

Bank Credit Finance and Macro Economic Determinants of Industrial Output in Nigeria 1980-2010

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Abstract

The study analyzed the effect of bank credit finance and other macroeconomic policy variables on industrial output in Nigeria. Time series data which covered the period 1980-2010 were obtained from Central Bank of Nigeria (CBN) and used for the study. Data were analyzed using Ordinary Least Square (OLS) regression technique. To ascertain the stationarity of variables, Augmented Dickey-Fuller (ADF) unit root test was carried out on the variables. Empirical results revealed that install capacity utilization rate, previous industrial output, inflation rate and political instability significantly influenced industrial output in Nigeria. Bank credit finance and government expenditure on industrial sector failed to explain the variation in industrial output, implying that the industrial sector has been poorly funded and that access to bank credit finance has been limited. Hence, to boost industrial output, there is need to pursue policies that would enhance the capacity utilization rate of industries, promote political stability, ensure proper funding of the sector by government as well as ensuring the provision of bank credit finance at affordable interest rate and less stringent conditions.

Keywords: Funding; Exchange rate; Inflation rate; Gross domestic product; Commercial Bank

1.0 Introduction

The pivotal role of industrial sector as an engine room for economic development of Less Developing Countries (LDCs) cannot be overemphasized. Acquisition of industrial capabilities by an economy is seen as a potential for rapid and improve economic growth and development. Industrial development involves a technical shift from the crude production technique to a modern system of mass production of goods and services (Anyanwu, 1996). Apart from being a prerequisite for growth and development (Ogunpola, 1985), it offers substantial dynamic benefits that are imperative for changing the structure of Less Development Countries (Okpan, 1999). To achieve these objectives, adequate funding (Anderson, 1998) and stable macroeconomic policies are indispensable. In spite of the huge potential of the industrial sector, the sector is still plagued with numerous problems, ranging from poor funding (Anyanwu,1996), overdependence on foreign machinery and intermediate inputs (Iwayemi,1995), under capacity utilization, poor performance of infrastructural facilities, import dependence to weak industrial base (FRN,2003). UNECA,(2007) posited that the manufacturing subsector of most developing countries, (Nigeria inclusive) continue to depend on imported capital, technology input and skilled labour and that only very few countries have progressed beyond mere assembly and light industries.

Over dependence on foreign machinery and intermediate inputs by a country exposes her more to foreign influence than domestic economic policies and hamper both import substitution and export promotion initiatives (Iwayemi, 1995). Complementing this view was Ndebbio (1987) who documented the loss of huge foreign exchange and phasing out of our small and medium scale industrialists from businesses as a consequence of over dependence on import.

This was the case during the import industrialization policy of Nigeria in the 70s, where importation of machines, raw material and manpower were encouraged. Also, NISER (2000), documented that the major contributor to gross domestic product (GDP) in Nigeria is the primary sector (Agriculture and mining) and the tertiary (Distributive trade), while the manufacturing represented by the secondary is declining over time. Further comparison of the Nigerian manufacturing and agricultural contribution to GDP with 3 industrialized countries of the world in the pre-SAP and SAP period as presented in table 1 revealed that Nigeria's agricultural contribution to GDP outweighed that of other countries. This high contribution of the agricultural sector to GDP furthers evidence that the Nigerian industrial sector is still underdeveloped and requires urgent intervention.

Table 1 : Comparison of Nigeria's GDP with Three Industrialized Countries

Country	GDP of Manufacturing (%)		GDP of Agricultural sector (%)	
	1980	1987	1980	1987
Japan	28.1	30.07	5.5	3.4
Western Germany	22.3	19.6	4.7	3.4
United Kingdom	43.4	26.2	4.6	2.7
Nigeria	2.7	6.2	51.3	33.2

Source: Computed by author from World Tables.

In terms of funding, Anyanwu, et al. (1997) reported that the Nigerian financial sector has performed satisfactorily in terms of aggregate credit generated by the banking sector to the manufacturing sector. Despite this, insignificant funding and poor access to bank credit finance remained among the perennial problems plaguing the sector. For instance, Brauhgan (1982) pointed out that 50 percent of industrial firms do not receive external finances. Another study by World Bank (1995) also pointed out to the fact that 80 percent of industries surveyed could not get credit from banks. Also, the Report of Inter-Ministerial and Technical Committee on the establishment of National Credit Guarantee Scheme (1993) documented that 50 percent of the demand for finance by small scale industries is unmet. This can be attributed to high interest rates charged by fund providers and other stringent credit conditions. The interest rate policy in Nigeria has been such that borrowing is discouraged. The liberalization of the financial sector and the tight monetary policy stance to address excess liquidity has resulted in rising interest rates (Obitayo, 2001). Such high interest rates discourage investors in that the cost of funds would undermine profit and result in loss of investment (Ogugiuba et al, 2004). However, issues pertaining to the attachment of stringent conditions to credits in developing countries can be attributed to high rate of loan default. To enhance fund mobilization and accessibility which are required for firm's performance and growth, Edrisuriya (2008) and Asamoh (2008) advocated for financial liberalization.

In order to boost the Nigerian industrial output, several policies have been formulated by successive governments. Such policies include: the import substitution policy, the Nigerian Promotion Decree (NEPD) 1972 and 1977, the Nigerian Investment promotion Council (NIPC), Decree No,16 of 1995. Policies in the areas of finance ; the establishment of commercial banks, specialized development banks, setting up of small and medium scale enterprises equity investment Scheme , creation of Industrial Development Centres (IDCs), setting up of Nigerian Bank for Commerce and Industry in 1973, creation of the Industrial Development Bank, as well as the creation of National Economic Reconstruction Fund (NERFUND) in 1989 with the aim of providing concessionary loan for small, medium and macro enterprises (SMMES). Others according to Nwakoby (2004) include the creation of CBN apex unit loan funded by World Bank through participatory banks, the Rediscount Finance Facility (RFF) which provides export- oriented funding support and the Small and Medium Enterprises Development Agency in Nigeria (SMEDAN).

The above initiative of the government, which was all aimed at boosting the output of the industrial sector, shows the level of government interest in promoting industrial growth in Nigeria. However, for activities of government and stalk holders in the industrial sector to be sustained, proper funding of the sector as well as stability of macroeconomic variables become imperative. For instance, as evidenced in Table 2, the GDP of industrial sector as percentage of total GDP was 33.83 percent during the 1981-1985 period, commercial bank credit to the manufacturing sector as percentage of total credit in the economy was 28.08 percent, mean nominal exchange rate was 0.733(N/\$). Also, mean manufacturing capacity utilization rate was 53.58 percent, inflation rate 19.38 percent. Lending rate 11.55 percent while government expenditure on economic services was N373.34 million.

But in 2006 - 2010 periods, the mean industrial GDP as percentage of total GDP of the economy dropped to 22.39 percent, commercial bank credit to manufacturing as percentage of total credit to the economy dropped to 14.75 percent, exchange rate increased to N134.112 per US dollar. Also, install capacity utilization rate of manufacturing and inflation rate decreases to 41.68 percent and 9.5 percent respectively while government expenditure on economic services increase to N186,187.56. NISER (2000) attributed the fall in capacity utilization rate to high cost of production, high cost of transport, electricity, communication, labour and continuous depreciation of exchange rate.

From the foregoing, it is clear that the output of industrial sector measured by the percentage share of industrial sector gross domestic product to total GDP fluctuates as bank credit finance and other macroeconomic variable fluctuates. This is an indication that the industrial sector is not technically strong and dynamic and in terms of growth has been sluggish. Against this backdrop, the study seek to determine empirically the relationship between the output of industrial sector and bank credit finance as well as macroeconomic policy variables in Nigeria between 1980-2010.

Table 2: Industrial GDP, Bank Credit finance and some macroeconomic variables in Nigeria.

period	GDP1 (Nm)	GDPP (%)	BCF(%)	ER(%)	ICU(%)	IFR(%)	LR(%)	GEX (Nm)
81-85	81,764.22	33.83	28.08	0.733	53.58	19.38	11.55	373.34
86-90	120,818.02	38.30	29.60	5.201	41.10	20.46	20.14	1172.10
91-95	108,703.78	31.85	40.05	18.606	35.40	48.90	25.97	3785.5
96-000	116,643.26	30.07	31.43	52.091	33.23	12.26	22.85	15152.94
01-05	143,708.96	29.11	21.93	125.584	52.92	15.74	20.18	67.608.80
06-010	152,185.05	22.39	14.75	134.112	41.68	9.65	2017	186,187.56

Note: GDP1= Average Gross Domestic Product of industrial sector, GDPP= Gross Domestic Product of industrial sector as percentage of total GDP, BCF= Commercial bank credit to manufacturing as percentage to total commercial bank credit, ER= Exchange rate, ICU = Install capacity utilization rate of manufacturing, IFR = Inflation rate, LR = Lending rate, GEX = Government expenditure on economic services

Source: Computed by authors using data from CBN Statistical Bulletin

2.0 Research Methodology

2.1 Study area

The study was carried out in Nigeria, which lies between Latitude 4⁰ and 14⁰ N of the Equator and between Longitude 3⁰ and 15⁰ East of the Greenwich meridian. The country has a population of 140 million people (NPC, 2006) and a total land area of about 923,769 Km²

2.2 Sources of data collection

The study made use of secondary data which were sourced from various issues of the Central Bank of Nigeria statistical bulletin. Data series of interest covered the period 1980-2010.

2.3 Model specification

Ordinary Least Square regression technique was used to analyze the data. Accordingly, we express industrial output as a function of bank credit finance and other macroeconomic variables in our regression model.

$$IO_t = f (ICU_t , IOU_{t-1} , BCF_t, LRT_t, IFR_t, GEXPt, POL_t, EXR_t) . . . \quad (1)$$

It is stated econometrically as;

$$\text{Log IO}_t = b_0 + b_1 \log \text{ICU}_t + b_2 \log \text{IOU}_{t-1} + b_3 \log \text{BCF}_t + b_4 \log \text{LRT}_t + b_5 \log \text{IFR}_t + b_6 \log \text{GEXP}_t + b_7 \log \text{POL}_t + b_8 \log \text{EXR}_t + U_t \quad (2)$$

Where IO_t = Gross Domestic Product of industrial sector measured as a percentage of total GDP in period t

IOU_{t-1} = Previous GDP of industrial sector as percentage of total GDP

BCF_t = Total commercial bank credit to industrial sector in period t

LRT_t = Lending rate at period t measured in percentage

IFR_t = Inflation rate in period t measured in percentage

GEXP_t = Total government expenditure on economic services in period t

POL_t = Political instability proxy by years of military rule in Nigeria

EXR_t = Exchange rate at period t measured in percentage

U_t = Stochastic error term

2.4 Test for stationarity

In order to test for stationarity, a unit root test was carried out using the Augmented Dickey Fuller (ADF) test to examine each of the variables for the presence of a unit root (an indication of stationality). The ADF test minimizes autocorrelation in the error term since it involves the first difference in lags such that the error term is distributed as white noise.

$$\text{The test formula for ADF is shown as; } \Delta Y_t = \alpha + \rho Y_{t-1} + \sum_{i=1}^j Y \Delta Y_{t-i} + U_t \quad (3)$$

Here the lag length j chosen for ADF ensure U_t is empirical white noise. The significance of ρ is tested against the null that $\rho = 0$ based on the t statistics obtained from the OLS estimated in equation (3). If the null hypothesis of non stationarity cannot be rejected, the variables are difference till they become stationary, that is, till the existence of a unit root is rejected.

2.5 A priori Expectation

The following equation is obtained from the specified model

$$\text{IO}_t = b_0 + b_1 \log \text{ICU}_t + b_2 \log \text{IOU}_{t-1} + b_3 \log \text{BCF}_t + b_4 \log \text{LRT}_t + b_5 \log \text{IFR}_t + b_6 \log \text{GEXP}_t + b_7 \log \text{POL}_t + b_8 \log \text{EXR}_t + U_t \quad (4)$$

Where $b_0, b_1, b_2, \dots, b_8$ are parameters to be estimated and U_t is the error term.

The a priori expectation becomes $b_1 > 0, b_2 > 0, b_3 > 0, b_4 < 0, b_5 > 0, b_6 > 0, b_7 < 0, b_8 > 0$

Based on the a priori ground, the sign of b_1, b_2, b_3, b_5 and b_6 are expected to be positive while b_4, b_7 and b_8 are expected to be negative.

3.0 Result and Discussion

3.1 Test for stationarity

Table 3 below present the result of the Augmented Dickey Fuller unit root test which was carried out to ascertain the stationarity of the time series variables used for the regression. The test result was compared with the Mackinnon (1991) critical values for the rejection of the null hypothesis of the unit root. From the table, all variables were not stationary at levels except industrial GDP (dependent variable) and inflation rate. Hence, any attempt to specify their dynamic functions in the level of series would have led to spurious regression (Mesike et al.,2010), which might not be ideal for policy formulation (Yusuf and Falusi 1999). All other variables were, however, stationary at first difference, thereby justifying the use of OLS regression in the analysis.

Table 3: Result of the unit root test for variables used in the analysis

Variable	Level	Ist diff.	OT
D(IO)	-5.034 **	-	I(0)
D(ICU)	-3.167	-6.814**	I(1)
D(BCF)	-2.163	-5.743**	I(1)
D(LR)	-1.544	-4.818**	I(1)
D(IFR)	-3.571**	-	I(0)
D(GEXP)	-1.692	-6.940**	I(1)
1%	-4.23	-4.24	
5%	-3.53	-3.54	

Note: : OT means order of integration. Critical values (CV) are defined at 1% and 5% significant levels and asterisks * and ** represent 5% and 1% significance levels respectively. Variables are as defined in equation 3.

3.2 Regression result and Discussion

Table 4 present the result of the diagnostic test which was carried out to verify the impacts of the explanatory variables on industrial GDP in Nigeria. Evaluation of the model revealed R^2 value of 0.6157, indicating that the explanatory variable explain about 61.57 percent of the total variability in industrial output (IO_t). The F-statistics (6.610) was significant at the 1 percent level of probability, denoting the goodness of fit of the estimated model. The RESET (3.62***) and normality (9.51***) tests were significant depicting that the functional form is not mis-specified, as well as the appropriateness of the OLS regression technique used. The Durbin Watson (DW) statistics (2.04) showed the absence of serial auto correlation.

From the result, the coefficient for industrial capacity utilization rate (ICU_t) had a positive significant relationship with industrial GDP at the 1 percent level, implying that an increase in industrial capacity utilization rate will increase the output of the industrial sector by 21.513 units. In the cassava subsector, Akpan et al. (2012a) and Akpan et al. (2012b) reported a significant positive relationship between install capacity utilization and cassava output growth rate in Nigeria. Loto (2012) reported a negative relationship in his study on the manufacturing sector in Nigeria.

The coefficient of previous output of industrial output (IOU_{t-1}) also exerted a significant positive influence on industrial output. The plausible explanation for this is that industrialists use their past performance as a yardstick to measure present accomplishment and would strive to improve upon their past year performances. This result contradicts Akpan et al (2012a and 2012b) who reported a negative significant relationship between previous growth rate and current cassava output.

Also, the inflation rate (IFR_t) variable was positive and negatively significant at the 5 percent level, showing that any increase in inflationary rate would reduce the output of the industrial sector in Nigeria. This result is justified in that firms tend to produce less during inflationary periods that are characterized by high cost of raw materials. Studies such as Narayan (2009); Andreou et al (2008) and Ajayi (2002) also reported a negative relationship between inflation and output volatility while Loto (2012) reported a positive significant relationship.

The coefficient for political instability (POL_t) also exerted a significant inverse relationship with industrial output at the 10 percent significance level. The implication is that political instability reduces industrial output. For instance, during periods of war outbreak, emphasis is often shifted to the production and importation of war equipments, thereby limiting the production capacity of most industrial goods. This is consistent with Rama (1996). Akpan et al (2012a) and (2012b) also reported similar finding in the cassava subsector. In their opinion, political instability is always characterized by poor policy formulation and implementation

Table 4: Relationship between industrial output, bank credit finance and some macro-policy variables in Nigeria

Variable	coefficient	Standard error	t-value
Constant	-53.178	22.761	2.336
LogICU _t	21.513	5.652	3.806***
LogIOU _{t-1}	0.292	0.156	1.872*
LogBCF _t	0.476	0.294	1.619
LogLR _t	-0.052	0.165	-0.315
LogIFR _t	-0.533	0.214	-2.491**
LogGEXP _t	0.036	0.028	1.286
POT _t	-3.812	1.914	-1.992*
EXR _t	-1.627	1.836	-0.886
Diagnostic tests			
R ²	0.6157	Akaike C.	281.726
F-Cal	6.610***	Schwarz C.	306.153
D-Watson	2.024	Hannan- Quinn	294.541
Normality	9.510***		
RESET test	3.623***		

Note: Asterisks ***, ** and * represent 1%, 5% and 10% significance levels respectively. Variables are as defined in equation (3).

4.0 Conclusion

The paper has empirically analyzed the effect of bank credit finance and other macroeconomic policy variables on industrial output in Nigeria during the 1980-2010 periods. From the outcome of the research, expansion of industrial output has been positive and significantly influenced by industrial capacity utilization rate, previous industrial output and inflation rate, while political instability exerted a negative significant influence on industrial output. Bank credit finance, lending rate, government expenditure on industrial sector and exchange rate fail to explain the variation in industrial output during the period under consideration. The inability of bank credit finance and government expenditure to explain the variation in industrial output is an indication that most of our industrialists have limited access to bank credit, presumably due to slow pace of disbursement and stringent lending conditions such as collateral requirement and high interest rates. However, the past intervention effort of the government in the industrial sector is commendable but her inability to evolve a vibrant financial strategy to ensure all round liquidity of bank credit finance as well as ensuring proper funding of the sector is worrisome.

5.0 Recommendations

The following recommendations evolved from the findings:

- (i) Macroeconomic policies that would enhance the capacity utilization rate of industries should be pursued as this would enhance industrial output. Such policies should be directed towards improving upon the erratic power supply and revamping ailing industries. The recent privatization of the power sector is a good step towards addressing the erratic power supply in the country.
- (ii) Also, there is need to pursue policies that would promote political stability and foster national integration. Such policies should be tailored towards minimizing corruption, ensuring timely and equitable provision and distribution of basic amenities and infrastructure as well as upholding democratic tenets such as respect for rule of law. The recent passage into law of the freedom for information (FOI) bill would avail the citizens the immunity to question government integrity and adverse policies, thereby putting government on check.
- (iii) Effort should be directed towards enhancing access to bank credit finance by industrialists. If possible, apart from relaxing credit conditions such as provision of collateral and reducing interest rates charge by banks, credit guarantee schemes such as the Agricultural Credit Guarantee Scheme Fund should be introduced in the industrial sector. Government on its part should ensure that money allocated to the industrial sector through participatory banks is disbursed timely and at Central Bank of Nigeria's approved rates and conditions.

References

- Ajayi, D. D. (2002). Industrial Subcontracting Linkages in the Lagos Region, Nigeria. *The Nigerian Journal of Economic and Social Studies (NJESS)* 43(2), 265-272.
- Akpan, S. B., Edet J. Udoh & A. A. Umoren (2012a). Modeling the Dynamic Relationship between Food Crop Output Volatility and Its Determinants in Nigeria. *Journal of Agricultural Science; Vol. 4, No. 8; Pp 36 – 47.*
- Akpan Sunday Brownson, Inimfon P. Vincent & Bassey, N. Edet (2012b). The Empirical link between cassava output growth rate and some macro-policy variables in Nigeria (1970-2011). Proceedings of the annual Conference of Nigerian Association of Agricultural Economics (NAAE), held at Obafemi Awolowo University, Ile Ife, Osun State, Nigeria September 25th-27th
- Anderson, D. (1988). Small industry in developing countries. World Bank Report staff working paper No. 518. Washington D C.
- Andreou, E., Pelloni, A., & Sensier M. (2008). *Is volatility good for growth?* Evidence from the G7. Centre for Growth and Business Cycle Research, Discussion Paper Series No. 97, University of Manchester.
- Anyanwu, C. (1996). Efficient Administration of Credit for Small Scale Industrial Development. Bullion Publication of the Central Bank of Nigeria, Vol.20, No.3.
- Anyanwu, J. C., Oyefusi A. oaikhenan H., & Dimowo, F. A (1997). *The Structure of the Nigerian Economy (1960-1970)*. Onitsha Joanee Educational Publisher.
- Asamoah, G. N. (2008). The impact of the financial sector reforms in savings, investment and growth of GDP in Ghana. *International Businaess and Economic Research Jouenal* 7(10), 73-84.
- Central bank Of Nigeria (2011). Annual statistical Bulletin, Vol. 22, December 2011.
- Chizea, B. (1993). Interest rates, Exchange rates and inflation. *The Nigerian banker. Journal of Chartered Institute of Bankers* pp 6-10
- Edirisuriya, P. (2008). Effect of financial sector in SRI Lanka: Ev idence from the banking sector, *Asia Pacific Journal of Finance and banking Research* 1(1), 2008.
- Federal Republic of Nigeria (2003). *Nigerian Economic Policy 1999-2003*, pp 16
- Federal Republic of Nigeria (1993). Report of the Technical Committee on the Establishment of Nigerian Agricultural Credit Guarantee Scheme.
- Iwayemi, R. (1995). *Macroeconomic Policy Issues in an open Developing Economy: A case study: Ibadan national Centre for Economics, Management and Administration.*
- Loto, M. A. (2012). The determinants of output expansion in the Nigerian manufacturing industries. *Journal of Emerging Trends in Economics and Management Sciences (JETEMS)* 3(6): 991-996.
- MacKinnon, J. G. (1991). Critical Values for Cointegration Tests, Chapter 13. In: RF Engle, CWJ Granger (Eds.):*Long-run Economic Relationships: Readings in Cointegration*, Oxford: Oxford University Press.
- Mesike CS, Okoh R. N., Inoni OE 2010. Supply Response of Rubber Farmers in Nigeria: An Application of Vector Error Correction Model. *Agricultural Journal*, 5(3):146-150
- Narayan, P. K., Narayan, S., & Smyth, R. (2009). Understanding the inflation-output nexus for China. *China Economic Review; Vol. 20*, Pp. 82-90.
- National Population Commission (NPC). (2006). *National Census Data*. www.population.gov.ng/. Retrieved 19- 09 -2012.
- Ndebbio, J. (1987). Distortion in industrial development strategies in Nigeria: can small scale enterprises survive? In: distortion in the Nigeria economy. Publication of the Nigerian Economy Society (NES), Ibadan: pp5.
- Nigerian Institute of Social and Economic Research (NISER,2000). NISER survey of business conditions, experience and expectation in the manufacturing sector. A publication of the NISER Annual Monitoring Research Proqramme (NAMRP). Nigerian Institute of Social and Economic Research (NISER).
- Nwakoby, C. I.,(2004). Role of Financial Institutions in Private Sector led development in Nigeria. Paper presented in the Thirteenth Annual Conference of the Regional Research Unit of Central Bank of Nigeria, Motel Benin Plaza, Benin City, Edo State, 8th- 12th Nov 2004.
- Obitayo, K. (2001). Creating an enabling environment for small scale industries. *Central Bank of Nigeria Bullion* 25(3): 33-36.
- Ogunpola, G. (1985). The rational and relevance of National Economic Policies in the development of African Countries: A case study, Unpublished, pp 25-27
- Okpan, M. (1999). *Naira Devaluation and Industrial Developm,ent in Nigeria 1970-1995*. Unpublished M.Sc Dissertation Submitted to the department of Economics, University of Calabar, Cross River State.
- Ogugiuba, K., Ohuche, F. and Adenuga, A. (2004). Credit availability to small and medium scale enterprises in Nigeria: Importance of new capital base for banks. Background and Issues working Paper 23 (1), Retrieved March 2, 2010 from <http://www.heritage.org>.
- UNECA (2007). *Economic Report on Africa 2007: Accelerating Africa's Development through Diversification*. Addis Ababa, Ethiopia: UNECA.
- Uwatt, U. (1999). Financial sector reform and interest rate behavior in Nigeria. An empirical investing action. *International Journal of Social Science* 1(1), 48-75
- World Bank (1995). *Nigeria: A diagnostic review of small and medium scale enterprises sector (Interim Report)*. Washington D C.
- Yusuf SA, Falusi AO (1999). Incidence analysis of the effects of liberalized trade and exchange rate policies on cocoain Nigeria: An ECM approach. *Rural EconomicDevelopment*, 13: 3-14.