Impact of Rising Interest Rate on the Performances of the Nigerian Manufacturing Sector

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Abstract

The dismal performance of the Nigerian manufacturing sector could be attributed to inadequacy of financial support for the manufacturing sector, which ultimately has contributed to the reduction in capacity utilization of the manufacturing sector in the country. The insignificant contribution of the sector to gross domestic product could be as a results of continued deterioration in infrastructural facility as well as lack of access to cheap finance characterized by rising lending rate. This study therefore examines the effect of rising interest rates on the performances of the Nigerian manufacturing sector. Data for the study spans thirty five (35) years covering 1981 to 2015. The models were analyzed using the ordinary least squares. Findings from the study shows that rising interest rate in Nigeria has a negative effect on the contribution of the manufacturing sector to GDP as well as on the average capacity utilization of the Nigerian manufacturing sector. This implies that the rising interest rate in Nigeria impedes the activities and the performances of the Nigerian manufacturing sector. Given these findings, the study recommends that aside from trying to manage interest rate for enhanced economic growth, the Nigerian Government should strive to provide infrastructural facilities particularly power and transportation to reduce the high cost of production.
Keywords: Interest Rate; Capacity Utilization; Manufacturing Sector; GDP.

1. Introduction

The manufacturing sector plays a significant role in the transformation of the economy. For example, it is an avenue for increasing productivity related to import replacement and export expansion, creating foreign exchange earning capacity; and raising employment and per capital income which causes unique consumption patterns (Imoughele and Ismaila, 2014). Furthermore, Ogwuma (1995) opines that it creates investment capital at a faster rate than any other sector of the economy while promoting wider and more effective linkages among different sectors. Loto (2012) revealed that the Structural Adjustment Programme (SAP) introduced in May 1986 was partly designed to revitalize the manufacturing sector by shifting emphasis to increased domestic sourcing of inputs through monetary and fiscal incentives. The deregulation of the foreign exchange market was also effected to make non-oil exports especially manufacturing sector more competitive even though, this also resulted in massive escalation in input costs (Loto, 2012).

Examining the growth of the manufacturing sector over the years in Nigerian, the share of the manufacturing sector in gross domestic product has not been impressive.
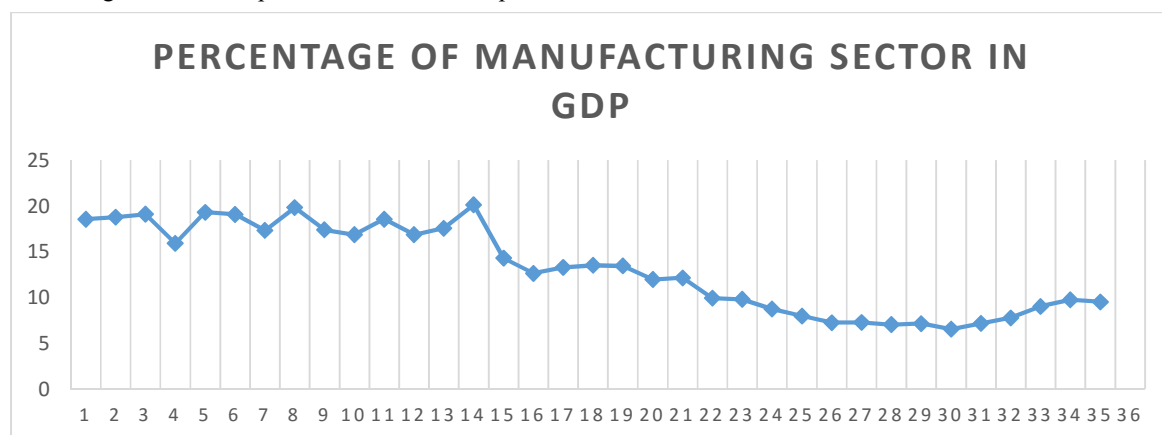

Fig. 1: Percentage of the Manufacturing in Nigeria's GDP (1981-2015).
Source: CBN 2015 Statistical Bulletin.

Over the thirty five (35) years of this study, the percentage of the manufacturing sector in GDP averaged 18% in the 80s' (i.e. between 1981 and 1989). In 1994, the manufacturing sector contributed above 20% into the Nigeria's GDP but have been on the decline afterwards as can be witnessed in fig. 1 above. In the recent times, specifically from 2002, the manufacturing sector contributes less than 10% to gross domestic product and was almost but averaging 9% between 2013 and 2015.
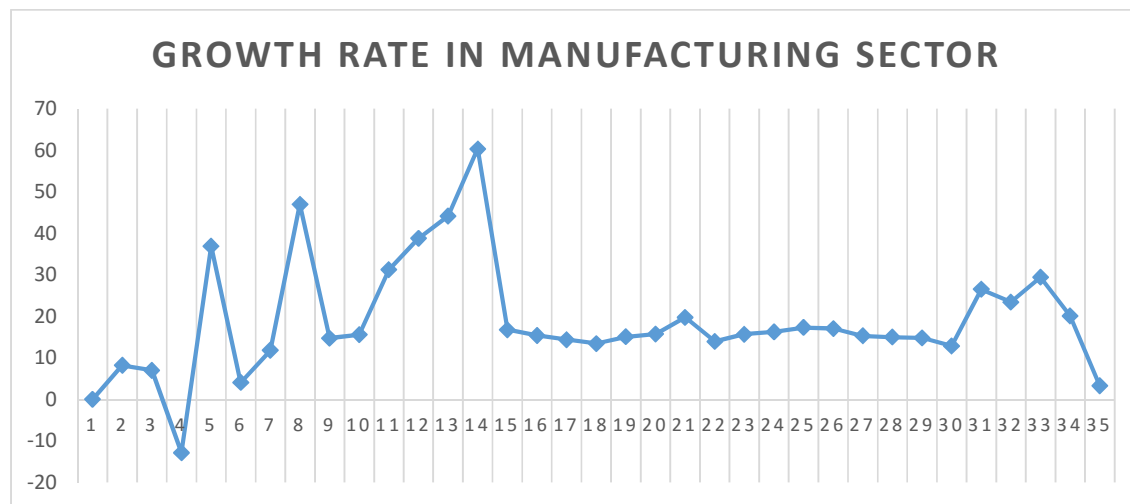

Fig. 2: Percentage Growth Rates of the Nigerian Manufacturing Sector (1981-2015).

Source: Appendix

Fig. 2 above shows that the highest growth rate of the Nigerian manufacturing sector of 60.3% was recorded in 1994 and although negative in 1984. The whooping 60% growth rate recorded in 1994 dropped drastically to 16.7% in 1995 and growing by a paltry 3% in 2015. This implies that the Nigeria manufacturing sector has not improved in terms of its growth rate from 1995.

On capacity utilization, the manufacturing sector average capacity utilisation as at 1986 stood at 38.8% and increased to 40.3% in 1990.
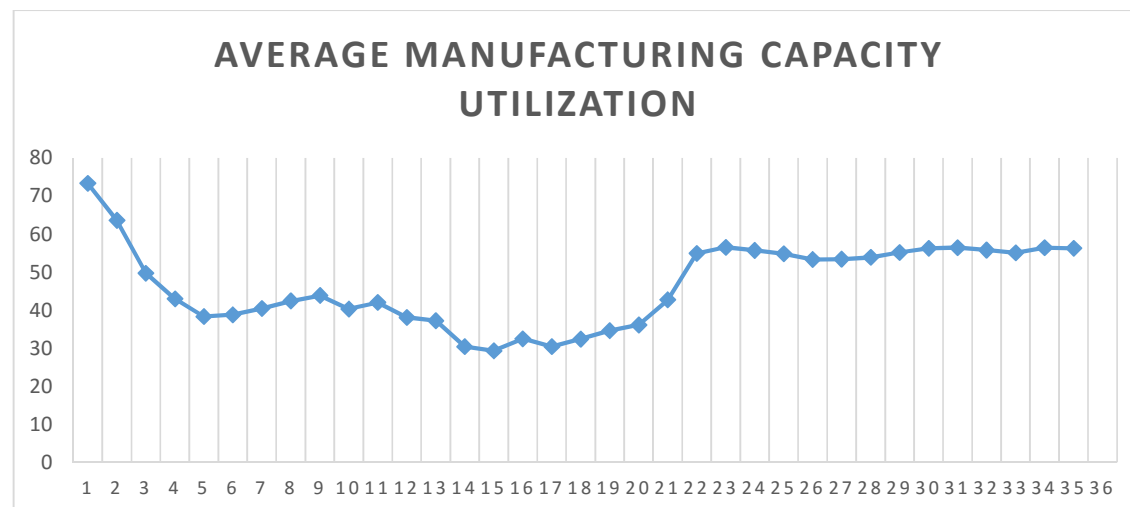

Fig. 3: Average Capacity Utilization of the Nigerian Manufacturing Sector.

Source: Appendix

It further decreased to 29.29% and 36.1% in 1995 and 2000 respectively. The value of the average capacity utilisation in 2005, 2010 and 2012 was 54.8%, 56.44% and 55.82% respectively (Imoughele and Ismaila, 2014).

This dismal performance of the sector in Nigeria could be attributed to massive importation of finished goods and inadequate financial support for the manufacturing sector, which ultimately has contributed to the reduction in capacity utilization of the manufacturing sector in the country. The insignificant contribution of the sector to gross domestic product could be as a results of continued deterioration in infrastructural facility as well as lack of access to cheap finance. Obamuyi, Edun and Kayode (2010) asserted that the growth rate of manufacturing sector in Nigeria has been constrained due to inadequate funding, either due to the inefficient capital market or the culture of the Nigerian banks to finance mainly short term investment. The long term funds from the banking sector are not easily accessible as a result of the stringent and restrictive credit guidelines to the sector as well as high interest rates. All these could be the reason why the Nigerian manufacturing sector has failed to serve as an avenue for increasing productivity in relation to import replacement and export expansion, creating foreign exchange earning capacity, rising employment and per capita income, which causes unique consumption patterns.

The manufacturing sector in Nigeria is faced with the problem of accessibility to funds. Even the financial sector reform of the Structural Adjustment Programme (SAP) in 1986, which was meant to correct the structural imbalance in the economy and liberalize the financial systems did not achieve the expected results (Obamuyi, Edun and Kayode, 2010). As Edirisuriya (2008) reported, financial sector reforms are expected to promote a more efficient allocation of resources and ensure that financial intermediation occurs as efficiently as possible. This also implies that financial sector liberalization brings competition in the financial markets, raises interest rate to encourage savings, thereby making funds available for investment, and hence lead to economic growth (Asamoah, 2008). However, these seems not to be the case in Nigeria.

Over the years, interest rates have remained a subject for critical assessment with diverse implications for savings mobilization and investment promotion. Generally, interest rates are the rental payments for the use of credit by borrowers and return for parting with liquidity by lenders (CBN, 1997). In the Nigerian economy, the minimum rediscount rate (MRR) now monetary policy rate (MPR) is the official interest rate of the Central Bank of Nigeria (CBN), which anchors all other interest rates in the money market and the economy (Ogunbiyi and Ihejirika, 2014). In August, 1987 the CBN liberalized the interest rate regime and adopted the policy of fixing only its minimum rediscount rate to indicate the desired direction of interest rate. This was modified in 1989 when the CBN issued further directives on the required spreads between deposit and lending rates. In 1991, the government prescribed a maximum margin between each bank's average cost of funds and its maximum lending rates. Later, the CBN prescribed savings deposit rate and a maximum lending rate. The removal of the maximum lending rate ceiling in 1993 saw interest rates rising to unprecedented levels in sympathy with rising inflation rate which rendered banks' high lending rates negative in real terms (Ogunbiyi and Ihejirika, 2014). In 1994, direct interest rate controls were restored. As these and other controls introduced in 1994 and 1995 had negative economic effects, total deregulation of interest rates was again adopted in October, 1996.
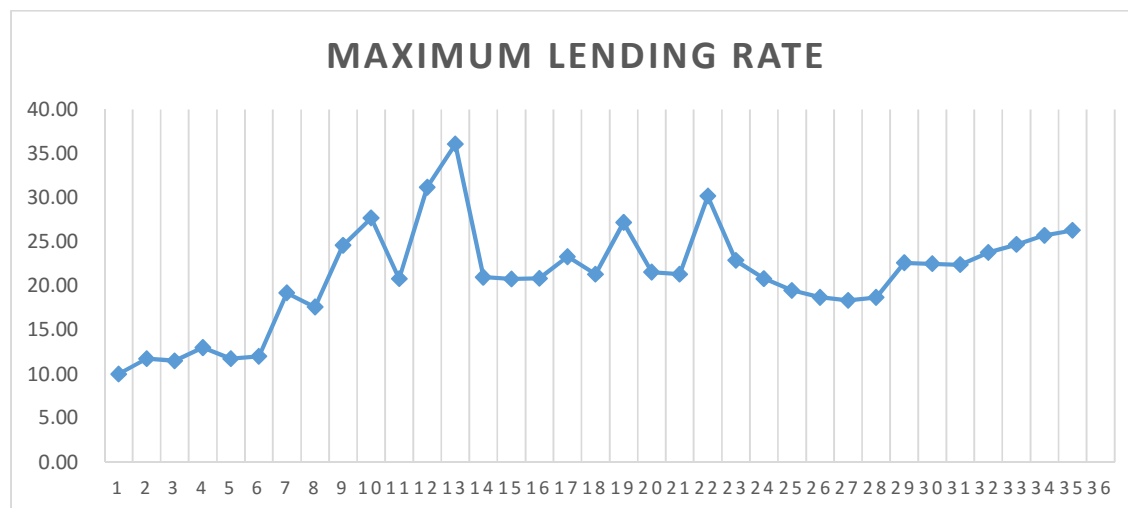

Fig. 4: Maximum Lending Rate in Nigeria (1981-2015). Source: Appendix.

Over the years, the maximum lending rate has been fluctuating and was above 30% in years 1992, 1993 and 2002. In the recent times, the maximum lending rate increased steadily from 22% in 2011 to 23%, 24%, 25% and

26% in years 2012, 2013, 2014 and 2015 respectively. This implies, that the maximum lending rate in Nigeria increased by 1% during these periods.

However, all the regulations and deregulations of interest rate in Nigeria were all in a bid to manage the country's capital allocation through the financial sector. The essence of managing interest rates were based on the premise that the market, if freely allowed to determine the rate of interest would exclude some priority sectors. Thus, interest rates were adjusted through the "invisible hand" in order to promote increased level of investment in the various preferred sectors of the economy. Prominent among the preferred sectors were the agricultural, manufacturing and solid mineral sectors which were accorded priority and deposit money banks were directed to charge preferential interest rates on all loans to encourage the upsurge of small-scale industrialization which is a catalyst for economic development (Udoka and Roland, 2012). Thus, this study therefore examines the effect of rising interest rates on the performances of the Nigerian manufacturing sector. The remainder of this paper consists of four parts. Section 2 provides the review of related literature consisting of the theoretical, conceptual and empirical reviews. Section 3 presents the research methodology while section 4 presents the data and discusses the findings. Section 5 presents the conclusion and recommendations of the study.

2. Review Of Related Literature

Conceptual Framework

The crucial role of capital in the economic growth and development process had been recognized that without doubt, every nation in the world today still lay tremendous emphasis on capital accumulation by stressing the need for raising the level of investment in relation to output. This emphasis is traceable to the short term fiscal policies and national development plans of both the developed and the developing economies over the past four decades. One important trend in developmental process which has remained consistent since civilization is that, all developed Nations are industrialized (Udoka and Roland, 2012). Industrialization is associated with heavy investments financed through capital accumulation. Rapid and sustainable real economic growth is a necessary condition for economic development. Meanwhile, for growth to occur there is the need for a relatively stable macro-economic environment which is an indicator for low risk and a condition for attracting investment and boosting entrepreneurial activities. Even though a certain level of lending interest rate and inflation may be important in attracting investment. There is therefore the need to keep lending interest rate and inflation at a manageable limit in order to propel economic growth. The macro-economic policy formulation challenge

confronting many developing countries today is how to achieve a single digit inflation, manageable trade and balance of payments deficits and higher savings and investments rates to finance long term economic growth.

In Nigeria, interest rate is determined by the following factors:

i.   The investment demand: The higher the level of investment demand the higher the level of interest rates. On the other hand, the lower the investments demand, the lower the level of interest rates.

ii.   The level of savings (or conversely the level of consumption): The higher the level of savings the lower the interest rate while, the borrower the level of savings, the higher the level of interest rates,

iii.   Demand for money or the liquidity preference: The higher the money demand, the lower the interest rate while the lower the money demand the higher the interest rates,

iv.   The quantity of money or money supply: In the Keynesian parlance as we increase money supply the interest rate will reduce.

Capacity utilization is a concept in Economics, which refers to the extent to which an enterprises or a nation actually uses its installed productive capacity (Adeyemi and Olufemi, 2016). Thus, it refers to the relationship between actual output produced and potential output that could be produced with installed equipment if capacity was fully used. Capacity utilization in industry is described as the level of utilization of an industry's installed productive capacity. An industry would be said to be performing optimally when its installed production capacity is fully utilized. By contrast, in the cost approach, capacity output is an optimum level of output at which an additional unit of output would well exceed the output range.

Theoretical Framework

Macroeconomists have established the theoretical relationship between real output and monetary policy measures. In contrast to Keynesian policy prescription, McKinnon (1973) and Shaw (1973) in there hypothesis

of finance led growth advocated that market force induced higher interest rate, would enhance more investment by channelling saving to productive investment and stimulate real output growth such as the manufacturing sector.

Udoka and Roland (2012) notes that there is a large body of literature on interest rate management. The important ones are the classical, the loanable funds, the Keynesian and the modern theory of interest. The classical theory posits that, rate of interest is determined by the supply and demand for capital by the expected productivity of capital. Both time preference and productivity of capital depend upon waiting or saving or thrift. The theory is also known as the supply and demand theory of savings (Udoka and Roland, 2012). The Keynesian liquidity preference theory determines the interest rate by the demand for and supply of money in a stock theory. It emphasizes that the rate of interest is purely a monetary phenomenon. It is a stock analysis because it takes the supply of money as given during the short run and determines the interest rate by liquidity preference or demand for money. On the other hand, the loanable funds theory is a flow theory that determines the interest rate by the demand for and supply of loanable funds. It involves the linking of interest rates with savings, dishoarding and bank money on the supply side.

However, this work is anchored on the Keynesian theory. According to the Keynesians school of thought, a discretionary change in money supply permanently influences real output by lowering the rate of interest and through the marginal efficiency of capital, stimulate investment and output growth (Athukorala, 1998).

Empirical Review

Imoughele and Ismaila (2014) examine the impact of monetary policy on Nigeria's manufacturing sector performance for the period 1986-2012. Data were collected from the Statistical Bulletin and Annual Report and Statement of Accounts of the Central Bank of Nigeria as well as the Annual Abstracts of statistics (various issues) of the National Bureau of Statistics (NBS). Results of the study after ensuring data stationarity and co integration show that the individual variables: external reserve, exchange rate and inflation rate were statistically significant to manufacturing sector output while broad money supply and interest rate were not statistically significant to manufacturing sector output in the previous and current year. However, interest rate, exchange rate and external reserve impacted negatively on the sector output but broad money supply and inflation rate affect the sector positively. The pair-wise Granger Causality results suggest that real exchange rate and external reserves granger cause Nigeria's manufacturing output to each other unidirectional. Imoughele and Ismaila (2014) also found that the manufacturing sector contribute insignificantly to the Nigerian economy.

Obamuyi, Edun and Kayode (2010) investigate the effect of bank lending and economic growth on the manufacturing output in Nigeria. Times series data covering a period of 36 years (1973-2009) were employed and tested with the cointegration and vector error correction model (VECM) techniques. The findings of the study show that manufacturing capacity utilization and bank lending rates significantly affect manufacturing output in Nigeria. However, the relationship between manufacturing output and economic growth could not be established in the country. These results, therefore, call for concerted effort by the government, manufacturers and the lending institutions to reviewing the lending and growth policies and provide appropriate macroeconomic environment, in order to encourage investment-friendly lending and borrowing by the financial institutions.

Udoka and Roland (2012) investigate the effect of interest rate fluctuation on the economic growth of Nigeria. To this end, two hypotheses were formulated to investigate the relationship between interest rate and economic growth and the difference in economic growth before and after interest rate deregulation regime in Nigeria. Data were analyzed and tested using the ordinary least square multiple regression analytical technique and the result of the findings revealed that: there existed an inverse relationship between interest rate and economic growth in Nigeria. This implies that increase in interest rate will decrease GDP of the country, thus retarding growth of the real sector.

Ayanwale (2013) noted that the Central Bank of Nigeria (CBN) has not formulated a model that will reduce interest rate, inflation and stabilize the exchange rate and as such set out to examine the impact of interest rates on the development of an emerging market using a time series analysis of 40 years (1970- 2010).The Error Correction Modelling (ECM) was adopted to reconcile fluctuations or changes both in the short and long run between the variables and the result shows that due to the ability to estimates the parameters of Error Correction Mechanism (ECM), which is generally consistent, sufficient, significant and negative. The non-zero coefficient of changes in interest rate and exchange rate in both ways been statistically significant indicates a short-run causality from interest rate to gross fixed capital formation as well as from changes in inflation to gross domestic

product. Thus the paper recommends that pragmatic approach needs to be adopted to ensure that the lending rates are reduced to single digit in order to reduce production cost, high unemployment rate and encourage Foreign Direct Investment (FDI).

Adeyemi and Olufemi (2016) investigated the determinants of capacity utilization in the Nigerian manufacturing sector between 1975 and 2008. The study used capacity utilization as the dependent variable while its determinants such as Real Manufacturing Output Growth Rate (MGDP), Real Interest Rate (INTR), Consumer's Price Index (CPI), Fixed Capital Formation in Manufacturing Sector (CPF) and Electricity Generation on Rate (ELEGR) (Proxy for energy) were used as independent variables. Cointegration and Error Correction Model (ECM) were employed as the estimation techniques so as to study the time series properties of the variables and to ascertain the existence of long-run relationship between capacity utilization and its determinant indicators. Structured questionnaire was administered to assess the operational materials and the performance of the selected firms. The findings of the study revealed that there is positive relationship between consumer's price index, fixed capital formation in manufacturing sector and capacity utilization. The study also showed that there is negative relationship between electricity generation, real manufacturing output growth rate and capacity utilization which resulted in low manufacturing productivity growth rate in Nigeria.

Odior (2013) investigates the impact of macroeconomic factors on manufacturing productivity in Nigeria over the period 1975-2011. The analysis starts with examining stochastic characteristics of each time series by testing their stationarity using Augmented Dickey Fuller (ADF) test and estimate error correction mechanism model. The findings were reinforced by the presence of a long-term equilibrium relationship, as evidenced by the cointegrating equation of the VECM. Odior (2013) found that credit to the manufacturing sector in the form of loans and advances and foreign direct investment have the capacity to sharply increase the level of manufacturing productivity in Nigeria, while broad money supply has less impact. The study, therefore, recommends that government must create ''enabling environment'' for manufacturers in the area of infrastructure, financial, legal and property rights. High cost of borrowing is due to high interest rate spread. Therefore, this paper advocates a cut in margin between lending and deposit rates.

Idoko and kpeyol (2012) assessed the impact of interest rate deregulation on economic growth in Nigeria. Using an autoregressive model, GDP growth rate (G) was regressed against lending rate (LR), savings rate (SR), Inflation rate (IF), exchange rate (X), financial deepening (FD) and lagged G (G-1) for two separate periods; the regulation era (1970-1986) and deregulation era (1987–2009). The result showed that deregulated interest rate (represented by LR) has an insignificant impact on economic growth. However, inflation rate and exchange rates were found to have positive and significant impact on economic growth.

Ojo and Ololade (2014) assessed the contribution of manufacturing sector to economic growth in Nigeria in the era of globalization. Ordinary Least Square (OLS) econometric technique was used on time series data of relevant variables of manufacturing output, trade openness and current account balance and the study found that though Nigeria manufacturing sector benefited from globalization process, the level of the development in the sector was found to be highly negligible. Thus implying that globalization exerts little impact on economic growth via manufacturing sector of the economy.

Okonkwo, Egbulonu, and Mmaduabuchi (2015) examined the impact of monetary policy variables on manufacturing in Nigeria from 1981 – 2012. The theoretical relationship between monetary policy variables and manufacturing sector (that is, the real sector) was critically examined and established in this study using the Johansen cointegration test in order to establish long run equilibrium relationship between the explained and the explanatory variables. The error correction model (ECM) was employed to estimate the model and the study revealed that money supply and credit to private sector exert tremendous influence on manufacturing in Nigeria.

Macroeconomists have established the theoretical relationship between real output and monetary policy measures thus reiterating that the finance led growth advocated that market force induced higher interest rate would enhance more investment by channelling saving to productive investment and stimulate real output growth such as the manufacturing sector. Thus the crucial role of capital in the economic growth and development process had been recognized such that Industrialization is associated with heavy investments financed through capital accumulation. Meanwhile, for growth to occur there is the need for a relatively stable macro-economic environment characterized with low risk and a condition for attracting investment and boosting entrepreneurial activities. There is therefore the need to keep lending interest rate and inflation at a manageable limit in order to propel investments in the manufacturing sector and by implication, economic growth. This can only be achieved through the management of interest rate. Thus, interest rates were adjusted through the "invisible hand" in order to promote increased level of investment in the various preferred sectors

(manufacturing) of the economy. Despite the management of policies to keep interest rate low, Nigeria has been experiencing rising interest rates over the past years. This study therefore examines the effect of rising interest rates on the performances of the Nigerian manufacturing sector.

3. Methodology

This study adopts the ex-post facto research design to examine the effect of rising interest rate on the performances of the Nigerian manufacturing sector. The data used are secondary data and spans for a period of thirty five years covering 1981 to 2015. The data were obtained from the Central Bank of Nigeria 2015 statistical bulletin. The model was specified to show the effect of rising interest rate on the performances of the Nigerian manufacturing sector and were estimated using the ordinary least squares after ensuring the stationary properties of the dataset. Thus the study hypothesizes that rising interest rate has a negative effect on the performances of the Nigerian manufacturing sector.

The functional relationship is expressed as:

AMCU = f (MLR) ……………………… ..(1)

CMSGDP = f (MLR) ……………………. (2)

Where:

AMCU = Average Manufacturing Capacity Utilization

MLR = Maximum Lending Rate

CMSGDP = Contribution of the Manufacturing Sector to GDP

Prime and Maximum Lending rates are considered the two major types of lending rates in the Nigerian financial sector. Prime lending rate refers to the average prevailing lending rate charged by most deposit money banks in Nigeria to some of its more favored customers. Maximum lending rates refers to the average of the highest lending rates charged by deposit money banks in Nigeria. The disparity between both rates have widened over the years particularly since 2009 topping a differential of about 10% in most instances. In Nigeria, large corporates and matured companies perceived as having lesser risk with a history of generating consistent cash flows are offered prime lending rates while small businesses and individuals perceived as having higher risk typically fall above the prime lending rate margin.

4. Findings

The estimation outputs of models 1 and 2 are reported in tables 1 and 2 below. Table 1 below shows the regression analysis determining the effect of rising interest rate on the contribution of the Nigerian manufacturing sector to GDP.

Table 1: Regression Analysis One

Dependent Variable: Percentage of the Manufacturing Sector in GDP
Method: Least Squares
Date: 12/16/16   Time: 23:03
Sample: 1981 2015
Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MAXIMUM_LENDING_RATE	-0.227222	0.133713	-1.699332	0.0987
C	18.00781	2.936694	6.132001	0.0000

R-squared	0.080466	Mean dependent var	13.19213
Adjusted R-squared	0.052601	S.D. dependent var	4.681932
S.E. of regression	4.557132	Akaike info criterion	5.926709
Sum squared resid	685.3258	Schwarz criterion	6.015586
Log likelihood	-101.7174	Hannan-Quinn criter.	5.957389
F-statistic	2.887729	Durbin-Watson stat	0.129973
Prob(F-statistic)	0.098666		

Source: Author's Eviews Output.

Table 2: Regression Analysis for Equation2

Dependent Variable: AVERAGE_MANUFACTURING_CA
Method: Least Squares
Date: 12/16/16   Time: 23:05
Sample: 1981 2015
Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MAXIMUM_LENDING_RATE	-0.387575	0.315984	-1.226564	0.2287
C	54.86864	6.939859	7.906305	0.0000

R-squared	0.043602	Mean dependent var	46.65450
Adjusted R-squared	0.014620	S.D. dependent var	10.84880
S.E. of regression	10.76920	Akaike info criterion	7.646703
Sum squared resid	3827.197	Schwarz criterion	7.735580
Log likelihood	-131.8173	Hannan-Quinn criter.	7.677383
F-statistic	1.504460	Durbin-Watson stat	0.232713
Prob(F-statistic)	0.228666		

Source: Author's Eviews Output.

Table 1 and 2 shows the sign of the co-efficient of -0.227222 and -0.387575 respectively to be negative. This thus implies that the rising interest rate in Nigeria has a negative effect on the contribution of the manufacturing sector to GDP as well as on the average capacity utilization of the Nigerian manufacturing sector. This implies that the rising interest rate in Nigeria impedes the activities and the performances of the Nigerian manufacturing sector.

5.   Conclusion and Recommendation

The regulations and deregulations of interest rate in Nigeria were all in a bid to manage the country's capital allocation through the financial sector to encourage economic growth especially through the preferred sectors. Prominent among the preferred sectors were the agricultural, manufacturing and solid mineral sectors which were accorded priority and deposit money banks were directed to charge preferential interest rates on all loans to encourage the upsurge of small-scale industries which acts as a catalyst for economic development. Thus, this study therefore examines the effect of rising interest rates on the performances of the Nigerian manufacturing sector. Findings from the study shows that rising interest rate in Nigeria has a negative effect on the contribution of the manufacturing sector to GDP as well as on the average capacity utilization of the Nigerian manufacturing sector. This implies that the rising interest rate in Nigeria impedes the activities and the performances of the Nigerian manufacturing sector. Given these findings, the study recommends that aside from trying to manage interest rate for enhanced economic growth, the Nigerian Government should strive to provide infrastructural facilities particularly power and transportation to reduce the high cost of production. In other words, Government should closely manage monetary and fiscal policies in a way that they engender the need growth of the Nigerian economy.

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Appendix

Years	Growth Rate in Manufacturing Sector	Percentage of Manufacturing Sector in GDP	Average Manufacturing Capacity Utilization	Maximum Lending Rate
1981	0	18.56366	73.3	10.00
1982	8.18595	18.76832	63.6	11.75
1983	7.007635	19.0952	49.7	11.50
1984	-12.853	15.92029	43	13.00
1985	36.91863	19.31557	38.3	11.75
1986	4.070223	19.09258	38.8	12.00
1987	11.81309	17.32531	40.4	19.20
1988	46.98	19.82933	42.4	17.60
1989	14.76344	17.38961	43.8	24.60
1990	15.60249	16.86496	40.3	27.70
1991	31.24371	18.55556	42	20.80
1992	38.76006	16.86825	38.1	31.20
1993	44.15378	17.57088	37.19355	36.09
1994	60.3148	20.11921	30.4	21.00

1995	16.76567	14.30387	29.29355	20.79
1996	15.41126	12.64702	32.45806	20.86
1997	14.38749	13.2967	30.4	23.32
1998	13.44235	13.51503	32.4	21.34
1999	15.09475	13.44965	34.6	27.19
2000	15.71874	11.97575	36.1	21.55
2001	19.74382	12.16003	42.7	21.34
2002	13.96322	9.947065	54.9	30.19
2003	15.68845	9.803896	56.5	22.88
2004	16.25492	8.752502	55.7	20.82
2005	17.32688	7.987121	54.8	19.49
2006	17.07738	7.265566	53.3	18.70
2007	15.3039	7.27736	53.38	18.36
2008	15.00741	7.052347	53.84274	18.70
2009	14.82039	7.159947	55.14319	22.62
2010	12.86162	6.552817	56.21672	22.51
2011	26.51295	7.188658	56.44245	22.42
2012	23.44317	7.793216	55.79276	23.79
2013	29.42482	9.031204	55.05026	24.69
2014	20.07525	9.75413	56.3776	25.74
2015	3.319849	9.531868	56.21672	26.30

Source: CBN 2015 Statistical Bulletin