European Journal of Finance and Management Sciences | ISSN 2754-4109
Published by DEQE Publications| https://ejfms.deqepub.org
4 Rhindmuir Dr, Baillieston, Glasgow G69 6ND, UK
deqepub@gmail.com; enquiry@deqepub.org

RESEARCH ARTICLE

An Analysis of Bank Lending Practices and Credit Risk Management in the Economic Development of Nigeria

Egiyi, Modesta Amaka
Department of Accounting, Godfrey Okoye University, Enugu

***Corresponding Author: Egiyi, Modesta Amaka | Godfrey Okoye University, Enugu**

ABSTRACT

An analysis on bank lending practices and credit risk management in the economic development of Nigeria was carried out in this study. It is evident that credit risk has a negative impact on bank efficiency and distort profitability with a resultant loss in banks' earnings. This can affect the rate at which the banks mobilize funds and will in turn affect economic growth and development in Nigeria. This study seeks to examine the effect of credit risk if not properly managed on the development of Nigeria's economy. The CBN Statistical Bulletin was used to gather secondary data for an empirical analysis. Banks should also stick to the credit risk management guidelines as stated in the prudential guideline of the Central bank of Nigeria. The data were analyzed using a multiple linear regression model for this research work. The findings of this research work were that there is a significant increase in predictor variables such as interest rate spread, actual liquidity ratio, loan to deposit ratio, non-performing loan, and money supply will cause a corresponding unit to increase in economic development of Nigeria. This study was based on the endogenous growth theory. The resultant effect of this is that, there will be a decline in economic development as a result of an increase in these variables. This means that bank lending activities have a significant impact on the economy of Nigeria. Therefore, bank performance is determined by its ability to manage its credit risk and generate sustainable profit.

Keywords: *Credit Risk Management; Bank Lending; Bank Efficiency; Economic Development*

Introduction

In many nations today the pace of development in the economy has been slowed especially in the underdeveloped and developed countries but over the past 15 years, Africa has experienced sustained economic growth with the way growth rate frequently exceeds 5% per annum (Sunday, 2017). It is a known fact that, the lending practices of the banks have provided more insight into the sustainable environment and economic growth of developing nations. Commercial banks have played a significant role as a financial pool in mobilizing funds among the sectors such as private households, business firms, and the government. Investment activities, business expansion, and industrial development depend largely on the funds, without which a country's economy will be stagnant and even worse the economy is going to be in catastrophe. Apparently, lending activity is the core business of commercial banks that contributes the largest income proportion to the banks (Mohammed, 2019). Funds provided by banks to people and organizations to help them with medium, short- or long-term deficit operations are referred to as bank lending. The business sector won't expand, there won't be enough deposits, which will make it harder for banks to make money if they can't lend to the deficient economic units in their immediate operating area. For most banks, loanable funds account for about fifty percent or even more of their total assets and about half to two-thirds of their revenue (Udoka, 2006). This made lending the first and most important function of banks. The function is considered important due to number of reasons. First, the general public or customers use lending in assessing banks stability. Banks that are willing and able to give out loans are considered more stable than those that mostly reject loans proposals of their customers. Second, lending is regarded as part of legal requirement by the monetary authority, which may stipulate certain percentage of bank lending to some sectors like agriculture, small scale industries etc. Third, lending is use as tool in implementation of the monetary policies of government, which affects money supply and demand in the economy. Fourth, lending affects pattern of production, level of entrepreneurship and consequently, aggregate output and productivity.

Citation: Egiyi, M. O. (2022). An Analysis of Bank Lending Practices and Credit Risk Management in the Economic Development of Nigeria *European Journal of Finance and Management Sciences, 6(3), 13-18. DOI:* https://doi.org/10.5281/zenodo.7207430
Accepted: *September 20, 2022; Published: September 30, 2022*
Copyright: © 2022 The Author. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

The most important reason why the lending function of banks is crucial in every economy is that it is generally known that there is positive relationship between bank credit and economic growth. Economic growth entails positive change in the national income or the level of production of goods and services by a country over a certain period of time. A bank's primary goal is to profitably and sustainably transfer money from the surplus sector to the deficit sector. A commercial bank's primary sources of income are interest on loans and advances. However, by making loans, banks are subject to many hazards, including liquidity risk and credit risk, among others. These risks if not properly managed, can affect an organization's performance adversely. However, credit risk which arises as a result of default in loan repayment occurs as a result of poor management procedures, loan diversion and unwillingness to repay amongst others because of this, the lenders must give various institutional methods that aim to reduce the risk of loan defaults. The management of credit risk of credit portfolios is therefore one of the most important tasks for the financial liquidity and stability of banking sector in connection with increased sensitivity of banks to the credit risks and changes in the development of prices of financial instruments (Kisel'akova, 2013). The determination of each individual loan, or borrower, risk assessment techniques play a primary role in the management and minimization of the credit risk. It is only after determining the risk represented by each individual borrower and by each individual credit service that one can begin to manage the loan portfolio as a whole (Konovalova, 2016). In view of the foregoing, Nigeria is considered a veritable case for investigating the link between bank lending and economic growth, for at least two reasons. First, since the reform measures carried out in its banking sector are meant to strengthen the banking system to adequately play its intermediary role between the surplus and deficit unit, there is need to assess the efficacy of the measures in raising the lending ability of banks. Second, since the ultimate aim of developments/reforms in the banking sector is boosting of economic activities, there is need to determine the level of impact of bank lending on the economic growth.

Theoretical Framework

Endogenous Growth Theory

The study is underpinned by the endogenous growth theory. It is centered on the proposition that financial development impact positively on economic growth and development. For a country to achieve a desired level of economic growth and development, the financial system: banking and stock market should be developed to mobilize the needed finance. A financial system that is well functioning would successfully harness savings from households and efficiently allocate same to deficit unit, diversify risk to ease liquidity flow, reduce transaction cost and information asymmetry, and bestow an opportunity to sourcing finance via retained earnings and savings of individuals. The central argument of the endogenous growth theory is that finance generates an external effect on aggregate investment efficiency, which offsets the decrease in the marginal product of capital (Eschenbach, 2004).

Empirical Review

Anyanwu (2017) carried out research on the impact of commercial banks' lending on economic development of Nigeria from 1986 to 2015. The data was sourced from the Central Bank of Nigeria Statistical bulletin were diagnosed for serial correlation, heteroskedasticity and Ramsey Reset model fitness specification and stationarity. From the results of this study, it was evidenced that there is significant impact of commercial banks' lending on economic growth, it is concluded that finance is a great catalyst for development and growth of Nigeria's economy. In lieu of the findings of this study, it was recommended that, the central bank of Nigeria should implement regulation to stop banks from centering loans and advances to a particular sector which is, oil and gas to improve credit flow to other strategic sectors, especially agriculture and industries to increase their contributions to gross domestic product of Nigeria. It was also recommended that, the central bank of Nigeria should through monetary policy complement fiscal policies of the government to reduce the level of inflation in country, having regard to its negative effect on index of industrial production.

Aliyu (2014) examined the impact of bank lending on economic growth in Nigeria. It also examined the impact of bank lending on economic growth in Nigeria for the period 1987 to 2012. The study relied on secondary data, and using multiple regression model, the study found out that bank lending accounts for about 82.6% variation in economic growth in Nigeria for the period under study. The study concludes that there is a statistically significant impact of bank lending on economic growth in Nigeria. This, suggest that the performance of the Nigerian economy is greatly influenced by bank lending. The study recommends that the federal government of Nigeria through the central bank of Nigeria (CBN) should strengthen the banking sector to ensure an improve credit flow to the activity sectors because of its strategic importance in creating and generating growth of the economy.

Njoku (2020) analyzed the relationship between bank sectorial lending and economic growth in Nigeria over the period 2009 to 2018 using annual time series data gathered from the Nigerian Bureau of Statistics and the Central Bank of Nigeria (CBN) annual report for the period of 2009 to 2018. The stationarity of the data was tested using the Augmented Dickey Fuller Test (ADF). This implies that the relationship between the variables of the study can be estimated using the ordinary least square regression analysis. The finding from the study indicates that that sectorial allocation to Manufacturing Sector (MAN) has a positive effect on Gross Domestic Product and the relationship is statistical. This implies that a unit increase in sectorial allocation will lead to an increase in GDP by a margin of 90.01%. It was concluded that bank lending has a tremendous positive effect on economic growth. It was recommended that the disbursed loan should be monitored so that it is utilized or the purpose for which it was meant for. Since sectoral allocation to the manufacturing sector is significant and positive government should ensure the proper financing and monitoring of this sector.

Mukolu (2020) carried out a study on lending rate in the Nigerian money deposit banks and their effects on banks performance from 2001 to 2016. The study examined the correlation between the cash reserve ratio, lending rate, monetary policy rate, total deposit on return of asset and return on equity of money deposit banks in Nigeria. Secondary data was used in this study while unit root test, co-integration test, correlation analysis, and regression analysis were used as an estimation technique for the study. Multiple regression analysis was used to estimate the data for 21 commercial banks. The result confirmed that the lending rate has significant and positive effects on the performance of Nigeran money deposit banks.

Nnaemeka (2022) studied on the effectiveness of bank loan and informal financing of businesses in achieving increased investment. The study also aimed to ascertain if money supply is related to investment. The study used co-integration with vector error correction and Granger causality technique to investigate the impact of bank loan on investment computed from time series data covering the period of 1982-2019. Logistic regression analysis was used to ascertain if informal external finance to businesses increases investment. The study covered a sample size of 265 small and medium scale enterprises using a structured questionnaire with random sampling technique to investigate the role of informal financial institution financing in investment in Nigeria. Results from logistic regression analysis shows that informal external finance to businesses contribute to investment. Therefore, good policies should be put in place to encourage informal and formal financial institutions to give loans to business enterprises.

Methodology

Data Collection Method/Techniques of Data Analysis

The CBN Statistical Bulletin was used to gather secondary data for an empirical analysis. The data were analyzed using a multiple linear regression model in the study. Furthermore, it employed Ordinary Least Square (OLS) regressions to ascertain how the predictor factors affected GDP, the dependent variable. The adjusted R^2, Fcal, Standard Error, T-cal, and 5% level of significance will be used in the statistical test of parameter estimates. Using Pearson correlation, the study also examines the connections between the different variables. The result was computed using Eviews 10.0

Model Specification

To examine the analysis of bank lending practices and credit risk management in the economic development of Nigeria. The model can be stated in two forms, firstly the mathematical model and secondly the econometric model as stated in equation 1 & 2 below

$$\mathrm{GDP} = \mathrm{f}(\mathrm{IRS}, \mathrm{ALR}, \mathrm{LTDR}, \mathrm{NPL}, \mathrm{M2}) \ldots\ldots\ldots\ldots\ldots\ldots.(1)$$

$$\mathrm{GDP} = \beta_0 + \beta_1(\mathrm{IRS}) + \beta_2(\mathrm{ALR}) + \beta_3(\mathrm{LTDR}) + \beta_4(\mathrm{NPL}) + \beta_5(\mathrm{MS}) + \mu \ldots\ldots\ldots\ldots\ldots\ldots.(2)$$

Where:

IRS= Interest Rate Spread

ALR= Actual liquidity Ratio

LTDR= Loan to deposit Ration

NPL= Non-performing loan

MS= Money supply

Table 1: Correlation of the variables

	GDP	IRS	ALR	LTDR	NPL	MS
GDP	1					
IRS	0.512[0.004]*	1				
ALR	0.331[0.000]*	0.761[0.321]	1			
LTDR	0.019[0.021]*	0.412[0.202]	0.219[0.000]*	1		
NPL	0.021[0.037]*	0.698[0.000]*	0.104[0.000]*	0.812[0.000]*	1	
MS	0.661[0.000]*	0.714[0.000]*	0.111[0.002]*	0.617[0.000]*	0.307[0.0012]*	1

[ ] represent the probability value; * represent a significant correlation.

Table 1 represent the correlation analysis, the variables are found to be positively correlated with the dependent variables, the probability value < 0.05 indicates that the relationship did not occur by chance otherwise they did not occur by chance.

Table 2: Estimation of Result and Interpretation

Variables	Coefficients	T-Statistic	P-value	Std. Error	95% Confidence Interval	
					Lower	Upper
Constant	25.311	1.250	0.239	20.30	[-19.38771]	[70.01048]
IRS	0.421	3.725	0.000	0.113	[-0.561327]	[0.967521]
ALR	-0.150	-1.03	0.347	0.155	[-0.187432]	[0.291044]
LTDR	0.309	1.587	0.013	0.195	[-0.138771]	[0.519869]
NPL	0.127	0.960	0.141	0.132	[0.6386239]	[1.016397]
MS	0.114	3.298	0.027	0.376	[-0.556538]	[0.451610]
R^2	0.7921					
Adjusted R^2	0.7348					
F-stat	184.80					
Prob of (F-stat)	0.0000					

Computed with EViews, Compiled by the Author

The Adjusted R^2 is 0.73 which means that 73% of the variations in the dependent variable are explained by the predictor variables. The F-stat result is significantly high at 184.80, showing that the predictor variables jointly explain the variations in the model. We discovered that three predictor variables are statistically significant at the 5% level of significance using the t-stat values. At a 5% threshold of significance, the money supply is statistically significant. A unit change in the money supply will result in an 11.4% change in Nigeria's economic development, assuming all other factors remain constant. At a 5% level of significance, the loan-to-deposit ratio is statistically significant. Holding other variables constant, a percentage change in the loans to deposit ratio will lead to 30.9% change in the economic development of Nigeria. Non-performing loans is positively related to the dependent variable but statistically insignificant at 5% level of significance. Interest rate spread is statistically significant at 5% level of significance and is positively related to economic development of Nigeria. Actual liquidity ratio has a negative relationship with economic development of Nigeria, but the independent variable is not statistically significant at 5% level of significance.

Diagnostic Checking for the Model

Here we conducted the diagnostics checking's to confirm that the developed model satisfies some basic statistical assumptions such as constant variance and autocorrelation test etc.

Table 3: Breusch Pagan test for Heteroskedasticity

chi2(1)	0.57
Prob > chi2	0.132

The null hypothesis of no constant variance is thus rejected, and we conclude that variance is homoscedastic in nature.

DOI: https://doi.org/10.5281/zenodo.7207430

Table 4: Durbin Watson test for autocorrelation

Durbin Watson Statistic (5, 15)	2.0674

There is absence of autocorrelation in the model since the Durbin Watson is approximately 2.

Table 5: Test for mitted variable

F (3, 8)	1.18
Prob >F	0.677

Conclusively the above table suggest that the model has no omitted variable

Discussion of Results

The study focuses on the analysis of bank lending practices and credit risk management in the economic development of Nigeria, the proxies for bank lending and credit risk management are highlighted as interest rate spread, actual liquidity ratio, loan to deposit ratio, non-performing loan, and money supply. The results as obtained from table 2 indicates that money supply, interest rate spread, and money supply was found to be positively and statistically significant at 5% level of significance. This implies that a unit increase in these significant predictor variables will cause a corresponding unit to increase in economic development of Nigeria. Also, the study found out that Actual liquidity ratio and non-performing loan were not statistically significant at 5% level of significance, hence has no statistical impact on the economic development of Nigeria.

Conclusion

At the end of this research work, a conclusion was reached that a significant increase in predictor variables such as interest rate spread, actual liquidity ratio, loan to deposit ratio, non-performing loan, and money supply will cause a corresponding unit to increase in economic development of Nigeria. This means that bank lending activities have a significant impact on the economy of Nigeria. The data were analyzed using a multiple linear regression model for this research work. We hereby suggest that banks should adhere strictly to the rule that guides its lending of money to individuals and government alike.

References

Ayanwu, F. (2017). An empirical Assessment of the Impact of Commercial Banks' lending on Economic Development of Nigeria. *International Journal of Applied Economics, Finance and Accounting*, 14-29.

Eschenbach, F. (2004). Finance and Growth: A Survey of the Theoretical and Empirical Literature. *Tinbergen Institute Discussion Paper.*

Kisel'akova, D. (2013). Analysis of Banking Business and it's Impact on Financial Stability of Economic Euro Area. *Polish Journal of Management Studies* , 1-25.

Konovalova, N. (2016). Credit Risk Management in Commercial Banks. *Polish Journal of Management Studies*, 90-99.

Mamman, A. (2014). Impact of Bank Lending on Economic Growth in Nigeria . *Research Journal of Finance and Accounting*, 174-182.

Mohammed, I. (2019). Factors Influencing Commercial Banks' Lending Behaviour in Malaysia. *Advanced International Journal of Banking, Accounting and Finance*, 48-58.

Mukolu, M. (2020). Lending Rates and the Performance of Money Deposit Banks in Nigeria . *International Journal of Management*.

Njoku, C. (2020). Analysisof Bank Sectional Lending and it's Influence on Economic growth in Nigeria. *Account and Finance Management Journal*, 2054-2062.

Nnaemeka, N. O. (2022). The role of Bank Loan and Informal Financial Institution Financing on Investment: Evidence From Nigeria. *American Journal of Economics*, 1-25.

Sunday, M. (2017). Bank Lending and it's Impact on Small Scale Enterprises in Nigeria. *Imperial Journal of Interdisciplinary Research (IJIR)*.

Udoka, C. (2006). The Effect of Bank Lending to the Socio-economic Transformation of Nigeria (1980-2005). *International Journal of Economic Development*, 222-228.