THE ROLE OF MANUFACTURING SECTOR IN ECONOMIC GROWTH AND DEVELOPMENT OF NIGERIA

BY

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DECLARATION

I hereby declare that this dissertation has been written by me and it is a report of my research work. This work has not been presented elsewhere for the award of any academic programme in any institution. All quotations are indicated and sources of information specifically acknowledged by means of bibliography.

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CERTIFICATION

This project entitled "The Role of Manufacturing Sector in Economic Growth and Development of Nigeria" has been read and approved by the undersigned as meeting the requirement for the award of Masters in Management (MBA) Business Administration, Faculty of Administration of Nasarawa State University, Keffi.

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TABLE OF CONTENTS

CHAPTER FOUR: Data Presentation and Analysis

CHAPTER FIVE; Summary, Conclusion and Recommendations

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The manufacturing sector plays a catalytic role in a modern economy and has many dynamic benefits crucial for economic transformation. In any advanced economy or even growing economy, the manufacturing sector is a leading sector in many respects. It is 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. Furthermore, 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 (Ogwuma 1995).

It has been argued that the fastest trend through a nation can achieve sustainable growth and development is neither by the level of endowed material resources, nor its vast human resources, but technological innovation, enterprise development and industrial capacity. For instance, Germany despite its poor natural resources and the hurdles it faced in the 1920's chronic inflation, it has effectively exploited its manufacturing sector and rose up to become the largest economy in Europe and the fourth in the world.

In the modern world, manufacturing is regarded as a basis for determining a nation's economic efficiency (Amakom, 2012). However after the discovery of oil in the late 1950's, the nation has shifted from its preeminent developing industrial production base and placed heavy weight on crude oil production (Englama, et al. 2010): not only has this jeopardize its economic activities, it also aggravated the nation's level of unemployment. Nigeria as a giant of Africa has for long been regarded as a nation blessed with abundant human and material resources; however, the underutilization of these potentials has amplified widespread poverty, low standard of living at individual level and rising unemployment in the country as a result of incessant mono-economic practice and drastic neglect of other sectors of the economy such agriculture, mining, tourism and the manufacturing industry.

In spite of the country's vast oil wealth, the World Bank development indicators (2012) has shown that majority of Nigerians are poor with 84.5 percent of the population living on less than two dollar a day. The United Nations development Index (2011) also ranks Nigeria as 156 out of 179 countries, which is a significant decrease in its human development ranking of 151 in 2004; and the World Bank Development Indicator (2012) have placed Nigeria within 47poorest countries in the world. The issue of poverty can be easily traced to mono-economic practice and

underutilization of the nation's endowed resources, especially in the manufacturing sector, which could have opened up windows of opportunity in job creations and economic development.

Putting the country back on the path of recovery and growth will require urgently rebuilding deteriorating infrastructure and making more goods and services available to the citizenry at affordable prices. This will imply a quantum leap in output of goods and services. Ogbu (2012), states that no other sector is more important than manufacturing in developing an economy, providing quality employment and wages, and reducing poverty.

Government in recognition of the role of manufacturing in the economy launched an economic reform programme, the National Economic Empowerment and Development Strategy (NEEDS) in 2004. Countries that have found themselves in the same predicament have resolved them through productivity enhancement schemes. For instance, Japan from the end of the World War II and the United State of America from the 1970's have made high productivity the center point of their economic planning and the result have been resounding. Also, the middle income countries like Hong Kong, South Korea, India and Singapore have embraced boosting productivity schemes as an integral part of their national

planning and today they have made significant in-roads into the world industrial markets (Amakom, 2012).

There was a strong concern especially for manufacturing and agriculture and that there need to develop these sectors among others. Given the importance of high productivity in boosting economic growth and the standard of living of the people, it is necessary to evaluate the role and performance of Nigerian manufacturing sector.

1.2 Statement of the Problem

The history of industrial development and manufacturing in Nigeria is a classic illustration of how a country could neglect a vital sector through policy inconsistencies and distractions attributable to the discovery of oil (Adeola, 2005). However, Ogbu (2012), argued that the country's oil industry is not a major source of employment and its benefit to the other sectors in the economy is limited since the government has not adequately developed the capacity to pursue the more value-added activities of the petrochemical value chain. As a result, the oil industry does not allow for any agglomeration or technological spillover effects, (Ogbu, 2012) stresses.

From a modest 4.8% in 1960, manufacturing contribution to GDP increased to 7.2% in 1970 and to 7.4% in 1975. In 1980 it declined to 5.4% but then surge to a record high of 10.7% in 1985. By 1990, the

share of manufacturing in GDP stood at 8.1% but fell to 7.9% in 1992; 6.7% in 1995 and fell further to 6.3% in 1997. As at 2001, the share of manufacturing in GDP dropped to 3.4% from 6.2% in 2000. However, it increased to 4.16% in 2011which is less than what it was in 1960. Currently, Nigeria's manufacturing sector's share in GDP remains minuscule (CBN, 2011). Compare that to the strong manufacturing sector in other emerging economies, where structural change has already occurred and where millions have been lifted out of poverty as a result: manufacturing contribute 20 percent of GDP in Brazil, 34 percent in China, 30 percent in Malaysia, 35 percent in Thailand and 28 percent in Indonesia (Ogbu, 2012). The more recent experience of the East and Southeast Asian economic transformations demonstrate that diversification into manufacturing and industrial production facilitated by Arthur Lewis calls the "intelligent government" are critical to poverty reduction. However, Nigeria has no effective industrial policy that promotes manufacturing; at least not in the sense of policy which provides practical solutions to the difficulties encountered incipient entrepreneurs or emerging manufacturing firms. It is in the light of the foregoing that the study seeks to evaluate the role of manufacturing sector in the Nigerian economy.

1.3 Objectives of the Study

The broad objective of this study is to appraise critically, the performance of the Nigerian manufacturing sector.

The specific objectives of this study include;

1. To investigate the impact of the manufacturing sector on the economic growth and development of Nigeria
2. To assess the level of productivity in Nigeria manufacturing sector
3. To identify the major constraints confronting the Nigeria manufacturing sector
4. To find out the various policies measures available to the government that can be used to redress persistent decline in the manufacturing production.

1.4 Research Questions

The study will examine the following questions:

1. To what extent has the manufacturing sector impacted on the growth of and development of the country?
2. What has been the productive level of the Nigerian manufacturing sector?
3. What are the constraints that are confronting manufacturing sector?
4. What policy measures could be adopted to redress the persistent decline in the manufacturing production?

1.5 Research Hypotheses

The hypothesis to be tested in the course of the analysis is stated below:

H_0: Manufacturing sector does not impacted significantly on the Nigerian economy

H_1: Manufacturing sector impact significantly on the Nigerian economy

1.6 Significance of the Study

The study of role of manufacturing sector on the economic development of Nigeria is significant in the following areas;

1. It will help to reveal the role of industrial activities in solving the basic problems of unemployment, inflation, budget deficit and general economic disequilibrium;
2. It will equally assist to appraise the policies of the government that have been directed towards the improvement of local production;
3. It will expose the forces behind the continued pressure on balance of payment in spite of the various policy measures taken so far to address the situation.

1.7 Scope and Limitation of the Study

This study evaluates the role of the Nigeria manufacturing sector in relations to the growth of the economy. The major constraints that are

confronting the sector would be identified in the course of examining the overall development in the sector. The analysis of the contribution of the manufacturing sector to the economic growth of Nigeria is restricted to the period between 1980 and 2011 using only relevant performance indicators such as index of manufacturing production, manufacturing capacity utilization rate, and manufacturing sector growth rate.

1.8 Plan of the Study

The study shall be divided into five chapters. The first chapter provides the background of the subject matter justifying the need of the study. Chapter two presents related literature on the subject matter. The research methodology which includes research design, population of the study, sampling techniques, method of data collection and analysis, are stated in chapter three while data presentation and analysis were made in chapter four. Concluding comments in chapter five reflects on the summary, conclusion and recommendations based on the findings of the study.

1.9 Definition of Terms

For proper understanding of issues to be analyzed in this study, it is important to clarify terms that are relevant to the subject under consideration. This study shall take a look at the some concepts:

Economic Growth

Growth means more wealth, more leisure time and choices of leisure activities, more occupational choices and more educational opportunities. Economic growth refers to the increase of total output per person. Although value judgment may differ, most people agree that the more output that is produced per person by an economy, the better off are its citizens. Economists define economic growth as an increase in national income, usually measured by GDP. If GDP increases it is usually assumed that so will employment rates, income and general prosperity. It is in the foregoing context that the term is used in this work.

Development

Development as used in this study refers to a rise in the standard of living of the population in such a way that majority can satisfy their economic and social needs adequately and enjoy life more fully.

Economic Development

Economic development can be defined as a sustained community effort to improve both the local economy and the quality of life by building the area's capacity to adapt to economic change.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

The manufacturing sector is 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. Furthermore, 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 (Ogwuma 1995). In terms of contributing to the Gross Domestic Products, the manufacturing sector is recognized, but it has been overtaken by the services sector in a number of countries, including Nigeria. Before independence, agricultural production dominated Nigeria's economy and accounted for the major share of its foreign earnings. Early efforts in the manufacturing sector were oriented towards the adoption of an import substitution strategy in which light industry and assembly related manufacturing ventures were embarked upon by the former trading companies. Up to about 1970 the prime mover in the manufacturing activities was the private sector which established some agro-based light manufacturing units, such as vegetable oil extraction, plants, tobacco etc. The import-dependent industrialization strategy

virtually came to a halt in the late 1970s and early 1980s when the liberal importation policy expanded the imports of finished goods to the detriment of domestic production. This led to relative decline in manufacturing production of exportable and thus, little diversification in products and production processes was achieved. The Structural Adjustment Programme (SAP) introduced in 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 manufactures more competitive even though, this also resulted in massive escalation in input costs. Looking at the manufacturing sector over the years shows that the share of the manufacturing in the GDP has been relatively low. In 1970, it was about 9%, 1980, about 10%, 1990, about 8% and 1998 about 6% and 2008 about 5.9% (CBN Annual Report). Even though in the 90's especially 1994, manufacturing shares in GDP was about 7%, the growth rate was a negativeof 8%. Also at that same period, the overall manufacturing capacity utilization fell from over 70% in 1973 to 39% in 1986 and to about 27% in 1998. It is only when firms are efficient that their potential for job creation, for promoting technology adoption, and ensuring equitable distribution of economic opportunities and the macro stability of the economy can be fulfilled. (Inegbenebor, 1995). He stressed further

that the determinants of the performance of enterprises are many and interwoven but could be grouped under three main headings:

1. Individual enterprise characteristics and behaviour,
2. External/ecological factors and
3. Internal structure arrangements of the enterprise.

Essien (2005) in his studies also stressed the point that more countries of the world have undertaken one form of economic reform or another at a time in their history. The goals of these reforms may differ from country to country; nevertheless, they are all closely aligned towards putting their economies on a path of sustainable growth and development. In developing economies such as Nigeria, such reforms have characterized the development strategy. In recent times and in virtually all cases, structural weaknesses in the economy, high debt service burden, spatial and sectoral unevenness and poor growth performance have been some of the most compelling reasons for their implementation. The recent reform by the Nigeria government is the (NEEDS). In this new reform there is strong emphasis on the manufacturing and agricultural development. The emphasis on these two is predicated on the fact that these two sectors are very important in any economy.

Omanukwue (2005) pointed out that manufacturing and agriculture have become a complex activity, more so in the light of dynamic changes and innovations that have pervaded the global economy. In a developing economy like Nigeria, this becomes much more challenging given the desire and need to compete both domestically and internationally. This chapter will focus the theoretical framework, the manufacturing sector and growth, and the challenges of the manufacturing sector.

2.2 Structure of the Nigerian Economy

After fifty three years of political independence, the productive base of the Nigerian economy remains weak, narrow and externally-oriented with primary production activities of agriculture and mining and quarrying (including crude oil and gas) accounting for about 65 percent of the real gross output and over 80 percent of government revenues. In addition, primary production activities account for over 90 percent of foreign exchange earnings and 75 percent of employment. In contrast, secondary activities comprising manufacturing and building and construction, which traditionally have greater potential for broadening the productive base of the economy and generating sustainable foreign exchange earnings and government revenues account for a mere 4.14 percent and 2.0 percent of gross output respectively. Services or tertiary activities which depend on wealth generated by the productive sectors for their operations comprise

about 30 percent of gross output. Significantly, service activities have been expanding their influence in the economy over the last decade accounting for over 35 percent of the growth of the real gross domestic product (GDP).

Over the last eight years, certain changes have taken place in the structure of output in the economy, prominent among which is the entry of the telecommunications sector which has witnessed explosive and sustained real GDP growth. The sector's share of GDP and contribution to GDP growth jumped from barely 1 percent and 3 percent respectively in 2005 to over 3 percent of GDP share and over 14 percent of GDP growth respectively, in 2010. This represents an annual average growth rate of about 34 percent in the last five years. Similarly, wholesale and retail trade sector accelerated by more than 10 percent per annum in the last five years, accounting for over 32 percent of GDP growth and 16 percent of GDP during 2006-2010.

By contrast, the oil and gas sector shrank in importance during 2006-2010 as its share of GDP declined from about 25 percent in 2005 to about 16 percent in 2010. With an average annual real growth rate of -3 percent, the sector's contribution to GDP growth was negative between 2005 and 2009.It however had a positive growth rate in 2010 as normalcy returned

to the Niger Delta region. Manufacturing sector's contribution to real GDP growth which declined from over 5 percent in 2005 to about 3.96 percent in 2009, however edged up to 4.14 % in 2010. The lackluster performance of the manufacturing sector reflects the appalling state of infrastructure and a constellation of other growth-inhibiting constraints as well.

Agricultural activities comprising crop production, forestry, livestock and fishery recorded an average annual growth rate of about 5.74 percent and remain the dominant sector of the economy with 41 percent share of the real GDP during 2006-2010. The sector's activities are largely informal and dominated by use of simple technologies. Consequently, productivity is low as growth has been largely induced by expanding hectares cultivated. However, recent entry of commercial farmers notably from Zimbabwe and the planned land reform by the Federal Government could engender greater productivity in the agricultural sector.

2.3 Theoretical Framework of Economic Development

There are a range of competing theories to the study of economic development. Each approach has its strength and weaknesses with different ideological, theoretical and empirical conclusions. The theories

include the classic theories of economic development and the endogenous growth model. The Classic theories have four approaches:

a. The Linear-stages theories: This includes the Rostow's stages of growth and the Harrod- Domar Growth Model.
b. Structural Change Models: The Lewis theory of development and structural change.
c. The international dependency revolution: This includes the Neoclassical Dependence Model, false paradigm model and the Dualistic-Development Thesis.
d. The traditional neoclassical growth model: This study is anchored on the endogenous growth model.

The motivation for the endogenous growth model stems from the failure of the neoclassical theories to explain the sources of long-run economic growth. The neoclassical theory does not explain the intrinsic characteristic of economies that causes them to grow over extended period of time. The neoclassical theory focuses on the dynamic process through which capital-labour ratios approach long-run equilibrium. In the absence of external technological change, which is not clearly explained in the neoclassical model, all economies will converge to zero growth. The neoclassical theory see rising GDP as a temporary phenomenon resulting from technological change or a short-term equilibrating process

in which an economy approaches its longrun equilibrium. The neoclassical theory credits the bulk of economic growth to a completely independent process of technological progress. According to neoclassical theory, the low capital-labour ratios of developing countries promise exceptionally high rates of return on investment. Based on this premise, it was expected that the free market reforms imposed on highly indebted countries by the World Bank and the International Monetary Fund should have prompted higher investment, rising productivity, and improved standards of living. Yet even after the prescribed liberalization of trade and domestic markets, many LDCs experienced little or no growth and failed to attract new foreign investment or to halt the flight of domestic capital. The anomalous behaviour of developing-world capital flows (from poor to rich nations) helped provide the impetus for the development of the concept of endogenous growth or, more simply, the new growth theory. The new growth theory represents a key component of the emerging development theory. The new growth theory provides a theoretical framework for analyzing endogenous growth, persistent GNP growth that is determined by the system governing the production process rather than by forces outside that system. In contrast to traditional neoclassical theory, these models hold GNP growth to be a natural consequence of long-run equilibrium. The principal motivations of the new growth theory are to explain both growth rate differentials across

countries and a greater proportion of the growth observed. In particular, endogenous growth theorists seek to explain the factors that determine the rate of growth of GDP that is left unexplained and exogenously determined in the Solow neoclassical growth equation (that is, the Solow residual).

Models of endogenous growth bear some structural resemblance to their neoclassical counterparts, but they differ considerably in their underlying assumptions and the conclusions drawn. The most significant theoretical differences stem from discarding the neoclassical assumption of diminishing marginal returns to capital investments, permitting increasing returns to scale in aggregate production, and frequently focusing on the role of externalities in determining the rate of return on capital investments.

By assuming that public and private investments in human capital generate external economies and productivity improvements that offset the natural tendency for diminishing returns, endogenous growth theory seeks to explain the existence of increasing returns to scale and the divergent long-term growth patterns among countries. And whereas technology still plays an important role in these models, it is no longer necessary to explain long-term growth. A useful way to contrast the new (endogenous) growth with traditional neoclassical theory is to recognize

that many endogenous growth theories can be expressed by the simple equation Y = AK, as in the Harrod-Domar model. In this formulation, A is intended to represent any factor that affects technology, and K again includes both physical and human capital. And there are no diminishing returns to capital in this formula, so the possibility exists that investments in physical and human capital can generate external economies and productivity improvements that exceed private gains by an amount sufficient to offset diminishing returns. The net result is sustained long-term growth – an outcome prohibited by traditional neoclassical growth theory. Thus even though the new growth theory reemphasizes the importance of savings and human capital investments for achieving rapid growth, it also leads to several implications for growth that are in direct conflict with traditional theory. First, there is no force leading to the equilibration of growth rates across closed economies; national growth rates remain constant and differ across countries depending on national savings rates and technology levels. Furthermore, there is no tendency for per capita income levels in capital-poor countries to catch up with those in rich countries with similar savings and population growth rates. A serious consequence of these facts is that a temporary or prolonged recession in one country can lead to a permanent increase in the income gap between itself and wealthier countries. Perhaps the most interesting aspect of endogenous growth models is that they help explain anomalous

international flows of capital that exacerbate wealth disparities between developed and developing countries. The potentially high rates of return on investment offered by developing economies with low capital-labour ratios are greatly eroded by lower levels of complementary investments in human capital (education), infrastructure, research and development (R&D). In turn, poor countries benefit less from the broader social gains associated with each of these alternative forms of capital expenditure. Because individuals receive no personal gain from the positive externalities created by their own investments, the free market leads to the accumulation of less than the optimal level of complementary capital. Where complementary investments produce social as well as private benefits, governments may improve the efficiency of resource allocation. They can do this by providing public goods (infrastructure) or encouraging private investment in knowledge-intensive industries where human capital can be accumulated and subsequent increasing returns to scale generated.

Unlike the Solow model, new growth theory models explain technological change as an endogenous outcome of public and private investments in human capital and knowledge-intensive industries. Thus in contrast to the neoclassical counterrevolution theories, models of endogenous growth suggest an active role for public policy in promoting

economic development through direct and indirect investments in human capital formation and the encouragement of foreign private investment in knowledge-intensive industries such as computer software and telecommunications (Stern, 1991; Sala-i-Martin, 1990; Romer, 1986; Helpman, 1986; Lucas, 1988; Barro, 1990; Todaro and Smith 2003).

2.4 Contributions of Manufacturing Industries in Nigeria to Growth and Development

The contribution of the manufacturing industries in the economy cannot be over emphasized when considering its employment potentials and financial impacts on the economy. Apart from its role of building grounds for development by laying solid foundation for the economy it also serve as import substituting industry and provide ready market for intermediate goods. According to Aderibigbe (2004) manufacturing industry contributes significantly to the nation's economic development in the following ways;' increase in government review through tax; boost manufacturing no doubt will leads to industrialization. The bigger the number of manufacturing industries the better industrialized such society is said to be; Improve standard of living with manufacturing potentials, more of the people will be gainfully employed in various manufacturing activities, per capital income may increase and the general standard of living improved; Infrastructural growth- construction of good roads to

areas where raw materials are exploited and sitting of manufacturing industries to these sources of raw materials may help improve the growth of basic infrastructural requirements; Contribution to Gross National Product (GNP)- the manufacturing sector in Nigeria being next to oil has through their operations contributed to the gross national product of the country through earning from exportation of manufactured goods; Employment generation- manufacturing industry being one of the largest in the economy performs the major role of employment generation at all levels i.e. skilled, semi-skilled and unskilled labour and thereby fulfilling one of the nation's ultimate macroeconomic goals; Enhance manpower development- the manufacturing industries provides on the job training for some of the workers to enable them to operate some machine or perform some activities and thereby enhancing manpower development; Manufacturing can also make available many essential commodities; it lead to transfer of technology; Manufacturing may bring about an improvement in bilateral relationship especially in terms of trade with other foreign nations; Industrialization lead to foreign direct investment.

2.5 The Nigerian Manufacturing Sector, Growth and Development

The manufacturing sub-sector is made up of large, medium and small enterprises, as well as cottage and hand-craft units. The importance of manufacturing can be looked into in various angles. The Governments of

Nigeria has in recent years been pursuing several policy initiatives to augment the process of manufacturing production in the country. It is of considerable importance both for the policy makers as well as researcher to take stock of the impact of these policy measures on the performance of the manufacturing sector. The dynamics of manufacturing sector can be assessed in terms of its size, composition, contribution and growth. Papanek (1962) noted that changes in the economic environment would stimulate the successful transfer of Nigerian entrepreneurial talent into the large scale-manufacturing sector. But according to him, manufacturing industries have been growing slowly and the values added of Nigerian industries have increased less significantly over the years. The contribution of the Nigerian manufacturing sector to Gross domestic product is still very insignificant.

One of the main reasons for industrialization is the expansion and generation of employment. According to Oladokun et al (1979), the proportion of labour employed in manufacturing has slowed down greatly. This may be due to the under-utilization of capacity. In the manufacturing industry, the capacity utilization in 1980 was 70.1 and by 2000, it was below 35% (CBN 2002). Kayode (1987), made us to believe that the industrial sector and in particular, the manufacturing sub-sector is the heart of any economy. He went further to confirm that faulty or poor

industrial development policies have long been recognized as major factors that adversely affect the well-being and socioeconomic improvement of the people in developing countries. He argued that such policies are the major contributing factors to low value added and low economic growth. Uzaoga (1981) also threw more light on the low performance of the manufacturing sector in Nigeria. He made us to believe that Nigeria being a colony of Britain had to specialize on the production of raw materials while Britain serves as the main supplier of manufactured goods. According to him, this unfortunate pattern of investment promoted the theory based on a static scheme of comparative advantage whereby diverting the Nigerian economy into activities that offered little opportunity for technical progress. The few industries established depended on foreign inputs. All these distortions according to him affected the performance of the industrial sector in terms of its contribution to the gross domestic product, employment generation, capacity utilization; export and value added which are indices for measuring the performance of the manufacturing sub-sector. Investment structure in the manufacturing sector also affects the performance of the sector, looking at it from aggregate investment behaviour in the sector.

Value added is a crucial indicator in measuring the significance of manufacturing in an economy. Bakitt and Bhaltacharya (1991) made us to

believe that if the share of manufacturing in total GDP of an economy is low, the value added will surely be very low. Low share according to them is associated with low value added. According to the paper presented in July 1983 at the national workshop on Raw Materials for Nigerian Industries, which read that: For a developing country of the size and potential of Nigeria, industrialization is essential if it is to achieve rapid economic and social development.

Industrialization is also imperative, for in the world of today, every country is pursuing a policy of efficiency and effective participation in the global economy. Development is nothing more than ensuring that maximum use is made of available minerals and vegetable resources for the benefit of the citizens of the country.

In spite of spirited efforts made to boost manufacturing output and various policy regimes, manufacturing has not made any significant contribution to the growth of the economy. Industry as a whole contributed only 11.3 per cent of the GDP in 1960 – 70, growing significantly in the next two decades to a high of 41.0 per cent in 1981 – 1990, owing largely to the crude petroleum and gas production during the decades. It accounted for only about 6.18% of the gross Domestic Products in 1998.The contribution contracted to 38.6 per cent in the

1990s and further to 39.4 per cent during 2001 – 2009. These numbers, in fact, belie the poor contribution of the manufacturing sub-sector to aggregate output in Nigeria compared with its peers in Asia and Latin America. Indeed, the contribution of the manufacturing components has on average been below 5.0 per cent in the last two decades. During and some few years after SAP, the main manufactured export were textiles, beer and stout, cocoa butter, plastic products, processed timber, tyres, bottled water, soap and detergents as well as iron rods. However, some of these products have disappeared from the export list owing to poor enabling environment (Sanusi, 2010).

Manufacturing in Nigeria however is still at an infant stage. The industrial base is small and there is great scope for expansion. The Nigerian Industries are concentrated in light consumer goods. There is hardly any production of capital and intermediate goods. Another feature of the manufacturing sector is its over-dependence on imports for the supply of raw materials and spare parts. There is no single industrial product in which the country is entirely self-sufficient. The Nigeria's import bill is dominated by the cost of raw materials and spare parts for industries. This explains why in the 1980's the economic stabilization measures designed to conserve foreign exchange affected industries most adversely. Many factories as a result of this reduced their scale of

operations completely and even some had to close down completely with increase in our unemployment rates.

So many literatures confirmed the insignificant nature of the Nigerian manufacturing industries in terms of its contribution to economic development Enisan Akinlo (1996) also confirmed this by stressing that the industrial sector of the Nigerian economy was relatively insignificant even starting from independence in terms of its contribution to the gross domestic product (GDP). Most of the earliest manufacturing industries, established by the colonial trading companies and a handful of other international firms, concentrated on the production of light industrial commodities such as detergents soft drinks, leather work, textiles and confectionery (Olukoshi 1991). He went further to point out that the pre-owned post-colonial production policy occasioned distortions in the sector, which was as a result of neglecting research and an excessive reliance on foreign input. The manufacturing subsector is still characterized by distortions despite the adjustment programmes. This needs to be eliminated according to him if the sector is to experience substantial growth.

2.6 Challenges of the Nigerian Economy

The Nigerian economy continues to grapple with a number of challenges that has hampered efforts at economic transformation. First, the

economy is yet to achieve the necessary structural changes required to jump-start rapid and sustainable growth and development. Aside disarticulated and narrow productive base, sectoral linkages in the economy are weak. Primary production comprising agriculture, mining and quarrying inclusive of oil and gas dominate national output while the manufacturing sector role in the economy is decidedly small in terms of share of gross output, contribution to growth, foreign exchange earnings, government revenues and employment generation (CBN, 2010).

The economy also confronts monumental challenges in form of dilapidated and chronically non-functional infrastructure. The decay in the country's infrastructural base reflects decades of poor maintenance and weak technological base. The weak technological base is a consequence of low research and development efforts and disconnect between research findings and industry. The private sector is equally weak and diffuse with poor response record to industrial incentives.

Although the economy experienced respectable GDP growth rates, averaging over 6.5 percent per annum between 2006 and 2010, this growth did not spawn corresponding employment nor resulted in attenuation of poverty. Moreover, growth rates of the non-oil output remains unsatisfactory. Concomitantly, there has been gradual decline in the level of competitiveness of the Nigerian economy to the extent that

the country has become one of the least competitive economies in Africa. The narrow base of government revenue and the near monolithic nature

Of exports constitute additional challenges confronting the economy. Finally, the global financial crisis that engulfed the world during 2008-2009 and which impacted negatively on macroeconomic aggregates in the Nigerian economy introduced additional complications to the task of managing the Nigerian economy.

The effectiveness with which the above challenges are tackled, especially the reduced government revenue, foreign exchange earnings and depletion of the external reserves, arising from downturn in crude oil fortunes in the international oil market will determine in large measure, the level of progress the Nigerian economy would make in the next one year (CBN, 2010).

2.7 Summary

The study has brought out in clear terms the achievement of the Nigerian Economy through economic reform programs of the past and present administrations. It also considered some literatures on economic growth and development, and also the contribution of manufacturing industries to growth and development. It shows reasons why manufacturing industries are not doing performing well.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter involves the examination of the research instrument, research design, model specification and the operational procedures for collection and analysis of data. These instruments will assist the researcher to achieve the key objective of the study.

3.2 Research Design

Research design is the structure and strategy for investigating the relationship between the variables of the study. The research design adopted for this study will be the experimental research design. The reason that experimental research design combines the theoretical consideration with empirical observation; it enables a researcher therefore to observe the effects of explanatory variables on the dependent variables. The study is based on the use of time series data.

3.3 Population of the Study

The study will cover the years 1982 – 2011 which is a period of twenty eight (28) years. This period is believed to be long enough to capture the long-run relationship between public investment and economic growth.

The data will be obtained from Central Bank of Nigeria Statistical Bulletins.

3.4 Data Collection

Secondary data will be used for this study. The data utilized consists of annual observations on growth (GDP), Manufacturing sector output (industrialization), and other important indicator like exchange rate, inflation rate, interest rate for 28years (1982 - 2011). The data were obtained from various issues of CBN statistical bulletin, CBN statement of account of annual reports etc.

3.5 Model Specification

Undoubtedly, there are extensive research works on the role of industrialization in the actualization of economic growth and development. However, there seems to be no consensus in these studies on the empirical form of the specification of a model qualifying the impact of manufacturing sector can take or follow. Conventionally, empirical specification of growth (proxy with development) oriented model often follows the Solow growth model, although subsequently modified by Mankiw et al (1992) (which is termed “Augmented Solow growth model).

i. Solow (1956) postulated that economic growth is as a result of the accumulation of physical capital and an expansion of the labour force in conjunction with an “exogenous” factor, technological progress, that makes physical capital and labour more productive (Udah 2010)1 In the simplified version presented in this study, we abstract from the household sector, an important feature of the original endogenous growth model, in order to concentrate on issues concerning industrialization. The general endogenous production function

Gdppc = Akiα Li1–α KB …….. (1)

ii. We assume symmetry across industries for simplicity, so that each industry will use the same level of capital and labour. Then, we have the aggregate production function as

Gdppc = AKα Lβ …….. (2)

where

Gdppc = real GDP per capita at time t

A = total factor productivity

K = Capital stock

L = Labour.

Following Beck, Levine and Loayza (2000), we include initial income to control for convergence effects and secondary school enrolment to capture human capital accumulation. Further, we

include several policy variables, such as government expenditures as a share of GDP, the share of exports and imports in GDP, the inflation rate, the black market premium and the share of credit to the private sector by financial institutions in GDP. For the purpose of this research work the above model specification will be adopt and build upon, I proxy economic development with Gross Domestic Product (GDP); industrialization (proxy by manufacturing sector output); Exchange rate to examine the healthy competitiveness, inflation rate and interest rate to examine the effect of institutional framework and government expenditure to check government commitment on the provision of infrastructural facilities that will attract investor. With these adjustment incorporated into the model, it can therefore be specified in the form expressed below.

$$\mathbf{logGDP = a_0} + \mathbf{a_1}\log M + \mathbf{a_2}EXR + \mathbf{a_3}INFR + \mathbf{a_4}IR + \mathbf{a_5}\,GEXP + \mathbf{U_t}$$

Where:

GDP = Real Gross Domestic Product;

M = manufacturing sector output

EXR = Exchange Rate;

INFR = Inflation rate;

IR = Interest rate;

GEXP = Government Expenditure;

Parameters = $\mathbf{a_0, a_1, a_2, a_3, a_4, a_5}$;

$\mathbf{U_t}$= Error term

From the specified model equation above, endogenous variable is GDP while the exogenous variables are manufacturing sector output, exchange rate, inflation rate and interest rate.

3.6 Method of Data Analysis

The investigation of the relation between Economic growth and manufacturing sector output and other relevant indices in Nigeria is analyzed based on the specified model in section three. In capturing the precise link, economic growth is regressed on manufacturing sector output and other macroeconomic variables like inflation rate, government expenditure, exchange rate and inflation rate which is considered as an important factor that could affect the economy at large. The OLS is employed in estimating the model and the Augmented Dickey-Fuller (ADF) unit root test is used to examine the properties of the time series variables incorporated in this study.

To test the implied and expressed model and assess the relative significance of the variable under study, E-view statistical package for econometric techniques will be used. The ordinary least square regression

models will be used to establish the role of manufacturing sector on economic growth and development in Nigeria.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents the variables measured and the regression result. The level of government expenditure and contribution of manufacturing to the economy are important determinants of economic growth. The model;

$$\mathbf{logGDP = a_0 + a_1 \log M + a_2 EXR + a_3 INFR + a_4 IR + a_5 GEXP + U_t}$$

4.2 Model Estimation and Analysis

The result of the estimated model examined is presented in table 4.1 below.

Table 4.1: Result

Dependent variable: LOGGDP

Method: Least square

Sample: 1982– 2009

	C	**LOGM**	**EXR**	**IR**	**INFR**	**LOGGEXP**
	122258.3	0.977854	-37.7830	3564.477	105.5852	-0.011485
Std. Error	25454.27	0.156982	351.8946	1329.865	417.9887	0.018029
t-stat	4.803058	6.229101	-0.10737	2.680330	0.252603	-0.637017

Prob	0.0001	0.000	0.9154	0.0134	0.8028	0.5304

R-Square = 0.957000**Adjusted R-Square** = 0.947652

F-Statistic = 102.3764**Durbin-Watson stat** = 0.395378

Prob(F-Stat) = 0.0000

Augment Dickey-fuller Unit Root Test on (LOGGDP,2)

Null Hypothesis: D(LOGGDP,2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: (Automatic based on SIC, MAXLAG=7)

t –statistic	Prob.*	
Augmented Dickey-Fuller test statistic	-9.055859	0.0000
Test critical values: 1% level	-4.339330	
5% level	-3.587527	
10% level	-3.229230	

*Mackinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LOGGDP,3)

Method: Least Squares

Sample (adjusted): 1985– 2011

Included observation: 27 after adjusting

Variable	Coefficient	Std. Error	t – Statistics	Prob.
D(LOGGDP(-1),2)	-0.987616	0.109058	-9.055859	0.0000
C	7723.729	9433.815	0.818728	0.4210
@TREND (1980)	-513.1373	525.6684	-0.976161	0.3387

R – Squared	0.801445	Mean dependent Var	4379.824
Adjusted R – Squared	0.784899	S.D dependent Var	43780.13
S. E. of Regression1	20304.78	Akaike info criterion	22.77954
Sum Squared resid	9.89E+09	Schwarz criterion	22.92352
Log likelihood	-304.5238	F – Statistic	48.43674
Durbin Watson stat	2.160006	Prob (F – Statistic)	0.000000

The multiple linear regression analysis was equally employed to capture the effect of some important macro-economic variables and manufacturing sector output that have been assumed to either directly or indirectly influence the Economic growth and development in Nigeria for the period 1982 to 2011. From the results obtained, the regression

equation shows that there is positive relationship between endogenous variable and exogenous variables except for exchange rate and government expenditure. The probability shows that infrastructural facilities provision through government expenditure was not adequate, inflation rate, exchange rate has not been favourable, a unit increase in commercial banks loans as Central Bank of Nigeria perform his supervisory role using interest rate as one of the tools bring about a percent increase in manufacturing sector output. The adjusted co-efficient of determination (R^2) shows that the equation has a good fit with 0.947 percent of the analysis. The study also indicates that in countries where industrialization are given a primary place, act as a catalyst to economic development process. Experience from various countries, developed and developing attest to the relevance of manufacturing sector as a catalyst to economic growth and development. The study recognized the various governmental policies that have been implemented by the government to promote the development of SMEs, varying from monetary to fiscal policies before, during and after Structural Adjustment Programme (SAP), then recent National Economic Empowerment and Development Strategy (NEEDS). The study recognize finance using interest rate as well as inflation rate as major influence in development (GDP) explained by the variables in the equation. The reason for this is that influence of

the explanatory variables cannot be over emphasized on economic growth and development in Nigeria.

For second order test, F-statistic is perfect and the Durbin Watson (D.W) statistics of 0.39 as it is significantly below the bench mark of 2.00, we can conclude that there is no auto correlation or serial correlation in the model specification hence, the linear assumption is not violated. The f-statistics test is statistically, thus shows the manufacturing sector output is statistically significant. The second order test confirms the significance of the research hypothesis. The unit root test result reveals that all the time series variables are non-stationary at level and first difference for both intercept and deterministic trend. But, all the series are found to reject the null hypothesis of no-stationary at second difference. Therefore, all the series are taken to be stationary at second difference for unit root models with intercept and trend.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The study examines specifically the role of manufacturing sector in economic growth and development in Nigeria. In trying to achieve this objective, an ordinary least square regression approach was adopted for the data analysis.

The study established that there is a very strong relationship between manufacturing sector and economic development in Nigeria.

5.2 Conclusion

An attempt has been made in this work to indicate the role of manufacturing using manufacturing sector output in the economic growth and development process of any economy most especially Nigeria. In doing this, the study review literatures and form it model from theoretical framework as an econometric tool was employed for the country in spite of various government policies aimed at facilitating financial and technical support for the promotion of manufacturing sector, exchange rate fluctuation among others. The Augmented Dickey-Fuller (ADF) unit root test reveals that all the time series variables employed are non-stationary at second level; both the intercept and deterministic trend as

the estimated result can be found in appendix. Some constraints that hinder the performance and increase in production capacity of manufacturing sector in Nigeria aside from high exchange rate (exchange rate policy) for importation of equipment, financial facilities is needed electricity supply. Nigeria is a country that is blessed with a lot of natural varying from agriculture, oil, gas and solid mineral have been confirmed to exist in commercial quantities. Nigeria also has enormous electric power resources, a large human population forming a very big market and substantial idle capacity in all industrial sectors (CBN 2010). The result of the empirical tests provides useful insight to policy formulation and implementation. It indicates that the contribution of the industrial sector to economic development was below the expected threshold given the gamut of industrial policies put in place since independence. This poor estimated result could be attributed to poor infrastructure especially electricity supply. This assertion agrees with submission of Ajanaku (2007), who argued that poor electricity supply and other factors have contributed to the dismal performance of the nation's industrial sector. Therefore, it has shown that Nigerian economy has what is takes to achieve economic development and growth through the manufacturing sector, due to the fact that it will assist in employment generation, stimulation of entrepreneurship, mobilizing hidden capital in the economy, provide a level class of self-employed entrepreneurs,

development and utilization of local and foreign technology, steaming rural-urban migration and encouragement of equitable distribution in income and wealth. Finally, it is important to note the efforts made by the government to increase manufacturing sector output by increasing it expenditure on capital expenditure most especially electricity power supply, which is the one of the major agenda of this present civilian government in Nigeria.

5.2 Recommendations

For industrialization to act as a catalyst to economic growth and development in Nigeria, the study will prescribe some solutions to constraint of the facing this sector;

1. There is need to improve the administration legal, and fiscal environment of manufacturing sector.
2. Development of network of local teams in conjunction with the Universities in required making industrialization more aware of the changes in their Environment.
3. There should be promotion of finance institution to cater for the creation of manufacturing sector.
4. There is need for sustained collaboration between government and the private sector. Government needs to sustain the present consultations with the private sector by providing incentives and

the needed enabling environment to stimulate and foster the survival and growth of manufacturing sector.

5. There is need for cooperation between manufacturing sector and research institute with a view to making R&D activities more demand driven.
6. There is need for the nation's engineering infrastructure to be established in order to facilitate the local production of machinery and equipment strengthens the industrial development and growth.

All these cannot be left in the hands of the government alone but banks, private individuals, multi-national companies, and mass media, economic analyst and training center, should come together to assist manufacturing sector to achieve Nigerian economic growth and development.

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APPENDIX I

YEAR	GDP	M	EXR	IR	INFR	GEXP
1982	31546.8	5162.2	0.5445	9.50	10	10163.4
1983	205222.1	4484.5	0.6369	10.00	21.42	6567.0
1984	199685.3	4770.6	0.6702	11.75	7.16	6417.2
1985	185598.1	5543	0.7486	11.50	23.22	4885.7
1986	183563	4771.4	0.8083	13.00	40.71	4100.1
1987	201036.3	6042.3	0.9996	11.75	4.67	5464.7
1988	205971.4	6098.5	3.3166	12.00	5.39	8426.8
1989	204806.5	6997.5	4.1916	19.20	10.18	6372.5
1990	219875.6	10390.5	5.353	17.60	56.04	8340.1
1991	236729.6	11040.8	7.65	24.60	50.47	15034.1
1992	267550	13847.5	9.0001	27.70	7.5	24048.6
1993	265379.1	18298.6	9.7545	20.80	12.7	28340.9
1994	271365.5	25520.8	19.6609	31.20	44.81	39763.3
1995	274833.3	37223.6	22.6309	36.09	57.17	54501.8
1996	275450.6	60991.4	21.8861	21.00	57.03	70918.3
1997	281407.4	101850.3	21.8861	20.79	72.81	121138.3
1998	293745.4	128390.3	21.8861	20.86	29.29	158678.3
1999	302022.5	139580	21.8861	23.32	10.67	269651.7
2000	310890.1	137758.2	21.886	21.34	7.86	3009015.6

2001	312183.5	146229.5	92.5284	27.19	6.62	498027.6
2002	329178.7	161091.6	109.55	21.55	6.94	239450.9
2003	356994.3	182049.4	112.486	21.34	18.87	438696.5
2004	433203.5	219471.1	126.4	30.19	12.89	321378.1
2005	477533	266136.3	135.407	22.88	14.03	241688.6
2006	527576	321381.4	132.67	20.82	15.01	351259.9
2007	561931.4	375167.3	130.4	19.49	17.85	519510
2008	595821.4	429274.5	128.27	18.70	8.24	552385.8
2009	634251.1	464610.4	117.968	18.24	5.38	2450897
2010	674889	543259.4	130.75	21.18	11.6	3240820
2011	654570.1	503934.9	124.36	19.71	8.49	2845858

Sources: CBN-Statistical Bulletin 2011 and various issues.