

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Most developing nations define industrialization as a central objective of their economic policy they see; industrialization goes with agricultural progress as an integral part of growth and structural change. Some economist and analysts are of the view that industrialization plays a major role in the economic growth and development of any nation.

Thus in this research work, effort is made to assess the impact of industrialization on economic growth of Nigeria. Before colonial rule in Nigeria, there were numerous economic activities undertaken by Nigerians. Nigerians were among the most active and industrious group of people in Africa. The economic activities were based mostly on primary production especially on agriculture. Such activities were engaged in, included farming, hunting and quarrying. The coming of the white men to Nigeria recorded more changes in life style of Nigerians. The economy was changed from its agricultural based to a market based for imported manufactured product.

The colonial masters at the same time took the Nigerian economy as a base for the supply of resources both mineral and agricultural raw materials for industries in their own country. The worst aspect of it was that they exploited these resources at a cheap price, but when their product was brought into Nigeria, the prices were placed so high to exploit the nation.

Furthermore, the colonial lords at no times endeavoured to industrialize Nigeria, and Nigerians were not motivated to involve themselves in industrial activities. All these contributed to Nigeria being both technologically backward and industrious. The attainment of political independence by Nigeria in 1960 made it possible for the 1st national development plan in Nigeria in 1962. The main aim of this plan was for industrialization. Industrialization in Nigeria was aimed at the achievement of import substitution and even export promotion.

Industrial development and economic growth are necessary in any developing country. In an economy where there is availability of industries, the majority of unemployed people will engaged themselves in productive activities. If industrial development is well encouraged it will be of great help to the

developing economy and it will also go a long way in enhancing economic growth.

Industrialization is the process through which the primary based economy becomes industrialized.

According to Ojo (1987:256) industrialization could be seen as the process by which the industrial sector of such a country or region increases its share in gross domestic product (GDP), employment, poverty alleviation efforts, investment and so on. From the works of Shaw and Emer(2000:13) industrialization is the process where manufacturing becomes increasingly important in the economic structure of the society.

According to Holis, Bacheney (1999:624) said that industrialization is the main hope of most countries trying to increase their level of income. Industrialization in Nigeria has the idea of transforming the peasant or idle workers of Nigeria into full time or part time industrial workers and on the other hand it will transform the structure of Nigerian economy. The standard of living of the people in the economy will be improved and economic growth is gingered.

1.2 STATEMENT OF PROBLEMS

The need for industrialization has become one of the problems facing Nigeria. Not with standing that industrialization can lead to economic development, creation of employment pportunities, increases in productivity, increase in foreign exchange etc.

Insufficient capital is one of the reason Nigerian economy is termed underdeveloped or developing. Huge amount of capital is needed for an industrial development because it is a capital project that needs both labour intensive and capital intensive in abundant. When such funds are made available for industrialization and it is not properly utilized, it tends to create problems in the economy.

Presently in Nigeria, there are sources of finance specified to industrial sector made available by the government but in spite of them many industries have gone into collapsing while a good number are making effort to survive. The provision of finance for industries is generally problematic world-wide and is therefore not specific to developing countries like Nigeria.

The study is therefore necessary to enable a thorough investigation of financial problems of the industrial sector especially that of the manufacturing industries and various

government agencies setup to provide credit facilities to the industrial sector to ensure the continual growth of this sector for rapid economic development of this nation. This work intends to find out,

- (a) Does industrialization have any impact on economic growth in Nigeria?
- (b) What is the nature or relationship between economic growth and industrialization?

1.3 OBJECTIVES OF THE STUDY

It has been observed that most poorly industrialized countries of which Nigeria is one, has not realised their economic development goal even with the existence of manufacturing industries within the economy.

These are the objectives of the study.

- (a) To analyse the performance of industrialization and its effect to Nigerians in economic growth.
- (b) To analyse the relationship between industrialization and economic growth.
- (c) To determine the contribution of industrialisation to Nigerian economic growth.

- (d) To identify the determinants of industrialization in Nigeria.
- (e) To make policy recommendations.

1.4 STATEMENT OF HYPOTHESIS

The study is guided with both null and alternative hypothesis which is denoted using H_0 for null hypothesis and H_1 for alternative hypothesis.

H_0 - Industrialization has no significant effect on Nigerians economic growth.

H_1 - Industrialization has significant effect on economic growth.

1.5 SIGNIFICANCE OF THE STUDY

The significant of the study lies on the fact that it will expose the extent to which industrialization has contributed to the economic growth in Nigeria. It will highlight some obstacles hindering Nigeria from becoming an industrialized nation.

This work will be relevant to entrepreneurs and government by directing them on the easiest means of embarking on an industrial development plan. It will help in establishing the relevance of industrialization in order to uplift the economy. This study will reveal that the industrial sector is engine for economic growth and development.

This work will assist students of economics, estate management, urban and regional planning etc on how to get jobs. This means that with the help of established industrial sector, poverty will reduce and eliminated because people will be employed and it will increase their standard of living and the economy to grow.

1.6 SCOPE OF THE STUDY

The research work deals with the impact of industrialization on economic growth in Nigeria. This research work covers the period of years (1980-2010) with reference to limitation in a research project like this.

The data used is a secondary data which was obtained from the publication of Central Bank of Nigeria. The analytical tools employed on this research include t-test and regression analysis.

1.7 LIMITATION OF THE STUDY

A study of this nature cannot be done without some problems and as such it was considered by many factors namely time, finance and data.

TIME- Here the researcher was having lectures, preparing for examination, engaging in such activities and domestic works as well.

FINANCE- financial inadequacy was the major limitation for this work. The researcher was financially independent as a student and materials needed for this research was not provided.

DATA- the controversial nature of Nigerian data delayed this work. It took the researcher a lot of time before the harmonization of data used,

1.8 OPERATIONAL DEFINITION OF TERMS

Economic Growth

This can be defined as the increase in the production and consumption of goods and services. It is also the increase in the output that the economy produces over a period of time.

Economic Development

This refers to the sustained, concerted actions of policy makers and communities that promote the standard of living of the economy. Economic development is also defined as the quantitative and qualitative changes in the economy such as actions like human capital, critical infrastructure and regional competitiveness and so on.

Industry-

An industry is a group of firms that produce similar product or a group mainly in manufacturing physical services

Export Promotion-

This is defined as a strategy for promoting economic development in less developed countries. This involves running an open economy relying on a foreign market

Entrepreneur-

A person who organises, operates and assumes the risk for a business venture. He receives profit and bears losses.

Gross Domestic Product (GDP)-

The gross domestic product is the market value of all officially recognised final goods and services produced within a country in a given period of time.

Import Substitution-

A strategy for the industrialization of less developed countries, concentrating initially on replacing imports by domestically produced substitute

Industrialization-

This is the process of moving resources into the industrial sector or it is the transformation methods of production involving the use of traditional or modern equipments or mechanized equipments.

CHAPTER TWO

LITERATURE REVIEW

2.1 THEORETICAL REVIEW

Industrialization is a pre-requisite for economic development, (Meir, 1975) defined industrialization as the process of developing an economy founded on the mass manufacturing of goods.

(Tadaro, 1977) defined industrial development in three inter-related conductional ties. The core values of development are life sustenance.

That is the ability to provide basic necessities self esteem and freedom from servitude.

Some economist like (Terriba, Edozie, Kayode, 1981) equated industrial development with industrialization, that in most developing countries, industrialization has by and large become synonyms with development and the reasons are not hard.

(Okowa, 1996) also classified under-development in terms of modern industrial development. (Ezekwe, 1996.) defined industrialization as the extensive development of the manufacturing and productive system of an area.

Developing industry view industry as the leading sector essential for high rates of present and future growth and development. Industry is realized to satisfy the rapidly growing demand and manufacturing goods which developing nations cannot because of balance of payment difficulties. (Njoyong, 1993) believed that one of the arguments for industrialization as a development strategy is that various industries enjoy specialization and increasing return and therefore the scope of achieving a rapid economic growth is greater in the manufacturing section than in the agricultural section. (Ogbonna B.M, 2004.) also defined industrialization as a slow steady and patient process of learning. It is a step by step process of the development of productive capacity of the economy.

Developing countries has realized the benefit of industrialization as a tool for accelerated structural transformation of their economy.

Diaku, (1989.) Said that in any industrialization process, the main handicap is the inadequacy of financial institutions and techniques for channelling domestic savings and foreign financial assistance into productive investment.

Diaku said that evidence indicates that a part from acute shortage of technical and managerial skills and poor financial management, capital is a source of great concern to the entrepreneurs in this sector.

Uzaga, (1981.) Classified the source into internal and external such business should arrange its finance from the best source available to it.

He is of the opinion that the method of financing employed will depend on a number of factors. Some of the factors are the money market conduction at the time he wishes to raise the funds and the time he or she to raise the funds and the interest rates and conditions of repayment.

Ezejulue, (1988.) Identified these sources and classified them according to the time for which funds are used. That is short term, medium term and long term.

According to him short-term source include retained profit, over drafts, credit cards, trade credit, factoring, accrued taxes and accounting method. Medium term sources included banks, loans and government sources.

Long term source included personal savings, gifts and inheritance, sale of shares and venture nature capital, mortgages, lease back and private loans.

Another source of financing industries has been identified by other contributors as capital market in the aspect of wide financial market. Financial markets are not physical geographical locations where people assemble to exchange goods and services neither the goods traded are tangible goods.

According to (Afam, 1992.) he observed that financial market are networks of human inter-relationships backed by conventions both of which enable people and organisation who need money to come into contract with surplus unit.

(Nwankwo, 1978.) defined capital market as that which consist of structural practices and institutions which enables users of long-terms funds to source such funds from the surplus unit within or outside the economy. He summarized the following as basis performed by the capital market, they include.

- (a) Provide local opportunities for borrowing and lending purposes

- (b) Provide facilities for the quotation and ready market shares stocks and opportunity facility to raise capital in the market.
- (c) Introduce a code of conduct, check abuses, regional activities of the operators in the market. These are some of the component listed below.
 - (1) Nigeria stock exchange (NSE)
 - (2) Securities and exchange commission (SEC)
 - (3) Nigeria agricultural bank (NAB)
 - (4) Nigeria industrial development bank (NIDB)

2.1.1 THE RATIONAL AND REASONS FOR INDUSTRIALIZATION.

Most developing countries regard industrialization as a central objective of their economic policy they see it as integral part of a development and structural change.

The following are the reasons for industrialization.

1. **To increase export and import substitution** with industrialization in a country, more goods will be exported to

another country leading to favourable balance of payment and also reducing the heavy dependency on imported materials and goods. With industrialization also there will be an increase or improve in output i.e. GDP.

2. **To reduce dualistic economy:** with industrialization most of the less developing countries of the world will be developed that is the gap between the developed countries and developing countries (the rich and poor).

3. **To alleviate poverty and standard of living:** With industrialization the standard of living of the people will increase or improve as a result of increase in goods and services, basic amenities and income per capital.

4. **To improve and explore the natural resources:** industrialization will help in the exploration and utilization of the abundant natural resources in the country and by so doing it will help in economic growth and generate revenue to government.

5. **To reduce unemployment rate:** industrialization will reduce the number of people that is unemployed in the country when more industries are established by both foreign and domestic investors.

2.1.2 PROBLEMS OF INDUSTRIAL DEVELOPMENT IN NIGERIA:

Looking at our country, it has been shown that industrialization has not helped in reshaping the economic structure of Nigeria. One may ask of the responsible development for the slow rate of industrial development. The problems militating against rapid industrialization growth are discussed as follows.

(a) Lack of capital/finance in the problems of industries:

whether by their owners or those interested in their well being their financial problems have tended to over shadow others which they also encounter in their daily struggle for survival. The problem would be caused by unwillingness of the role proprietors to allow the participation of outsiders in what is usually known as personal or family ventures.

According to Okeke,(1991) industries are afflicted with difficulties in Nigeria with over abundant of problems, chief among them is lack of capital and over reliance on market serve.

Owualah, (1992) observed that the financial problems of industries arises from multi-famous sources which broadly can be classified as endogenous and exogenous. The endogenous

problems include under-capitalization ,poor accounting and record keeping management incompetence and financial discipline. Exogenous financial problems is partly due to the behaviour of institutional leaders and capital market to past policy biases.

Finally it is also important to state that because of our depressed economy and our debt problem, industrialist are finding it difficult to obtain enough trade credit or source capital abroad to enable them expand their operations. It is also difficult to attract direct foreign investment capital or obtain multilateral and due to high rate of inflation prevailing in the country.

(b) Lack of technical know-how :The dearth of technological know-how and shortage of managerial manpower is another problem facing the Nigerian industries. According to Babington, Ashaye (1985). It is rare for the entrepreneur to have strong managerial and technical expert. He said that many industries entrepreneur engage in industries where they do not have appreciable technological back g round or experience.

Finally Akinkugbe, (1980). State that lack of efficient organisational structure and practice of modern management

techniques in industries could be attributed to the lack of understanding of management practice.

(c) **Weak raw materials based:** This is another problem of Nigerian industries due to poor state of its agricultural sector, lower weak production of raw materials; these resulted to excessive reliance on the external sector for capital equipment and raw materials.

(d) **Inadequate basic infrastructural facilities:** infrastructural facilities like road, network, railway, river transportation, airways, water facilities, irrigation, machinery and equipment hampered industrial development in Nigeria, it has resulted to closing of the existing industries while new ones are not yet to come and also inconsistent power supply has contributed to low production of the Nigerian industries. Currently Michelin tyre has closed in Nigeria because of these problems. Other problems include,

(c) **Institutional and administrative bottle-neck:** This includes various policies government put in place like excessive tax and these really decreased and reduced the coming of foreign industries.

(d) **Militancy**: This is one of the major problem against industrial development of Nigerian region. These militants have vandalized pipe lines given or supplying gas to these industries. Kidnapping of their workers there by requesting a lot of money from these industries in that region.

2.1.3 ROLE OF MANUFACTURING INDUSTRIES IN THE DEVELOPMENT OF NIGERIA ECONOMY

Nigeria is fully educated on the role manufacturing industries plays in the transformation of her vast resources even though they have been a neglect of the sector. Even at that there has been series of incentives and benefits prepared from time to time to encourage the revival and growth of the manufacturing sector. This could be due to dependency on the oil sector which has been experiencing a slump in the price per barrel and the even ragging desire to develop other sectors of the economy for general and continuous economic growth and development. Especially towards the end of last century from (1980s) to the late 1990s up to 2000 its role or contributions are as follows

(1). **Dependency**- manufacturing industries in Nigeria has brought an economical free and not depending on the developed

economy for exporting goods and services there by creating more demand for goods and services

(2). **Employment Generation**- manufacturing industries reduce the situation of unemployment in the country with establishment of more industries by Nigerian (private sector), the government and foreign industries (owned by foreigners) more people are been employed and these will result to an increase in income and standard of living of people

(3). **Technology Transfer**- manufacturing industries also facilitate the transfer of technology to economy through foreign manufacturing industries established in Nigeria.

(4). **Capacity utilization and GDP**- Company utilization entails the ability of industries and firms to operate within the ambit of the installed capacity, it involves being able to take advantage of the available raw materials and other inputs both internally and externally at selective cost so as to make a meaningful impact. This has help in the growth and development of the economy.

(5). **Industrial production**: manufacturing industries in Nigeria, so far has done well in the production of goods to the nation. Recent study has shown that Nigerian goods are been exported to

other countries and with the ban of imported products in the country. Nigeria now patronize made in Nigerian goods.

Table 1.1 capacity utilization of industries in Nigeria.

YEAR	MAN	CBN
1992	35.55	41.8
1993	32.33	37.2
1994	28.39	30.5
1995	27.86	29.3
1996	32.48	26.5
1997	35.42	37.2
1998	31.70	32.4
1999	32.50	34.3
2000	40.22	52.7
2001	38.69	42.3
2002	31.55	35.6
2003	32.50	37.3

Source: Manufacturing Industrial Survey CBN Annual Report and Statement of Account.

2.1.4 EFFECT OF INDUSTRIALIZATION IN THE ECONOMY IF NOT CHECKED

Despite the various contributions of industrialization in the development or growth of the economy in Nigeria, it created problems to the economy. These are the problems.

(a) **Deterioration of the environment:** industrialization unless carefully managed causes deterioration of the environment. It entails sacrifices of environmental quality for more goods. Examples are air pollution and water because industrialization increases the number of industries that emit dangerous toxin waste into the atmosphere.

(b) **Urbanization-** industrialization causes urbanization and this resulted in the migration of people from rural to urban areas in search of job opportunities.

(c) **Industrialization requires the economy to be changing-** it requires rapid adjustment of the people which can cause much upset and misery to individuals affected.

2.2 EMPIRICAL REVIEW

Some empirical studies have been carried out by some great economist that is similar or related to the topic to help simplify

the researcher(s) work in the field of investigation on the impact of industrialization on economic growth in Nigeria (1980-2010) Saver, Gawande and Li, (2003) performed test of the big push industrialization hypothesis of Murphy, Shelter and Vishny, (1989) for selected industries including iron and steel, in a set of emerging countries and primary results supported the theory that a role for activist, government policy in the industrialization process is necessary in other to achieve economic growth.

A survey carried out by Ngoc, Phanminh on exports and long run growth in Vietnam between (1975-2001) with the purpose of examining the long run impact of export in GDP growth in Vietnam in the period 1975-2001. The application of this policy leads to the expansion of industries producing consumption, inputs, and capital goods at the expense of export sellers.

VOHRA, RUBINA carried out a research on export and economic growth from less developed countries (India, Pakistan, Philippians, Malaysia, and Thailand) between 1973-1993.

The empirical result indicates that exports have a positive and significant impact on economic growth when a country has achieved some level of economic development or industrialization.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 DESIGN OF THE STUDY

In the course of these research on the impact of industrialization on economic growth in Nigeria. Gross domestic products will be used to regress against industrial output (INDO), interest rate (INTR) and manufacturing capacity utilization (MCUT).

Thus $y = f(x_1, x_2, x_3)$

$GDP = f(INDO, INTR, MCUT)$

Where

GDP= gross domestic product

INDO= industrial output

INTR= interest rate

MCUT= manufacturing capacity utilization

3.2 AREA OF THE STUDY

The area of the study covers the Nigerian economy between the year 1980 to 2010. In 70's the Nigerian economy witnessed oil

boom. The economy implemented both substitution and export promotions such as SAP, NEEDS were implemented within this period.

3.3 SOURCE OF DATA

The data used in this research work is a secondary data from the publication of Central Bank of Nigeria (CBN) statistical bulletin and Annual Report account as well as the publication of the federal bureau of statistics which the time reference falls within 1980 to 2010. This will enable us ascertain the appropriate data and information necessary for the study.

3.4 METHOD OF DATA ANALYSIS

The method that shall be adopted is the linear regression method by applying ordinary least square technique or method. The reason for choosing this method is because firstly, the parameter estimates obtained by ordinary least square have some optimal properties of being the best linear unbiased estimator (BLUE). Secondly, the computational procedure of ordinary least square is fairly simple as compared with other econometrics techniques.

Thirdly the machines of ordinary least square method are simple to understand. Finally, the least square method has been used in a wide range of economic relationship with fairly satisfactory results.

The analysis will use E-views and other economic package which will help to regress the data, find out the correlation coefficient (R), coefficient determination (R^2) standard error test and Durbin Watson test on the model stated.

3.4.1 MODEL SPECIFICATION

In order to achieve the objective of this work, the multiplying linear regression model of statistical analysis is employed. Thus mathematically represented

$$Y = f(x_1, x_2, x_3)$$

$$GDP = f(INDO, INTR, MCUT)$$

$$GDP = B_0 + b_1 INDO + b_2 INTR + b_3 MCUT + UT$$

Where

B_0 = constant or intercept

$B_0 - b_3$ = the coefficient of the explanatory variables.

Ut = stochastic error term

INDO=industrial output

INTR=interest rate

MCUT=manufacturing capacity utilization

GDP= gross domestic production

DEFINITION OF VARIABLES

GDP- the gross domestic production is essential in this study because of its major determination to the level of economic growth in an economy. It serves as a dependent variable in the model. It dictates growth in an economy

INDUSTRIAL OUTPUT

Industrial output is a measure of output of the industrial sector of the economy. The industrial sector includes manufacturing, mining and utilities. Although these sectors contribute only a small portion of GDP (gross domestic product) they are highly sensitive to interest rate and consumer demand.

INTEREST RATE

Interest rate is the rate at which interest is paid by borrowers for the use of money that they borrow from a lender.

3.5 TECHNIQUES EVALUATION

The result of the model will be evaluated on the basis of three criteria, which are the: a priori, criteria, statistical criteria, and the economic criteria.

3.5.1 A PRIORI CRITERIA

(i) It is expected that our manufacturing capacity utilization will have a positive relationship with GDP. (ii) it is expected that our industrial output will have a positive relationship with GDP. (iii) finally it is expected that our energy consumption will have a positive relationship with GDP.

Variable**Expected sign**

Industrial output (INDO)	Positive (+)
Interest rate (INTR)	Positive (+)
Manufacturing capacity utilization (MCUT)	Positive (+)

3.5.2 STATISTICAL CRITERIA (FIRST ORDER TEST)

Statistically theory defines test and it's use in evaluating the reliability of the parameter estimates. According to Gujarati, (2004:148) a test of significance is a procedure by which sample results are used to conduct a hypothesis. T- Statistics test- the t-test will be carried out in order to determine the significance of the parameter estimates of the model.

Standard error test- the estimates obtained from a given set of a sample observation are not free sampling errors. It is therefore necessary to measure the size of the error and subsequently determine the degree of confidence in the validity of the obtained estimate. The test helps us to know if our estimates are statistically significant or whether the sample from which we made estimations might have come from a population whose parameter value is zero Kout soyiannis.

The test tells us whether there is a strong relationship between the regress and the regressors. The R^2 shall be carried out to test the strength of the determination of the independent variable in explaining the change in the dependent variable. R^2 is reported as a multiple coefficient determination adjusted to take into account the degree of freedom associated with the sum of squares.

3.5.3 ECONOMIC CRITERIA (SECOND ORDER TEST)

They are test set by theory of econometric and arrived at investigating whether the assumption of the econometric method employed are satisfied or not among the test are test for auto correction.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULT

4.1 PRESENTATION OF REGRESSION RESULTS.

The result of the estimated models of this study are presented and analyzed in this section,

TABLE 4.1 Result Summary

VARIABLE	COEFFICIENT	STD. ERROR	t-value	t-prob	PartRY
CONSTANT	-1.4033e+007	8.5324e+006	-1.645	0.1121	0.0942
INDO	0.23802	0.12258	1.940	0.0631	0.1266
INTR	3.1747e+005	2.6292e+005	1.207	0.2381	0.0531
MCUT	2.8416e+005	1.3048e+005	2.178	0.0387	0.1543

$R^2 = 0.326709$ $F(3,26) = 4.2054 \{0.0149\}$, $DW = 1.03$

4.2 INTERPRETATION OF RESULTS

4.2.1 ANALYSIS OF REGRESSION OF COEFFICIENTS

In this section, the coefficients of the explanatory variables are analyzed based on their effects on the explained varied.

a. Constant:

The coefficient of the constant has a negative value of -1.4033, which means that when all the explanatory variables (INDO, INTR and MCUT) are held constant, the value of the gross domestic will be -1.4033.

b. Industrial Output (INDO):

The coefficient of industrial output is 0.23802 showing a positive value in variation. It implies that a unit increase in industrial output variation causes the gross domestic product to increase by 0.23802 units.

c. Interest Rate (INTR):

The coefficient of interest rate is 3.1747, which is positive; The Negative sign shows that a unit increase in interest rate will increase the gross domestic product by 3.1747 units.

d. Manufacturing Capacity Utilization (MCUT):

variation in the manufacturing capacity utilization showed a positive value of 2.8416, showing that a unit increase in manufacturing capacity utilization makes the gross domestic product to increase by 2.8416 units.

4.2.2 Analysis of economic a Priori expectation

In this section we will ascertain if the obtained signs conform to economic theory or the a priori expectation.

variables	Expected sign	Obtained sign	conclusion
INDO	+	+	conforms
INTR	+	+	conforms
MCUT	+	+	conforms

From the above table, all the obtained signs conform to the a priori expected sign.

4.2.3 STATISTICAL CRITERIA FOR EVALUATION OF RESULTS

These tests are determined by statistical theory and aim at evaluating the statistical reliability of the estimates and parameters of the model from the sample observation. The first order test is carried out based on the following: R^2 , t- test and F- test.

1. Coefficient Of Determination (R^2):

In our models, $R^2= 0.326709$, which implies that approximately 33% of the variation in the dependent variable is caused by the explanatory variables in this model.

2. The T- TEST:

This test is conducted to ascertain the significant of each of the parameters or variables. In doing this, we employ the two – tail test which will compare the t- calculated for each of the explanatory variable with the t- tabulated.

At 5% level of significance

N-K degree of freedom

$$\alpha = 5\%$$

$$\alpha/2=0.05/2=0.025$$

$$N-K=30-4=26$$

Decision rule:

If t-cal is greater than t- tab at 5% level of significance, we reject the Ho and accept if otherwise.

Table 4.2: t- test summary test

variables	T- values	T- tab	conclusion
CONSTANT	-1.645	±2.0555	Not significant
INDO	1.942	±2.0555	Not significant
INTR	1.207	±2.0555	Not significant
MCUT	2.178	±2.0555	significant

The above result shows that all the variables except MCUT are statistically not significant since their t-cal is less than the t- tab.

3. THE F- TEST:

The F – test, which follows an F – distribution, measures the overall significance of the model.

Hypothesis test:

$H_0: B_1 = B_2 = B_3 = 0$ (the model is statistically insignificant)

Against

$H_1: B_1 \neq B_2 \neq B_3 \neq 0$ (the model is statically significant)

At $\alpha = 5\%$ level of significant, with $n - k$ degree of freedom.

Decision rule:

Reject H_0 if $F\text{-cal} > f\text{-tab}$ and accept H_1 if $F\text{-cal} < F\text{-tab}$.

From our analysis $F\text{-cal} > F\text{-tab}$ i.e. $4.2054 > 2.98$, we therefore reject H_0 and accept H_1 which states that the model is statically significant.

4.2.4 ECONOMETRIC CRITERION (SECOND ORDER TEST)

i. Normality Test:

This test is carried out to check whether the error term follows the normal distribution. The normality test adopted is the Jarque-Bera (JB) test of normality.

The JB test of normality is asymptotic or large sample test and it is based on the OLS residuals. This test computes the skewness and kurtosis measures of the OLS residuals and uses the chi-square distribution (Gujarati, 2004: 148)

Hypothesis: test:

HO: $B = 0$ (The error term follows a normal distribution)

Against

HI: $B \neq 0$ (The error does not follow a normal distribution)

At a = 5% with 2 degrees of freedom.

Decision rule:

Reject H_0 if $X^2\text{-cal} > X^2\text{-tab}$, and accept H_0 if otherwise.

From the result obtained from JB test of normality, $JB = 10.986$, and from chi-square table $X^2\text{ tab} = 5.991$. Therefore since $X^2\text{-cal} = 10.986 > X^2\text{-tab} = 5.991$ at 5% level of significance, we reject H_0 and

conclude that the error term does not follow a normal distribution.

ii. TEST FOR AUTOCORRELATION:

The conventional Durbin Watson the statistics is employed. We compare the established lower limit d_L and upper limit d_U of DW based on 5% level of significance and k degrees of freedom.

Where k = no of explanatory variables

Excluding the constant.

@ 0.05 (5% significance level)

The decision rule is to reject H_0 if $\chi^2\text{-cal} > \chi^2\text{-tab}$.

From the heteroscedasticity test result, $\chi^2\text{-cal} = 17.307$ (@ 6 degrees of freedom), while from the $\chi^2\text{-tab}$ (@ 0.05 degrees of freedom) = 12.592.

Since $\chi^2\text{-cal} > \chi^2\text{-tab}$, we reject H_0 and conclude that the variance of the error term is not constant.

4.3 EVALUATION OF HYPOTHESIS:

The hypothesis has earlier been stated as:

H₀: industrialization has no significant effect on the Nigeria economic growth.

H₁: industrialization has a significant effect on the Nigerian economic growth.

Going strictly by the obtained result, all the variables conformed to the “a priori” expectation while one of the variables included in the model (manufacturing capacity utilization) showed a robust significance impact on the gross domestic product.

From the observation above, we reject the null hypothesis and accept the alternative hypothesis that industrialization has a significance effect on the Nigerian economic growth (i.e since manufacturing capacity utilization has a positive significant effect).

TABLE 4.3: Decision Rule

NULL HYPOTHESIS	DECISION	IF
No positive autocorrelation	Reject	$0 < d^* < d_L$
No positive autocorrelation	No decision	$d_L \leq d^* \leq d_U$
No negative autocorrelation	Reject	$4 - d_L < d^* < 4$
No negative autocorrelation	No decision	$4 - d_U \leq d^* \leq 4 - d_L$
No autocorrelation positive or negative	Do not reject	$D_U < d^* < 4 - d_U$

From the result, the estimated $d^* = 1.03$, and the tabulated DW with 5% degree of freedom for 30 observations are $d_L = 1.28373$ and $d_U = 1.56661$. therefore d^* falls within the region of $0 < d^* < d_L$, we concluded that there the presence of positive serial correlation.

III. TEST FOR MULTICOLLINEARITY

The test was carried out using correlation matrix. According to Barry and Feldman (1985) criteria “multicollinerarity is not a problem if no correlation exceeds 0.80”.

TABLE 4.4: Correlation matrix.

	GDP	INDO	INTR	MCUT
GDP	1.000			
INDO	0.4420	1.000		
INTR	0.09428	0.004781	1.000	
MCUT	0.4219	0.2929	-0.2891	1.000

From the above table; we can conclude the multicollinearity does not exist between any pair-wise.

iv. **HETEROSCDASTICITY TEST**

This test is carried out to evaluate the levels of distribution of the error term. It is used to test the variance of error term is constant. It follows chi-square distribution with degrees of freedom equal to the number of regression in the auxiliary regression excluding the constant.

Test hypothesis:

H₀: Homoscedasticity (the variance of the error term is constant)

H_i: Heteroscedasticity (the variance of the error is not constant)

CHAPTER FIVE

SUMMARY, RECOMMENDATION, AND CONCLUSION

5.1 SUMMARY

This research work has examined performance and contributions of the manufacturing industries (sector) its impact on economic growth in Nigeria. It was necessitated by the perceived progressive decline in capacity utilization of manufacturing firms in Nigeria, which occasioned massive lay off worsening economic conditions. At this stage it is pertinent to actually highlight the various write up of all the chapters. This goal, the salient points are clearly set out.

Chapter one is the introductory chapter of this study, it is composed of background of the study, statement of problems, objective of the study, research questions, statement of hypothesis, scope of the study, limitations of the study and lastly definition of terms.

Chapter two studies the literature review work. It further went into development plan and the Nigerian industrial economy trying to bring out a picture of the growth and establishment of

manufacturing industry of Nigeria, which encompasses the structure of manufacturing industries in general. It also shows the trends and scope of manufacturing industries in Nigeria. In this chapter the rational reasons for industrialization are clearly stated, problems of industrial development of the Nigeria, the role of manufacturing industries in the development of the Nigerian economy and the effects of industrialization in the economy if not properly checked. Then finally the empirical review carried out by some economist that is related to the topic.

Chapter three shows the design of the study, area of the study, source of data, method of data analysis, specification of the model, the techniques of evaluation which includes the Apriori criteria, statistical criteria and economic criteria and finally in chapter four shows the result of the regression that there is a negative value in capacity utilization implying that Nigeria manufacturing industries are not utilizing their capacity and there is need for them to utilize their capacity in other to increase their productivity while interest rate shows a positive relationship with gross domestic product. Finally industrial output shows a positive relationship with gross domestic product meaning that

there is constant increase in the industrial output in other for the growth and development o f the Nigerian economy.

5.2 RECOMMENDATION

Based on the findings of this research, the following recommendations were made on how to improve economic growth in Nigeria through industrialization.

1)In the previous chapters industrialization of developing countries is generally characterized by import substitution, that is development of the domestic production, manufactured goods previously transported from abroad, it was shown that import substitution policy is a faculty one therefore, there is need for government to direct their policies against importation of foreign goods and less export is bound to suffer loss in foreign exchange.

2) Manufacturing Association of Nigeria MAN- persistently called on the government to streamline the number of taxes being imposed on the manufacturing industries In the face of the confluence of constraints bisecting the industry. In order to enable the manufacturing sector contribute their quota to the country's gross domestic product, it is recommended that, government should try to restructure our tax system with regards

to the effect of tax on the manufacturing industry, therefore, the government should really examine the possibility of streamlining the number of taxes levied and also granting of tax holidays to new industries.

(3) Government should create a good enabling environment to attract foreign investors into the economy; government should do that by creating a policy that will solve the problems of militancy in the oil region, religious crisis and other political problems in the country.

(4) Government should provide infrastructural facilities like good roads, network that will facilitate easy converging of goods constant power supply, adequate water and good management scheme in order to ensure production of goods by industries

(5) Government should organise campaign and seminars to encourage the masses to make use of domestic produced goods or made in Nigeria goods.

(6) Government should give credit facilities to small scale industries especially in agricultural sector so as to produce enough quality of raw materials for the industries and to reduce

the price of industrial output due to high price of imported raw materials, technology and manpower.

(7) Provision of raw materials at cheap rate

(8) Industrialization does not bring about development automatically rather a meaningful industrialization strategy is a function of a well planned and strictly carried out industrial priority. The priority of which is schemed out with references.

Above all these industries need to be highly labour intensive for the provision of employment of the labour force and should also aim at developing indigenous technology.

5.3 CONCLUSIONS

Industrialization is a legitimate objective of most developing countries. This is why Nigeria as a developing country should pursue industrialization with single mind. Although the present performance of industries are not all that good, a brighter future analysis awaits it if proper case is taken and of all these recommendation above are implemented, industrialization will increase economic growth in Nigeria.

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