# Bank's Intermediation Role and Industrial Output in Developing Economies 

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#### Abstract

Nigerian banks perform their financial intermediation role in such a way that makes them unable to mobilise funds for production. Over the years, the lending rates have increased and thus hindered investors from borrowing funds. This has contributed to the slow process of industrialisation in the country. The central focus of the study is to determine the role that Deposit Money Banks play in promoting industrialisation in Nigeria and how high lending rates have affected industrial output, thus slowing down the process of industrialisation. The empirical relationship between bank credit and industrial output was tested in this study using the Johansen Co-integration test. The findings revealed that there is an inelastic relationship between bank credits and industrial output in the long run. It was also discovered that high lending rates greatly affects industrial output and thus industrialisation development. Therefore, a policy to reduce lending rates so as to foster industrialisation and thus economic growth in Nigeria was recommended. This study concludes that banks are important catalysts for industrialisation however; deposits money bank needs to perform their financial intermediation role more efficiently and effectively as no economy can achieve growth in the absence of adequate credit to its real sector.


Key words: Financial intermediation, industrial output, Nigerian banks, production, industrialisation

## INTRODUCTION

A country's development and advancement is a function of its level of industrialization. A country becomes famous among other countries in the world, when it has been able to achieve a significant level of industrialization. Nigeria is an import based country and thus it is largely essential that the industrialization be given high priority in our economy. Banks have creative role in the industrial sector. Banks are to provide ancillary services to firms and industries. Banks among other financial institutions are meant to act as catalyst to the process of industrialisation in a particular country. Banks promote exchange and create liquidity for industries. Banks can through their lending activities influence the investment decisions of firms, thus giving them the platform to make the right investment decisions. Banks also provide settlement and payment services to industries, thus facilitating their transactions and enhancing their growth. Banks and other financial institutions constitute an effective means in the industrialisation process because of their financial intermediation role. Nigeria as a developing countrymust achieve a big industrial base in its quest for development. Over the past years, focus is placed more on the oil and gas sector rather than the real sector of the Nigerian economy. Many industries have collapsed and foreign firms are moving away from Nigeria to other favourable
environment. The basic challenges of all businesses, both domestic and foreign, are lack of finance, personal and property security, poor governance, poor infrastructure and so on. The most important of all is lack of finance and this is where the banks come into play. Banks should be able to provide finance to support the establishment of new firms and even the expansion of existing ones. Currently, the naira is depreciating, thereby causing foreign reserve losses. We need production and diversified exports to build up our foreign reserve and strengthen our currency. The importance of capital to stimulate production cannot be over emphasized. Therefore, the role of banks in industrialisation becomes a very vibrant and important issue that needs immediate attention. Thus, the main objective of this paper is toevaluate the role played by Nigerian Deposit Money Banks in promoting industrialisation. The pertinent question therefore is what is the effect of Nigerian banks' intermediation role in industrialization?

Literature review and theoretical framework: Industrialisation is the sustained combination and application of technology, management techniques and other resources for the advancement of an economy from the traditional low level of production to a more mechanized and efficient system of mass production. Industrialization is a concept that refers to the transformation of an agricultural society into a society

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based on the manufacturing of goods and services. According to Todaro and Smith (2009), industrialisation in its full sense is the process of building up a country's capacity to process raw materials and to manufacture goods both for consumption and further production. The history of industrialisation can be traced as far back as the development experience of countries in Western Europe and North America during the 19th and early 20th centuries. Industrialisation is a shift from subsistent production system to a production system that involves the refining or transformation of raw materials with the use of highly sophisticated technology and equipment, into finished goods either for consumption or for further production.

The importance of industrialisation in the development of any economy cannot be overemphasized. Nigeria is in need of a vibrant industrial sector so as to help maximise the benefits of globalisation, thus improving the development of the country. Dangote stressed that Nigeria needs an industrialisation strategy. It needs a potent industrialisation strategy that will help to absorb its plentiful resources, expand its export base, integrate it with the world economy and take cognisance of its comparative advantage. The focus of the Nigerian economy should not be concentrated on the availability of plenty resources. The concentration should be on how value can be added to these resources in order to maximise full benefits. Thus, there is need to welcome industrialisation in Nigeria to increase productivity. The resources of the country should not be exported to finance industries in other countries. As stated by Ojo (2010), many LDCs have depended on abundant resources to fuel growth or rather 'extensive' growth. The much harder task is to use resource more 'intensively', i.e., increase productivity. He further stressed that as long as there is plentiful supply of labour and natural resources in Nigeria, there will be less of an impetus to be more efficient. The fast growing countries have developed through improved productivity, often driven by a lack of natural resources.

The major types of industries that exist in Nigeria are manufacturing industries, mining and quarrying industries, electricity and crude petroleum. Other types include; energy based industries, tourism service and construction industries. Factors affecting industrialisation include capital formation, education, availability of technology, foreign direct investment, foreign trade requirement, raw materials and availability of good infrastructures. Government policies and presence of government monopolies also affects the rate of industrialisation in the country. Over the years, Nigerian industrialisation has encountered some challenges. These
challenges includepoverty, ignorance, ideological challenges pertaining to the right path that would guide the development process, the dominance of foreign companies, the presence of delayed economy development strategy, the state of the economy and lack of adequate infrastructures. Other challenges include obsolete technology, unfavourable macroeconomic environment, cumbersome documentation process and inadequate long-term finance. The Nigerian industrial sector has great potentials and opportunities for growth and development as well as challenges.However these challenges can be mitigated by learning from other countries that have successfully achieved industrialisation and carefully adopting the policies that apply to and suit our economy.

The financial intermediation role of banks: For the banking system of a country to foster development efficiently and effectively, it must be structured in such a way that it will suit the country's needs. As postulated by Ojo (2010), experience in some countries has shown that banks, if sufficiently adapted to their respective countries' need to be of the development oriented, innovative and dynamic type, could serve as an engine of growth to greatly assist the promotion of rapid economic transformation of a nation. This is the case of Nigeria where the banking system, policies and style need to be restructured to suit the developmental needs. According to Ojo (2010) well developed and integrated financial institutions speed up the process of development in three ways; by encouraging a more efficient mobilisation of resources and allocation of a given amount of tangible wealth; through changes in wealth ownership and composition by encouraging a more efficient allocation of new investment and by inducing an increase in the rate of capital formation.

The financial intermediation role is the primary function of the banking sector. It is defined as the process of channelling funds mobilised from the surplus sector of the economy (savers) to the deficit sector (investors). Banks perform their financial intermediation role by combining bank deposits and transforming them into bank loan. As such, financial intermediaries channel funds from people who have surplus funds (savers) to those who do not have enough money to carry out a desired activity (borrowers). Oboh (2005) indicated that financial intermediation is an area in which banks have the professional expertise of matching the interest of depositors with those of borrowers by providing more or less a coordination function for two groups. Financial intermediation is the process of channelling investible funds from one economic unit (surplus) to another deficit
unit. In more technical terms, banks intermediation functions entail maturity, transformation and separation of the saving and investment function in an economy. (Baliamoune, 2003). Banks are statutory vested with the primary function of intermediation in order to make funds available to all economic agents. The intermediation process involves directing idle funds from surplus sectors of the economy to deficit sectors. The degree to which this is done depends on the level of development and advancement of the financial sector as well as the savings habit of the populace.

Rin (1996), showed in his work that banks may act as catalyst to industrialisation provided that they are sufficiently large to mobilise a critical mass of firms and they possess sufficient market power, though this not a necessary condition. They were able to show through historical works by different writers that there is a link between fast industrialisation and the financing of industry by private banks. Theycarried out a study of the industrialisation of three countries; Belgium, Germany and Italy. In this study, they were able to show that a few private banks financed the majority of new industrial firms in the three countries. They showed that the banks did not grow as a result of industrialisation but pre-existed it. In Belgium, banks detect industries with high potential for growth to which they extended credit and in which they bought equity participations. Bank managers consulted their clients on business and sometimes acted as their financial managers. This will be very useful for Nigerian banks in playing their role as catalyst to the industrialisation process of the economy.

They emphasised on the importance of universal banking and how it helped the industrialisation of Belgium, Germany and Italy. The most interesting fact about these three countries is that few large universal banks played a significant role in promoting industrialisation. The banks acted not only as lenders but also as shareholders thus pioneering universal banking. They showed that for banks to act as catalyst, banks can mobilise a critical mass of firm i.e. invest in a set of firms that induces other banks and firms to also invest in the emerging markets. This will be helpful in Nigeria. In any economy, the availability and terms of external finance directly influence entrepreneurs' decision to set up. Where there are only small savers in an economy just like the case of Nigeria, it is difficult to direct financing from savers to firms in order to achieve coordination and induce the emergence of new markets. This suggests the need for financial intermediaries (especially the banks). Banks do not need to be necessarily large to promote industries. A bank can speed up the process of industrialisation, by investing in firms that have good
potentials and can also induce other firms and banks to invest in the emerging markets. Banks provide funds, which are essential to the growth of most firms. Moreover, banks interact with many entrepreneurs and thus have a unique opportunity to induce coordination. Banks are needed for organising the monitoring process that individual savers could not carry out on their own.

Therefore, Nigerian banks should study these industrialised countries to discover how their banks have helped their industries. Since it is evident in the industrialised countries that only few banks supported industrialisation, we have enough banks to fasten and support industrialisation in Nigeria. The only requirement is their willingness to do so. They should note that not all the policies or strategies used in other countries will be suitable for our economy but the suitable and relevant ones should be adopted. The primary function of banks in economics is their financial intermediation role, which is to pool together small surpluses in savings and to loan out these aggregated chunks of funds to firms for investments. Generally, commercial banks have creative role in the industrial sector. They act as catalyst to industrial activities of any country. Banks have historically been viewed as playing special role industrial sector for two reasons. One is that they perform a critical role in facilitating payments. The other is that they have longed played an important role in channelling credit to businesses ie., credit creation role. As noted by Schumpeter (1934), if the banks perform its function efficiently, the economy would be able to mobilise meaningful level of savings and channel these funds in an efficient and effective manner to ensure that no viable project is frustrated.

According to Ojo (2010), the Nigerian commercial banks have lost their focus and their commercial nature has turn into mere battering. He noted that commercial banks do not take any risk in the course of their businesses. Genuine bank loans granted to investors are usually granted on the basis of collaterals that worth twice the amount granted. This makes the banks to be less concerned about how the borrowing investor uses the loan or how such investor carries on with his or her business because once the investor fails to pay back the loan, they take over the asset. Banks are meant to partner with investors in their businesses, thus increasing their interest in the growth of the business, to ensure profitability and subsequently recover their loans. Banks can sit on the board of directors of the borrowing businesses in order to efficiently monitor the businesses. This is not the case in Nigeria, since all loans are backed with high level collateral. The commercial banks in Nigeria do not engage in core investments, investment on real
assets that can stimulate rapid economic growth. This is basically because they do not want to take risk and the long gestation period of such an investment. According to Ojo (2010), bank's lending to the non priority/unproductive sectors has been on the upswing over the years, a situation which has spurred a decline in credit to the manufacturing sector. The high lending rate charged by banks on productive loans also hampers industrial growth. Lending rate is the price that borrowers pay for loan. The prevailing rate of interest has great impact on the investment behaviour. It is said to be not investor friendly. That is, the escalating interest rates scare away investors from borrowing. Since the theory of demand states that the higher the price of a product, the lower the demand for that product, high interest rates on loans will therefore reduce the demand for loans by investors.

As rephrased from the works of Ojo (2010), the generalised prescription and consideration of keeping interest rate high to stimulate saving while ignoring the negative implication on production and economic activities (which affects the ability to save) is to the detriment of the economic development of the country and welfare of a large proportion (over $90 \%$ ) of Nigerians. Attention should be given more to lending rates being kept low enough to stimulate production and the real sector, rather than making the interest rate structure too high mainly for the sake of stimulating saving and the financial sector. This is because, once there is profitable production, savings will increase.

In similar vein, Ndekwu (1991) noted that while high interest rates on savings deposits stimulated the supply of savings to the banking system, the high cost of borrowing in the form of high lending rates discouraged borrowers, especially the private sector producers and investors. Thus, the high cost of borrowing leads to high cost of production. According to Adebiyi and Obasa as cited in Osinubi and Akinyele (2006), interest rate spread (difference between lending rate and savings rate) had negative impact on growth in the manufacturing sector since it led to high cost of borrowing. This study is based on the Supply Leading Theory which posits that there is a casual relationship from financial sector growth or development to real sector growth. In this study, the financial sector is represented by the Deposit Money Banks and industrialisation represents real sector growth. That is, growth in the banking system is meant to lead to an increase in the supply of bank credits to industries, thus leading to their growth. In general, financial development in developing countries refers to the development of money and financial intermediation (Baliamoune, 2003). Therefore, efficient and effective
financial intermediation by banks is expected to lead to increase in credit creation for productive uses, thus promoting the process of industrialisation and thus industrial development in Nigeria.

## MATERIALS AND METHODS

The methods chosen (the Johansen co-integration test and the Vector Error Correction Model) to analyse the data in this study has been selected so as to give a reasonable level of assurance of the relationship between the banking industry and the industrial sector in Nigeria. Error Correction Models (ECMs) are a category of multiple time series models that estimate the speed at which a dependent variable (Y) returns to equilibrium after a change in an independent variable (X). ECMs are useful for estimating both short term and long term effects of one time series on another. The study focuses on the Deposit Money bank and Industrial sector which comprises of the mining sector, manufacturing sector just to mention a few. Secondary data were obtained from CBN Statistical Bulletin for the period of 1981-2011. The data collected are on the relevant variables needed to carry out the analysis. Since bank credits to the real sector are expected to have a positive effect on industrial development, the model below was formulated:

$$
\begin{gather*}
\mathrm{IO}=\mathrm{F}(\mathrm{BCP}, \mathrm{LR}, \mathrm{ACU})  \tag{1}\\
\mathrm{IO}=\alpha_{0}+\alpha_{1} \mathrm{BCP}+\alpha_{2} \mathrm{LR}+\alpha_{3} \mathrm{ACU}+\mu \tag{2}
\end{gather*}
$$

The lagged function is:

$$
\begin{equation*}
\mathrm{LIO}=\alpha_{0}+\alpha_{1} \mathrm{LBCP}+\alpha_{2} \mathrm{LLR}+\alpha_{3} \mathrm{LACU}+\mu \tag{3}
\end{equation*}
$$

Where:
IO $\quad=$ Industrial output as a component of Gross Domestic Product (GDP)
$\mathrm{BCP}=$ The total Bank Credit To Private sector
LR $\quad=$ The Lending Rate of deposit Money Banks
$\mathrm{ACU}=$ Average Capacity Utilisation rate is the constant term
$\alpha_{1}, \alpha_{2}, \alpha_{3}=$ Slope coefficients of the independent variables
$\mu \quad=$ The error term
Definition of variables: The dependent variable is industrial output as a component of Gross domestic product the independent variables, there are three in number. The first is a bank credit to private sector. This is the total value of loans that banks give to the private sector of the economy. The second one is the Lending
rate. It is the rate at which banks give out loans. It can also be said to be the price that a borrower pays for loan. The third is the average capacity utilisation rate. This is the magnitude at which a nation uses it installed productive capacity.

Apriori expectations: $\Delta \mathrm{IO} / \Delta \mathrm{BCP} 0$ : There is an expectation of a positive relationship between industrial output and bank credit to private sector. That is, an increase in the value of credit given to private sector by deposit money banks will result to an increase in industrial output.
$\Delta \mathbf{I O} / \Delta \mathrm{LR} 0:$ A negative relationship is expected between industrial output and lending rates. High lending rate is not investor-friendly and will discourage investors from borrowing. This will reduce their source of finance and thus reduce industrial production.
$\boldsymbol{I I O} / \Delta \mathbf{A C U}>\mathbf{0}$ : There is an expectation of a positive relationship between industrial output and average capacity utilisation. An increase in the average capacity utilisation rate will lead to an increase in industrial output, thus leading to industrial development.

## RESULTS AND DISCUSSION

This study deals with the analysis of the $\log$ of the data presented in Table 1 shown as appendix. The descriptive analysis and the trend analysis of the data collectedis shown below.

Descriptive analysis of data collected: The descriptive analysis of data tends to describe the characteristics of both the dependent variable and the independent variables. The descriptive analysis includes mean, median, standard deviation and Jarque-Bera statistics. The mean and median are measures of central tendency. The mean shows the average value of each variable over the years. Jarque-Bera statistics is a test of normality. If each variable is statistically significant (indicated by a probability of zero), then the series is not normally distributed. Therefore, the farther the probability statistics is from zero, the lower the value of its Jarque-Bera statistics and the more normally distributed it is. The standard deviation tells how spread out a variable is around its mean

Table 2 shows that all the variables (LIO, LBCP, LLR and LACU) are normally distributed. LACU is the most normally distributed among the variables. For each of the variables, the standard deviation is low compared to their

| Table 1: Descriptive statistics |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Variables | LIO | LBCP | LLR | LACU |
| Mean | 13.13843 | 12.32555 | 2.957483 | 3.789349 |
| Median | 13.68999 | 12.38253 | 3.035914 | 3.754199 |
| Maximum | 16.60441 | 16.18202 | 3.586016 | 4.294561 |
| Minimum | 9.517590 | 9.056029 | 2.251292 | 3.377246 |
| Std. Dev. | 2.400667 | 2.300153 | 0.336410 | 0.241204 |
| Jarque-Bera | 2.520536 | 2.064629 | 1.602408 | 1.161301 |
| Probability | 0.283578 | 0.356182 | 0.448788 | 0.559534 |

Researcher's compilation, EViews 5


Fig. 1: Trend analysis of data
mean. This shows a small coefficient of variation. LIO has the highest mean. The range of variation between the maximum and the minimum value of all the variables is not too large.

Trend analysis of data: Trend analysis shows the trend in the long run behaviour of the variables used for this study over the time period which is between 1981 and 2011. From the above Fig. 1, it can be seen that Industrial Output (LIO) and Bank Credit to Private sector (LBCP) have upward trends. Bank credits have been almost stable and have been increasing slowly. Industrial Output was highly unstable between 1985 and 2003. Lending Rates (LLR) have been unstable and not investor-friendly. Lending Rates (LLR) was at its peak in 1994. It had an upward trend between 1981 and 1994 from when it dropped and has been increasing till date. Average Capacity Utilisation rates (LACU) have almost a linear trend and have been on the decrease over the years.

Unit root test results: The Augmented Dickey Fuller test is used to test whether the variables are stationary. The decision criteria is that, the variables are said to be stationary when the ADF value is higher than the test critical value and are non-stationary when the critical value is greater than the ADF test value.

The Table 3 above shows that all the variables are non-stationary at level I (0). When the variables are nonstationary and not of the same order, there is no guarantee of feasibility of co-integration among the variables in the long run. Therefore, the unit root test at first difference should be carried out.

Table 2: Summary of the unit root test at level

| Variables | Deterministic term | Optimal lag length | Test statistics | $10 \%$ Critical value | $5 \%$ Critical value | 1\% Critical value | Stationary/nonstationary |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LIO | 0 | 2 | -0.912404 | -2.625121 | -2.971853 | -3.689194 | N Stationary |
| LBCP | C | 0 | 0.903247 | -2.621007 | -2.963972 | -3.670170 | N Stationary |
| LLR | C | 0 | -2.518128 | -2.621007 | -2.963972 | -3.670170 | N Stationary |
| LACU | C | 0 | -1.974787 | -2.621007 | -2.963972 | -3.670170 | N Stationary |

Table 3: Summary of unit root test at first difference

| Variables | Deterministic term | Optimal lag length | Test statistics | 10\% Critical value | $5 \%$ Critical value | 1\% Critical value | Stationary/nonstationary |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LIO | C | 1 | -4.949270 | -2.625121 | -2.971853 | -3.689194 | Stationary |
| LBCP | C | 0 | -3.849144 | -2.622989 | -2.967767 | -3.679322 | Stationary |
| LLR | C | 0 | -6.891540 | -2.622989 | -2.967767 | -3.679322 | Stationary |
| LACU | C | 0 | -3.203644 | -2.622989 | -2.967767 | -3.679322 | Stationary |

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Table 4: Summary of the co-integration test among series

| Hypothesized No. of CE $(\mathrm{s})$ | Eigen value | Trace statistics | 0.05 Critical value | Prob. | Max eigen statistics | 0.05 Critical value | Prob. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{r}=0^{* * *}$ | 0.676431 | 70.05361 | 55.24578 | 0.0015 | 32.72197 | 30.81507 | 0.0289 |
| $\mathrm{r}=1^{* * *}$ | 0.517717 | 37.33163 | 35.01090 | 0.0277 | 21.14752 | 24.25202 | 0.1222 |
| $\mathrm{r}=2$ | 0.312545 | 16.18412 | 18.39771 | 0.0993 | 10.86802 | 17.14769 | 0.3222 |

Researcher's compilation, Eviews 5, the trace Statistics indicates two co-integrating equations at 0.05 level the Max Eigen Statistics indicates one co-integrating equation at 0.05 level; *denotes rejection of the hypothesis at the 0.05 level; **MacKinnon-Haug-Michelis; p-values

Table 5: Summary of the normalised co-integration coefficients
Normalized cointegrating coefficients (standard error in parentheses)

| LIO | LBCP | LLR | LACU |
| :---: | :---: | :---: | :---: |
| 1.000000 | -0.390178 | -1.172671 | 0.623216 |
|  | (0.27944) | (0.27909) | (0.29265) |
| t-stat | -1.4 | -4.2 | 2.1 |

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Table 4 shows that all the variables are stationary at first difference at 10,5 and $1 \%$ levels. Therefore, it can be said that all the variables are of the same order I. Since the co-integration theory, states that only a linear combination of series that are stationary of the same order can be done, then the co-integration test should be carried out.

The co-integration test: When the Trace Statistics and the Max Eigen Statistics are greater than the critical values at 0.05 level, the null hypothesis of no co-integration will be rejected and the alternative hypothesis of presence of co-integration will be accepted. The table above shows that there is co-integration among the variables and this implies long run equilibrium. For this study, the Max Eigen Statistics decision of one co-integrating equation will be followed.

From Table 5, the t -statistics shows that Lending Rate and Average capacity utilisation rate are statistically significant in explaining Industrial output based on the rule of thumb that when the $t$ - statistics is approximately two, the variables are significant. Bank credit to private sector is not statistically significant. Since the model is logged, the coefficient estimates of the variables can be interpreted in terms of long run elasticity. The major

| Table 6: Summary of the error correction results |  |
| :--- | :--- |
| Variable | LIO |
| ECM | $-0.722640(0.14512)$ |
| t-statics | $[-4.97977]$ |
| Researcher's compilation, EViews 5 |  |

relationship of interest is that which exits between industrial output and bank credit and also between industrial output and lending rate in Nigeria.

The coefficient estimates of LBCP shows an inelastic relationship between LBCP and LIO in the long run. This shows that a change in Bank credit to private sector leads to a less than proportionate change in industrial output. The t-statistics shows that Bank credit is not statistically significant in explaining changes in industrial output.

The coefficient estimate of Ending Rates (LLR) shows an elastic relationship between LLR and LIO in the long run. That is, a change in leading rates leads to a more than proportionate change in industrial output. The tstatistics shows that lending rates are statistically significant in explaining changes in industrial output. The coefficient of average capacity utilisation shows an inelastic relationship in the long run. The $t$-statistics also showed that average capacity utilisation rate is statistically significant in explaining industrial output. From Table 6, the t-statistics shows that VECM is statistically significant. The speed of adjustment for industrial output is -0.722640 . This means that $72.3 \%$ of the errors generated in each year are corrected in subsequent years.

## Test of hypotheses

- $\mathrm{H}_{1}$ : Bank credits to private sector do not have a positive effect on industrial development

Since, the variables were logged, the coefficients were interpreted in terms of elasticity and not sign. There is an inelastic relationship between bank credits to private sector and industrial output (industrial output as a component of GDP was used to measure industrial development). Thus an inelastic relationship can be said to exist between bank credits and industrial development. From the analysis, $100 \%$ change in bank credits leads to $39 \%$ change in industrial output. The t-statistics shows that bank credit is not statistically significant in explaining the changes in industrial output. This shows that bank credits to private sector might not be efficiently utilised. This makes bank credits lead to a less than proportionate change in industrial output and subsequently industrial development:

- $\mathrm{H}_{2}$ : High Lending rates do not hinder industrial development

The results also showed an inelastic relationship between lending rates and industrial output in Nigeria. That is, a change in Lending rates will lead to a more than proportionate change in industrial output. The t-statistics shows that lending rates is statistically significant in explaining industrial output. A policy on the reduction of interest rate will lead to a more than proportionate increase in industrial, thus industrial development.

## CONCLUSION

This research work originated due to the researcher's interest to see the banking system in Nigeria, maximise its full potentials in promoting growth and development in the economy. The aim of this study was to determine the role that banks have played in the industrialisation in Nigeria. However, it was discovered that banks still need to improve the performance of the financial intermediation role so as to foster industrialisation the way they should. The results show that a change in bank credit leads to a less than proportionate change in industrial output, thus slowing the process of industrialisation. It was also discovered that a change in lending rate leads to a more than proportionate change in industrial output. Therefore, high lending rates will greatly affect industrial output and development. An increase in lending rate will lead to a more than proportionate decrease in industrial output. This can be traced to the fact that high lending rates scare
investors away, thus disenabling them to produce and thereby hindering industrial outputs. No economy can achieve growth and improved standard of living in the absence of credit to its real sector. It was also established that average capacity utilisation rate has an inelastic relationship with industrial output. This means that a change in average capacity utilisation leads to a less than proportional change in industrial output. This can be traced to the fact that the available technology and resources are not maximally utilised because the economy is based on importation. Therefore in line with the findings of this study, it is suggested that deposit money banks should enlarge their horizon. That is, they should increase the range of financial services that they offer to businesses. They should be willing and ready to stand by these borrowing businesses. Also, credit should be majorly directed to productive activities and at lower lending rate than they presently charge.

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