Bank Financing and the Economy: The Nigerian Manufacturing Sector in Perspective

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Abstract:*The objective of this study is to examine the impact of bank funding on the growth of the Nigerian manufacturing sector. The result showed that bank funding had positive and significant impact on manufacturing sector gross domestic rate and the overall economic growth (GDP). The study thus concludes that bank funding has a significant impact on the growth of the Nigerian manufacturing sector. The study recommends amongst others that government should duly regulate the banking sector to ensure proper lending to the priority sector of which the manufacturing sector is one.*

Keywords: *Bank Financing, Manufacturing Sector, Economic Growth.*

1. INTRODUCTION:

The financial system of any economy is supposed to contribute significantly to the growth and development of such economy. The Nigerian financial system comprises of various institutions, markets and operations that are in the business of providing financial services. These institutions can be broadly categorized into money and capital markets while money market is a market in which short term financial instrument are traded, capital market on the other hand deals with long term transactions.

The history of the Nigerian banking industry could be traced to 1890 when first bank in the country was established called the African Banking Corporation. However, within that period to 1952, there was no banking legislation existing until 1952, at which point Nigeria had three foreign banks (the Bank of British west Africa, Barclays Bank, and the British and French Bank) and two indigenous banks (the National Bank of Nigeria and the African Continental Bank) with a collective total of forty branches. The 1952 ordinance set standards, required reserve funds, established bank examinations, and provided for assistance to indigenous banks (Uche, 2003). Since, 1952, several banking decree and acts have been enacted (1968 Banking act, the CBN Decree No 41 of 1991 amended in 2003, BOFIA Act 1991 etc) in the country to regulate the banking industry in Nigeria.

An examination of the contributions of the banking sector to growth of the Nigerian economy since the beginning of uninterrupted democratic rule in Nigeria in 1999 reveals that the banking sector contribution to Nigeria's gross domestic product since 1999 have not exceeded 2%. The year with highest contribution was in 2007 when the banking sector contributed 1.6% to GDP while the least was in 2005 when the sector contribution was 0.87% (CBN, 2012). Thus, it shows the failure of the banking sector to contribute meaningfully to the growth of the Nigerian economy, however, the recent banking consolidation exercise in 2005 and other reforms within the Nigerian Banking Industry have increased deposit money banks' contribution to GDP from 1.51 in 2006 to 1.74% in 2009 (CBN, 2012). This indicates that given the right regulatory and operational atmosphere, the potential of the Nigerian Banking Industry to enhance economic growth is assured.

Again, it is expected that a critical sector like the manufacturing sector should be given adequate funding since the sector remained one of the most powerful engines for economic growth and development. This was highlighted by Adomola (2012) who opines that the contribution of the manufacturing sector of the economy cannot be over emphasized when considering its role in building grounds for development, employment potentials and impacts on the economy. The sector can act as a catalyst to transforming economic structure of nations from slow-growing and low-value added activities to more productive activities that enjoy greater margins driven by technology. Thus, Sangosanya (2011) posits that empirical evidence from the developed and few emerging economies have shown that the producing unit of the economy tends to influence the entire economy's performance and stability but asserts that without adequate finance, incentive of operations, business friendly environment, effective management and operation structure, growth-oriented government policies and regulations, the manufacturing firms' will not perform as expected.

However, in Nigerian and as well as most developing economies, the capacity of the manufacturing sector to act as an engine room for economic growth and development have been stunted by inadequate capital. This is against the fundamental role of banks to intermediate funds between surplus and deficit economic units (Ajayi, 2007). In 2009, according to Sangosanya (2011) the Manufacturers Association of Nigeria (MAN) declared that 820

manufacturing companies have closed down in the past nine year (between 2000 and 2008) of civilian rule and rendered thousands of people jobless. This buttresses the comatose nature of the Nigerian Manufacturing Sector due majorly to inadequate funding. The primary task of banks according to Nwankwo (1991) include the mobilization of saving, stimulation of investment and economic growth, assistance in resources allocation, boasting of international trade and promotion of the payment system (Ajayi, 2007). This position was supported by De Young, Hunter, and Udell (2004), Bitler, Robb, and Wolken (2001) and De Young, Gron and Winton (2005) when they assert that banks play a central role in the supply of credit and about one-third of all household debt is obtained from banks, and about two-fifths of all small businesses obtain some form of credit from a bank.

Inadequate funding has been a major problem to manufacturers in Nigeria. Most Manufacturers find it difficult to access credits from financial institutions and where such credit are available the rate of interest charged by these banks may be too high that by the time the manufacturer liquidates the loan, nothing will be left for investment. A cursory examination of the banking sector credit to the manufacturing sector as well as manufacturing sector contribution to economic growth in Nigerian from 1981 to 2012 shows that there have been a dismal performance of the Nigerian banking sector to growth of the economy vis-à-vis the manufacturing sector (CBN, 2012). The manufacturing sector is supposed to be the driver of growth in any economy and a lot is expected from banking in terms of loans and advances to the however, the total credit to the manufacturing sector by banks in Nigeria from 1981 to 2012 is not significant (CBN, 2012).

Though, the Nigerian banking system has appeared to have experienced a lot of challenges which affected its contribution to the country's economic growth. For example, according to Afolabi (2004) the decade, 1995 to 2005 was particularly challenging for the Nigerian financial sectors as the magnitude of distress in the banking sector reached an unprecedented level, making it an issue of concern not only to regulatory institutions but also to the policy analysts and the general public. Harsh monetary policies implemented by the Central Bank of Nigeria to absorb excess Naira liquidity in the economy has made life more difficult for banks, some of whom engage in currency arbitrage (round-tripping) activities that generally fall outside legal banking mechanisms. Private sector-led economic growth remains stymied by the high cost of doing business in Nigeria, including the need to duplicate essential infrastructure, the threat of crime and associated need for security counter measures, the lack of effective due process, and nontransparent economic decision making, especially in government contracting. While corrupt practices are endemic, they are generally less flagrant than during military rule, and there are signs of improvement. Meanwhile, since 1999 the Nigerian Stock Exchange has enjoyed strong performance, although equity as a means to foster corporate growth is being more utilized by Nigeria's private sector (World Bank, 2013). It is therefore, against this background that finance has a role at enhancing growth of an economy that this study will examine the impact of bank funding on growth of the Nigeria manufacturing sector.

2. THEORETICAL FRAMEWORK:

There is no gainsaying that standard of living differs across different countries and within the same countries among different parts of the country. Also it could be noted that every country is considerably richer today than it was a century ago hence, the question that is often asked is what account for such disparities? The implications of these differences in standards of living both in space and time almost all aspects of life, it is essential to understand what determines economic growth and development. Various theories have been postulated to explain what determines economic growth and development of nations. However this stiduy will be anchored on the endogenous growth theories.

The endogenous growth theory holds that economic growth and development of nations is based on the result of endogenous factors and not external forces. The theory postulates that a nation's investment in human capital, innovation and knowledge are contributors to economic growth and development. Again, the theory focuses on positive externalities and spillover effect of a knowledge based economy which lead to economic growth and development. It thus holds that the long run growth rate of an economy depends on policy measures that drive innovation as well creating incentive for growth.

The endogenous growth theory is supported with models in which agents optimally determined the consumption and saving, optimizing the resources allocation to research and development leading to technological process. The simplest form of the endogenous theory is the AK model. The model gives a constant saving rate of the endogenous growth and assumes that the production function does not exhibit diminishing return to scale. The rationale for this assumption is anchored on the positive spillovers for capital investment to the economy as a whole or improvements in technology leading to improvements (Romer, 1994; Agion and Howitt, 1992 and Grossman and Helpman, 1991).

The AK model works on the property of absence of diminishing returns to capital and the simplest form of is depicted in the production function with non-diminishing return. This is represented below as:

$Y = AK$

where:

Y = Output

A = Positive constant that reflects the level of the technology

K = Capital

This implies that output per capita and average and marginal product are constant at the level where A > 0. The endogenous growth theory hence tries to build macroeconomic models out of microeconomic foundations. Thus, households are assumed to maximize utility subject to budget constraints and firms maximize profits. Therefore, premium is placed on the production of new technologies and human capital. The engine for growth thus, can be as simple as a constant return to scale production function (the AK model) or with more complicated set ups with spillover effects increasing the numbers of goods, increasing qualities amongst other.

3. EMPIRICAL REVIEW:

This subsection summarizes empirical literature in this area of finance-growth nexus, for instance, Odedokun (1998) who emphasized that even though financial intermediation promotes growth, the growth-promoting effects are more pronounced in the low-income countries Odedokun (1998) using a cross-country data analysis of 71 less developed countries (LDCs) for the period 1960 to 1980 expanded the neo-classical one-sector aggregate production function with financial development as an input. He derived his two models with economic growth as the dependent variable, while labour force growth, investment –GDP ratio, real export growth, and financial depth were the independent variables. Odedokun (1998) established that the impact of financial intermediation is at par with export growth and capital formation but its impact on economic growth is superior to labour force growth.

Jayaratne and Strathan (1996) reaffirmed that financial institution through intermediation impacts positively on growth. However, there was a clause that there should be an improvement in the quality of bank lending. Jayartne and Strathan (1996) using the bank deregulation reform in the US as a case-study established that the rate of real, per-capita growth in income increased significantly. The impact of the reform in the financial system on economic growth was thus attributed to the improvement in the quality of bank lending and not the increase in volume of bank lending.

Levine, Loayza, and Beck (2000) viewed the relationship between financial intermediation and economic growth differently. The examined the impact of the endogenous component of financial intermediation on economic growth using two models and estimation technique. The first model, which defines economic growth as function of finance indicators and a vector of technique. The second model is a dynamic panel model and is estimated using the Generalized Methods of Moments (GMM). Their test confirmed the strong positive impact of the endogenous components of financial intermediation on economic growth however, they noted that countries with high priority for creditors' protection, strong will to enforce contracts, and unambiguous accounting standards have the potential for a developed financial intermediation.

McCaig and Stengos (2005) introduced more instrumental variables with a view to establishing a more robust empirical relationship between financial intermediation and economic growth. Their study supports the argument that a positive relationship exists between financial intermediation and economic growth. However, they emphasized that this will be true if financial intermediation is measured by liquid liabilities and private credit as a ratio of GDP, while it will be weaker if it is measured using the Commercial-Central Bank ratio.

Demirgue-Kunt&Maksimovic (1998) carried out a firm level-based to justify their assertion with respect to the relationship between finance and economic growth. This study shows that a developed financial system and legal system stimulates growth. They were of the view that an active stock market is an indication of a well-developed financial system. Thus, while the firms in a country with a high rate of compliance with the rules and regulations have access to the capital market, the developed financial system will ensure growth of these firms. This implies that finance stimulates growth.

Rajan and Zingales (1998) examined the impact of financial development on industry-specific growth using a cross-country and cross-industry and assert that financial development enhances growth in indirect ways by expanding rate of value-added and gross fixed capital formation.

Romeo-Avila (2007) again confirmed the positive impact of finance on growth. He investigated the relationship between finance and growth, with emphasis on the effect of financial deregulation and banking law harmonization on economic growth in the European Union. His study established that financial intermediation impacts positively on economic growth.

Deidda (2006) was quite informative and unique approaching this issue. Deibba (2006) employed micro-based data and used the inter-temporal approach to explain the theoretical rationale of the impact of financial intermediation on growth. He assumed a transition from period 1 (financial autarky) to the period 2, which is the period when financial intermediation is costly financial development is ambiguous when regime switch is associated with the adoption of more capital intensive technology.

Shittu (2012) examine the impact of financial intermediation on economic growth in Nigeria. Time series data from 1970 to 2010 were used and were gathered from the CBN publications. For the analysis, the unit root test and co-

integration test were done accordingly and the error correction model was estimated using the Engle-Granger technique. He again established that financial intermediation has a significant impact on economic growth in Nigeria. Hao (2006) evaluates the relationship between financial intermediation and economic growth using a country-specific data from China. They study used one-step parameter estimates for the Generalized Method of Moments (GMM) estimation and found that financial intermediation has a causal effect and positive impact on growth through the channels of house-holds' savings mobilization and the substitution of loans for state budget appropriations. If it was revealed that bank, as an indicator of financial development, is significant but negatively related to growth. This was attributed to the inefficiency in loan distributio'n and the self-financing ability of the provincial governments. From this study therefore, efficiency of loan distribution is as important as the granting of the load itself to borrowers.

4. METHODOLOGY:

A model is a simplified view of reality deigned to enable a researcher described the essence and inter relationship within the system or phenomenon it depicts. (Yomere and Agbonifoh, 1999). Following a detailed review of previous studies (Solow 1956; Beck et al., 2000) and specifically king and Levine (1993a), the model of this study is expressed as follows:

$$MsGDP = \beta_0 + \beta_1 BF + \beta_2 INFR + \beta_3 EXR + \mu \ \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \ (ii)$$

> *where:*
> MsGDP   =   Manufacturing sector gross domestic product rate
> *BF*   =   Bank Funding
> *INFR*   =   Inflation Rate
> RIR   =   Real Interest Rate
> β_0 =   Constant of the Equation
> β_{1-3} =   Coefficient of Independent Variable

Manufacturing Sector Contribution to GDP
This proxy will be measured by the manufacturing output divided by the gross domestic product of Nigeria over the period of this study in line with work of Obasan an Adediran (2010). The manufacturing sector is supposed to be the driver of growth in any economy and a lot are expected from the banks in terms of loan and advances to the sector to advance the sector.

Bank Funding
This proxy will be measured by dividing the total loans and advances to the manufacturing sector by the total bank loans and advances in line with work of Obasan and Adediran (2010). Inadequate funding has been a major problem to manufacturers in Nigeria. Most Manufacturers find it difficult to access credits from financial institutions and where such credit are available the rate of interest charged by these banks may be too high that by the time the manufacturer liquidates the loan, nothing will be left for investment.

Inflations Rate
Inflation rate will be adopted as a control variable. The higher the inflation rates in a economy, the higher the operating costs and lower ability of borrows to repay their loans. Thus, this proxy will be adopted to captured the effect of inflation on borrower's ability to repay loans

Real Interest Rate
These measures will also be used as control variable real interest rates are expected to have an effect on banks' profitability through their impact on the cost of funds. Besides being associated with high default rates, high real interest rates indicate a high cost of funds to banks. Since bank loans and other assets are usually fixed over long periods, rising real interest push up the cost of funds, adversely affecting the liability side of the banks' balance sheets and consequently squeezing the banks' profits.

5. DATA ANALYSIS AND RESULTS:

The descriptive statistics in table 5.1 shows the basic aggregative averages like mean, median and mode for all the observations. The spread and variations in the series are also indicated using the standard deviation. Significantly kurtosis which shows the degree of peakedness is also shown together with skewness which is a reflection of the
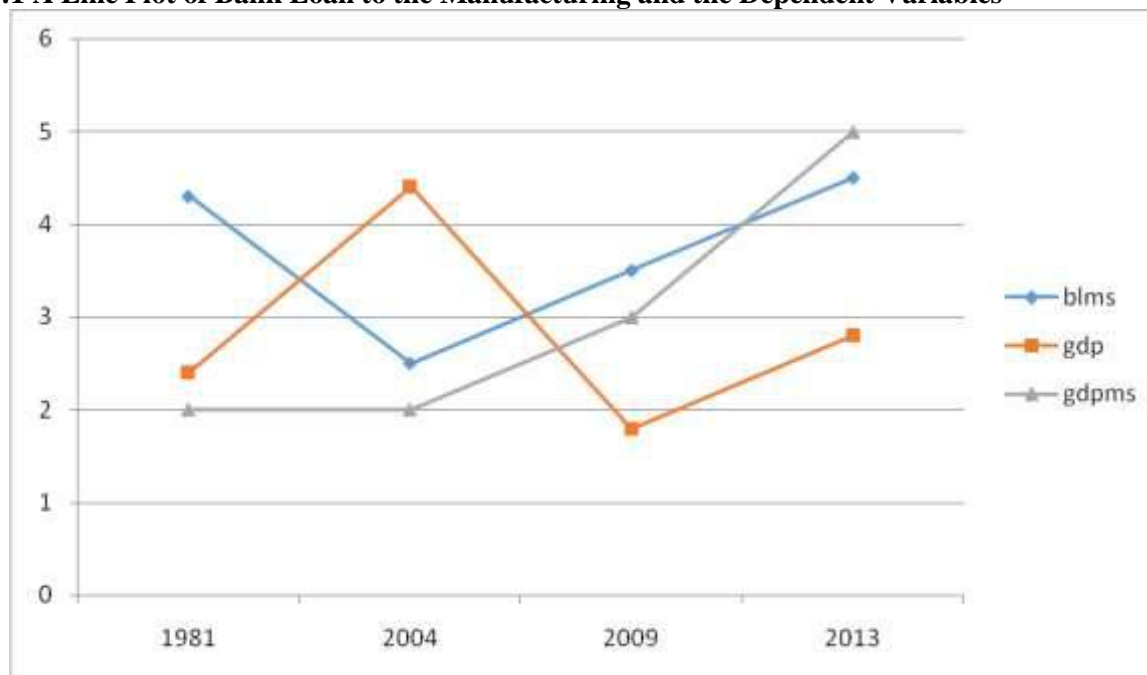
degree of or departure from symmetry of the given series. In an attempt to further describe the behaviour of the datasets.

Table 5.1 Basic Descriptive Statistics of the Dependent and Independent Variables

	BLMS	GDP	GDPMS	INT
Mean	280.7170	13340.44	7292.670	17.67152
Median	82.82310	4032.300	7341.000	17.95000
Maximum	1179.691	80222.13	8776.000	29.80000
Minimum	2.659800	94.32502	4926.200	7.750000
Std. Dev.	386.8728	21813.58	974.0376	4.967850
Skewness	1.293301	1.997994	-0.386958	0.133486
Kurtosis	3.121746	5.789470	2.817574	3.195566
Jarque-Bera	9.219825	32.65496	0.869308	0.150589
Probability	0.009953	0.000000	0.647489	0.927470
Sum	9263.662	440234.7	240658.1	583.1600
Sum Sq. Dev.	4789458.	1.52E+10	30359977	789.7452
Observations	33	33	33	33

Source: Author's Computation from Eviews

Figure 5 :1 A Line Plot of Bank Loan to the Manufacturing and the Dependent Variables

Source: Authors Plot from Microsoft Excel

Table 5.2 Correlation Matrix

	BLMS	GDP	GDPMS	INT
BLMS	1.000	0.928	0.496	-0.022
GDP	0.928	1.000	0.418	-0.042
GDPMS	0.496	0.418	1.000	0.357
INT	-0.022	-0.042	0.357	1.000

Source: Author's Computation from Eviews

The correlation matrix in the table above shows a test of the linear association of the variables under study. The essence is not to test impact or causation, but just an indication of whether or not a linear relationship can be established among the variables of interest. BLMS demonstrated a positive correlation with variables like GDP, GDPPMS, and a negative correlation with INT.

5.1 Unit Root Test

Table 5.3   Summary of the Unit Root Test (Philip Perron Test)

VARIABLES	PP Test Statistic	CRITICAL VALUES at 5%	PVALUE	Order of Integration
BLMS	-6.099894	-3.562882	0.000001	I(1)
GDP	-5.156186	-3.562882	0.000012	I(1)
GDPMS	-6.324101	-3.562882	0.000001	I(1)
INT	-9.367274	-3.562882	0.000000	I(1)

Source: Author's computation (Extract from the Eviews results of PP unit roots test results in Appendix 1)

All the variables were found to be stationary at order 1. At the first difference as reported, the PP statistics for the respective variables were more negative than the critical values at 5% level of significance. The reported p-values are all less than 0.05 for which cause, the null hypothesis of the presence of unit root in all the variables is convincingly rejected. It is also interesting to state that the variables are all integrated of the same order. This is also the reason for running the regression at first difference to avoid spurious regression which is common to non-stationary data.

5.2   Test of Hypotheses

Two major test statistics were adopted in testing the formulated hypothesis. These include the Pairwise Granger Causality Test and the Classical Linear Regression Model (CLRM). Hypothesis number one was tested using Granger Causality Test while the second and third hypotheses were tested using CLRM respectively. The respective estimation results are presented below and discussed and the hypotheses tested. The results of the tests represent the outcome of this study.

5.2.1 Test of Hypothesis One
Step One: Restatement of Hypothesis in Null and Alternative Form
Ho$_1$: There is no causal relationship between bank funding and manufacturing sector performance.
Ha$_1$: There is a causal relationship between bank funding and manufacturing sector performance.

Step Two: Interpretation of the Granger Causality Test Results

Table 5.4 Pairwise Granger Causality Tests
Date: 01/02/16   Time: 09:44
Sample: 1981 2013
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
D(GDP) does not Granger Cause D(BLMS)	30	0.32497	0.7256
D(BLMS) does not Granger Cause D(GDP)		339.672	8.E-19
D(GDPMS) does not Granger Cause D(BLMS)	30	6.46080	0.0012
D(BLMS) does not Granger Cause D(GDPMS)		5.23554	0.0019
D(INT) does not Granger Cause D(BLMS)	30	0.12996	0.8787
D(BLMS) does not Granger Cause D(INT)		0.17326	0.8419
D(GDPMS) does not Granger Cause D(GDP)	30	1.41663	0.2613
D(GDP) does not Granger Cause D(GDPMS)		1.43081	0.2580
D(INT) does not Granger Cause D(GDP)	30	0.42568	0.6580
D(GDP) does not Granger Cause D(INT)		0.34180	0.7138
D(INT) does not Granger Cause D(GDPMS)	30	1.75493	0.1936
D(GDPMS) does not Granger Cause D(INT)		1.17828	0.3243

Source: Author's Computation

The Granger Causality Test result in Table 5.4 was done with a lag of 2. The choice of a lag of 2 is aimed at not sacrificing greater degrees of freedom which may affect the outcome of the test. Performance of the manufacturing

sector proxy by Contribution to Gross Domestic Product (GDPMS) and bank funding by loan to the manufacturing sector (BLMS). In determining the existence and direction of causality, the p-value of the F-statistics is used with a 5% level of significance to either accept or reject the null hypotheses as stated.   From the results, there is no causal found among other sets of variables except between BLMS, GDP and GDPMS. The causal relationship was found to be unidirectional running from BLMS to GDP without any feedback from GDP to BLMS. BLMS and GDPMS share a bidirectional relationship. This means that BLMS granger causes GDPMS and there is a feedback running from GDPMS to BLMS. This implies that as the loan to the manufacturing sector increases productivity, more income is generated which arguably increases the propensity to save and builds up more loan to the sector for enhanced productivity.

Step Four: Decision

Given the fact that BLMS showed causal relationship with GDPMS, we conclusively reject the null hypothesis. There is evidence in support of the fact that bank funding shares a causal relationship with the performances of the manufacturing sector.

5.2.2 Test of Hypothesis Two

Step One: Restatement of Hypothesis in Null and Alternative Form
Ho_2:   Bank funding does not have positive and significant impact on the manufacturing sector's contribution   to Nigeria's Gross Domestic Product (GDP)
Ha_2:   Bank funding has positive and significant impact on the manufacturing sector's contribution to Nigeria's Gross Domestic Product (GDP)
Test Statistics: Ordinary Least squares with other diagnostics tests

Step Two: Interpretation of Regression Results

Table 5.5 Ordinary Least Squares Results
Dependent Variable: GDPMS
Method: Least Squares
Date: 01/02/16   Time: 09:53
Sample: 1981 2013
Included observations: 33

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5657.847	528.0755	10.71409	0.0000
BLMS	1.270167	0.361393	3.514648	0.0014
INT	72.33478	28.14355	2.570208	0.0154
R-squared	0.382207	Mean dependent var	7292.670	
Adjusted R-squared	0.341021	S.D. dependent var	974.0376	
S.E. of regression	790.6994	Akaike info criterion	16.27022	
Sum squared resid	18756169	Schwarz criterion	16.40627	
Log likelihood	-265.4586	Hannan-Quinn criter.	16.31600	
F-statistic	9.279994	Durbin-Watson stat	1.509411	
Prob(F-statistic)	0.000729			

Source: Author's Computation

From the table 5.5 above, INT was used as a moderating variable. Bank funding represented BLMS (the explanatory variable of interest) shows positive and significant response manufacturing sector contribution to the Gross Domestic Product (GDPMS). This is indicated by the t-value (3.514648 with a p-value of 0.0014). It shows that as BLMS increases, GDPMS increases. The R^2 which is a show of the goodness of fit of the model is 38% which means that there is 38% of variation in was explained by the regressors and less than 62% of the relationship is explained by factors not captured by the model. The adjusted R^2 of about 34% take account of more number of regressors if included and it still explains 34% variation in the dependent variable.

The F-statistics of (9.27994, P-value = 0.00729) at a critical value of 0.05 shows that the overall regression is significant and can be used for meaningful analyses. The Durbin Watson statistics (DW) value of 1.5(approx 2) shows that there is no evidence of a first order serial autocorrelation (AR(1)). By rule of thumb, if the DW statistics is approximately equal to 2, it is evidence against the existence of a first order serial correlation.

Step Four: Decision
        Given the fact that BLMS showed a positive and significant relationship with GDP; this is evidenced by a positive coefficient (1.270) and a p-value (0.0014) that is less that 5%, we conclusively reject the null hypothesis and conclude that Bank funding has positive and significant impact on the manufacturing sector's contribution to Nigeria's Gross Domestic Product (GDP).

5.2.3 Test of Hypothesis Three

Bank funding does not have positive and significant impact on the overall growth of the Nigerian economy.
Step One: Restatement of Hypothesis in Null and Alternative Form
Ho₃: Bank funding does not have positive and significant impact on the overall growth of the Nigerian economy.
Ha₃: Bank funding has positive and significant impact on the overall growth of the Nigerian economy.
Test Statistics: Ordinary Least squares with other diagnostics tests

Step Two: Interpretation of Regression Results

Table 5.6 Ordinary Least Squares Results

Dependent Variable: GDP
Method: Least Squares
Date: 01/02/16   Time: 09:54
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-215.2018	3155.347	-0.068202	0.9461
BLMS	13.14216	4.716151	2.786627	0.0095
INT	-5.747489	165.1034	-0.034811	0.9725
GDP(-1)	0.912814	0.099486	9.175300	0.0000

R-squared	0.965391	Mean dependent var		13754.39
Adjusted R-squared	0.961682	S.D. dependent var		22030.54
S.E. of regression	4312.449	Akaike info criterion		19.69287
Sum squared resid	5.21E+08	Schwarz criterion		19.87609
Log likelihood	-311.0859	Hannan-Quinn criter.		19.75360
F-statistic	260.3429	Durbin-Watson stat		2.380705
Prob(F-statistic)	0.000000			

Source: Author's Computation

        From the table 5.6 above, INT was used as a moderating variable. A lag of the dependent variable was used to make the model dynamic and address the possibility of autocorrelation. Bank funding represented BLMS (the explanatory variable of interest) shows positive and significant response to the overall growth of the Nigerian economy (GDP). This is indicated by the t-value (13.14216 with a p-value of 0.0095). It shows that as BLMS increases, GDP increases. The R^2 which is a show of the goodness of fit of the model is 97% which means that there is 97% of variation in was explained by the regressors and less than 4% of the relationship is explained by factors not captured by the model. The adjusted R^2 of about 96% take account of more number of regressors if included and it still explains 96% variation in the dependent variable.
        The F-statistics of (260.3429, P-value = 0.00000) at a critical value of 0.05 shows that the overall regression is significant and can be used for meaningful analyses. The Durbin Watson statistics (DW) value of 2.3(approx 2) shows

that there is no evidence of a first order serial autocorrelation (AR(1). By rule of thumb, if the DW statistics is approximately equal to 2, it is evidence against the existence of a first order serial correlation.

Step Four: Decision

Given the fact that BLMS showed a positive and significant relationship with GDP; this is evidenced by a positive coefficient (13.14216) and a p-value (0.0095) that is less that 5%, we conclusively reject the null hypothesis and conclude that Bank funding has positive and significant impact on the overall growth of the Nigerian economy (Gross Domestic Product).

5.3   Implications of Results

This study examined the impact of banking funding on the growth of the Nigerian manufacturing sector from 1987 to 2013. Following a detailed time series data analysis, the findings revealed plausible results. The implications of these findings are discussed in line with the objectives of this study.

Objective One: To analyze the causal relationship between bank funding and growth of the manufacturing sector.

This examined Performance of the manufacturing sector proxy by Contribution to Gross Domestic Product (GDPMS) and bank funding by loan to the manufacturing sector (BLMS). In determining the existence and direction of causality, the probability value of the F-statistics was used with a 5% level of significance to either accept or reject the null hypotheses as stated. From the results, the causal relationship was found to be unidirectional running from BLMS to GDP without any feedback from GDP to BLMS. BLMS and GDPMS share a bidirectional relationship. This means that BLMS granger causes GDPMS and there is a feedback running from GDPMS to BLMS. This implies that as the loan to the manufacturing sector increases productivity, more income is generated which arguably increases the propensity to save and builds up more loans to the sector for enhanced productivity.

Objective Two: To evaluate the impact of bank funding on the manufacturing sector's contribution to the Gross Domestic Product in Nigeria.

Bank funding represented BLMS (the explanatory variable of interest) shows positive and significant response manufacturing sector contribution to the Gross Domestic Product (GDPMS). This is indicated by the t-value (3.514648 with a pvalue of 0.0014). It shows that as BLMS increases, GDPMS increases. The R^2 which is a show of the goodness of fit of the model is 38% which means that there is 38% of variation in was explained by the regressors and less than 62% of the relationship is explained by factors not captured by the model. The adjusted R^2 of about 34% take account of more number of regressors if included and it still explains 34% variation in the dependent variable. The F-statistics of (9.27994, P-value = 0.00729) at a critical value of 0.05 shows that the overall regression is significant and can be used for meaningful analyses. The Durbin Watson statistics (DW) value of 1.5(approx 2) shows that there is no evidence of a first order serial autocorrelation (AR(1). By rule of thumb, if the DW statistics is approximately equal to 2, it is evidence against the existence of a first order serial correlation. Given the fact that BLMS showed a positive and significant relationship with GDP; this is evidenced by a positive coefficient (1.270) and a probability value (0.0014) that is less that 5%, we conclusively reject the null hypothesis and conclude that Bank funding has positive and significant impact on the manufacturing sector's contribution to Nigeria's Gross Domestic Product (GDP).

Objective Three: To determine the impact of bank funding on the overall growth of the Nigerian Economy.

Bank funding represented by BLMS (the explanatory variable of interest) shows positive and significant response to the overall growth of the Nigerian economy (GDP). This is indicated by the t-value (13.14216 with a pvalue of 0.0095). It shows that as BLMS increases, GDP increases. The R^2 which is a show of the goodness of fit of the model is 97% which means that there is 97% of variation in was explained by the regressors and less than 4% of the relationship is explained by factors not captured by the model. Given the fact that BLMS showed a positive and significant relationship with GDP; as evidenced by a positive coefficient (13.14216) and a pvalue (0.0095) that is less that 5%, we conclusively reject the null hypothesis and conclude that Bank funding has positive and significant impact on the overall growth of the Nigerian economy (Gross Domestic Product).

6. SUMMARY OF FINDINGS:

The findings from the specific objectives of this study are as follows:
  i.   There was a unidirectional relationship between bank funding and growth of the manufacturing sector
  ii.   That Bank funding has positive and significant impact on the manufacturing sector's contribution to Nigeria's Gross Domestic Product (GDP).

iii.   That Bank funding has positive and significant impact on the overall growth of the Nigerian economy (Gross Domestic Product).

7. CONCLUSION:

Despite the huge and abundant resources in Nigeria, the country is still battling with general problems of poverty, untapped natural resource, and a growing population without a corresponding level of living standard, unemployment and economic backwardness. In dealing with these challenge policy makers have vigorously pursued ways of putting the economy on the part of growth and sustainable development. One of the policy directions over time has been emphasis on engineering the priority sectors like agriculture, manufacturing and others to greater productivity. One of the obvious signs of underdevelopment is low level of capital accumulation and consumption. This undoubtedly affects the ability of the priority sectors to play their roles as drivers of growth and development in Nigeria and other developing countries alike.

The finance sector led prominently by the banking sector is expected to provide funds and funding for not only the manufacturing sector but all the priority sectors. How far this role has been played by banks over the years has continually been put to question. While some argue that banks in their role of financial intermediation have provided funding for economic sectors, others say that what they have done over time have not been good enough to drive the requisite level of growth. It is against this backdrop that this study was set out to measure the impact which bank funding has exerted on the manufacturing in the Nigerian economy. This study chose a main objective of investigating the impact of bank funding on the manufacturing sector in Nigeria. To achieve this main objective, the study sought to specifically: (i) analyze the causal between bank funding and the growth rate of the manufacturing sectors, (ii) evaluate the impact of bank funding on manufacturing sector in Nigeria and (iii) determine the impact of bank funding on the overall growth of the Nigerian economy.

The study adopted the *ex-post facto* design. The study also used annual time series data covering the period 1999- 2013 drawn from the Central Bank of Nigeria's annual reports and statistical bulletin. The Ordinary Least Square (OLS) regression was used to test the hypotheses. Economic growth represented by Gross Domestic Product (GDP) and Contribution of Manufacturing Sector to Gross Domestic Product were used as the dependent variables while Bank Funding to the Manufacturing Sector, was used as independent variable. Interest Rate was used as moderating or control variable. Descriptive statistics on both the dependent and independent variables were used to complement the method of estimation. The probabilities were based on a 5% level of significance.

The work discovered a unidirectional causality running from bank funding to contribution of the manufacturing sector. In addition, bank funding showed a positive and significant impact on manufacturing sector gross domestic rate and the overall economic growth (GDP).

8. RECOMMENDATIONS:

In line with the specific objectives of this study, we recommend as follows:
- That the government should duly regulate the banking sector to ensure proper lending to the priority sector of which the manufacturing sector is one.
- Efficient policies would not only make the banking sector stable, but would also enhance its performance of the necessary economic and finance roles.
- Given the contributions of the manufacturing sector to the overall growth of the Nigerian economy, efforts should be made to evolve policies that would integrate all the essential ingredients necessary to drive the growth of the manufacturing sector in particular and the economy in general.

9. CONTRIBUTIONS TO KNOWLEDGE:

This study radically lends credence to earlier works in this area of finance and economics, thereby contributing significantly to literature by taking a position on the arguments on the responsiveness of stock market returns to inflation. The most profound contribution to knowledge which this study did, borders on measuring the impact of bank funding and manufacturing sector using expanded empirical evidence from Nigeria. This domesticates the findings in line with the peculiarities of the Nigerian economic environment.

10. RECOMMENDATION FOR FURTHER STUDIES:

As this work does not claim to be exhaustive this study recommends the following areas for further studies:
- A comparative study of the effect of bank funding on all the key sectors of the Nigerian economy.
- Secondly, this study recommends for further studies the use of Lagged models to study the lag effect of regulatory policies on bank funding on the manufacturing sector of the economy.

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