to wrong inference about the behaviour of the variable.

**Table 2: Correlation Analysis** 

Correlation					
Probability	GDP	GE	LR	DE	CR
GDP	1.0000				
GE	0.9449	1.0000			
	0.0000				
LR	-0.5291	-0.2784	1.0000		
	0.0000	0.0312			
DE	0.5415	0.4392	-0.2277	1.0000	
	0.0000	0.0000	0.0801		
CR	0.5074	0.3492	-0.3156	0.3306	1.0000
	0.0000	0.0003	0.0140	0.0000	

Source: E-view Version 10.0 2022

#### **6.3 Variance Inflation Factor**

Variance inflation was undertaken to further ascertain the degree of multicollinearity among explanatory variables. A variable is said to exhibit collinearity when the VIF is more than 10.

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The occurrence of multicollinearity among explanatory variables reduces the correctness of the standard errors. It can either understate or overstate the standard errors. The result of VIF as reported in Table 3, shows that independent variables exhibited a low degree of collinearity with VIF of less than 5. This implies that the variables failed to exhibit multicollinearity.

**Table 3: Variance Inflation Factor** 

	VIF	1/VIF	
DE	4.354	.229	
CR	3.663	.273	
GE	1.552	.644	
LR	1.232	.812	

Source: E-view Version 10.0 2022

**Table 4: Model Estimate** 

Dependent Variable: GDP						
	Fixed Effect Model			Random Model Effect		
Variable	Coefficient	t-value	P-value	Coefficient	t-value	P-value
GE	12.314	22.857	0.000	12.544	31.665	0.000
LR	-1.642	-9.614	0.000	-1.762	-10.847	0.000
DE	-4.368	-2.014	0.049	-3.205	-2.094	0.040
CR	11.119	3.238	0.002	6.665	2.493	0.015
C	48188266	12.429	0.000	51360582	14.232	0.000
R-squared		0.975 0.972				
Adjusted R-squared	0.971			0.970		
F-statistic	220.758			493.766		
Prob (F-statistic)	0.000			0.000		
Durbin-Watson stat	1.847		1.894			
Hausman Test		112.359 (p=0.000)				
Serial correlation test	0.008 (p=0.993)					
Heteroscedasticity			0.9316 (p=0.988)			

Source: E-view Version 10.0 2022

### **6.4 Financial Intermediation and Economic Growth**

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This section reports the finding of model estimates on the effect of financial intermediation on Nigeria economic growth. Table 4 captures the outcomes of the estimated model. The study estimated two models namely: Fixed effect and random effect models to select the best fit model between the two. Hausman test was conducted with a view to selecting the best fit model between random and fixed-effect model. The random effect seems to be appropriate when the p-value of the test statistic is greater than 0.05, otherwise, the fixed effect is the suitable model. The result of the test as reported shows that the fixed effect model was the best fit model with test statistics of 112.359 (p=0.000). In relation to the outcome of the Hausman test, the research will interpret the result of fixed-effect model. More so, other post estimation tests were conducted to access the robustness of the model. The finding of both the Serial correlation test and the Heteroscedasticity test showed that the model is free from the problem of serial correlation and homoscedasticity. The overall f-statistics of the model indicated that independent variables were different from zero. The R-squared of the model reflects that about 97.5% of the source of variation was accounted for by explanatory variables.

#### 6.5 Effect of Deposits on Nigerian Economic Growth

Findings of individual variables as reported in Table 4, revealed that the variable of customer deposits had a negative correlation with economic growth in the country. The variable reported a coefficient of -4.368 with a t-value of -2.014 and a p-value less than 0.05. The outcome showed that a rise in customer deposits reduces economic growth in Nigeria. This implies that customer deposits reduce the amount of money in the financial system and again weaken the financial intermediation of banks in Nigeria. This could have been the reason why the rise in customer deposits does not improve economic growth.

### 6.6 Influence of Credits on Nigeria economic growth.

The result of model estimation shows that credit exhibited positive effects on the economic growth in Nigeria. It reports a coefficient of 11.119, t-value of 3.238 and p-value of 0.002. The outcome of the model shows that a rise in credit leads to an increase in economic growth. It is expected when credit is available to customers, money in circulation will increase and the economy will be agitated and therefore ignite investment and capital development. The economy grows better when financial intermediaries support investment in the real sector through affordable interest rates.

### 6.7 Effect of Liquidity Reserve on the Nigerian Economic Growth

The outcome of the model revealed that liquidity reserves had a negative effect on economic growth. The factor of the liquidity reserve (-1.642) indicates that a rise in liquidity reserve leads to falling in economic growth with a t-value of -9.614 and a p-value of 0.000.

### 6.8 Influence of Government Expenditure on the Nigerian Economic Growth

The influence of government expenditure on Nigeria economic growth shows that a rise in government expenditure brings about an increase in economic growth. Government expenditure induces a 12.314 coefficient on economic growth with a t-value of 22.857, which means that government expenditure exhibited a significant relationship.

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#### 7.0 CONCLUSION AND RECOMMENDATIONS

The study has demonstrated that credit and government expenditure have enhanced Nigeria economic growth, whereas customers' deposits and liquidity reserve did not enhance Nigeria economic growth.

Based on the results of this study, the following recommendations are suggested:

- 1. Financial intermediaries should improve their support for micro, small and medium enterprises (MSME) and the real sector of the economy to enhance Nigeria economic growth.
- 2. Supervisory authorities should formulate policies that would encourage financial intermediaries to reduce their lending rates to assist the productive sector of the economy to do better.
- 3. Nigerian government to provide basic infrastructures such as adequate electricity supplies, provision of enough security personnel, good road networks to help banks to minimize amounts spent on providing an alternative source of power and securities for their branches.
- 4. Financial intermediaries to be more effective in mobilizing and distributing funds to entrepreneurs.
- 5. Financial intermediaries should be more efficient in credit allocation to speed up economic growth.
- 6. Regulatory authorities to properly regulate and control activities of financial intermediaries to achieve sound financial systems.
- 7. Government needs to improve spending on capital expenditure rather than spending on recurrent expenditure to stimulate economic growth.
- 8. Government should provide enabling environment for its citizenry to embark on businesses that will stimulate economic growth.

#### REFERENCES

- Abdullah, H. A. (2000). The relationship between government expenditure and economic growth in Saudi Arabia. Journal of Administrative Science, 12(2), 173-191.
- Adekunle, O., Salami, G. O., & Adedipe, O. A. (2013). Impact of financial sector development on Nigerian economic growth. American Journal of Business and Management, 2(4), 347-365.
- Agbada, A. O & Osuji, C. C. (2013). An empirical analysis of trends in financial intermediation and output in Nigeria: Global Journal of Management and Business Research, 13(9), 115-125.
- Al-Yousif, Y. (2000). Does government expenditure inhibit or promote economic growth: Some empirical evidence from Saudi Arabia. Indian Economic Journal, 48(2).
- Allen, F. & Santomero, A. M. (1998). Theory of financial intermediation. Journal of Banking and Finance, 21, 1461-1485.

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ISSN 2582-0176

- Badun, M. (2009). Financial intermediation by banks and economic Growth: A review of empirical evidence. Financial theory and practice, 33(2), 121-152.
- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. Journal of Financial Economics, 58, 261-300.
- Bencivenga, V. R., & Smith, B. D. (1991). Financial intermediation and endogenous growth: Review of Economic Studies, 195, 209.
- Callen, T. (2008). Back to Basics: What is gross domestic product? Finance & Development, 48-49.
- Emecheta, B. C., & Ibe, R. C. (2014). The impact of bank credit on economic growth in Nigeria: Application of reduced vector auto-regression (VAR) technique. European Center for Research, Training and Development, UK, 2(9), 111-121.
- Fama, E. F. (1980). Banking in the theory of finance. Journal of Monetary Economics 6, 39-58.
- John, E.I., & Nwekemezie, O.A. (2019). Effect of financial Intermediation on economic development.
- Gisanabagabo, S., & Ngalawa, H. (2016). Financial intermediation and economic growth: Evidence from Rwanda. Journal of Economics and Financial Science, 10(2), 253-273.
- Levine, R. (1997). Financial development and economic growth: Views and agenda. The Journal of Economic Literature, 35(2), 688-726.
- Levine, R., & Zervos, S. (1998). What we have learnt about policy and growth from cross-country regressions: The American Economic Review, 83(2), 426-440.
- Manasseh, C.O., Okoh, J.I., Abada, F.C., Ogbuabor, J.E., Alio, F.C., Lawal, A.I., Nwakoby, I.C. and Asogwa, O.J. (2021). Impact of financial intermediaries on Nigerian economic growth: International Journal of Financial Research, 12(1), 348-356.
- Markjackson, D., Timinipre, E.T., Nelson, J. and Okoyan, K. (2017). Impact of financial intermediation on economic growth in Nigeria: A Disaggregate approach: Journal of Economics and Sustainable Development, 8(22), 9-14.
- Ngwu, T. C. (2006). Bank management and Nigeria's economic growth: Nigerian Journal of Integrated Financial Science, 1, 18-27.
- Nwaeze, C., Onydikachi, M., & Nwabekee, C. (2014). Financial intermediation and economic growth in Nigeria. A Multidisciplinary Journal of Global Macro Trends, 3(6).
- Nwite, S. C. (2014). Determinants of financial intermediation and its implications on economic growth in Nigeria. British Journal of Marketing Studies, 3(9), 49-56.

Volume: 05, Issue: 01 " January - February 2022"

ISSN 2582-0176

- Nzotta, S. M. (2004). Money, banking & finance: Theory and practice. Husdon-Judge Publications Owerri.
- Ogege, S., & Boloupremo, T. (2014). Deposit money banks and economic growth in Nigeria. Financial Assets and Investing, 1(1).
- Ogiriki, T. & Andabai, P. W. (2014). Financial intermediation and economic growth in Nigeria, 1988 2013: A vector error correction investigation. Mediterranean Journal of Social Sciences, 5(17), 203-211.
- Ogwumike, F. O. & Salisu, A. A. (2009). Financial development and economic growth in Nigeria. Journal of Monetary and Economic Integration, 12(2), 91-105.
- Okereke, R. J. (2005). Money and the Nigerian financial system: Owerri 2nd Ed, Jeso International.
- Olowofeso, E. O., Adeleke, A. O. & Udoji, A. O. (2015). Impact of private sector credit on economic growth in Nigeria. CBN Journal of Applied Statistics, 6(2), 81-101.
- Oluwasogo, A., Princess, E. C., Oluwatoyin, M. A. & Folasade, A. B. (2017). Co-integration analysis of financial intermediation and economic growth in Nigeria. Journal of Internet Banking and Commerce, 22(S8), 1-12.
- O'Neill, D. (2014). Degrowth a vocabulary for a new era. Routledge.
- Onoh, J. K. (2002). Dynamics of money, banking, and finance in Nigeria: An emerging market. Astra Meridian Publishers, Aba- Nigeria.
- Onyeagocha, S.U.O. (2001). Problems and challenges of Nigeria financial institution in credit operations: Nigeria Banker, July-December 2001.
- Onyeriuba, L.O. (2009). Analyzing and managing risks of bank lending: Malthouse Press Ltd, Lagos.
- Ozurumba, B.A. (2016). Impact of non-performing loans on the performance of selected commercial banks in Nigeria: Research Journal of Finance and Accounting, 7(16), 95-109.
- Sanusi, J. O. (2002). The importance of financial intermediation in sustaining economic growth and development: The banking sector review. A keynote address delivered at the banking seminar, organized by the institute of directors, on Thursday, June 13, 2002 at The Le'meridien Hotel, Victoria Island, Lagos.
- Shittu, A. I. (2012). Financial intermediation and economic growth in Nigeria. British Journal of Art and Social Sciences, 4 (2), 164-179.
- Umoh, P. N. (2005). Assets allocation approach in the context of asset/liability management of financial institutions: NDIC. 5(2).

Volume: 05, Issue: 01 " January - February 2022"

ISSN 2582-0176

- Uremadu, S. O. (2000). Bank management. Basic issues in money, bank lending and credit administration. Benin City: Mindex Publishing Company.
- Usman, O. A., Alimi, A. A. & Onayemi, M. A. (2018). Analysis of bank intermediation activities on economic growth in Nigeria a Cointegration approach. Journal of Accounting and Financial Management, 4(6), 1-8.
- Vaughan, E. & Vaughan, T. (2003). Fundamentals of risk and insurance. John Wiley & Sons, New York.
- https://www.investopedia.com/terms/d/deposit.asp Accessed on December 6, 2021.
- https://www.collinsdictionary.com/dictionary/english/deposit Accessed on December 6, 2021.