Impact of Bank Funding on The Growth of Nigeria's Manufacturing Sector

DON OGBONNA

A THESIS SUBMITTED
IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF
EDINBURGH NAPIER UNIVERSITY

FOR THE DEGREE OF

DOCTOR OF BUSINESS ADMINISTRATION

IN THE SCHOOL OF

ACCOUNTING, FINANCIAL SERVICES AND LAW

July, 2018

DECLARATION

I Don Ogbonna declare that no material contained in this thesis has been used in any other submission for an academic award. I also declare that while registered as a candidate for an Edinburgh Napier University research degree, I have not been a registered candidate or an enrolled student for another award at Edinburgh Napier or any other academic institution.

ACKNOWLEDGEMENTS

My sincere acknowledgement goes to my supervisory team of Malcolm Pettigrew and Dr Janice McMillan who also doubles as the Director of DBA Programme for their immense support and guidance through my DBA journey. My special thanks to Prof Anne Munro and Prof Robert Raeside for not only being part of the facilitation of this programme but reviewing some of my works and providing quality guidance.

I want to appreciate my darling wife, Chibuzo for not only believing in my ability to pull through a doctoral studies but spearheading the search for a quality school for the programme. My gratitude also goes to my wonderful children, Jewel and Shield for tolerating my stress induced temperament especially at the thesis writing stage.

While I may not be able to mention all the local support and encouragement I enjoyed in course of this tasking process, I want to specially appreciate Dr Larry Izamoje for inspiring me to go the contemporary DBA route, Dr Godwin Imo Ibe and Prof J.U.J Onwumere for their mentoring role.

I will not fail to thank my DBA cohorts for not only sharing their experiences but encouraging me to pull through at difficult moments.

Finally I acknowledge the uncommon grace and the hand of God that made this DBA a reality.

DEDICATION

I dedicate this doctoral degree to the memory of my late parents, Mr and Mrs Law Rogers Ogbonna who saw this day in my youth and fondly addressed me as Dr Don, even as a child. It has taken a while in actualizing, but it has happened.

ABSTRACT

Several studies and theories have linked economic growth to finance and further posit that a well funded and supported manufacturing sector could transform the economic fortunes of nations. However, the Manufacturers Association of Nigeria has complained of paucity and unfavourable terms of funding from the Nigerian banks. This study is motivated by the concerns of the industry stakeholders on the need to evaluate the contributions of bank funding on economic growth of Nigeria. Therefore the main aim of the study is to investigate the impact of bank funding on the growth of Nigeria's manufacturing sector. To achieve this aim, the objectives of the study are to contribute to knowledge and practice, examine causality relationship in the funding-growth nexus and assess the impact of bank funding on the growth of the nation's manufacturing sector. Others are to identify factors that affect bank lending to the manufacturers and make recommendations that can improve lending practice. The research is anchored on the endogenous growth theory and underpinned by the realist philosophical paradigm thereby employing both qualitative and quantitative approaches in data seeking, gathering and analysis. The study identified the lending banks, the regulators and the manufacturers as the three major stakeholders and administered structured questionnaires on 227 bank operators and 213 manufacturers covering the six identified domains of factors that affect bank funding. The causality and impact tests established that there is a bi-directional relationship between bank funding and manufacturing sector growth and the impact of bank funding is with a lapse of time while the impacts of interest and inflation rates are immediate. Factor analysis of stakeholders' responses confirmed this result and further revealed that weak public infrastructure, insurgencies, harsh fiscal and monetary policies adversely affect manufacturers' growth. The findings of this study shall help stakeholders have a better understanding of the issues militating against improved bank funding and challenges of the manufacturers towards achieving economic growth in Nigeria. The study therefore recommends that for the economy to tap from the growth enhancing potentials of the manufacturing sector, it is essential to adopt policy measures favourable to the banking and manufacturing sectors. The government should create enabling business environment with special single-digit interest manufacturing sector intervention fund, provision of stable power and infrastructure for the sectors, and maintain stable exchange rate regime that makes foreign exchange available to the manufacturers. This work covers data from 1987 to 2015 and limited to bank lending as the source of funding to manufacturers. Further studies could extend the period, funding sources, sectors and even territorial coverage.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

Abbreviations	Meanings
ABC	African Banking Corporation
AGO	Automotive Gasoline Oil
ARDL	Auto Regressive Distributed Lag
ADF	Augmented Dickey Fuller
AIC	Akaike Information Criterion
AFDB	African Finance Development Bank
BOFID	Banks and Other Financial Institutions Decree
BBWA	British Bank of West Africa
CBN	Central Bank of Nigeria
CRR	Cash Reserve Requirement
DPK	Dual Purpose Kerosene
DMB	Deposit Money Bank
DCO	Dominion Colonies Overseas
DBA	Doctor of Business Administration
FBN	First Bank of Nigeria
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GNP	Gross National Product
GMM	Generalized Methods of Moments
GTBank	Guaranty Trust Bank
IMF	International Monetary Fund
INFR	Inflation Rate
IRER	Log of Real Exchange Rate
LCD	Less Developed Countries
LMGDP	Log of Manufacturing sector Gross Domestic Product
LTBLABS	Log of Total Bank Loans and Advances by the Banking Sector
MFB	Micro Finance Banks
MAN	Manufacturing Association of Nigeria
MPR	Monetary Policy Rate
NDIC	Nigeria Deposit Insurance Corporation
NAICOM	National Insurance Commission
NBCB	National Board for Community Banks
NBS	National Bureau of Statistics
NDA	Niger Delta Avengers
NAL	Nigeria Acceptances Limited
NEP	Nigeria Enterprises Promotion
OLS	Ordinary Least Square
OMO	Open Market Operation
OECD	Organization for Economic Cooperation and Development
PVC	Polyvinyl Chlorides

PMS	Premium Motor Spirit
R&D	Research and Development
SEC	Security and Exchange Commission
SAP	Structural Adjustment Programme
SMIEIS	Small and Medium Industries Equity Investment Scheme
SME	Small and Medium Enterprises
SSA	Sub Saharan Africa
UK	United Kingdom
USA	United States of America
UNDP	United Nations Development Programme
USD	United States Dollar
UN	United Nations
UBA	United Bank for Africa

CHAPTER ONE
INTRODUCTION

1.1 Introduction

Since the establishment of the finance-growth nexus as highlighted by the demand-led hypothesis (Patrick, 1966) or the supply-following hypothesis (Jung 1986, Chrichton and De Silva, 1989 , King and Levine, 1993a, De Gregorio and Guidthi, 1995, Rajan and Zingales, 1998; Choe and Moosa, 1999; Odhiambo, 2011 amongst others), the search for alternative arguments for increasing financing of economies have encouraged researchers to develop theories that would explain the significance or otherwise of finance to national economic growth.

One of such sectors that has gained prominence due to its role as an engine room of the economy (Obasan and Adediran, 2010) is the manufacturing sector. It has also been established that government expenditure significantly affects manufacturing sector output (Eze and Ogiji, 2013). Although, the Nigerian economy has potentials such as abundant semi-skilled workforce, availability of local sources of raw materials like cotton, cocoa, amongst others with strong local demands in line with its increasing population, it nevertheless faces serious economic challenges. These challenges may include but not limited to inadequate power supply, poor basic infrastructures, heavy dependence on local agricultural inputs which in most cases result to inadequate and low financing from lenders which have the potential to limit the growth of the economy (NBS, 2014).

It is therefore against the need to provide empirical justification for the finance growth nexus that this study is set out to investigate the impact of bank funding on the growth of the Nigeria's manufacturing sector and is hinged on the finance-growth nexus, which postulates that a relationship exists between

finance and growth of the economy. This is predicated on the notion that increase in funding from the financial sector can either enhance economic development or the growth of the economy will spur the development of the financial sector (Patrick, 1966). Hence, OECD (1996) argues that this interaction can either come from the entire sectors of the economy or from certain sectors such as the manufacturing sector, agricultural or the services sector.

Although other sectors do exist, the manufacturing sector of any economy is often seen as the engine of growth in the economy, thus in a well-functioning financial system it could be assumed that a direct relationship exists between bank funding and growth of the recipient sector, and for this study, the manufacturing sector. This could be traced to the sector's ability to create employment, both directly and indirectly. According to Zalk (2014), the description of the manufacturing sector and its importance would be appreciated better if a biological metaphor is used. Hence, Zalk (2014: 1-2) posits that *…while the largest human organ is the skin; few would argue that this renders key organs like the heart and lungs of secondary importance. There is considerable accumulated evidence that manufacturing still functions as the heart of the economic development process…* It therefore suffices to say that the manufacturing sector is critical to the growth of any economy.

This study investigated the impact of bank funding on manufacturing sector's growth in Nigeria from 1987 to 2015 using time series data and descriptive data from survey design while anchoring the work on the critical realism philosophical stance. It employed the endogenous growth theory and re-examined the finance-growth nexus. It also applied the Johansen co-integration test, granger causality test, autoregressive Distributed lag (ARDL) approach or

bound test method and factor analysis to evaluate the impact of bank funding on manufacturing sector growth in Nigeria.

In this study, two major questions were addressed: To what extent is there a relationship between bank loans and advances to the manufacturing sector and manufacturing sector's growth in Nigeria? Also, based on the opinion and perceptions of the industry stakeholders, to what extent do factors affecting bank loans and advances to the Nigeria's manufacturing sector relate and influence the impact of the sector to Nigeria's economic growth?

To allow for robustness, the study utilized the aggregate loans and advances granted by the deposit money banks to the manufacturing sector and included control variables such as inflation rate, real exchange rate and monetary policy rate as the independent variables; and manufacturing sector contribution to gross domestic product rate as the dependent variable. Factor analysis tool was used to analyze the impact of the identified factors by grouping them into six critical domains selected to appraise their effect on the growth of the Nigerian manufacturing sector. These domains are funding volume and output of manufacturing sector, funding volume and employment creation of the manufacturing sector, funding of the manufacturing sector and lending rate, funding of the manufacturing sector and exchange rate, funding of the manufacturing sector and inflation rate and finally funding of the manufacturing sector and the business environment.

1.2 The Motivation and Rationale for the Study

An examination of the contribution of the manufacturing sector of the Nigerian economy from 1981 to 2015 reveals that the sector's relative contribution to economic growth has generally been on the decline, especially since 1984. Prior

to the economic boom of the 1970s and up to 1995, the sector was contributing over 10% to Nigeria's GDP (CBN, 2014). This development was despite policies of government to revitalize the sector such as the Nigerian Enterprise Promotion Decree of 1972 and 1977 which granted majority equity ownership of the firms from foreign to Nigerian. Similar policy measure was the World Bank's Structural Adjustment Programs (SAP) of 1986 which were aimed at liberalizing the economy, making it market focused and increasing domestic production of some basic commodities. Again, in spite of these policies which were aimed at enhancing import substitution of foreign products with locally produced ones, the relative sectoral contribution of the manufacturing sector has been on the decline (NBS, 2014).

Again, the reliance on oil revenue in Nigeria in the 1990s and 2000s may have been possible reason for the relative decline in manufacturing sector contribution to GDP. Within this period, it was observed that some manufacturing firms in Nigeria closed their shops (Michelin, Dunlop and Panalpina) and the few that remained were forced to operate at low capacity utilization (NBS, 2014). This could be noticed by the sector's contribution averaging 4.79% of GDP from1996 to 2013, a departure from 20.1% in 1994 (CBN 2015). The resultant effects of these declines have thus led several researchers to examine the role of the manufacturing sector on economic growth in Nigeria.

Amongst such researchers is Sangosanya (2011) who analyzed the dynamics of manufacturing firm's growth in Nigeria using panel analysis. The estimated dynamic panel model revealed that the manufacturing firms finance mix, utilization of assets to generate sales, abundance of fund reserves and government intervention as indicated by Tobin's Q, operating efficiency, capital

reserves and government policies are significant determinants of manufacturing firms' growth. Also, while Eze and Ogiji (2013) investigated the impact of fiscal policy on manufacturing sector output. The result indicates that government expenditure significantly affects manufacturing sector output.

However, Akinsola and Odhiambo (2017) examined an aspect of monetary policy (inflation) as it affects economic growth (manufacturing sector). The study specifically explored the empirical evidence on the relationship between inflation as a monetary policy target and economic growth. This was based a classification of empirical studies on the relationship between inflation and economic growth in developing and developed countries into four categories. These are (i) that inflation does not have any influence on economic growth, (ii) inflation has a positive impact on economic growth, (iii) inflation has a negative influence on economic growth and (iv) inflation impacts economic growth in terms of specific thresholds. Their study showed that the effect of inflation on economic growth varies from country to country and over time; and this depends on country specific characteristics, data set used, and methodology employed. Overall, their study showed a strong support in favour of a negative relationship between inflation and growth, especially in developed economies.

In the same vein, Lopez-Villavicencio and Mignon (2011) showed strong evidence that inflation non-linearly impacts on economic growth. More particularly, their study showed that there is a threshold beyond where inflation exerts a negative effect on growth, and below which it is growth enhancing in advanced countries.

This study hopes to empirically re-examine the impact inflation has on the growth of Nigeria's economy in general and the manufacturing sector in

particular. Beyond inflation, it shall also consider the impact other monetrary policy targeted variables like interest and exchange rates have on the manufacturing sector's contribution towards economic growth.

Obasan and Adediran (2010) investigated the role of industrial sector in the economic growth and development of the Nigerian economy and their result also supported the significance of the manufacturing sector on the growth of the economy. Manufacturing sector has the potential of enhancing the growth and performance of the economy (Libanio, 2006) and as such the manufacturing sector can significantly contribute through increase in government tax revenue, boost manufacturing activities which no doubt leads to industrialization (Aderibigbo, 2004). Therefore, the more the number of manufacturing industries, the better industrialized such a society is said to be.

Despite these evidences of the role of the manufacturing sector in economic growth and development of nations, it is also argued that one of the major factors militating against the growth of the sector is inadequate financing (Manufacturers Association of Nigeria, 2014). Most manufacturers find it difficult to access credits from financial institutions and where such credits are available, the rate of interest charged by these banks may be too high that by the time the manufacturer liquidates the loan, little profit is left for the investor. An examination of the total bank loans and advances to all sectors vis-a-vis bank loans and advances to the manufacturing sector in Nigeria indicates a relative decline in bank funding to the manufacturing sector (CBN, 2014).

Several factors have been highlighted as determinants of bank lending to the manufacturing sector and growing amount of literature have been empirically put forward (Takats 2010, Aisen and Fraken, 2010, Guo and Stepanyan, 2011).

The submissions of these authors point to the fact that inabilities of banks to lend to the manufacturing sector is as a result of both internal and external factors affecting their ability to lend. Identification of these factors for policy makers and practitioners' attention supports the motivation for undertaking this study.

From the foregoing debate, despite the critical role of a well-funded manufacturing sector in economic growth of nations, previous studies have revealed that one of the main factors militating against growth is inadequate finance and difficulty in accessing funds from the banks by the manufacturing sector. This is contrary to the key financial intermediation role banks play in the growth of economy via all sectors including the manufacturing sector. It has therefore become imperative that an empirical study on the impact of bank funding, especially with factors affecting bank loans to a high priority sector such as the manufacturing sector be undertaken given the role that the sector plays as the engine room of economic development of nations especially in emerging market economy like Nigeria. This is the research gap this study hopes to close by investigating the impact of bank funding on the growth of Nigeria's manufacturing sector from 1987 to 2015.

1.3 Aims, Objectives and Research Questions

The main aim of this thesis is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. It also aims to evaluate the finance-growth nexus and assess the impact and effectiveness of such link for economic transformation of nations. The study also aims to identify factors that affect funding of Nigeria's manufacturing sector by the country's deposit money banks.

The objectives of the study are:

i. To contribute to existing literature by critically reviewing the extant literature on finance and growth nexus with special emphasis on bank lending and manufacturing sector growth.
ii. To examine the relationship between bank loans and advances to the manufacturing sector and its impact on manufacturing sector's growth in Nigeria.
iii. To investigate possible factors that affect bank loans and advances to the manufacturing sector of the Nigerian economy.
iv. To highlight policy implications for Nigeria in view of the findings from this study.

Thus, this thesis shall address the following questions.

Research Question One

To what extent is there a relationship between bank loans and advances to the manufacturing sector and manufacturing sector's growth in Nigeria?

To address this question, this study explored both causal relationship between bank loans and advances and manufacturing sector growth in Nigeria and the impact of bank loans and advances to the manufacturing sector on manufacturing sector's contribution to Nigeria's gross domestic product.

As mentioned in the earlier section of this chapter, the debate on the relationship between financial intermediation and economic growth is still inconclusive. There have been arguments that financial intermediation drives economic growth and economic growth drives financial intermediation (Odhiambo, 2011). Therefore, there is a need to explore the direction of causality between bank

funding and manufacturing sector growth in this study. Thus, to answer this question, the study hypothesized that:

Ho1: There is no causal relationship between bank loans and advances and manufacturing sector growth in Nigeria.

Ha1: There is a causal relationship between bank loans and advances and manufacturing sector growth in Nigeria.

Again, the inconclusive argument on the role of the bank-based financial system on economic growth triggered a second hypothesis. The bank-based financial system stresses the importance of financial intermediation in ameliorating information asymmetries and intertemporal transaction cost (Levine, Loayza and Beck, 2000). Thus, it is argued that once these costs are removed the rate of interest will be lowered thereby increasing banks' ability to lend to the real sector which will result to growth. However, this view has not been sufficiently explored and investigated in Nigeria hence this study. To address this question, the study therefore hypothesized that:

Ho_2: Bank loans and advances to the manufacturing sector do not have positive and significant impact on manufacturing sector's contribution to Nigeria's gross domestic product.

Ha_2: Bank loans and advances to the manufacturing sector have positive and significant impact on manufacturing sector's contribution to Nigeria's gross domestic product.

Research Question Two

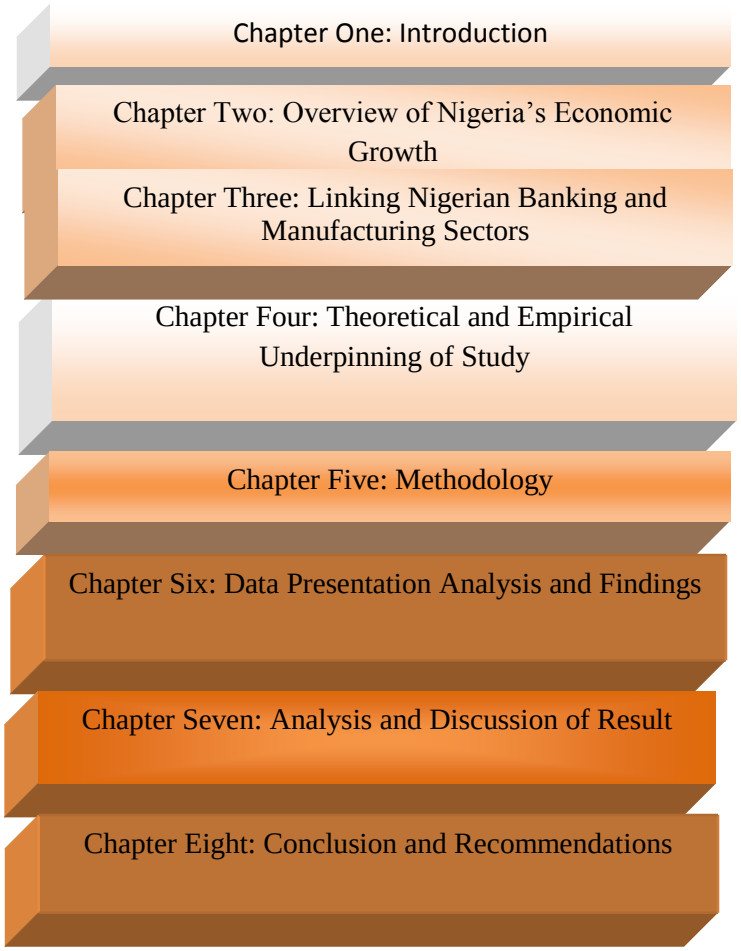
What factors affect bank funding to Nigeria's manufacturing sector? Despite the strategic importance of the manufacturing sector as the engine of growth of any

economy, empirical data on the quantum of bank loans and advances to the Nigerian manufacturing sector vis-a-vis total funding to the whole economy has been on the decrease. It becomes necessary to investigate the reasons behind this paucity of funding to this identified driver of economic growth (CBN, 2014).

1.4 Structure of the Thesis

This study is divided into eight chapters. As follow-up to this introduction chapter, Chapter two presents the contextual background of the Nigerian economy by taking an overview of the country's economic growth. It presents an overview of sectors of the Nigerian economy, their contributions and justification for pinning down the study on the interaction between bank funding and the contribution of the manufacturing sector towards the growth of Nigerian economy. Chapter three attempts to present a linking of the two major sectors of interface in the study, the funding banking and taking manufacturing sectors. Chapter four which is the literature review provides the theoretical and empirical underpinning of the study. This includes the theoretical evidence on the impact of bank funding on economic growth and empirical works on bank funding and economic growth. In Chapter five, research philosophy, methodology and method guiding the study is explained. This chapter explains what data to gather, why the data, where to gather them, and how to analyze and interpret the findings. Chapter six presents analysis of the secondary and primary data used in the study as well as its findings while Chapter seven presents further analysis of the data as well as discusses the results of the research findings relative to the reviewed literature. Lastly in Chapter eight, the study concludes by providing the summary of findings, contributions to knowledge and practice; policy recommendations and limitations for further study. This is presented in the flowchart below:

Figure 1.1: Outline of the Study Chapters



CHAPTER TWO

OVERVIEW OF NIGERIA'S ECONOMIC GROWTH

2.1 Introduction

The main aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. In line with this aim, this chapter provides an overview of the Nigerian economy with a view to providing evidence for better and contextual understanding of the country-specific economic history and dynamics. The belief is that this chapter shall provide a holistic view of the Nigerian economy, its history, growth and some key transformational policy measures taken to position the economy on stable and sustainable growth trajectory.

2.1.1 Chapter Objectives

In line with the overall aim of this study, the specific objective of this chapter is to provide an overview of the Nigerian economy with a view to presenting its economic growth experiences. It also hopes to review with specific interest the country's economic evolution from pre-independence to post-independence eras. The chapter shall highlight the reforms with a view to briefly presenting the various economic challenges and measures taken in addressing them. To support the manufacturing and the banking sectors towards funding enhancement, various policy interventions and their contributions to economic growth in Nigeria are also presented in this chapter. It shall conclude with the summary of the chapter.

2.1.2 Chapter Structure

This chapter is sub divided three sections. In section 2.2 the study highlights the background of the Nigerian economy and in section 2.2.2 the study examined

economic transformation measures and growth agenda of Nigeria and lastly, the chapter concluded with chapter summary in section 2.3.

2.2 Background of the Nigerian Economy

This section chronicles some of the highpoints of the Nigerian economy from her political independence in 1960 to 2015. Though this review may not capture all the key economic indices, but the major high-points within the period shall be highlighted. An examination of the country's history shows that Nigeria attained independence in 1960 and since then the Nigerian economy is still basically agrarian, dominated for the most part by peasant small holder farms (Edo and Ikelegbe, 2014).

2.2.1 Nigerian Key Economic Sectors

In his maiden address, the current Governor of Nigeria'sCentral Bank (CBN) Godwin Emefiele was of the view that the Nigerian economy relative to both global and sub-Sahara African growth trajectories has performed appreciably well over a seven years (2007—2013) period. During the period Emefiele (2014) posits that the Nigerian economy expanded by an average of 7%, while sub-Sahara Africa's real GDP growth averaged 5.2%. In the fourth quarter of 2013, he said the Nigeria's real GDP grew by 7.7%, mainly driven by an 8.8% growth in the non-oil sector. Also for fiscal 2013, the economy grew by 6.9%, with the non-oil sector providing 8.1% backbone to the strong growth (Emefiele, 2014).

Again, looking at the Nigerian population, it was estimated that Nigeria's population was 155,215,573 in 2011 with a total area of 923,768 sq km with land at 910,768 sq km and water 13,000 sq km. Other major sectoral macroeconomic GDP indices for selected years are depicted in Table 2.1 below.

Table 2.1: Percentage Contribution of Sectors to the Nigerian economy (1981-2015)

Year	Agriculture (N' Billion)	Crude Petroleum & Natural Gas(N' Billion)	Manufacturing (N' Billion)	Others (NBillion)[1]	GDP (N' Billion)	% Agriculture to GDP	% Crude Petroleum & Natural Gas to GDP	% Manufacture to GDP
1981	17.05	5.92	26.89	94.97	144.83	11.8	4.1	18.6
1982	20.13	4.93	29.09	100.84	154.98	13.0	3.2	18.8
1983	23.80	4.28	31.13	103.80	163	14.6	2.6	19.1
1984	30.37	5.24	27.12	107.66	170.38	17.8	3.1	15.9
1985	34.24	6.59	37.14	114.31	192.27	17.8	3.4	19.3
1986	35.70	5.54	38.65	122.55	202.44	17.6	2.7	19.1
1987	50.29	15.48	43.22	140.46	249.44	20.2	6.2	17.3
1988	73.76	17.30	63.52	165.75	320.33	23.0	5.4	19.8
1989	88.26	44.33	72.90	213.71	419.2	21.1	10.6	17.4
1990	106.63	58.06	84.27	250.73	499.68	21.3	11.6	16.9
1991	123.24	67.50	110.60	294.71	596.04	20.7	11.3	18.6
1992	184.12	142.98	153.47	429.24	909.8	20.2	15.7	16.9
1993	295.32	140.25	221.23	602.27	1,259.07	23.5	11.1	17.6
1994	445.27	126.92	354.66	835.95	1,762.81	25.3	7.2	20.1
1995	790.14	444.02	414.13	1,246.92	2,895.20	27.3	15.3	14.3
1996	1,070.51	670.74	477.95	1,559.93	3,779.13	28.3	17.7	12.6
1997	1,211.46	619.22	546.71	1,734.24	4,111.64	29.5	15.1	13.3
1998	1,341.04	426.80	620.20	2,200.95	4,588.99	29.2	9.3	13.5
1999	1,426.97	593.44	713.82	2,573.13	5,307.36	26.9	11.2	13.4
2000	1,508.41	1,266.67	826.03	3,296.38	6,897.48	21.9	18.4	12.0
2001	2,015.42	966.79	989.11	4,162.81	8,134.14	24.8	11.9	12.2
2002	4,251.52	1,042.00	1,127.23	4,911.51	11,332.25	37.5	9.2	9.9
2003	4,585.93	1,588.09	1,304.07	5,823.48	13,301.56	34.5	11.9	9.8
2004	4,935.26	2,460.55	1,516.05	8,409.44	17,321.30	28.5	14.2	8.8
2005	6,032.33	3,281.47	1,778.73	11,177.45	22,269.98	27.1	14.7	8.0
2006	7,513.30	4,044.97	2,082.49	15,021.71	28,662.47	26.2	14.1	7.3
2007	8,551.98	4,363.63	2,401.19	17,678.58	32,995.38	25.9	13.2	7.3
2008	10,100.33	5,270.01	2,761.55	21,026.00	39,157.88	25.8	13.5	7.1
2009	11,625.44	4,297.07	3,170.82	25,192.22	44,285.56	26.3	9.7	7.2
2010	13,048.89	8,402.68	3,578.64	29,582.05	54,612.26	23.9	15.4	6.6
2011	14,037.83	11,039.41	4,527.45	33,375.72	62,980.40	22.3	17.5	7.2
2012	15,816.00	11,315.03	5,588.82	38,994.09	71,713.94	22.1	15.8	7.8
2013	16,816.55	10,296.33	7,233.32	45,746.36	80,092.56	21.0	12.9	9.0
2014	18,018.61	9,616.49	8,685.43	52,723.09	89,043.62	20.2	10.8	9.8
2015	19,636.97	5,990.42	8,973.77	59,543.80	94,144.96	20.9	6.4	9.5

Source: CBN Statistical Bulletin 2015

At independence in 1960, the proportion of the Gross Domestic Product accounted for by agriculture and petroleum stood at 67.0% and 0.6% respectively and by 1974 the proportions had been reversed to 23.4% and 45.5% respectively (CBN, 2014). As shown in table 2.1 above, in 1984, the contributions of agriculture and petroleum had gone down to 17.8% and 3.1%

[1]Others include Industry, Construction, Trade and Services

respectively (CBN, 2015) while that of the manufacturing sector was 15.9%. As at the end of 1993, the percentage contribution of agriculture had climbed up once again to 23.5% of GDP with petroleum going down to 11.1% from the 15.7% in 1992; the manufacturing sector's contribution kept decreasing from 18.6% in 1981 to 7.2% in 2009 (Sanusi, 2010).

Just like most developing economies, the Nigerian public sector dominates economic activities. Government expenditure thus has a significant influence in growing the economy. The petroleum industry has continued to dominate the public finances and foreign exchange resources of Nigeria. Outside of transportation and, perhaps, a small section of the industrial sector, the petroleum sector has very little linkage with Nigerian industrial productivity. The underdevelopment of Nigeria's petrochemical industry has accounted for the under contribution of the petroleum sector to the nation's GDP. The nation, though the 6th biggest oil producing country in the world, still exports most of her crude oil only to import most of her national consumption of petrochemical products like premium motor spirit (PMS), automotive gasoline oil (AGO) and even dual purpose kerosene (DPK).

Outside these direct products of crude oil refinery, the nation also imports other bye products of hydrocarbons like chemicals and Polyvinyl Chlorides (PVCs) for her industries. Horizontal and vertical integration and development of the petroleum and petrochemical industry in Nigeria would have greatly enhanced the industrialization of Nigeria and also boosted her GDP.

Other sectors such as the real sector (manufacturing/agricultural) are yet to take their place in the gross domestic product of the country. However, it must be noted that agriculture together with trade provides the bulk of the employment

for Nigerians. Also, the agricultural sector provides the bulk of the needs of the household sector but supplies only a small part of the needs of the manufacturing sector (Oluduro, 2015).

While recognizing the critical size and relevant contributions of all the sectors of the economy, the researcher's interest in the Nigerian manufacturing sector for the purposes of this study is largely reinforced by the studies of Eze and Ogiji (2013), Loto (2012) and Charles (2012) which revealed that the manufacturing sector is the engine room for economic growth of nations and has the capacity of boosting fiscal revenue through taxation, growing and preserving exchange reserve through exports and creating jobs in the economy. Again the researcher's bank lending experience in the private sector of the Nigerian economy (especially the manufacturing sector) helped in firing up the curiosity to investigate empirically the impact of bank funding on the manufacturing sector and also identifying factors that affect such funding with a view to improving lending practice especially to the manufacturing sector. This is in line with the Nigerian government's commitment towards diversifying the economy and moving it from oil dependent to real sector (agriculture and manufacturing sectors) dependent.

2.2.2 Economic Transformation Measures and Growth Agenda

The year 1986 marked the beginning of economic deregulation with the objectives of restructuring and diversifying the economic base of the economy and reducing the dependence on oil; achieving fiscal balance and reducing the deficit in the balance of payments in the medium term and laying the foundation for non-inflationary growth in the medium and long term (Adedipe, 2004).

SAP, Monetary Policy and Financial Institutions Reforms

The thrust of the International Monetary Fund (IMF) induced Structural Adjustment Programme (SAP) through deregulation was to promote competition and efficiency through greater reliance on market forces. These encompassed the abolition in September 1986 of import licensing, privatization and commercialization of some public enterprises, the partial removal of exchange controls, reduction of government borrowing, and the strengthening of the use of Treasury Bills as effective tool of monetary control. Others include the removal of restrictions on commercial banks to engage in equipment leasing and relaxation of restrictions on equity participation in companies by banks. Finally it also entailed the adoption of tools of monetary control (the use of cash reserve requirements, liquidity ratios, the discount rate and open market operations) and the establishment of discount houses (CBN, 2014). Open market operation (OMO) describes the intervention process of the CBN in the money market through buying and selling of her instruments like treasury bills and government bonds with a view to pushing liquidity into the system or mopping up same respectively.

The CBN also uses the maintenance of certain reserves and ratios by the Deposit Money Banks (DMB) with her to control their ability and capacity to lend money to the system. Such reserves include liquidity ratio, which requires the banks to maintain a specified percentage of their entire customer deposits in her treasury bills instruments at a fixed yield. These instruments are discountable and tradable at the money market. Cash Reserves Requirement (CRR) occurs when the CBN freezes a certain percentage of the banks' deposits with her as compulsory cash reserve (usually interest free). These measures have far reaching implications for the manufacturing sector which is directly affected by the nation's foreign reserves and local currency liquidity and

consequent exchange rates which determine the landing prices of her imported raw materials and even plants and machineries.

In a free market economy, especially in Nigeria where the licensed Deposit Money Banks (DMBs) are quoted on the Stock Exchange (private sector owned and managed), their deposit mobilization and lending are largely market determined and subject to their liquidity position. Their cost of funds (interest rate payable on deposits) and lending rate are largely determined by the CBN's Monetary Policy Rate (MPR) and interplay of demand and supply of funds in the market place. Deposits of the Nigerian DMBs are largely driven by the money supply in the economy, which in turn is determined largely by government spending and capital inflows into the economy. Two major definitions of money supply in the economy exist, the narrow money (M1) and the broad money (M2). While M1 captures cash in circulation in the economy, M2 in addition to the cash in circulation captures the available withdrawable balances of customers in the banking system. When M2 is high in the system, especially after government has released funds to her service providers (recurrent and capital expenditure) or has constitutionally shared the monthly federally collected revenue to all tiers of government (the local councils, the state and federal governments), the economy is usually a washed with liquidity. This usually portends excess liquidity challenge to the CBN whose key function is to control inflation and stabilize the interest and exchange rates in the economy. Consequently, the CBN intervenes in the market through OMO by mopping up deposit liabilities of the DMBs and money in circulation belonging to the general public through sell of Treasury Bills (T-bills) at attractive interest rates. When this happens, the banks' ability to lend to the private sector and or the manufacturing sector is impaired (limited) as they may become "illiquid"

and the manufacturing sector could be said to have been “crowded out” (short changed) by the borrowing of the government through the CBN in OMO.

In 2013 and 2014, the OMO was CBN’s major tool for liquidity management which it achieved through the issuance of Treasury bills (T-bills). The sale of T-bills declined by 52.8% in the second half of 2013 compared with the first half. In the second half, the volume of transactions of the standing lending facility window rose by 30.66%, while that of standing deposit facility window rose by 53.6%, compared with the first half. Also in 2014, OMO was principally used to mop up or inject liquidity into the system as a strategy for monetary management by the CBN. OMO auction increased as a result of injections into the system arising from maturity of Federal Government Bonds (CBN, 2015).

Within the period of the Structural Adjustment Programme, the banking sector was not left out. The reform of the banking system was undertaken in part to strengthen and enhance the performance of the supervisory and regulatory framework and in part to improve the reliance of the banking industry on market forces (CBN, 2013). Among these reforms were the granting of autonomy to the Central Bank, the promulgation of the Central Bank of Nigeria and the Banks and Other Financial Institutions Decrees (BOFID) in 1991, the establishment of the Nigeria Deposit Insurance Corporation (NDIC), and the issuance of prudential guidelines and regulations by the Centra1 Bank to the banking institutions (CBN, 2014). These decrees were made to provide a further layer of protection for depositors, promote financial stability by complementing the supervisory activities of the Central Bank of Nigeria (CBN) in ensuring a safe and sound banking system. With the prudential guideline, lending banks are required to exercise due care in appraising and lending depositors’ funds (deposits). They are also required to take adequate security/collaterals as secondary source of repayment of loans and advances. In the event of non-

performance of the loans and advances, the guidelines also provide how the lenders shall make provisions from their current income earnings to cushion the effect of eventual loan loss on their liquidity and ability to honour their obligations to their depositors. Illiquidity occasioned by bad loans has been identified as one of the major reasons for bank failures and as such fear of bad loans is taken by bankers as necessary step towards achieving healthy bank and balance sheet (CBN, 2014).

The decade before the introduction of SAP to the Nigerian economy in 1986 can be described as an age of prohibitions in which the economy was almost choked to death by controls (CBN, 2005). On the other hand, the decade after the introduction of the SAP can be described as an age of transition. This period dismantled the controls exercised on the economy by politicians and bureaucrats for over four decades (CBN, 2014). The gains were most impressive and noticeable in the first three years of structural adjustment, thereafter the profligacy of government spending and the nature of its financing from 1990 to 1993 wiped out the progress already made (Dawoda, 2015).

Post SAP Economy (Return of Regulation)

Within this same period, (post SAP) there was an increase in the demand for foreign exchange, caused by the high level of liquidity in the system as a result of excess government spending. Also the dwindling level of export earnings caused by fall in oil prices and the stagnation of non-oil export resulted in a 16% average annual depreciation in the Naira (CBN, 2012). Such persistent and precipitous depreciation however failed to induce any significant increase in non-oil export as was pontificated when SAP was introduced. Efforts to stem the surging demand for foreign exchange, through monetary contraction failed to have a lasting effect and to prevent the widening of the gap between the official and parallel market exchange rates.

Consequently, in 1993 a new rule was introduced, in which each bank's allocated share of foreign exchange was made proportional to its holding of Naira deposits at the Central Bank of Nigeria (CBN, 2013). That arrangement caused a withdrawal of virtually all excess liquidity from the financial system for most of the time. When all efforts to stabilize the foreign exchange rate appeared to have failed, the government in 1994 fixed the rate at about ₦22.00 to USD1.00 (CBN, 2005). This period once again marked the re-introduction of exchange controls and the direct allocation of foreign exchange to priority sectors such as agriculture and manufacturing.

Return to Civil Rule

The period 1993 to 1998 recorded huge economic progress in Nigeria thereby laying an improved economic foundation for the country's return to democratic governance in 1999. The country saw an increase in her foreign exchange reserves from USD 494 million in 1993 to USD 9.6 billion by the middle of 1997, and a reduced external debt of Nigeria from USD 36 billion in 1993 to USD 27 billion in 1997 (CBN, 2011). The performance of the Nigerian economy in 1999 when the country returned to civil rule was mixed. Inflationary pressures eased especially during the second half of the year. At this period, inflationary pressures had decreased to 6.1%. This was a great decrease as it had risen up to 70% in 1995 and 1996 (Masha, 2000). This coincided with a period of expansionary fiscal deficit and money supply growth. Also, the naira exchange rate had depreciated as the dollar exchanged at ₦92.00 to a US dollar as at the last quarter of 1999. However, the later part of year 2000 witnessed a drastic increase in the exchange rate which is not unconnected with the introduction of a floating exchange rate regime which was hitherto fixed under the military era that ended in 1999. At this period up to the second half of year 2000, a dollar exchanged for ₦I35.00. This shows a further decrease of about 50% in the value of the naira (Mudasiru and Adabonyon, 2001).

However an examination of the real sectors (agriculture and manufacturing) showed sustained improvements. The increase in agricultural production in the preceding five years (i.e. from 1995) was sustained in 1999. During this period, the aggregate index of agricultural production rose by 3.3%, compared with 3.1% recorded in 1998 while the performance became highly unimpressive in the later part of year 2000 (CBN, 2000). The manufacturing sector was also not left out; the sector recorded a moderate recovery in 1999 and 2000 from what it experienced in 1996. However, the sector still found it difficult to change the appetite and orientation of the people for imported goods.

According to a nation-wide survey conducted by the CBN which covered 560 manufacturing establishments, the weighted average capacity utilization rate of the sector rose from 30.3% in 1998 to 34.3% in 1999. The total cost of operations also increased by 14.2% over the level in 1999 owing mainly to high costs of raw materials, machinery and spare parts. The value of imported raw materials rose significantly by 34.7% and accounted for about 47.5% of the total value of raw materials used, while the value of locally sourced raw materials, accounting for 53.5% of the total increased by 5.8% (CBN Annual Report, 1999).

Rebasing of Nigeria's GDP

With the rebasing of Nigeria's GDP from 1990 to 2010, there was a resultant 9% increase in the estimated size of the economy. As a result, Nigeria became the largest economy in Africa with an estimated nominal GDP of USD 510 billion, surpassing South Africa's USD 435 billion. The rebasing exercise also revealed a more diversified economy than previously thought. Nigeria maintained its impressive growth over the past decade with a record estimated 7.4% growth of real gross domestic product (GDP) in 2013, up from 6.5% in 2012. This growth rate is higher than the West African sub regional level and

far higher than the sub-Saharan Africa level. The performance of the economy continues to be underpinned by favorable improvements in the non-oil sector with real GDP growth of 5.4%, 8.3% and 7.8% in 2011, 2012 and 2013, respectively (AFDB, OECD, UNDP, 2014).

As revealed from this section, between 1960 and 2015 the Nigerian economy has shown a remarkable improvement in virtually all sectors of the economy; although the growth cannot be described as holistic. While some sectors have improved, others are still lagging behind. Different policy measures were adopted at different times for different purposes. The attained results from these measures were also as varied as the time they were applied and targets that were pursued. In summary therefore, the review of the Nigerian economy, majorly from 1967 to 2015 is a tale of an emerging market with unfolding challenges and opportunities from a 'virgin' nation that secured her political independence in 1960 from Great Britain.

The pre and post-independence backbone of the economy remained agriculture as it remained the largest employer of labour and one of the major contributors to her GDP. Between 1981 and 1985, manufacturing sector was the highest contributor to the nation's GDP, followed by agriculture and then oil. However, oil though a lower contributor behind manufacturing remained the major contributor to the nation's foreign reserve and consequently the major revenue source for the government's fiscal plan. The manufacturing sector as a key member of the real sector suffered competition from foreign goods, capacity underutilization, exchange rates, and illiquidity resulting from monetary policies and regulations.

2.3 Chapter Summary

This chapter has presented some of Nigeria's key economic indices and sectors from political independence in 1960 to 2015, while placing emphasis on the post SAP period of 1987 till 2015. Attempts were also made to show the growth trajectory and drivers at different times. The economic policies and measures taken during this time were also highlighted. While the scope of this study covers period from 1987 to 2015, the researcher considers it pertinent to mention here that Nigeria's economic fortune suffered a sudden and unprecedented decline from 2015 till 2017. This is largely due to the precipitous collapse of global oil prices from average of USD 100 per barrel in 2014 to average of USD 40 per barrel in 2016. Her situation was worsened by the resumed militancy in the oil producing areas of the Niger Delta with the emergence of the militant Niger Delta Avengers (NDA) amongst other groups that took responsibility for the blowing up of oil pipelines and destruction of oil flow stations.

These activities amongst others drastically reduced the country's oil output (production) from average of 2.1 million barrels per day in 2014 to about 1.1 million barrels per day in 2015/16. This double jeopardy of losses in volume and price of the nation's major revenue earner took its toll on the country's revenue thereby affecting its foreign reserves and adversely leading to the devaluation of her local currency against the USD by close to 90% as at close of 2016. Expectedly, this development led to deficits in funding the budget, drop in purchasing power and consumption. Consequently the productive base of the economy suffered from foreign exchange scarcity, adverse exchange rate, low patronage (demand), and even high inflationary rate (cost-pushed). These adverse conditions resulted to two quarters of negative GDP growth rates leading to recession by Q3 of 2016. In the light of the above the Nigerian

economy that was growing its GDP at 7.4% in 2013, went into recession in 2016.

CHAPTER THREE

LINKING NIGERIAN BANKING AND MANUFACTURING SECTORS

3.1 Introduction

The major aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. Coming from the heels of the broader overview of the Nigerian economy in the last chapter, this chapter shall attempt at providing a more specific review of the link between the two major sectors at play in this study; the Banking and the Manufacturing sectors. The chapter explores the history of the banking sector in Nigeria with all its attendant eras of development especially its various reforms eras. The chapter shall also review the contribution of the banking sector to Nigeria's economic growth and link with the manufacturing sector.

The chapter shall also explore the manufacturing sector of the Nigerian economy as well as the sector's funding experience. In line with one of the objectives of this study, this chapter shall also consider the contributions of the manufacturing sector of the Nigerian economy with a view to rationalizing the choice of the manufacturing sector as the key sector for the assessment of funding impact on an economy. The chapter shall be concluded with the chapter summary.

3.1.1 Chapter Objective

The objective of this chapter is to highlight the development of the Nigerian Banking and Manufacturing sectors in line with the main objective of the study of examining the impact of bank funding on the growth of Nigeria's manufacturing sector. It thus answers the questions of how has the Nigerian banking sector fared in the provision of bank funding to the entire economy and the manufacturing sector in particular. What are the policy reforms that have driven the development of both sectors.

3.1.2 Chapter Structure

This chapter is sub divided into eight sections. In section 3.2 the study examined the banking sector of the Nigerian economy. Further in section 3.3, the study looked at institutional reforms eras of the Nigerian Banking sector. Also in section 3.4, the study explored finance-growth theories and contributions of the banking sector to the Nigerian economy. Again in section 3.5, the study compared the sectoral contributions to Nigeria's GDP. While in section 3.6, the study explored the manufacturing sector of the Nigerian economy. Later in section 3.7, it examined Nigerian manufacturing sector and funding and lastly, in section 3.8, the study presents the chapter summary.

3.2 The Banking Sector of the Nigerian Economy

This section is subdivided into three subsections which include the history of the Nigerian banking industry, the reform eras of the Nigerian banking system as well as the contributions of the banking sector to economic growth in Nigeria. The essence is to put perspectives to the important role of the banking sector to economic growth in Nigeria.

3.2.1 The History and Reforms of the Nigerian Banking Sector

This subsection examines the historical background of the Nigerian Banking sector. Banking has come a long way in Nigeria with more than a century of relevance in the economic spheres of the country (Oluduro, 2015).

African Banking Corporation (ABC)

According to Familoni (2000) the history of banking in Nigeria dates back to 1892 when the African Banking Corporation (ABC) commenced activities of banking in Lagos. The ABC was a South African based bank which came to Nigeria and took over business from the Elder Dempster Merchants, which hitherto had been carrying on quasi banking business. Closely on the heels of

this is the British Bank of West Africa (BBWA), which started as a Trust Fund in 1893 by Sir Alfred Jones. It commenced banking activities fully in Lagos in 1894 and established a branch in Calabar in 1900 (Oluduro, 2015).

British Bank of West Africa

The British Bank of West Africa was registered as a limited liability company when it commenced operations in England before establishing the Lagos branch the same year. It was managed by group known as Elder Dempster Merchants and supported by the then colonial government. In 1894, the BBWA absorbed the ABC operations in Nigeria. The BBWA later in 1957 changed its name to the Bank of West Africa, and to the Standard Bank of West Africa Limited and later again to the Standard Bank of Nigeria in 1965, before finally metamorphosing to the First Bank of Nigeria (FBN), in 1979 when the government of Nigeria increased local interests holding in foreign banks in the country.

Anglo-African Bank

Another bank by the name of Anglo-African Bank was established in 1899 which later became Bank of Nigeria (Jones, 1993) but its activities regrettably were short-lived as its operations were absorbed in 1912 by the BBWA. In 1917, the Colonial Bank was established, which later in 1925 became the Barclays Bank DCO (Dominion, Colonies Overseas). Indigenous banking enterprises started in 1914, and between then and 1930, several attempts at establishing locally owned and managed banks were made out of spirit of patriotism and nationalism. For instance, in 1914, the Industrial and Commercial Bank was established but regrettably also failed in 1936.

Post Office Savings Bank

In 1936, the Post Office Savings Bank was established under the Savings Bank Ordinance. This was later succeeded in 1974 by the Federal Savings Bank which was established under the Federal Savings Bank Act 1974. In 1948, the Paton's Commission of Enquiry released its findings, which revealed a number of factors for the high bank mortality, as between 1949 and 1952 well over ten banks sprang up, most of which were small in balance sheet size, but which also did not survive for long. Among the reasons identified by the Commission were inadequate capital base, lack of banking regulation and acceptable prudential guidelines. Inexperienced staffing, fraudulent directors/operators, reckless and rapid expansion of branch network, as well as inability to meet the requirements of the new government regulations were some of the other reasons responsible for their failures (Olukotun, *et al* 2013).

Merchant Banks and Commercial Banks

While Nkiru-Nzegwe (1993) gave account of the emergence of Merchant Banks into the banking space, the period 1959 to 1985 experienced consolidated growth in the banking industry. In 1970 there were a total of 14 commercial banks which rose to 29 in 1980 (Ikpefan, 2012). From 1986, there was massive expansion and structural changes in the banking sector so much that by 1991 there were no less than 121 commercial and merchant banks in Nigeria. This was made up of 66 commercial and 55 merchant banks. Twenty new banks were licensed in 1991 alone, arising from the deregulation of the economy by the federal government, which brought an enhanced free-market enterprise and the liberalization of the banking licensing scheme.

Banking Consolidation

By 2006, due largely to the need for a healthy banking system, the Banking consolidation of 2005, which took effect from 2006 produced 25 re-capitalized

commercial banks having capital base of ₦25billion and above (Adamolekun, *et al*, 2012) arising out of a season of series of mergers and acquisitions in the banking sector to restore public and investors' confidence and forestall a total collapse of the sector. Oluduro (2015) argued that there was distress in the sector owing to several reasons such as mismanagement, bad loans and advances, and ownership structure, i.e. owners' direct intervention in the banks. In addition to this, inappropriate corporate governance, inadequate regulatory and supervisory capacity, asymmetric information, under capitalization, among numerous others were some of the causes of distress in the banking sector. These led to the crisis and erosion of public confidence, diminution of trust and relationship commitment.

Bank distress alone claimed the lives of 27 banks between 1994 and 2003 (Abiola, 2003). This has resulted in the loss of wealth, public confidence in the system and in more challenging and tougher monetary management. It is worthy of note that bank failure was not peculiar to the first era alone, but cuts across all other periods as well. There were quite significant cases of failure, which were indeed more pronounced in the period 1986 to 2003, which thus necessitated drastic regulatory measures to be taken in the succeeding years to stem the tide of failure which was on the high side and, to restore public confidence in the banking sector. Owing to the harvest of bank failures, the Nigerian Deposits Insurance Corporation (NDIC), was established by Decree 22 of 1988, to insure deposit liabilities of licensed banks, provide financial and technical assistance to banks and contribute to the quest for a safe and sound banking environment in Nigeria. In essence, it was created to carry out the final mortality and undertaking process of ailing banks whose licenses have been revoked by the Central Bank of Nigeria (CBN).

The period from 2004 to 2015 has been one of mixed feelings in the industry, as the CBN in 2004 issued a directive requiring commercial banks to increase their paid-up capital base from N2billion (two billion naira) to N25 billion (twenty five billion naira) by December 2005, within a period of eighteen months. This elicited resistance from the bankers, but the directive was irreversible. By 2006, there were just twenty five mega banks in existence resulting from recapitalization, mergers and acquisitions. It is interesting to note that what appeared like a mission impossible at the onset turned out to become something practicable through the dogged determination of operatives. This exercise produced 25 mega banks in 2006; however it left behind some systemic and post consolidation issues that Sanusi reforms (2009-2014) addressed.

This subsection has traced the evolution and genealogy of banking activities in Nigeria, its growth through different stages and through the years up until 2015. Having examined the history, it shows that banking is an integral and core part of the Nigerian economy, without which economic activities might be virtually impossible because of the strategic role of banks in not only safe-keeping of money and other vital documents of trade, but as facilitators of economic activities in the economy.

3.3 Institutional Reforms Era of the Nigerian Banking Sector

Discussion of the evolution of banking in Nigeria may not be complete without a special mention of several institutional reforms put in place over the years aimed at repositioning the financial system for enhanced effectiveness and support to the industrial sector. Emefiele (2014) posited that the critical reforms were designed to position Nigeria's banking industry as Africa's financial hub and the reforms have produced a financial landscape characterized by large and strong banks, an efficient payments system and improved financial

infrastructure. An examination of bank reforms reveals six distinct reform clusters which shall be briefly discussed below.

3.3.1 First (Independence) Reform Cluster (1958-1969)

During the First (Independence) Reforms Cluster (1958–1969) its major objectives and achievements were aimed at regulating the financial system and managing the supply of funds to the economy. The establishment of the Central Bank of Nigeria (CBN) through the Act of 1958 created the window for liquidity management through interventions in the market using Open Market Operation (OMO). The use of Treasury bill was the first major step at creating a local securitized money market to facilitate monetary policy implementation through OMO. The selling and buying of treasury bills by the CBN mops up and releases funds respectively to the economy which in turn affects the funding ability of the banks to the manufacturing sector. During this reform period the Lagos Stock Exchange was established which represented a key first step in developing a local secondary market for trading in both government and manufacturing firms' long tenured securities.

3.3.2 Indigenization Reforms Cluster (1970-1976)

In the Second (Indigenization) Reforms Cluster from 1970 to 1976 the key component of the indigenization reforms was the imposition of a minimum of 40% indigenization equity participation in Nigeria banks by the Nigeria Enterprises Promotion (NEP) Act 1972. This reform period was specifically targeted at enhancing indigenous participation in the Nigerian banking sector with a major objective of providing funding for indigenous manufacturing industries.

3.3.3 Okigbo Committee Reforms Cluster (1977- 1985)

During the Third (Okigbo Committee) Reforms Cluster of 1977 to 1985, the reform was also aimed at the integration of rural financial intermediation with the formal banking sector. This assisted financial institutions at deepening the intermediation capability of banks by meaningfully extending their services to under banked rural areas. This reform period led to fund mobilization that was subsequently channelled into productive activities. The policy of reserving a minimum percentage of banks' total credits as loans to the small scale enterprises (SSEs) was also introduced in 1982 thus assisting the manufacturing sector.

3.3.4 Structural Adjustment Programme) Reform Cluster (1986-1999)

In the Fourth (Structural Adjustment Programme) Reforms Cluster of 1986-1999, the major aim was the introduction of the Structural Adjustment Programme (SAP) recommended by the International Monetary Fund (IMF) as panacea to the country's dwindling economic fortunes. It was essentially a market based programme that thrives on deregulated and liberalized open market economy. During this time the country saw amongst other major economic policies on liberalization, the privatization and commercialization of some public enterprises, the licensing of more banks (merchant and commercial), opening of more branches at the discretions of the banks, introductions of new banking products (assets and liabilities), free allocation of loans to sectors based on risk acceptance criteria and sector attractiveness. This particular reform affected the volume of funding to the manufacturing sector depending on the lenders assessment of the individual firms.

3.3.5 Soludo (Consolidation) Reforms (2004-2009)

In the Soludo's (Consolidation) reforms of 2004-2009, emphasis was on enhancing the capacity of the banking industry to improve its service delivery

and effectiveness through recapitalization and consolidation. The introduction of the Small and Medium Industries Equity Investment Scheme (SMIEIS) in August 2001 was a major achievement at providing funding to the SMEs. The inauguration of the National Micro-Finance Policy earlier in 2004, and consequently the introduction of the Micro-finance Banks (MFB's) banking Module were all aimed at enhancing the growth of the manufacturing sector. This era also witnessed the consolidation of the numerous small operating Nigerian banks into 25 mega banks by 1st January 2006 with minimum issued capital of ₦25billion each. This exercise increased the lending capacity of the banking industry to support the real sector of the economy, especially the manufacturing sector.

3.3.6 Sanusi (Tsunami) Reforms of 2009 to 2014

The Sanusi (Tsunami) reforms of 2009 to 2014 was specifically to address emerging post consolidation structural and operational weaknesses of banks particularly in the area of liquidity, asset quality and capital erosion. These problems inhibited banks' continued ability to effectively provide loans and advances to the deficit units of the Nigerian economy (manufacturing sector inclusive). The reform measures led to the establishment of the Asset Management Corporation of Nigeria (AMCON) to provide a sustainable platform for relieving banks of non-performing (toxic) assets. Again, taking into account the religious diversity of Nigeria, non-interest banking (Islamic banking) was introduced in the country to cater for manufacturers and interested parties in the Northern part of the country.

This reform also saw the revocation of banking licenses of systemically weak and insolvent banks. Their boards and executive managements were sacked while the CBN replaced them with caretaker management pending their recapitalization and realization. Corporate governance issue in the industry was

also addressed and strengthened, separation was made between ownership and management of the licensed banks.

3.4 Finance-Growth Theories and Contributions of the Banking Sector to the Nigerian Economy

However, in spite of the various policy interventions in the Nigerian banking sector and their achievements, the Nigerian banking system appears to be experiencing lots of challenges which affect its contribution to the country's economic growth. Thus, according to Afolabi (2004) the decade, 1995 to 2005 was particularly challenging for the Nigerian financial sectors (banking, capital market, and insurance) as some banks in Nigeria went into distress due largely by to poor management by managers of the banks. These raised a lot of concern not only to the regulatory institutions but also to the policy analysts and the general public. Monetary policies are implemented by the Central Bank of Nigeria through various monetary policy tool such as open market operation, discount rates, and cash reserves ratios to mop up excess naira liquidity in the economy. These in most cases create difficulties for banks as they are unable to mobilize deposit into the banking sector. As a result some of the banks engaged in currency arbitrage activities that generally fall outside the authorized banking operation.

According to the World Bank (2013), private sector-led economic growth remains stymied by the high cost of doing business in Nigeria, including the need to provide essential infrastructure, increasing insecurity, the lack of effective due process, and non-transparent economic decision making (especially in government contracting). While corrupt practices are endemic, it is generally less flagrant now than during the military rule, and there are signs of improvement. Meanwhile, since 1999 the Nigerian Stock Exchange has

enjoyed strong performance, and equity as a means of fostering corporate growth is being more utilized by Nigeria's private sector (World Bank, 2013).

Meanwhile, the financial deepening table below shows Nigeria's total private sector credits (bank loans and advances to the private sector) and the corresponding gross domestic product (GDP) from 1999 to 2015.

Table 3.1: Financial Deepening

Year	Total Credit to the Private Sector (N,Billion)	GDP(N,Billion)	CPS/GDP (%)
1999	431.17	5,307.36	8.12
2000	530.37	6,897.48	7.69
2001	764.96	8,134.14	9.40
2002	930.49	11,332.25	8.21
2003	1,096.54	13,301.56	8.24
2004	1,421.66	17,321.30	8.21
2005	1,838.39	22,269.98	8.26
2006	2,290.62	28,662.47	7.99
2007	3,680.09	32,995.38	11.15
2008	6,941.38	39,157.88	17.73
2009	9,147.42	44,285.56	20.66
2010	10,157.02	54,612.26	18.60
2011	10,660.07	62,980.40	16.93
2012	14,649.28	71,713.94	20.43
2013	15,751.84	80,092.56	19.67
2014	17,129.68	89,043.62	19.24
2015	18,674.15	94,144.96	19.84

Source: CBN Statistical Bulletin 2015

While the financial deepening table has shown the overall growing volume of private sector credits in support of the national GDP, the major challenge this data presents is the need to evaluate how far the Nigerian banks' funding has impacted on the growth of the Nigerian economy. This remains an issue to be thoroughly evaluated considering recent emphasis on sustainable development which according to the World Development Report (2000) and Bigg (2013), is

aimed at ensuring meeting the needs of present generation without compromising the needs of the future generations. This could be possibly achieved through a conscious and wholistic policy driven approach at growing the Nigerian economy through economic diversification from oil dependence to real sectors dependence (manufacturing and agricultural sectors). Adequate funding of the real sector has been identified as key enabler towards its growth and economic contribution. This implies that the Nigerian government, policy makers and other developing economies must as a matter of urgency rethink their economic policies and formulate and implement policies that will assist in addressing the needs of not only the present generation but future generations as well. This consciousness of sustainable development however hinges on the nation's ability to enhance its rate of capital accumulation which is a central function of the banking system.

The financial system of any economy is supposed to contribute significantly to the growth and development of such economy (Balago, 2014). And the financial system consists of various financial institutions, operators and instruments that give the system its character and uniqueness. This was emphasized by CBN (2009) that the Nigeria financial system consists of a combination of financial arrangements, agents, institutions, rules and regulations which work together with each other and the entire world, with the aim of facilitating exchange and consequently economic growth of the country (CBN, 2009).

The financial system is a prime mover of economic growth, which it achieves through intermediation processes, which involves the provision of a medium of exchange necessary for the mobilization of savings from surplus units to deficit units (Agu, 2005). Thus, through financial intermediation process there is an enhanced productive activity that positively influences aggregate output and

economic growth which ensures effective transfer of fund from the surplus to the deficit sectors of the economy.

Financial markets are essential to a healthy modern economy and through them excess funds offered by lenders/savers are purchased by borrowers/spenders who need those funds for economic activities. The financial system again provides avenues for organizing and managing the payments system and mechanisms for the collection and transfer of savings by banks and other depository institutions. Arrangements are also made covering the activities of capital market with respect to the issue and trading on long term securities, the workings of the money market in respect of short-term financial instruments and the activities of financial markets are complementary to the money and capital markets (Nzotta, 1999, Nzotta and Okereke, 2009).

The financial sector in Nigeria is regulated by several hierarchical institutions which include the Central Bank of Nigeria (CBN), the Nigeria Deposit Insurance Corporation (NDIC), the Securities and Exchange Commission (SEC), the National Insurance Commission (NAICOM), and the National Board for Community Banks (NBCB). For the purposes of this study it shall limit the assessment to the Nigerian banking industry which is a very key component of the financial system. Also in this study, financial intermediation, is referred to looking at the activities of the banking industry as a member of the financial sector/system. It is actually the driver of the bank-based market economy.

As revealed from CBN (2015) the contributions of the banking sector to Nigeria's gross domestic product since 1999 has not exceeded 4% (see, table 3.2 below). The year with the highest contribution was 2006 when the banking sector contributed 3.37% to GDP while the least was in 2005 when the sector's contribution was 1.90%. This reveals the weakness of the banking sector in

contributing meaningfully to the growth of the Nigerian economy. The banking consolidation exercise in 2005 and other reforms within the Nigerian banking sector have improved the banks' contribution to GDP from 1.90% in 2005 to 3.37% in 2006. This indicates that given the right regulatory and operational support, the potentials of the Nigerian banking sector to induce economic growth could be enhanced.

However, the sector's contribution has been mixed since 2006. As revealed from table 3.2, banking sector contribution to GDP fell slightly to 3.36% in 2007 and it fell further to 1.92% in 2011. There was a slight increase in 2012 when the banking sector contribution rose to 2.45% and marginally increased to 2.59%, 2.73% and 3.02% in 2013, 2014 and 2015 respectively.

Table 3.2: Contribution of Nigeria's Banking Sector to GDP

Year	Banking Sector Contribution to GDP (N, Billion)	Nigerian GDP (N, Billion)	% Banking Sector Contribution to GDP
1999	127.8	5,307.36	2.41
2000	141.95	6,897.48	2.06
2001	176.32	8,134.14	2.17
2002	257.57	11,332.25	2.27
2003	263.87	13,301.56	1.98
2004	334.29	17,321.30	1.93
2005	423.51	22,269.98	1.90
2006	965.26	28,662.47	3.37
2007	1,107.32	32,995.38	3.36
2008	1,273.42	39,157.88	3.25
2009	1,442.61	44,285.56	3.26
2010	1,648.74	54,612.26	3.02
2011	1,209.78	62,980.40	1.92
2012	1,756.88	71,713.94	2.45
2013	2,076.21	80,092.56	2.59
2014	2,426.65	89,043.62	2.73
2015	2,842.39	94,144.96	3.02

Source: CBN Statistical Bulletin 2015

It is against this importance of the financial system that several studies have been carried out on the role of financial intermediation in economic growth of nations (Benston and Smith, 1975, Shittu, 2004, 2012). As argued by Benston and Smith Jr. (1975), besides the performance of the specialized tasks, financial intermediation mitigates the cost associated with information acquisition and the conduct of financial transaction (Shittu, 2012). It provides for insurance and risk sharing (Allen and Gale, 1977; 2004), stimulates funding liquidity needs (Holinstrom and Tirole, 1998) as well as assisting in the creation of specialized products (Benstone and Smith Jr., 1975). This implies that empirical evidences exists to show the role of finance in economies, although, these evidence are inconclusive and unexhausted hence this study.

To understand the role of financial intermediation especially bank based financial system and the role of finance in economies of nations, it is important to study the development of the Nigerian banking sector and its role over the years in stimulating the growth of the Nigerian economy. The stimulation of growth of an economy through various inputs cannot be disassociated with growth theories which have been propagated by economists from the classical view point to the endogenous growth model. The progress in economic growth theories is captured by Salvadori (2003: xi) when he contributed that

> …interest in the study of economic growth has experienced remarkable ups and downs in the history of economics. It was central in classical political economy from Adam Smith to David Ricardo, and then in its' 'critique' by Karl Marx, but moved to the periphery during the so-called 'marginal revolution'. John von Neumann's growth model and Roy Harrod's attempt to generalise Keynes's principle of effective demand to the long run re-ignited interest in growth theory. Following the publication of papers by Robert Solow and Nicholas Kaldor in the mid-1950s, growth theory became one of the central topics of the economics profession until the early 1970s. After a decade of dormancy, since the mid-1980s, economic growth has

> once again become a central topic in economic theorising. The recent theory is called 'endogenous growth theory', since according to it the growth rate is determined from within the model and is not given as an exogenous variable...

As explained above, growth theories began with the classical perspectives of Adam Smith and David Ricardo. Adam Smith viewed the growth process as a combination of capital accumulation and division of labour, and further explained economic growth as an endogenous process where growth depends on the decision and actions of agents (savers and investors) as well as the creativity and innovativeness that comes up in an economy.

David Ricardo though agreeing with Smith in many respects however differs as it concerns Smith's view of the long run trend of profitability as capital accumulates (Salvadori, 2003). Ricardo thus showed that given the real wage rate, the rate of profits cannot fall as a consequence of the 'competition of capital', as argued by Smith but only because of diminishing returns due to the scarcity of land(s) in the growth process.

Aside the classical perspective of economic growth as postulated by Adam Smith and David Ricardo, another strand of theory that came up to explain economic growth is the Keynesian theory of economic growth. The basis of the Keynesian theory of economic growth is that economic system does not tend necessarily to full employment and that the different components of demand may affect the rate of growth of the economy (Commendatore, *et al*, 2003). These components of aggregate demand include consumption, investment, and government spending with net of import over export.

In conclusion, this section has briefly considered the interplay based on the facilitation of transfer of resources between lenders and borrowers either from

the stock market angle or the money market aspects depicted by the market based and bank based financial systems respectively. While the market based financial system tends to relate economic growth with the growth of the stock market, the bank based relates economic growth with the development of banks in their intermediation functions to growth. Although, it is inconclusive on which aspect promotes economic growth and to what extent, however it has been established that there is a relationship between finance and growth (finance-growth nexus).

3.5 Comparative Sectoral Contributions to Nigeria's GDP

An examination of the Nigerian economy reveals that since the attainment of independence in 1960, the economy is still basically agrarian and dominated for most part by peasant small holder farms (Edo and Ikelegbe, 2014). At independence, the proportion of gross domestic product (GDP) accounted for by agriculture and petroleum stood at 67% and 0.6% respectively (CBN, 2014). By 1974, the proportion had been reversed to 23.4% and 45.5% respectively (CBN, 2014). This could be attributed to the discovery of oil and the attendant reliance on oil as the mainstay of government revenue. The discovery of oil though a blessing has also led to neglect of the other sectors of the economy, as evident by a drop in the manufacturing sector's contribution to GDP. From a modest contribution of 18.6 % to GDP in 1981, the manufacturing sector's contribution to GDP fell to 9.8% in 2003 and 9.0% in 2013 (CBN, 2015). This dismal performance of the manufacturing sector therefore reinforces the need to explore empirically the factors that have hindered the growth of the sector, hence this study. Table 2.1 had earlier presented the contributions of some selected sectors to the Nigerian economy from 1981 to 2015. It highlighted the contributions of the agricultural, petroleum, and manufacturing sectors while grouping the rest of the sectors of the economy as others. This arrangement is done by the researcher to single out these three sectors as major contributors in

terms of size and criticality to growth. As explained earlier, the research is narrowed further to the manufacturing sector because of its major impact on employment, engine of growth and the researcher's lending experience in line with the DBA research focus on impact.

An examination of the Nigeria's manufacturing sector performance indicates that one of the possible hindrances or obstacles is the lack of funding available for expansion of the sector. Loans and advances from deposit money banks to the manufacturing sector over the years have been decreasing on relative basis when compared with loans and advances to the rest sectors of the Nigerian economy. For instances in 1981, while total commercial banks loans and advances to the entire economy stood at ₦8.6billion, ₦2.7billion was channeled to the manufacturing sector with a corresponding manufacturing sector contribution to GDP standing at 18.6% (CBN, 2015). In 1991, when the total bank loans and advances rose to ₦26billion, loans and advances granted to the manufacturing sector was only ₦7.9billion, and correspondingly the manufacturing sector's contribution to GDP remained at 18.6% and fell to a low of 71.% in 2008 (CBN, 2015).

As stated in the motivation of this study, an examination of the contribution of the manufacturing sector of the Nigerian economy from 1981 to 2015 reveals that the sector's percentage contribution to economic growth has generally been on the decline, especially since 1984. While other sectors' contribution was increasing, the manufacturing sector contribution though increasing in quantum value was decreasing in relative percentage terms to the Nigerian economy. The question thus is why was the manufacturing sector's percentage contribution declining? This is the question which this study seeks to answer.

Prior literature reviewed have shown the role of the manufacturing sector in economic growth of Nigeria which supports the significance of the sector in the country's growth analysis (Eze and Ogiji, 2013). However, some studies have also mentioned that one of the main factors militating against the manufacturing sector growth is inadequate finance and difficulty in accessing funds from the banks. Again, this is contrary to the key funding role banks are meant to play in the growth of economy via all sectors including the manufacturing sector. It therefore becomes imperative that an empirical study on the impact of bank funding, especially with factors affecting bank loans to a high priority sector such as the manufacturing sector be undertaken given the role that the sector plays as the engine room of economic development of nations especially in emerging market economy like Nigeria. This is yet another gap which this study intends to fill.

3.6 The Manufacturing Sector of the Nigerian Economy

This section examines the manufacturing sector, the definition of what is a manufacturer in accordance with the United Nation International Standard industrial classification as well as the CBN definition.

3.6.1 Introduction of Nigerian Manufacturing Sector

According to the United Nations International Standard industrial classification of all economic activities, a firm qualifies to be classified under the manufacturing sector if it engages in the physical or chemical transformation of materials, substances, or components into new products. The materials, substances, or components transformed are raw materials that are products of agriculture, forestry, fishing, mining or quarrying as well as products of other manufacturing activities (UN, 2008). Again, the Central Bank of Nigeria (CBN, 2010) defined manufacturing firms as entities involved in the production and processing of tangible goods; firms that fabricate, deploy plants, machinery or

equipment to deliver goods. They may also provide infrastructure to facilitate economic activity in the real sector; and such entities must not be involved in the financial services industry.

It is against the definition given by the CBN (2010) that Dickson (2010) was of the opinion that manufacturing sector accounts for a significant share of the industrial sector in developed countries. The final products from most manufacturing sector firms can either serve as finished goods for sale to users for consumption or as intermediate goods/raw materials used in further production process for value adding firms. For example, PVC produced by a petrochemical company is raw material for a plastic manufacturing company. In referring to the role of the manufacturing sector, Loto (2012) referred to the manufacturing sector as an outlet for increasing productivity in the economy in relation to import replacement and export expansion, creating foreign exchange earning capacity, raising employment and per capita income which causes unrepeatable consumption pattern. Also, Mbelede (2012) opined that manufacturing sector is involved in the process of adding value to raw materials by turning them into products.

Therefore, manufacturing industries are the key catalytic variable in economic development that drives the conversion of raw materials into finished goods and sometimes raw material to semi-finished goods. Charles (2012) asserts that manufacturing industries create employment which helps to boost agriculture and diversify the economy and in that process helps the nation to increase its foreign exchange earnings. Manufacturing sector is categorized into engineering sector, construction sector, electronics sector, chemical sector, energy sector, textile sector, food and beverage sector, metal-works sector, plastics sector, transport and telecommunication sector (CBN, 2012).

3.6.2 Nigerian Manufacturing Businesses and Small and Medium Enterprises (SMEs)

While the definition of SMEs vary across the globe, in the work of Mohammed, S et al (2015) SMEs are defined as enterprises with capital base of not less than N1.5 million but not more than N200 million (including working capital and excluding land) with employee strength of between 10 to 300 staff. They also define SMEs from the perspective of the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) which tries to distinguish small scale enterprises from the medium scale enterprises. Small scale enterprises are businesses with 10 to 49 employees and N5 million to N49 million annual turnover. On the other hand medium enterprises have employee strength of between 50 and 199, and annual turnover of N50 million to N499 million. The activities of SMEs cut across many sectors but in Nigeria they are more dominant in the food, services and agro allied businesses. They are also found in the lower end of the plastic industry. There are mostly thin lines between the ownership and management of SME businesses in Nigeria, and this rather weak managerial structure and corporate governance contribute to their rather high mortality rate and poor access to funding from the lending banks. (Mohammed et al 2015).

While adopting the CBN and Nigeria Bureau of Statistics (NBS) aggregate GDP contribution of the entire manufacturing sector of Nigeria for quantitative analysis in this study, for the qualitative investigation of the factors affecting bank funding of the manufacturing sector, the researcher purposively limits the administration of questionnaires to a representative sample from the list of registered manufacturers in the books of the Manufacturers Association of Nigeria (MAN).

As could be observed from Table 2.1, the manufacturing sector in Nigeria especially from 1999 has been characterized by declining relative contribution to the nation's GDP, which is caused largely by inadequate electricity supply, smuggling of foreign products into the country, trade liberalization, globalization, high exchange rate, and low government expenditure (Charles, 2012). It is hoped that this study shall provide answers to the questions policy makers have been asking on the impact of bank funding on the manufacturing sector and its contribution to nation building as well as factors militating against the sector's attraction of bank funding. This is necessary giving the declining percentage contribution rate of the manufacturing sector in Nigeria and the focus of this study.

The slow performance of manufacturing sector in Nigeria could be attributed to massive importation of finished goods, inadequate financial support and other exogenous variables which have resulted in the reduction in capacity utilization and output of the manufacturing sector of the economy. As revealed from CBN Statistical bulletin (CBN 2015) there have been weak performances of the Nigerian manufacturing sector to economic growth. It has also been revealed that there has been a consistent decline in the percentage contribution of the sector to the growth of the Nigeria's economy from 13.4% in 1999 to 7.2% in 2011 and rose slightly to 9.5% in 2015. This has necessitated the need to empirically examine the reasons behind this downward trend being recorded in Nigeria.

Ademola (2012) had opined that the contribution of the manufacturing sector of the economy cannot be over emphasized when considering its role as building grounds for development, employment creation potentials and overall impacts on the economy. The sector can act as a catalyst for transforming economic

structure of nations from slow-growing and low-value adding activities to more productive activities that enjoy greater margins driven by technology.

Thus, Sangosanya (2011) posits that empirical evidences from the developed (USA, UK, Germany, Japan, China) and few emerging economies (South Africa, Brazil) have shown that the producing unit of the economy tends to influence the entire economy's performance and stability, but also asserts that without adequate finance, operations incentives, business friendly environment, growth-oriented government policies and regulations, the manufacturing firms will perform below expectation.

In Nigeria according to Sangosanya (2011) and as well as most developing economies, the capacity of the manufacturing sector to act as an engine room for economic growth and development has been stunted by inadequate capital. This is against the fundamental role of banks to intermediate funds between surplus and deficit economic units (Ajayi, 2007). In 2009, according to Sangosanya (2011) the Manufacturers Association of Nigeria (MAN) declared that 820 manufacturing companies had closed down in nine years (between 2000 and 2008) of return to civil rule in Nigeria and rendered thousands of people jobless.

This buttresses the weak nature of the Nigerian Manufacturing sector due majorly to inadequate funding. The primary tasks of banks according to Nwankwo (1991) include the mobilization of saving, stimulation of investment and economic growth, assistance in resources allocation, boosting of international trade and promotion of the payment system (Ajayi, 2007). This position supports Bitler, Robb, and Wolken (2001), DeYoung, Hunter, and Udell (2004), and DeYoung, Gron and Winton (2005) when they assert that banks play a central role in the supply of credit and about one-third of all

household debts is obtained from banks, and about two-fifths of all small businesses obtain some form of credit from the banks.

This section reaffirmed the critical role of finance in the economic development of economies in general and the manufacturing sector in particular. It went further too to empirically show how the Nigerian manufacturing sector has fared in its performance of this critical function. The section further exposed some of the limiting factors inhibiting the sector from making significant contributions to the economy. These sector growth challenges included harsh operating environment, government fiscal and monetary policies and adequacy of funding from the banking industry. It is against this background that this research shall like to evaluate the present situation (within the research period of 1987-2015) of bank funding to the manufacturing sector with a view to identifying its adequacy, and obtaining the opinion and perceptions of the industry operators on the support they enjoy from the banks and factors affecting their access to bank funding.

3.7 Nigerian Manufacturing Sector and Funding

This section shall briefly consider the aggregate credit (funding) exposure of the Nigerian banking industry to the manufacturing sector with a view to establishing the adequacy or otherwise of bank funding to this identified critical sector of the economy. An examination of the direction of relative percentage bank funding (loans and advances) to the manufacturing sector has been on the downwards trend. In 1999, the percentage of bank loans and advances to the manufacturing sector was 42.4% (CBN, 2015). Over the period 1999 to 2011, there was a consistent fall in this percentage despite the various reform measures aimed at boosting funding to the sector. This study shall seek to explore the reasons behind this trend in Nigeria.

As submitted by Libanio (2006), the manufacturing sector is supposed to be the driver of growth in any economy and much is expected from the banks in terms of loans and advances in support of this sector.Also Libanio's presentation of the manufacturing sector as the engine room of any economy is borne out of its role in generating employment within the economy. This was further confirmed from a job creation survey by the National Bureau of Statistics (NBS) which indicated that the private sector posted a significant share of the 1.2 million jobs created in the country in 2013 (Emefiele, 2014). While this achievement is laudable, it clearly suggests that the country needs to do more to create more jobs for the existing job seekers as well as for new entrants into the labour market. It is therefore against this urgent necessity to empirically examine the impact of bank funding on the growth of Nigeria's manufacturing sector with a view to enhancing the sector that this study becomes imperative and apt.

Factors Hindering the Growth of the Manufacturing Sector

As stated earlier in this chapter, the discovery of oil though a blessing may have also led to neglect of the other sectors of the economy, as evident by the drop in the manufacturing sector's contribution to GDP. From a modest contribution of 18.6% to GDP in 1981, the manufacturing sector's contribution to GDP fell to 9.8% in 2003 (CBN, 2015). This declining performance of the manufacturing sector reinforces the need to explore empirically the factors that have hindered the growth of the sector, hence this study.

The result from a few of the literature so far reviewed suggests that the manufacturing sector has an important role in the growth of government taxes boosting of manufacturing activities which lead to industrialization (Aderibigbo, 2004). Therefore, the more the number of manufacturing industries, the better industrialized such society is said to be.Thus as earlier mentioned, Sangosanya (2011) posits that empirical evidences from the

developed and few emerging economies have shown that the producing unit of the economy tends to influence the entire economy's performance and stability but however asserts that without adequate finance, operations incentives, business friendly environment, growth-oriented government policies and regulations, the manufacturing firms may not perform as expected. In 2009, according to Sangosanya (2011) the Manufacturers Association of Nigeria (MAN) declared that 820 manufacturing companies had closed down in nine years between 2000 and 2008 and rendered thousands of people jobless. This buttresses the difficulties being experienced by the Nigerian Manufacturing sector due majorly to inadequate funding from the banks.

Some manufacturing industries in Nigeria have been characterized by declining capacity utilization, by extension employment generation, which is caused largely by inadequate power supply, smuggling of foreign products into the country, trade liberalization, globalization, high exchange rate, and low government expenditure (Charles, 2012). Despite the overwhelming evidence of the role of the manufacturing sector in economic growth and development of nations, it is also evident that one of the major factors militating against the growth of the sector is inadequate financing (MAN, 2014). Most manufacturers find it difficult to access credits from financial institutions and where such credits are available, the rate of interest charged by these banks may be too high that by the time the manufacturer liquidates the loan, little profit is left for the investor (Sangosanya, 2011).

Some studies have revealed that the manufacturing sector has the potential of enhancing the growth and performance of the economy (Libanio, 2006, Obasan and Adediran, 2010, Sangosanya, 2011, Ademola 2012, Eze and Ogiji, 2013) and as such the manufacturing sector can significantly contribute to economic growth through increase in government tax revenue and improved

industrialization (Aderibigbo, 2004). Therefore, the more the number of manufacturing industries, the better industrialized such a society is said to be.

Again on government's monetary policy intervention, McKinnon (1973) and Shaw (1973) also introduced and highlighted financial repression policy which was largely pursued by many developing countries and advocates of financial liberalization. In this policy according to McKinnon and Shaw, financial repression policy implies interest rate caps, higher banking reserve rates and cross-border capital controls. This could be considered as an implicit tax imposed on financial institutions. These policies are instrumental in terms of growing budget deficits and national debt and impede the development of private financial institutions.

3.8 Chapter Summary

As revealed from the examination of the reform eras of the Nigerian banking industry, each reform era was geared towards addressing perceived problems affecting the Nigerian banking system at that period. These were all geared towards ensuring a sound and robust financial system in Nigeria that could amongst others provide the needed funding for the growth sectors of the economy. Despite these reforms and policy formulations, the challenges of the banking sector, especially as it relates to funding the manufacturing sector persists.

Likewise, the Nigerian manufacturing sector has not performed optimally due largely to lack of funding. This was confirmed by, Takats (2010), Guo and Stepanyan (2011) and Eze and Ogiji (2013). Thus, as observed, given the right funding, the manufacturing sector has the potential to grow and contribute significantly to the nation's economy.

CHAPTER FOUR

LITERATURE REVIEW: THEORETICAL AND EMPIRICAL UNDERPINNING OF THE STUDY

4.1 Introduction

The main aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. In furtherance of this aim, this chapter reviews both theoretical and empirical underpinning of the study. It examines the endogenous and exogenous theories of economic growth that are considered important for proper situating of the research. While endogenous growth theory holds that economic growth and development of nations is based on the effects of internal factors and not external forces, the exogenous theory assumes that economic growth arises due to influences outside the economy thus economic prosperity is primarily determined by external factors rather than internal factors (Romer, 1994).

4.1.1 Chapter Objectives

The chapter also examines the existing empirical literature on finance and economic growth relationship, specifically within the context of the endogenous growth theory. The relationships between finance and economic growth have attracted a lot of interests from scholars recently. It has been accepted by the endogenous growth theory that finance plays a huge role in economic growth and development especially banks and other financial institutions. This chapter therefore focuses on studies that have been undertaken to establish this link between finance and economic growth. The approach is to critically explore studies that have examined the impact of finance on economic growth in general as well as specific studies that have evaluated the causal relationship between finance and growth both in Nigeria and in other jurisdictions. Thus, the chapter shall raise some questions amongst which is to what extent is there a relationship between bank loans and advances to the manufacturing sector and

manufacturing sector's growth in Nigeria. As stated earlier, this will be explored by addressing two important questions which are what is the causality between bank funding and manufacturing sector growth? And what is the impact of bank funding on manufacturing sector growth in Nigeria, especially on its GDP contribution?

4.1.2 Chapter Structure

The rest of the sections of this chapter are structured as follows: In section 4.2, the researcher explores finance and economic growth. In section 4.3, the application of the theories to the finance growth nexus is traced. In Section 4.4 finance, economic growth nexus and endogenous theory are explained. Also in section 4.5 the direction of causality between finance and economic growth is introduced. While in section 4.6, empirical evidence on the impact of finance on economic growth is explained. This section is further divided into two, market-based and bank-based finance-growth nexus impact on economic growth. Finally in section 4.7 a summary of the issues discussed in the chapter is presented. The outline of the chapter is diagrammatically depicted below.

Figure 4.1 Chapter Four Outline

4.2 Economic Growth Theories and Theoretical Justification of the Study.

According to Schumpeter (1911), economic growth is used to explain a steady and gradual change in the long run as a result of a general increase in the rate of savings and population in a dynamic economy. Consequently for a sector to be seen as having grown there must have been a steady and gradual change over the long run in that sector. Also Kuznets (1973) expressed economic growth as an increase in the rate of changes of output of economy overtime and is calculated as the percentage speed of improvement in real gross domestic product (GDP). It means that for such change to be seen as such there must be changes in GDP or its components. Yin, Gong and Zou (2006) further re-examined the relationship between income inequality and economic growth

especially in neoclassical framework by introducing government spending into the production function and relating it with utility function in a typical political-economic dynamics. From their study it was demonstrated that Kuznets' famous inverted–U shaped relationship between inequality and economic growth rate will hold, which postulates that the growth rate will be first increasing with the income inequality before it decreases with inequality. Therefore, one of the questions this study intends to answer is, what are the possible factors that may have hindered the growth of the manufacturing sector in Nigeria over the period of this study?

Economic growth has been explained with several theories over the years, and these growth theories have been based basically on the production function which assumes that economic growth is on aggregate level and based on factor inputs and level of technology. It is therefore argued that changes in output are as a result of changes in physical capital stock, human capital and technology. One of the things this chapter shall consider is three of the major growth theories in an attempt to anchor this study. These are Neoclassical, Neo-Keynesian and the Endogenous growth theories.

The neoclassical theory of growth can be traced to the works of Solow (1956) and Swan (1956). The theory assumes that there is a diminishing return on every input and this also involves the smooth elasticity of substitution between inputs. For this theory, economic growth is dependent on technological progress of nations, labour and the amount of capital stock. It thus submits that if technological progress remains constant and labour force grows at a steady rate, per capita income will be dependent on capital stock. It therefore means that the law of diminishing marginal returns will cause less output to be produced even with increasing capital stock. While this work intends to examine the changes in the Nigeria's manufacturing sector GDP contribution with changing labour,

capital stock and technology, this theory assumes that in the long-run, increase in per worker output could be maintained by increase in productivity. This assumption is one of the major criticisms of the neoclassical growth model as in the long-run, there are exogenous factors which can determine productivity.

The neo-Keynesian theory of growth is traced to the work of Harrod (1939, 1948) and Domar (1947). This growth model is often called Harrod-Domar (HD) Model. The model's major assumption is that rate of technological changes is determined externally and such change is attributed to capital accumulation in the economic growth process. The HD model therefore assumes that for economic growth process to take place, a net additional increase in capital stock is required. Thus, as asserted by Bhagwati (1984), the HD model for development of underdeveloped economies requires that increase in available resource should be used for investment. However, this theory has been criticized by Romer (1994) because it assumes that human capital as used must be fixed. Therefore, to sustain full employment, growth may not be sufficient.

The endogenous theory postulates that a nation's investment in human capital, innovation and knowledge are contributors to economic growth and development. Again, the theory focuses according to Romer (1994) on positive externalities and spillover effect of a knowledge-based economy which lead to economic growth and development. It thus holds that the long run growth rate of an economy depends on policy measures that drive innovation as well as creating incentives for growth. The endogenous growth theory is supported with models in which agents optimally determine consumption and savings, optimizing the resources allocation to research and development leading to technological progress. The simplest form of the endogenous theory is the AK model. The AK model (where A is factor productivity, and K capital) is a linear

model where output is a linear function of capital. The AK model succinctly captures the endogenous growth model and it is important because it assumes that all commodities are available and that the (unique) consumption goods enters directly in its own production hence spurring growth in the economy. The model gives a constant savings rate of the endogenous growth and assumes that the production function does not exhibit diminishing return to scale. The rationale for this assumption is anchored on the positive spillovers from capital investment to the economy as a whole or improvements in technology leading to further improvements (Romer, 1994).

The AK model as developed by Romer (1994) works on the property of absence of diminishing returns to capital and the simplest form of it is depicted in the production function with non-diminishing return. This is represented below as:

$$Y = AK$$

Where:

Y = Output

A = positive constant that reflects the level of the technology

K = Capital

This implies that output per capita and the average and marginal product are constant at the level where $A > 0$

It therefore suffices to say that the overall objective of the endogenous growth theory which this study will be based upon tries to build on macroeconomic models out of microeconomic foundations. The significance to this study therefore is that the manufacturing sector is the engine for growth thus; it can be as simple as a constant return to the scale production function (the AK model) or with more complicated set ups with spillover effects thereby increasing the number of goods thus increasing output amongst others.

The neoclassical, neo-Keynesian and endogenous theories provide different explanations to the growth theory of economics and all the three theories assert that growth in total factor productivity is important for the economic growth process. The distinction between the neoclassical and neo-Keynesian theories with the endogenous theory is that both the neoclassical and neo-Keynesians put more emphasis on physical capital stock, labour and human capital and as such ignore the impact of stock markets, banks as opposed to the endogenous theory. This is despite the importance of the stock market and banking sector at enhancing financial intermediation by providing funds from the surplus units to the deficit units of the Nigerian economy. This is the strong justification for the use of the endogenous growth theory as simplified by Romer (1994) in the AK Model as the theoretical underpinning of this study.

The perceived impact of bank funding on economic growth (manufacturing sector) has been of interest to researchers. However, there is a paucity of literatures that have examined its impact in developing economies especially on a specific aspect of economic growth, the manufacturing sector. This study therefore amongst others intends to contribute to theories and knowledge by examining the impact bank funding to the manufacturing sector exerts on economic growth of Nigeria using the endogenous growth theory. This chapter thus attempts to provide a review of the theoretical basis for the study. This will enable the researcher to build a theoretical framework for the test of hypothesis in a later chapter of this study.

4.3 Tracing the Application of Theories to the Finance Growth Nexus

In order to understand the importance of finance on the enhancement of growth, it is important to trace some of the perceptions, contributions and roles of economists from the classical perspective to the recent thinking. In this section

some of their various contributions to the importance of finance on economic growth of nations are explored.

Introducing the debate, Smith (1776) as cited in Jhingan (2012) opines that every person within the society is the best judge of his/her self-interest who should and must be left alone to pursue it to his/her own advantage. In furthering their personal interest, the interest of the society is enhanced through the invisible hand mechanism. Smith therefore sees the level of capital accumulation through savings as a principal necessary condition for growth. He regards capital accumulation as a necessary condition for economic development and opines that the process of economic development was largely as a result of the ability of the people to save more and invest more in their country, and thus summaries that in any society "*every prodigal appears to be a public enemy and every frugal man a public benefactor"* (Jhingan, 2012:87). This assertion still applies to the Nigerian Banking industry which largely depends on savings deposit liability to fund her risk asset (loans and advances) creation especially to the manufacturing sector.

Reverend Malthus, another classical economist in Malthus (1836) as cited in Jhingan (2012) also emphasized on the role of finance on growth. He was concerned with progress in the area of wealth which means economic development that could be achieved by increasing the wealth of a country. According to Malthus (1836), of all the factors of production which are necessary conditions for economic development, it is the accumulation of capital that is the most important determinant of economic development. It was against this background that he suggests the concept of the optimum propensity to save. This means saving from the stock which might have been destined for immediate consumption thereby adding to that which is to yield profit or in other words in the conversion of revenue into capital.

In like manner, Mills (1871) emphasizes the impact of finance on growth of nations. According to Mills development is a function of land, labour and capital and while land and labour are the two original factors of production, capital is a stock previously accumulated as the product of former labour. According to Mills (1871), the rate of capital accumulation depends on the amount of fund from savings or the size of the net produce of industry and the strength of the disposition to save. Therefore, capital is the result of savings and savings comes from the abstinence from present consumption for the sake of future goods. Thus for nations to achieve sustainable development, there must be an effective desire to accumulate capital. While capital in Mills' context may refer to savings towards equity financing, in the process of setting these savings apart the banking system creates a lending capacity for the banks in their intermediation function, especially in favour of the manufacturing sector.

Like Smith (1776), Ricardo (1817) also highlights the connection between finance and economic growth. He underscores the importance of capital accumulation through agricultural development and increase in the various sources of savings and profit rate. According to Ricardo capital accumulation which is a process of financial intermediation is the outcome of making profits. Profits lead to savings of wealth which in turn is used for capital formulation, however this is dependent on the capacity and will power to save. Thus, for any economy to develop, such economy must enhance her capacity to make profit and save. Profit reserves and retentions by firms is one of the cheapest ways of internal financing of businesses today.

Another protagonist in the finance and economic development debate was Walter Bagehot, a classical British economist and famous follower of Adam Smith who also highlighted the impact of finance on growth. The appearance of Bagehot's work in the early 1870s in Great Britain according to Stolbov (2012)

sparked off the discussion on how loanable funds encourage economic activity. It was argued that these loanable funds held in banks unclaimed will subsequently enter into some sectors thereby leading to very profitable investments. Thus, the loanable funds when allocated lead to development and other sectors associated with it technologically also start booming. Gradually, this process spills over to the whole economy. Bagehot's work finds a place in the current intermediation process of the Nigerian banking industry and the provision of loanable funds to her borrowing customers, including the manufacturing sector.

Another notable contributor to the role of capital on growth was Joseph Schumpeter. Schumpeter's interest in Marxist economics culminated in his 'The Theory of Economic Development' published in 1911 which was recognized as the next stage of finance-growth nexus analysis. In the book, Schumpeter (1911) proposed 'new combinations' that drive economic development. He identified five forms of these combinations: (1) production of new goods; (2) applying new ways of production and commercial utilizing of the existing goods; (3) new commodity market development; (4) new sources of raw material development and (5) sector structure alteration (Schumpeter, 1911).
According to Schumpeter, there are two ways to make the new combinations work; by administrative power and by means of bank loans in case of a market economy. It was argued that the banker is an intermediary between those who strive for the realization of new combinations and owners of capital which is necessary to accomplish this aim.

Therefore, when a bank grants a loan, say to the manufacturing sector, it activates the implementation of the new combinations in favour of the whole society. Hence, banking activity was aimed at stimulating economic development. Schumpeter's work finds relevance in the workings of Nigeria's

banking industry and its support of the key growth sectors of the economy. However, according to Stolbov (2012), it implies the absence of centralized power that would exert exclusive control over social and economic processes. At the same time it should be considered that according to Schumpeter bank loans are of great importance just at the moment of creating the new combinations, whereas in a steady state of the economy when firms have already had necessary means of production or are able to fill them up constantly due to the revenues from previous production, finance just plays an auxiliary role.

The debate on the role of finance on growth could not have been more succinctly argued than Robinson (1952), when he asserts that enterprise leads finance. Robinson's view and others before him was at that time termed unscientific because there were largely no scientific explanation prior to 1930-1940 on the finance-growth nexus. However, since 1955 when the article "Financial aspects of economic development" (Gurley and Shaw, 1955) was published, the interest of the scientific community in studying the influence of financial system on economic growth began to re-emerge.

Gerschenkron (1962) also supports the impact of finance on growth. According to Gerschenkron (1962), all nations were backward once, thus to move from the traditional levels of economic backwardness to a modern industrial economy requires a sharp break from the past. He categorized countries into three groups on the basis of their degree of economic backwardness: advanced, moderately backward and very backward. To put perspectives on the role of finance on growth, Gerschenkron notes that advanced nations started their first stage of development with the factory as the organization lead; moderately backward nations start with banks and extreme backward nations with government.

He further argued that as a necessary precondition for development for countries that are moderately backward, banks through the process of intermediation can play an important role in the achievement of growth through the enhancement of capital accumulation. This is necessary since the enterprises have no substantial prior ploughed-back profits, and the average plant size is assumed to be much larger, making the banks to be the prime sources of capital and entrepreneurship for the type of industrialization, indicating a kind of supply-leading tendency. The implication of the Gerschenkron analysis is that external finance is considered critical for the manufacturing sector to contribute to economic growth. This means that the financial sector must be well developed and function efficiently to speedily and cheaply mobilize the needed funds for productive investment, while earning reasonable returns for the financial institutions.

Patrick (1966) joined the debate by highlighting two ways of interweaving of finance on growth, having named them "demand-following" and "supply-leading". "Demand-following" is a situation when finance is required to attract external financing in terms of supporting economic growth. "Supply-leading" takes place when financial institutions accumulate savings and transform them into investments, which are necessary for the development of modern sectors of the economy. Thus, Patrick (1966) was the first attempt to discuss the problem of causality in the finance–growth nexus literature. We shall be hinging this work on Patrick's "supply-leading" finance growth theory.

Another notable contribution to the role of finance on growth was Cameron (1967) a prominent economic historian, who used the same approach as Patrick (1966) to study the interaction between financial intermediaries and growth. In addition he made a special emphasis on the quality and effectiveness of financial services.

Cameron (1967) pointed out key functions of financial systems which are still common with its modern features. These are financial system redistributes monetary resources from risk-averse economic agents to entrepreneurs; financial intermediaries spur investments reducing borrowing costs, which leads to decreasing interest rate spreads across geographical and sectoral dimensions as well as to a diminishing role of seasonality in investment fluctuations and financial institutions facilitate an effective allocation of the initial stock of capital in the period of industrialization and contribute to technological advancement.

Again Cameron carried out a comparative analysis of the interaction between finance and growth of England, Scotland, France, Belgium, Germany, Japan and Russia in the 19th century. He showed that in Scotland, Belgium, Japan and Russia the financial system played a crucial role in the rapid industrial growth but in Germany and France this link was less pronounced mainly due to differences in their economic policy. Nigerian banks exhibit the features of Cameron's financial system in their intermediation function with particular reference to funding of the key sectors of the economy.

McKinnon (1973) and Shaw (1973) also appeared and added more impetus and depth to the finance-growth nexus debate. McKinnon (1973) and Shaw (1973) introduced and highlighted financial repression policy which was largely pursued by many developing countries and advocates of financial liberalization. In this policy according to McKinnon and Shaw, financial repression policy implies interest rate caps, higher banking reserve rates and cross-border capital controls. This could be considered as an implicit tax imposed on financial institutions. These policies are instrumental in terms of growing budget deficits and national debt and impede the development of private financial institutions. The monetary policy measures of the CBN is akin to McKinnon and Shaw's

repression policy which often times determine the banks' ability to create loans and funding to the manufacturing sector. High cash reserve requirement and or high Monetary Policy Rate (MPR) of the CBN will sign-post period of tight liquidity and low lending.

One of the key questions this study shall attempt to answer is the question on if there is a relationship between bank loans and advances and growthof nations and or businesses (especially the manufacturing sector). Beginning from 1980, more literatures emerged to support the finance-growth nexus. According to Jhingan (2012), in the early eighties, the decline in the growth rate of developed countries, the rise in oil prices, the debt crisis in developing countries and the worsening of their terms of trade pushed the basic needs strategy to the background. Many countries embarked on programmes of stabilization and structural adjustments. Initially stabilization measures supported by the International Monetary Fund (IMF) and World Bank were aimed at reducing inflation, cutting public spending, reducing wages and raising interest rates.

Thus, as suggested by the World Bank and IMF, many developing countries switched to long-term structural adjustment programmes. The programmes were domestically designed programmes of reforms by following the policies of liberalization, adjustment and privatization. These involve reducing the role of the state, removing subsidies, liberalizing prices and opening economies to flows of international trade and finance. Most developing economies adopted the structural adjustment programmes. These programmes of adjustment led to further emergence of literature on the finance-growth nexus.

Leading literature in this regard is King and Levine (1993) who citing Schumpeter (1911) opine that the services provided by financial intermediaries (mobilizing savings, evaluating and facilitating transactions) are essential for

technological innovation and economic development. It was against the importance of financial intermediaries in performing the above functions that King and Levine (1993) suggest that finance has a significant impact on growth.

Taking a cue from King and Levine (1993), Jayaratne and Strahan (1996) also reaffirmed their support for finance growth nexus by underscoring that financial institutions through intermediation impact positively on growth. However, there was a clause that there should be an improvement in the quality of bank lending. Jayaratne and Strahanusing the bank deregulation reform in the US as a case-study established that the rate of real per-capita growth in income increased significantly. The impact of reform in the financial system on economic growth was thus attributed to the improvement in the quality of bank lending, and not the increase in volume of bank lending. It is hoped that the evaluation of impact of bank funding on the growth of the Nigeria's manufacturing sector shall address questions on quantum of funding, types of funding, promptness of funding and even rate (cost) attached to funding.

The works of these economists and researchers are still relevant today, especially as regards the question of what are the perceptions and opinions of the various stake holders on the quantity, quality and terms of bank funding to the manufacturing sector. On the liability side of any firm's balance sheet are sources of funding/financing of the business. Apart from the shareholders' funds which include the issued and fully paid up capital and the retained earnings from the previous years of operation, we may find external funding of the business from the banks and even trade customers through trade financing and other spontaneous financing structures. These external financing come with terms especially bank funding. In course of this research therefore we shall be looking at the volume (quantity) and the quality (structure and pricing) of the Nigerian banks funding to the manufacturing sector.

Having examined the contributions of various economists it can be concluded from the forgoing that finance enhances growth of the economy. However, as observed from most literatures, studies have majored on the impact of finance on the overall growth of the economy with limited reference to specific sectors of the economy such as the manufacturing sector, this is part of the gap in literature this study shall attempt to close.

4.4 Endogenous Finance Induced Growth

In this section of the review, attempts shall be made to review studies on finance induced economic growth using the endogenous theory. This will be intermingled with the financial sector incursion into the manufacturing sector of the Nigerian economy.

Levine, Loayza, and Beck (2000) examined the impact of the endogenous component of financial intermediation on economic growth using two models and estimation technique. The first model, which defines economic growth as function of finance indicators and a vector of economic growth determinants, was estimated using the pure cross-sectional estimation technique. The second model is a dynamic panel model and is estimated using the Generalized Methods of Moments (GMM). Their test confirmed the strong positive impact of the endogenous components of financial intermediation on economic growth. However they noted that countries with high priority for creditors' protection, strong will to enforce contracts, and unambiguous accounting standards have the potential for a developed financial intermediation. The Nigerian financial system is steadily undergoing reforms to strengthen it and with the return of unbroken democratic rule since 1999 to date (2017), her legislative and judicial arms have come alive again and have been busy reviewing the country's laws (creditor protection inclusive) and expeditiously dispensing justice on commercial cases respectively. All these shall culminate in deepening the

nation's financial system with a view to positioning the banking industry as a key player in the finance-growth nexus.

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

Also, Shittu (2012) examined the impact of financial intermediation on economic growth in Nigeria using the endogenous theory. Time series data from 1970 to 2010 were used and were gathered from the CBN publications. For the analysis, the unit root test and cointegration test were done accordingly and the error correction model was estimated using the Engle-Granger technique. The result revealed that financial intermediation impacts positively on economic growth. This research shall draw from some of the approaches of Shittu especially in using relevant time series data from the CBN publications and some of the quantitative tools he used in his investigation.

Hao (2006) evaluates the relationship between financial intermediation and economic growth using a country-specific data from China and applying the endogenous theory. The study used the one-step parameter estimates for the Generalized Method of Moments (GMM) estimation and found that financial intermediation has a causal effect and positive impact on growth through the channels of households' savings mobilization and the substitution of loans for state budget appropriations. It was revealed that bank, as an indicator of

financial development, is significant but negatively related to growth. This was attributed to the inefficiency in loan distribution and the self-financing ability of the provincial governments. From this study therefore, efficiency of loan distribution is as important as the granting of the loan itself to borrowers. Hao tested and established causality in his work; Granger causality approach in establishing and testing the magnitude and direction of relationship shall be also applied in looking at the link between bank funding and its impact on the manufacturing sector's contribution to economic growth measured by contribution to GDP.

4.5 Direction of Causality between Bank Loans and Advances and Economic Growth

This section examines the inconclusive argument that economic growth of nations is driven by the development of the financial sector. The view about this causality of economic development was first captured by Patrick (1966). According to Patrick, the direction of causality between financial development and economic growth changes over the course of development of that particular economy as shown in Odhiambo (2008) on financial depth, savings, and economic growth in Kenya: a dynamic causal linkage.

In Patrick (1966) view financial development is able to induce real innovation of investment before sustained modern economic growth gets under way and, as such growth occurs, the supply-leading impetus gradually becomes less and less important as the demand-following response becomes dominant. This argument was succinctly captured by Patrick (1966: 177) who opined that "this sequential process is also likely to occur within and among specific industries or sectors". From the forgoing therefore, it means that as the economy grows over time, industries (sector) will no longer depend on finance to grow the economy but will develop to spur the growth of the financial sector.

This submission by Patrick (1966) that finance plays a major role on economic development was supported by Oreiroand Nakabashi. (2012) who showed that almost 95% of the growth rate of real GDP in the period 1990-2005 in Brazil was explained by variables at the demand side of the economy and that the natural growth rate of the Brazilian economy is endogenous, being determined by the growth rate of aggregate demand through the instrumentality of capital as an endogenous factor.

Likewise, Agbetsiafa (2003) while examining the causal relationship between financial development and economic growth in a sample of eight (8) emerging economies in sub-Saharan Africa (SSA) finds a unidirectional causality from growth to finance dominant in Ivory Coast and Kenya. This was supported by Waqabaca (2004) who examined the relationship between financial development and economic growth in Fiji and finds a positive relationship between financial development and economic growth but, with the causation running from economic growth to financial development.

Drawing from the above findings, it could be argued that there is evidence to show that economic growth of nations spurs financial development of nations. Thus, as the economy grows there would be increased demand for financial services thereby forcing the financial sector to innovate with new and attractive products that lead to efficient allocation of financial resources to the most productive sectors of the economy.

While the above passages provided support that economic growth spurs financial development, other literatures have argued that financial development spur economic growth. The empirical works consistent with this argument include studies such as: Jung (1986); Crichton and De Silva (1989); King and

Levine (1993b); De Gregorio and Guidotti (1995); Rajan and Zingales (1998); and Choe and Moosa (1999); among others.

Using the endogenous growth model to examine how financial systems affect economic growth, King and Levine (1993a) were of the view that better financial systems improve the possibility of successful innovation, thereby accelerating economic growth. They argued again that financial sector distortions reduce the rate of economic growth by reducing the rate of innovation and concludes that financial systems are important for productivity, growth, and economic development.

Supporting King and Levine (1993a), Choe and Moosa (1999) again conclude that financial development in general leads to economic growth and that financial intermediaries are more important than capital markets in this relationship. Holding the same view Rajan and Zingales (1998) suggest that financial development has a substantial supportive influence on the rate of economic growth. Specifically, their study found that industrial sectors that are relatively more in need of external finance develop disproportionately faster in countries with more developed financial markets. Likewise, De Gregorio and Guidotti, (1995) while examining the empirical relationship between financial development and economic growth conclude that, by and large, financial development leads to improved growth. The authors, however, reiterate that the effects vary across countries and over time (De Gregorio and Guidotti, 1995).

From the forgoing therefore, the direction of causality between financial deepening (bank funding expressed as ratio of GDP) and economic growth is crucial because it has different implications for development policies of nations and evidence on direction of causality is inconclusive. It is therefore against the forgoing that this study explores the causal relationship between finance and

economic growth with specific emphasis on the manufacturing sector. Also, economies must take advantage of the positive interaction between finance and economic development to grow the real sectors of the economy such as the manufacturing sector.

4.6 Empirical Evidence on the Impact of Finance on Economic Growth

This section presents empirical evidence on the impact of finance on economic growth. Some of the available empirical evidences on this relationship are presented in the subsequent paragraphs.

Ceccetti and Kharroubi(2012) examined how financial development affects growth at both the country and the industry level. Based on a sample of developed and emerging economies, they first showed that the level of financial development is good only up to the point where factor inputs are yet under-utilized, after which it becomes a drag on growth. Secondly, focusing on advanced economies, they showed that a fast-growing financial sector can be detrimental to aggregate productivity growth. Finally, looking at industry-level data, they showed that financial sector growth disproportionately harms industries that are either financially independent or R&D-intensive. This study revealed that there is a link between finance and economic growth generally and the causal link can be beneficial and in some cases detrimental. This further justifies the need for this link to be investigated in Nigeria with a view to identifying whether the finance-growth nexus between bank funding and growth is beneficial or detrimental to the Nigeria's manufacturing sector.

Trying to investigate relationship between financial development and economic growth and other factors at play in such relationship, Zhang, Wang and Wang (2012) used data from 286 Chinese cities over the period 2001–2006 to investigate the relationship between financial development and economic

growth at the city level in China. Their results from both traditional cross-sectional regressions and first-differenced and system GMM estimators for dynamic panel data suggest that most traditional indicators of financial development are positively associated with economic growth.

However, this result runs contrary to the existing conclusion that a state-ruled banking sector, such as that in China, hinders economic growth because of the distorting nature of the government. Nonetheless, since they focused on the years after China's accession to the World Trade Organization (WTO) in 2001 while the existing studies mainly covered the years before 2001, their finding suggests that the financial reforms that have taken place after China's accession to the WTO are in the right direction. This further underscores the importance of economic reforms as key measures in support of financial intermediation for better economic performance of nations. This corroborates with the evidence shown in the earlier review of Nigeria's economic environment where it was shown that Nigeria's journey towards economic reforms had impacts on the nation's economic development.

Bittencourt (2011) investigated the role of financial development and more widespread access to finance in generating economic growth in four Latin American countries between 1980 and 2007. The results based on panel time-series data and analysis confirmed the Schumpeterian prediction which suggests that finance authorizes the entrepreneur to invest in productive activities thereby promoting economic growth. Furthermore, given the characteristics of the sample of countries chosen, they highlighted not only the importance of a more open, competitive and therefore active financial sector in channeling financial resources to entrepreneurs, but also the relevance of macroeconomic stability.
Some of the macroeconomic variables are low inflation rates, institutional framework which encompasses Central Bank independence and fiscal

responsibility laws, structural reforms which were implemented in the 1990s as necessary pre-conditions for financial development; were some of the factors that consequently sustained growth and prosperity in the region. Again this present study hopes to leverage on the work of Bittencourt (2011) by extending the investigation to the interplay of some control variables like inflation rate, interest rate and even exchange rate on the economic growth of Nigeria during the review period.

Deepening the research on the investigation of the relationship between finance and growth, Ceccetti and Kharroubi(2012) examined the negative relationship between the rate of growth of finance and the rate of growth of total factor productivity. They began by showing that by disproportionately benefiting high-collateral/low-productivity projects, an exogenous increase in finance reduces total factor productivity growth. Then, in a model with skilled workers and endogenous financial sector growth they established the possibility of multiple equilibria. In the equilibrium where skilled labour works in finance, the financial sector grows more quickly at the expense of the real economy. Conclusively they showed that consistent with this theory, financial growth disproportionately harms financially independent and R&D-intensive industries. This reinforces the case for the financial sector to invest in the manpower development of the borrowing sectors for improved performance of their loans and advances. It is thus based on this argument that this thesis will attempt to articulate policy recommendations and strategies that can foster better cooperation and support especially in the area of human capital investment in the manufacturing sector by the lending banks. This is already being practiced in Nigeria, especially in large syndicated loan arrangements where lenders appoint or second their staff as the Chief Financial Officers or Treasury Head during the life of their loans.

Law and Singh (2014) provided new evidence on the relationship between finance and economic growth using an innovative dynamic panel threshold technique. The sample consisted of 87 developed and developing countries. The empirical results indicated that there is a threshold effect in the finance growth relationship. In particular, they found that the level of financial development is beneficial to growth only up to a level, beyond that level further development of finance tends to adversely affect growth. These findings reveal that more finance is not necessarily good for economic growth and highlight that an "optimal" level of financial development is more crucial in facilitating growth.

Also narrowing the debate down to emerging markets, Pradhan, Dasgupta and Bele (2013) examined the nexus between financial development and economic growth by using panel data vector autoregression. Using five BRICS countries (Brazil, Russia, India, China and South Africa), the study finds bidirectional causality between financial development and economic growth. As a result, the policy implication is that the economic policies should recognize the finance-growth nexus in order to maintain sustainable development in the economy. This further gives impetus to this study as Nigeria, the biggest economy in Africa in search of foreign and local investors needs the findings and recommendations of this investigation in crafting policies for her economic development, especially in the key sector like the manufacturing sector.

Based on the literature examined in the preceding paragraphs on the impact and nature of relationship between financial development and economic growth, it could be deduced that a link exists, although the direction of the link is quite inconclusive.

From literature, two views on financial development have emerged amongst scholars even as the debate continues on which view has greater impact on economic development of nations. These are the market-based finance-growth

nexus and bank-based and finance-growth nexus. In the following section of this study, these aspects of the financial system are examined.

4.7 Market-Based and Bank-Based Financial Development and Economic Growth

Demirgu-Kunt and Maksimovic (2000) investigated whether firms' access to external financing to fund growth differs between market-based and bank-based financial systems. Using firm-level data for 40 countries, they computed the proportion of firms in each country that relied on external finance and examined how that proportion differed across financial systems. They found that the development of a country's legal system predicts access to external finance and that stock markets and the banking system have different effects on access to external markets. The development of securities markets (market-based) is related more to the availability of long-term financing, whereas the development of the banking sector (bank-based) is related more to the availability of short-term financing. They found no evidence however, that firms' access to external financing is predicted on an index of the development of stock markets relative to the development of the banking system.

Most studies on the relationship between stock market and economic development have been on their causal relationship and the results obtained had been that the relationship is unidirectional and it runs from the stock market to economic growth thereby supporting the argument that financial development enhances economic growth. This can be seen in N'Zue (2006) who investigated the relationship between the development of the Ivorian stock market and the country's economic performance. Stock market development indicators were identified and used to calculate the Ivorian stock market development index. A set of control variables were also identified. The empirical results suggest that gross domestic product and stock market development are cointegrated when

the control variables are included in the analysis. There is therefore a long-run relationship between these variables taken together. Moreover, there is a unidirectional causality running from stock market development to economic growth.

Supporting N'Zue is Adamopoulos (2010) who investigated the long-run causal relationship between stock market development and economic growth for Germany for the period 1965-2007 using a Vector Error Correction Model (VECM). Applying the Johansen co-integration analysis based on the classical unit roots test, the results of Granger causality tests indicated that there is a unidirectional causality between stock market development and economic growth with direction from stock market development to economic growth. This finding by Adamopoulos (2010) however does not conform to the assertion of Vitols (2005) which presented that the German economy grew as a result of the bank based financial system.

Again in a study in Nigeria, Alajekwu and Achugbu (2012) investigated the role of stock market development on economic growth of Nigeria using a 15-year time series data from 1994 – 2008 and Ordinary Least Square (OLS) techniques. The stock market capitalization ratio was used as a proxy for market size while value traded ratio and turnover ratio were used as proxies for market liquidity. The results show that market capitalization and value traded ratios have very weak negative correlation with economic growth while turnover ratio has a very strong positive correlation with economic growth. Also, stock market capitalization has a strong positive correlation with stock turnover ratio. This result implies that liquidity has propensity to spur economic growth in Nigeria and that market capitalization influences market liquidity. However, they advised that this view should be taken with caution and the notion that stock

market size is not significant for economic growth may not be entirely correct since multicollinearity exists in the data used for this analysis.

Most studies that explored the causal relationship between stock market development and economic growth and found a unidirectional relationship running from stock market development to economic growth and studies that examined the impact of stock market development on economic growth and found that stock market development has a positive and significant impact on economic growth. This result implies that stock market development has an impact on economic growth and as such an important ingredient for growth. However, this study will not focus on the market-based finance-growth nexus but on the bank-based finance growth nexus.

Tadesse (2001) examined the relationship between the architecture of an economy's financial system, its degree of market orientation and economic performance in the real sector. They argued that the relative effectiveness of bank-based versus market-based financial systems depends on the strength of the contractual environment and the extent of agency problems in the economy. The study found that while market-based systems outperform bank-based systems among countries with developed financial sectors, bank-based systems fare better among countries with underdeveloped financial sectors. Countries dominated by small firms grow faster in bank-based systems and those dominated by larger firms in market-based systems. The findings suggest that recent trends in financial development policies that indiscriminately prescribe market-oriented financial-system-architecture to emerging and transition economies might be misguided because suitable financial architecture, in and of itself could be a source of value.

Weighing the contributions of both market-based and bank-based financial systems, Arestis, Demetriades and Luintel (2001) used time series methods and data from five developed economies and examined the relationship between stock market development and economic growth, controlling for the effects of the banking system and stock market volatility. Their results support the view that, although both banks and stock markets may be able to promote economic growth, the effects of the banks are more powerful. They also suggest that the contribution of stock markets on economic growth may have been exaggerated by studies that utilize cross-country growth regressions.

Levine (2002) posit that for over a century, economists and policy makers have debated the relative merits of bank-based versus market-based financial systems. Recent research however argues that classifying countries as bank-based or market-based is not a very fruitful way to distinguish financial systems. The study represents the first broad, cross-country examination of which view of financial structure is more consistent with the data. The results indicate that although overall financial development is robustly linked with economic growth, there is no support for either the bank-based or market-based view.

Beck and Levine (2002) raised the question, are market-based or bank-based financial systems better at financing the expansion of industries that depend heavily on external finance, facilitating the formation of new establishments, and improving the efficiency of capital allocation across industries? Their result found evidence for neither the market-based nor the bank-based hypothesis. While legal system efficiency and overall financial development boost industry growth, new establishment formation, and efficient capital allocation, having a bank-based or market-based system per se does not seem to matter much.

Beck and Levine (2002) investigated the impact of banks on economic growth using a panel data set for the period 1976-98 and applying recent GMM techniques developed for dynamic panels. On balance, they found that banks positively influence economic growth and these findings are not due to potential biases induced by simultaneity, omitted variables or unobserved country-specific effects.

From the foregoing, most studies examined and reviewed did not explore only the impact of bank-based financial system on economic growth but comparisons were made between bank-based and market-based financial systems impact on economic growth. This is the lacuna which this study seeks to fill by examining specifically the impact of bank-based financial system on economic growth, especially that of the manufacturing sector of the Nigerian economy. This is reaffirmed by Arestis, Demetriades and Luintel (2001) who argued that bank-based financial system seem to have a more powerful effect on economic growth.

4.8 Chapter Summary

This chapter has provided both theoretical framework and empirical review on the finance-growth nexus. The chapter examined existing empirical literature on finance and economic growth relationship, specifically within the context of the endogenous growth theory. It therefore focused on studies that have been undertaken to establish this relationship between finance and economic growth. The aim was to provide an empirical background and underpinning for undertaking this research. Specifically this chapter raised amongst others the question of what is the best method of investigating the impact of finance and economic growth taking into account the peculiarities of the Nigerian environment?

A review of empirical literature shows that studies on the relationship between financial development and economic growth have majorly been conducted to test the causal relationship between financial development and economic growth. This informs our research objective two which seeks to explore the causal relationship between bank funding (measure of financial development i.e. bank based system) and manufacturing sector growth (measure of economic growth). From the review of extant literature, the chapter considered other studies that focused on the impact of financial development on economic growth using variants of regression analysis. Again this supports the second leg of our second research objective which is to examine the impact bank loans and advances to the manufacturing sector has on manufacturing sector's contribution to GDP.

The endogenous theory which postulates that a nation's investment in human, capital, innovation and knowledge are contributors to economic growth and development formed the basis of this study especially as it pertains to the role of capital on economic development. Again, the theory focuses according to Romer (1994) on positive externalities and spillover effect of a knowledge-based economy which lead to economic growth and development. It thus holds that the long run growth rate of an economy depends on policy measures that drive innovation as well as creating incentives for growth. Also, Shittu (2012) examined the impact of financial intermediation on economic growth in Nigeria using the endogenous theory. Time series data from 1970 to 2010 were used and were gathered from the CBN publications. For the analysis, the unit root test and cointegration test were done accordingly and the error correction model was estimated using the Engle-Granger technique. The result revealed that financial intermediation impacts positively on economic growth. This research shall draw from some of the approaches of Shittu especially in using relevant time series

data from the CBN publications and some of the quantitative tools he used in his investigation.

Patrick (1966) highlighted two ways of interweaving of finance on growth, having named them "demand-following" and "supply-leading". "Demand-following" is a situation when finance is required to attract external financing in terms of supporting economic growth. "Supply-leading" takes place when financial institutions accumulate savings and transform them into investments, which are necessary for the development of modern sectors of the economy. Thus, Patrick (1966) was the first attempt to discuss the problem of causality in the finance–growth nexus literature. We shall be hinging this work on Patrick's "supply-leading" finance growth theory. In Patrick (1966) view financial development is able to induce real innovation of investment before sustained modern economic growth gets under way and, as such growth occurs, the supply-leading impetus gradually becomes less and less important as the demand-following response becomes dominant. From the forgoing therefore, it means that as the economy grows over time, industries (sector) will no longer depend on finance to grow the economy but will develop to spur the growth of the financial sector.

As have been highlighted in this study, the debate on the relationship between financial intermediation and economic growth is still not conclusive. There have been arguments that financial intermediation drive economic growth (Nieh et al., 2009) and economic growth drives financial intermediation (Odhiambo, 2011).

Kuznets (1973) inferred economic growth as an increase in the rate of changes of output of economy overtime and is computed as the percentage speed of improvement in real gross domestic product (GDP). Therefore for such change

to be seen as such, there must be changes in GDP or its components. From this inference of Kuznets (1973), one of the questions this study intends to answer is, has the Nigerian manufacturing sector's contribution to GDP increased over the period of this study?

CHAPTER FIVE
METHODOLOGY

5.1 Introduction

The overall aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. To this effect, this chapter focuses on providing explanation on the philosophical underpinning for the study and considers the methodology and method to be undertaken in the study. The sources and nature of data which provides evidence on the impact of bank funding on the growth of the Nigeria's manufacturing sector is also highlighted in this chapter. Thus it gives an overview of the direction which this study follows in terms of what data to collect, why they are to be collected, where they are to be collected, their analysis and how all these relate to the research aims and objectives.

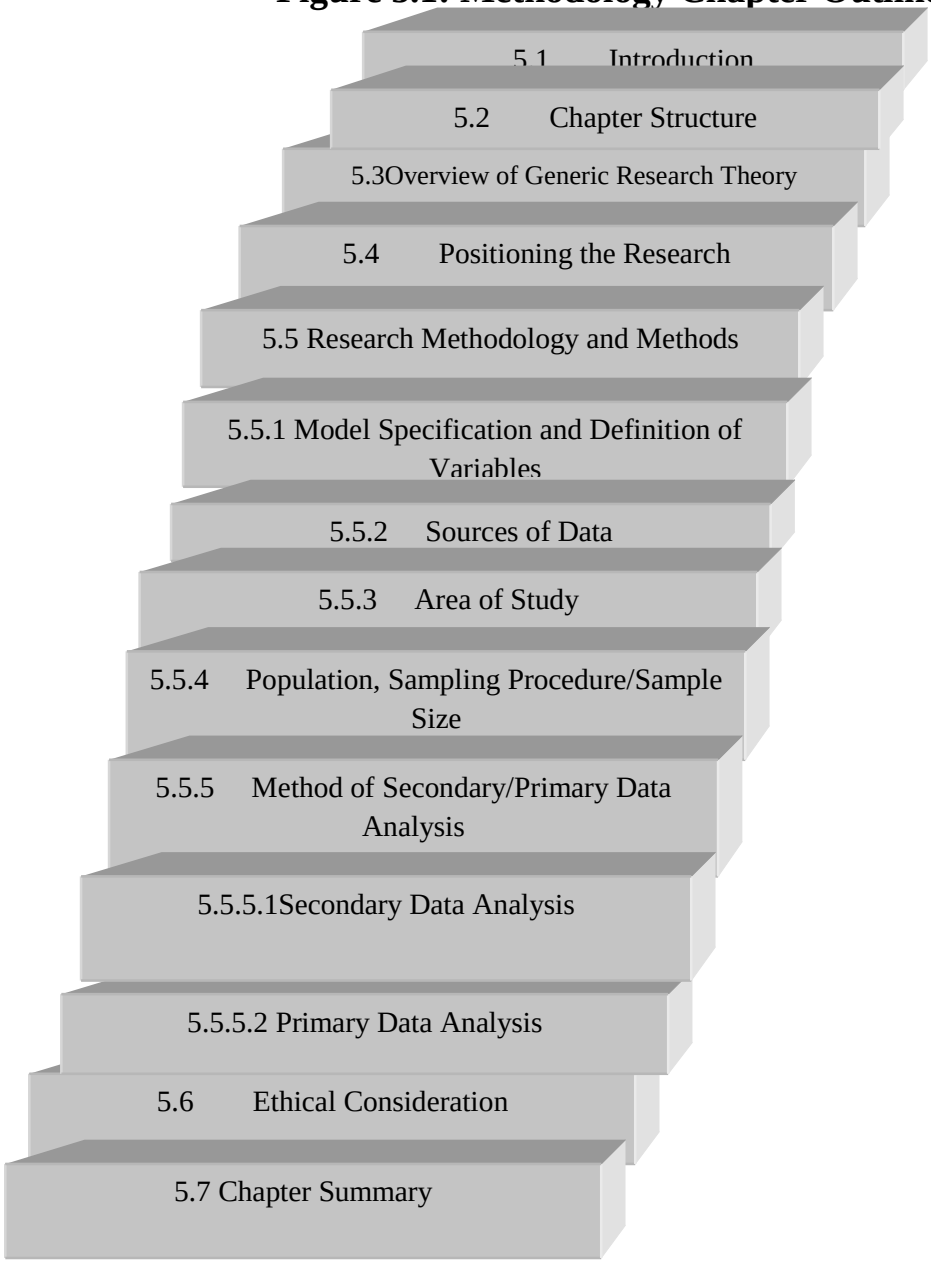
This chapter then proceeds to provide rationale for the research methodology, research design, and research methods. As submitted by Gray (2009), the choice of research method is influenced by the research methodology chosen which in itself is based on the theoretical framework adopted by the researcher. Again as noted, the choice of the theoretical framework is influenced by the epistemological stance of the researcher. This is then followed by the account of the method and analysis technique adopted.

In this chapter, the model for the analysis is introduced and the choice of the variables explained. The methodology for the research questions is discussed and this is finally followed by the chapter summary.

5.2 Chapter Structure

Figure 5.1 below shows diagrammatically the outline of this methodology chapter.

Figure 5.1: Methodology Chapter Outline



5.3 Overview of Research Philosophy

As noted by Donaldson (2005) methodology clarifies ways or procedures used to explore and analyze a particular problem and particularly for social sciences there are a wide range of philosophies dealing with how best to represent reality, thus, it is important to investigate these philosophies, as it helps the researcher to understand established principles which determine the way the social world is viewed and constructed. Again, Easterby-Smith et al. (1991) had suggested three reasons why an understanding of philosophical issues is beneficial. Firstly, it helps establish the research design, the data to collect, and how that data can be interpreted to provide good answers to the research questions. Secondly, it highlights the practical limitations of particular approaches and thirdly, it also enables researchers to develop designs which are outside their experiences.

As stated by Saunders et al (2012), research philosophy relates to the development of knowledge and the nature of that knowledge. It is worthy of note that at every stage of the research process, assumptions are made, these assumptions often underpin the research philosophy. Hence, Crotty (1998) argues that assumptions about human knowledge and about the nature of realities that a researcher encounters in research inevitably shape the researcher's understanding of the research questions, the method adopted and how the researcher interprets the findings. Hence, assumptions underpin the research strategy and the method chosen as part of the strategy.

Given the over 25 years' experience of the researcher in the Nigerian banking industry, the researcher holds some axiological values that might affect this research. The banking sector in Nigeria and indeed all over the world is a highly 'regimented' and regulated sector. Therefore the organisational structure and processes of banks may affect this study. On the ontological spectrum, the

researcher is also influenced by the controlled, process driven, measurable profit motivation and compliance nature of the industry where he has worked for decades. Therefore, he comes into this research as an objectivist. The objectivist axioms are set up in such a way that they are irrefutable. Anyone trying to object to them must implicitly assume them even before he or she can formulate a counter-argument. However, the criticism levelled against objectivism is such that humans cannot really be unbiased, however who/what is being studied and the need for interpretation in researches will act as a check on the researcher in adopting alternative philosophical stance.

The job of a social scientist is to gain access into people's common sense/thinking and interpret their actions and their social world from their point of view (Bryman and Bell, 2012). On the positivist positioning, Easterby-Smith et al. (1991) was of the opinion that the key idea of positivism is that the social world existsexternally as such its properties should be measured through objectivemethods, rather than being inferred subjectively through sensation, reflectionor intuition. Hence, this school of thought posits that the social science and organizational research can match the achievements of natural science in explanation, prediction, and control only by applying the methods of natural science (Lee 1991). It was against this argument that Marsh and Stocker (2002) argue that positivists are concerned with establishing causal relationships between social phenomena to detect the regularities in nature, and therefore propose generalization and replication.

As submitted by Delanty (2005), the positivist's knowledge is based on a foundation of certainty. The positivists' perspective is anchored on four basic assumptions which underscore their position. These are empiricism, value freedom, scientific truth and instrument knowledge. Empiricism implies the bedrock of observation which implies that phenomenon should be observed and

verified. This process of observation to verification makes it possible for operationalization through experimental methods. Also, one of the fundamental principles of science is objectivity, the evidences are obtained and inferences based on the evidences obtained. Objectivism tries to measure, evaluate and compare things without cutting other biases about one's own zone or from the society. So in terms of the world view, it's probably a set of criteria, standards and measures, similar to matrix system on the units of measurement. The challenge in objectivism is to apply this to more value written things such as social sciences.

Another notable tenet of the positivist perspective is that it involves the scientific search for truth. This can only be achieved when the researcher detaches him/herself from all forms of personal bias. Lastly the positivist perspective leads to instrumental knowledge, that is it is now associated with science as an institution or occupation (Delanty, 2005).

On the other hand, the interpretivist perspective is seen as a stand which seeks for culturally originated and historical based explanation of the social world (Crotty, 1998). Thus, the interpretivist perspective creates a means to explore the role of the researcher as a social actor who cannot be divorced from his or her research (Saunders et al, 2007). Hence, Easterby-Smith et al (2008) were of the view that the perspective is determined by people rather than an objective external factor.

As submitted by Hudson and Ozanne, (1988), the interpretivist perspective views reality as mental and perceived while Berger and Luckman (1966) posit that reality is nothing more than a social construction and all human knowledge is advanced, disseminated and maintained in social situations. Therefore, the intention of the interpretivist is not to discover reality because they perceive that

change is constant. Conclusively, this perspective implies the understanding of the culturally shared meaning involved in making social realities and the situations where such happen (Hudson and Ozanne, 1988).

However, the interpretivist has critiqued the positivist approach to research. Hence, while, Ritchie and Lewis (2003) suggest that interpretivists believe the methods of the natural sciences are not appropriate because the social world is not governed by law-like regularities but is mediated through meaning and human agency. Delanty (2005) had argued that the real strength of the social sciences is not in predictive or explanatory theory but in reflexive understanding, which is the weakness of the natural sciences therefore, the social researcher should be concerned with exploring and understanding the social world, as social science occupies an interpretative space in society.

Nonetheless, the protagonists of positivism have argued that the interpretivists merely offer subjective judgment about the world and as such there are no bases on which to judge or validate their claims hence, Bevir and Rhodes (2002) state that the interpretivist epistemology is developed based on two main premises which are people act on their beliefs and preferences, humans cannot presume objective facts, such as race, social class or institutional position by looking at people's belief and preferences. Thus, Lee (1991) claims that the social scientist must collect facts and data describing not only the purely objective, publicly observable aspects of human behavior, but also the subjective meaning this behavior has for human subjects themselves.

In view of the criticisms and lapses observed from the positivist and interpretivist approach, the realists tend to bridge the gap between positivism and interpretivism (Sayer 2000). As noted by Sayer (2000) the defining feature of realism is the belief that there is a world existing independent of our knowledge, while the independence of objects from knowledge immediately

undermines any complacent assumptions about the relationship between them and renders it problematic. Hence, the realists state that not all social phenomena and the relationships between them are directly observable. Thus, the realist acknowledge two very important points, firstly, social phenomena exist independent of the interpretation of social phenomena, secondly, the interpretation/understanding of them affects outcomes of the social phenomena. Therefore in carrying out a research, the researcher needs to identify and understand both the external reality and the social construction of that realty, if he or she is to explain the relationships between the social phenomena.

Bhaskar (1975) argued that reality exists in three overlapping domains which are firstly, the *"Empirical"* which are experiences or observed events, secondly, the *"Actual"* which are events whether observed or not, and thirdly, the *"Real"* being those underlying tendencies or mechanisms which may in a given situation give rise to events or lie dormant, being cancelled by other forces. The social sciences world, like the natural world is real and need not be treated as social facts as having an existence independent of our consciousness of them. Thus, in modern realism, it has been significantly influenced by the interpretivist critiques who according to Marsh and Stoker (2002) opine that there are no structures that are independent of social action and no objective basis on which to observe the actions or infer the deep structures. However, the interpretivist critiques have failed to acknowledge that knowledge and social phenomena are socially constructed, but this does not mean external phenomena cannot influence the interpretation of social phenomena.

The philosophical position taken by the researcher will determine the methodology and hence the method applied. As stated by Saunders and Thornhill (2007), research philosophy can be defined as the development of the research background, research knowledge and its nature and this helps the

research paradigm. In this study, the definition given by Cohen, Manion and Morrison (2000) that research paradigm broadens the framework, which comprises perception, beliefs and understanding of several theories and practices that are used to conduct a research is insightful.

The philosophical basis that was adopted by the researcher in this study is the realist position to explore the impact of bank funding on the growth of the Nigerian manufacturing sector. The realist school of thought necessitates an integration of the positivist and interpretivist ideology. The construction of a positivist understanding without the aid of a careful interpretation of the subjective meanings would be a methodological error. To avoid this, the researcher simply made sure that subjective meanings have been built into the positivist understanding, which according to Lee (1991) would then serve as the point of comparison for judging the subjective meaning contained in the positivist understanding.

Hence, Marsh and Stocker (2002) were of the view that realists might use quantitative methods to identify and analyze reality. Thus, the realist view is that reality exists externally to organizational actors, whether or not it is directly observable and that the consciousness of managers determines their response to that reality. The approach deployed by Marsh and Stocker (2002), seems to be the most appropriate for researching a complex phenomenon such as impact of bank funding on the growth of the manufacturing sector in Nigeria, where the application of a multilevelanalysis is required to understand the interplay of forces of the Nigerian banking industry and the manufacturing sector of the economy.

There is a strong relationship between research philosophy, methodology and methods. According to Saunders *et. al*. (2012), research methodology can be

described as the theory of how research is undertaken, including the theoretical and philosophical assumptions upon which research is based and the implications of these for the method or methods adopted.The methodology that is adopted for this study is both qualitative and quantitative. This involves the use of primary data on opinions and perceptions of industry stakeholders obtained through descriptive survey and secondary data on the banking industry and manufacturing sector obtained from the Nigeria Bureau of Statistics and the CBN annual journals and publications.

5.4 Positioning the Study

The choice of the research philosophy and strategies should not be dependent on arguments about the merits of deduction against induction but on the understanding of the most suitable philosophy for the adopted strategy and method in a given study. Having the above assertion in mind, for this study the critical realist position is adopted to examine the impact of bank funding on growth of the Nigeria's manufacturing sector. This will involve examining the direction of causality between bank loans and advances and manufacturing sector growth in Nigeria; evaluating the impact of bank loans and advances to the manufacturing sector on manufacturing sector's contribution to gross domestic product in Nigeria as well as gauging the perception of stakeholders on the factors that affect bank loans and advances to the manufacturing sector of Nigeria.

The researcher wishes to develop hypotheses, using mathematical and statistical instruments as well as raising and asking question from respondents on the factors that affect bank funding to the manufacturing sector. Thus, although, the researcher wishes to be detached from the research process as much as possible, but will still be involved in the research process especially in obtaining the perceptions and opinions of the stakeholders.

This research is based on the ontological assumption that empirical reality is objective and thus external to the subject matter (Ahren's and Chapman, 2006). Therefore in line with the above, the aim is to generate hypotheses and obtain results that will be further validated through the perception of stakeholders and this ties with the critical realist position.

As earlier stated, the researcher is influenced by the regimented and regulated industry practice which he has been a part and parcel of, therefore ontologically, he is an objectivist. The objectivist axioms are set up in such a way that they are irrefutable. Anyone trying to object to them must implicitly assume them even before he/she can formulate a counter-argument. However, the researcher believes that it may not be possible to explore the research phenomena using only quantitative or qualitative methodology. The investigation of impact of bank funding on growth of the Nigeria's manufacturing sector may not be exhaustively investigated using either of qualitative or quantitative approach but an integrative approach that will involve both.

From the foregoing therefore, this study adopts the critical realist position which is considered most suitable for this study than any other philosophy. While positivism focuses more on the quantitative at the methodological level, the interpretivist focuses more on changes that are made at the practical level. The critical realist suggests that both quantitative and qualitative approaches are important in a single research project in order to fully explore and understand the structure and mechanisms of what can be observed and experienced (Mctroy and Richards, 2009).

5.5 Research Methodology and Methods

Ghauri and Gronhang (2005) were of the view that research methodology is more than a set of methods, strategies or plan of action that underlay a particular

study but also enabled the researcher to achieve the desired outcome. Thus, research methodology of any research is critical to the success of that research. According to Ismail (2005), the relationship among variables of interest on which the researcher focuses is important in deciding the type of research method that is adopted. From the foregoing Ismail (2005) identified two types of relationships (cause and effect and non-cause and effect relationships). While a cause and effect relationship normally involves an experiment (quantitative study), a non-cause and effect relationship most likely will involve descriptive (qualitative) study. However, this study will involve both quantitative and qualitative methods in line with the critical realist's most commonly adopted mixed methods.

In addressing the methodology and method adopted for this study, model specification, sources of data, population, sampling procedure/sample size, area of study and method of secondary/primary data analysis are further outlined in the subsequent sub sections.

5.5.1 Model Specification and Definition of Variables

The Romer, (1994) endogenous growth model is used as the theoretical framework of this study. To shed more light on how bank loans and advances can influence manufacturing sector growth based on a simplified endogenous growth model (AK), as exemplified is shown in the production function as:

$$Y = AK$$

Where:

Y = Output

A = positive constant that reflects the level of the technology

K = Capital

This implies that output per capita and the average and marginal product are constant at the level where $A > 0$. This formed the basis of this study hence

exploring the impact of bank funding (capital) on growth of the Nigerian manufacturing sector (output).

The endogenous growth theory hence tries to build macroeconomic models out of microeconomic foundations. Thus, households are assumed to maximize utility subject to budget constraints and firms maximize output/profits. Therefore, premium is placed on the production of new technologies and human capital. The manufacturing sector is the engine for growth thus, can be as simple as a constant return to the scale production function (the AK model) or with more complicated set ups with spillover effects increasing the numbers of goods, increasing qualities amongst others.

Thus, based on the above theory, three models were specified in line with the AK model for each hypothesis. Consequently, based on the study hypotheses, three models were specified in null form in line with each hypothesis. Therefore, for hypothesis one which states that there is no causal relationship between bank loans and advances (bank funding) and manufacturing sector growth in Nigeria, it is represented as:

$$LMGDP \neq f(LTBLABS) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{ (i)}$$

where:

LMGDP	=	Log of manufacturing sector gross domestic product (Dependent variable)
LTBLABS	=	Log of total bank loans and advances granted by the banking sector to the manufacturing sector (Independent Variable)
f	=	Function

For hypothesis two which states that there is no positive and significant impact of bank loans and advances on the manufacturing sector's contribution to Nigeria's gross domestic product, it is represented as:

$$LMGDP = \alpha + \beta_1(LTBLABS) + \mu \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(ii)}$$

where:

LMGDP	=	Log of manufacturing sector gross domestic product (Dependent variable)
LTBLABS	=	Log of total bank loans and advances granted by the banking sector to the manufacturing sector (Independent Variable)
α	=	Constant of the Equation
β_1	=	Coefficient of the Independent Variable
μ	=	Error Term

Incorporating the control variables, equation (ii) will be transposed as:

$$LMGDP = \alpha + \beta_1(LTBLABS) + \beta_2 (INFR) + \beta_3 (LRER) + \beta_4 (MPR) \ldots (iii)$$

where:

INFR	=	Inflation rate
LRER	=	Log of real exchange rate
MPR	=	Monetary Policy Rate
β_{1-4}	=	Coefficients of Independent variables

From the above, the econometric equations (i) and (iii) would be used to test the hypotheses stated. The results are analysed to determine both impact and direction of the independent variables on the dependent variables. The quantum values of manufacturing sector gross domestic product, total bank loans and advances granted by the banking sector to the manufacturing sector and real exchange rate were logged to take care of equalization of the data in line with the ratio values of inflation rate and monetary policy rates in the model. This is necessary to ensure that all the variables operate at the same level.

5.5.2 Sources of Data

This study obtains data from both primary and secondary sources. The secondary data on the quantum of bank loans and advances (funding) and the corresponding output of the manufacturing sector measured by its contribution to the nation's GDP are obtained from the Central Bank of Nigeria statistical bulletin for the various years. Also, inflation rate, exchange rate and monetary policy rates are also obtained from the Central Bank of Nigeria Statistical Bulletin for the various relevant years. Nigeria Bureau of Statistics (NBS) is a public institution that compiles national economic data for access to researchers, policy makers and interested public. The CBN also has Research and Development as well as Statistics and Records departments where analysts and interested researchers can access monetary policy information. For this study, the researcher accessed data from these institutions. The process was seamless and these institutions are quite professional and cordial in line with the country's Freedom of Information Act.

5.5.2.1 Survey Design

The survey design was adopted to obtain the opinion of the key stakeholders on the factors that affect bank funding to the manufacturing sector. The choice of the survey design is hinged on the failed attempt at oral interview during the pilot study. Most Nigerian business executives are mostly busy dealing with peculiar environmental business challenges (which this study shall highlight) and hence the effective method of obtaining information from them is through the questionnaire where respondents can fill and return the questionnaire at their convenience. The survey was done through mapping out of broad research questions which respondents answered to. The targeted population included profiled manufacturers in Nigeria with minimum of N500 million annual turnover as well as Operators/Regulators in the Nigerian banking industry. Details of the respondents are found in section 5.10 below. One of the

objectives of this study is aimed at getting perceptions from respondents on the factors that affect bank funding to the manufacturing sector. The essence is to possibly corroborate and even validate the result which was obtained from the quantitative analysis of the secondary data as it relates to the impact of bank funding on manufacturing sector's GDP contribution in Nigeria.

The respondents, who are senior executives of the banking industry and key operators of the manufacturing firms were found to be extremely busy to grant interviews to the researcher. Consequently, the questionnaire was used as an instrument for the survey. This was well received as they were administered by the researcher. The respondents were allowed time to answer the questions and provide information using the Likert graded option questionnaires. The questions are carefully worded in a friendly and explicit clear manner with options that help respondents express themselves (Appendix 1). This elicited very encouraging response rate as against the failed interview attempt at the pilot study stage.

This objective is basically a perception and opinion assessment on the factors that have effects on bank loans and advances to the manufacturing sector and its growth in Nigeria. To achieve these objectives, questions were asked on broad ranging issues covering demographics and some factor domains of funding volumes, output size, capacity levels, staffing size, interest rate, inflation rate, exchange rate and even business environment issues.

5.5.3 Area of Study

This study was conducted in Lagos State Nigeria. The choice of Lagos (Lagos State) is hinged on the state being arguably the most economically important state of the country. Lagos State is located in the south-western part of the Nigerian federation. On the north and east it is bounded by Ogun State. On the

west it shares boundaries with the Republic of Benin and behind its southern borders lie the Atlantic Ocean. Lagos is Nigeria's financial, commercial and industrial nerve centre with over 2,000 manufacturing industries and over 200 financial institutions (Banks, Insurance companies etc) including the nation's premier stock exchange, the Nigeria Stock Exchange. It also houses the nation's monetary authority, the Central Bank of Nigeria (CBN) and the Security and Exchange Commission (SEC).

The State alone harbours 60% of the Federation's total industrial investments and foreign trade while also attracting 65% of Nigeria's commercial activities. It also accounts for more than 40% of all labour emoluments paid in the country. Indeed, the headquarters of multinational conglomerates like UAC, Unilever, John Holts, BEWAC/VYB, Leventis, Churchgate, Chevron, Shell, ExxonMobil and the nation's giant public enterprises are all located within the state (www.lagosstate.gov.ng). Thus, the choice of the state as our area of study for the purpose of this study is purposively chosen because of its strategic importance to the Nigerian economy. Hence, it is expected that a sample derived from this population will be a true representation of the perceptions of respondents on the factors affecting bank funding to the manufacturing sector in Nigeria. The data required include perception of respondents on possible factors affecting bank funding and growth of the Nigerian manufacturing sector. These factors were classified into six domains which are funding volume and output, fund volume and employment creation, bank funding and lending rate, bank funding and exchange rate, bank funding and inflation rate and bank funding and the business environment.

5.5.4 Population of the Study

A sample is a sub-group or representative selection of a population that is examined or tested to obtain statistical data or information about the whole population (Encarta Dictionary; Saunders et al 2007). Sampling on the other hand is the process of selecting a group of people, items or cases to be used as a representative or random sample (ibid). To ensure that all the various groups in the sampling frame were surveyed, the stratified random sampling method is adopted.

For this study, the population comprised of Operators (Commercial Bank[2] and CBN staff) that are of manager level and above and manufacturers that have turnover of N500 million and above per annum.

Thus, for the Operators, (Commercial Banks), based on The Banker Magazine of the Financial Times and Brand Finance London, in 2015 five banks out of the 25 mega banks that emerged from the 2006 Banking consolidation in Nigeria were ranked amongst the Top 500 Banking Brands in the World (www.thisdaylive.com/articles/four-nigeria-banks...top-500...banks/20083)**.**

These banks are First Bank Plc, Guaranty Trust Bank Plc (GTBank), Zenith Bank Plc, Access Bank Plc and UBA Plc. Hence for this study the population of senior bank staff was drawn from the offices of First Bank Plc, GTBank, ZenithBank Plc, Access Bank Plc and UBA Plc who are of manager grade and above in Lagos. This also included staff of the Central Bank of Nigeria (CBN) in Lagos that are of manager level from three departments (Credit and Monetary Policy, Research and Development and Banking Examination/Supervision).

[2]The commercial Banks are First Bank Plc, Guaranty Trust Bank Plc (GTBank), Zenith Bank Plc, Access Bank Plc and UBA Plc

5.5.5 Brief Profile of Selected Banks

This subsection presents a brief profile of the five selected banks in Nigeria. The banks are First Bank Plc, Guaranty Trust Bank Plc (GTBank), Zenith Bank Plc, Access Bank Plc and UBA Plc. The profiles of the selected banks were culled from the home pages of the official websites of the banks.

First Bank Nigeria Plc

First Bank of Nigeria Limited (FirstBank), established in 1894, is the premier Bank in West Africa, Nigeria's number one bank brand and the leading financial services solutions provider in Nigeria. The Bank was founded by Sir Alfred Jones, a shipping magnate from Liverpool, England. With its head office originally in Liverpool, the Bank commenced business on a modest scale in Lagos, Nigeria under the name, Bank of British West Africa (BBWA) as earlier captured in the evolution of banking in Nigeria.

Building on of its solid foundation, the Bank has consistently broken new ground in the domestic financial sector for over a century and two decades. FirstBank is present in the United Kingdom and France through its subsidiary, FBN Bank (UK) Limited with branches in London and Paris with its Representative Office in Beijing. In October 2011, the Bank acquired a new subsidiary, Banque International de Credit (BIC), one of the leading banks in the Democratic Republic of Congo. In November 2013, FirstBank acquired ICB in The Gambia, Sierra-Leone, Ghana and Guinea, and in 2014, the Bank acquired ICB in Senegal. These were major landmarks in its plan for growing its sub-Saharan African footprint and all the African subsidiaries now bear the FBN Bank brand.

Leveraging experience spanning over a century of dependable services, FirstBank has continued to build relationships and alliances with key sectors of

the economy that have served as strategic building blocks for the wellbeing, growth and development of the country. With its huge asset base and expansive branch network, as well as continuous re-invention, FirstBank is one of Nigeria's strongest banking franchise, maintaining market leadership on some fronts in the nation's financial services industry.

Zenith Bank Nigeria Plc

Zenith Bank Plc was established in May 1990, and commenced operations in July of the same year as a commercial bank. The Bank became a public limited company on June 17, 2004 and was listed on the Nigerian Stock Exchange (NSE) on October 21, 2004 following a highly successful Initial Public Offering (IPO). Zenith Bank Plc currently has a shareholder base of about one million and is Nigeria's biggest tier-1 capital bank. In 2013, the Bank listed $850 million worth of its shares at $6.80 each on the London Stock Exchange (LSE).

Headquartered in Lagos, Nigeria, Zenith Bank Plc has over 500 branches and business offices in prime commercial centers in all states of the federation and the Federal Capital Territory (FCT). In March 2007, Zenith Bank was licensed by the Financial Services Authority (FSA) of the United Kingdom to establish Zenith Bank (UK) Limited as the United Kingdom subsidiary of Zenith Bank Plc.

Zenith Bank also has subsidiaries in: Ghana, Zenith Bank (Ghana) Limited; Sierra Leone, Zenith Bank (Sierra Leone) Limited; Gambia, Zenith Bank (Gambia) Limited. The bank also has representative offices in South Africa and The People's Republic of China. It plans to take the Zenith brand to other African countries as well as the European and Asian markets. Zenith Bank Plc blazed the trail in digital banking in Nigeria; scoring several firsts in the deployment of Information and Communication Technology (ICT)

infrastructure to create innovative products that meet the needs of its teeming customers.

The bank is verifiably a leader in the deployment of various channels of banking technology, and the Zenith brand has become synonymous with the deployment of state-of-the-art technologies in banking. Driven by a culture of excellence and strict adherence to global best practices, the Bank has combined vision, skillful banking expertise, and cutting-edge technology to create products and services that anticipate and meet customers' expectations; enable businesses to thrive and grow wealth for customers.

Zenith Bank Plc currently ranks as the 6th biggest bank in the continent. The Bank grew its shareholder's fund of N20 million in 1990 to N704.5 billion as at year end 2016. Today, the Bank continues to thrive on the strong values, brand equity, corporate culture of professionalism and service excellence which are the foundations upon which the bank was built.

Guaranty Trust Bank Nigeria Plc

Guaranty Trust Bank plc is a leading African financial institution with vast business interests spanning West and East Africa, as well as the United Kingdom. The Bank has an Asset Base of over N3.213 trillion, Shareholders' funds of N581.91 billion and employs over 10,000 people in Nigeria, Gambia, Ghana, Liberia, Sierra Leone, Cote d'Ivoire, Uganda, Rwanda, Kenya, Tanzania and the United Kingdom.

Established in 1990 on a foundation of excellence, superior customer experience, ethics and best practices, GTBank has created an oasis in the African banking industry; delivering consistent year on year growth in clientele base and key financial indices since its inception. Guaranty Trust Bank is

recognized as one of the most profitable and well managed financial institutions in Africa for providing quality service, ethics, professionalism, integrity, innovation and internationally accepted corporate governance standards.

The Bank has a corporate banking bias and strong service culture that have enabled it record consistent year on year growth in clientele base and key financial indices since its inception in 1990.

Access Bank Nigeria Plc

It was granted license on 1st December 19, 1988. In February 8, 1989, Access Bank was incorporated as a privately owned commercial bank. In May 11, 1989, Access Bank commenced operations at its Burma Road, Apapa Lagos Head Office. On March 24, 1998, it became a Public Limited Liability Company and was listed on the Nigeria Stock Exchange. On February 5, 2001 Access Bank obtained a Universal Banking License from the CBN.Over the past 26 years, Access Bank Plc. has evolved from an obscure Nigerian Bank into a world-class African financial institution. Today, the bank is one of the five largest banks in Nigeria in terms of assets, loans, deposits and branch network; a feat which has been achieved through mergers and acquisitions, robust long-term approach to client solutions. Access Bank has built its strength and success in corporate banking and is now applying that expertise to the personal and business banking platforms it acquired from Nigeria's Intercontinental Bank in 2012.

As part of its continued growth strategy, Access Bank is focused on mainstreaming sustainable business practices into its operations. The Bank strives to deliver sustainable economic growth that is profitable, environmentally responsible, and socially relevant.

InMarch 2002, the Board of Directors appointed Aigboje Aig-Imoukhuede as Managing Director/Chief Executive Officer and Herbert Wigwe as Deputy Managing Director. The mandate was clear: Reposition the bank as one of Nigeria's leading financial institutions within a five year period (March 2002 to March 2007). This task was perceived by many as impossible given the realities of the Bank at the time. The new management team subsequently created a transformational agenda for Access Bank which represented a departure from all that characterized the Bank in the past and became the road map for the conversion of the bank into a world class financial institution.

In recognition of the role of an enhanced capital structure, the Bank embarked on a capital raising exercise in July 2007. The exercise was an astounding success recording an over subscription of over 300%. The public offer comprised of an Over-The-Counter GDR placement of US$250 million which was similarly oversubscribed by 700%. The Bank's shareholders fund currently stands at over N240 billion with an expanded shareholder base of over 1,000,000 domestic and foreign investors.

Access Bank is consistently seeking for ways to expand its service platform across the African continent. The bank currently operates through a network of about 366 branches across major cities and commercial centers in Nigeria, Gambia, Sierra Leone, Zambia, Rwanda and Democratic Republic of Congo.

U.B.A Nigeria Plc

United Bank for Africa Nigeria Plc (UBA Plc)UBA’s has more than 65 years of providing uninterrupted banking operations dating back to 1948 when the British and French Bank Limited (“BFB”) commenced business in Nigeria. BFB was a subsidiary of Banque Nationale de Crédit (BNCI), Paris, which transformed its London branch into a separate subsidiary called the British and

French Bank, with shares held by Banque Nationale de Crédit and two British investment firms, S.G. Warburg and Company and Robert Benson and Company. A year later, BFB opened its offices in Nigeria to break the monopoly of the two existing British owned banks in Nigeria then.

Following Nigeria's independence from Britain, UBA was incorporated on 23, February 1961 to take over the business of BFB. UBA eventually listed its shares on the Nigerian Stock Exchange (NSE), in 1970 and became the first Nigerian bank to subsequently undertake an Initial Public Offering (IPO). UBA became the first sub-Saharan bank to take its banking business to North America when it opened its New York Office (USA) in 1984 to offer banking services to Africans in diaspora.

Presently, UBA emerged from the merger of then dynamic and fast growing Standard Trust Bank, incorporated in 1990 and UBA, one of the biggest and oldest banks in Nigeria. The merger was consummated on August 1, 2005, one of the biggest mergers done on the Nigerian Stock Exchange (NSE). Following the merger, UBA subsequently went ahead to acquire Continental Trust Bank in the same year, further expanding the UBA brand. UBA subsequently acquired Trade Bank in 2006 which was under liquidation by the Central Bank of Nigeria (CBN). It had another successful combined public offering and rights issue in 2007 and made further banking acquisitions of three liquidated banks namely: City Express Bank, Metropolitan bank, and African Express Bank. The bank also acquired Afrinvest UK, rebranding it as UBA Capital, UK.

The quest to build a strong domestic and African brand intensified in 2008 when UBA made further acquisitions of two liquidated banks, Gulf Bank and Liberty Bank while at the same time intensifying its African footprint with the establishment of UBA Cameroon, UBA Cote d'Ivoire, UBA Uganda, UBA Sierra Leone, and UBA Liberia as well as the acquisition of a 51% interest in

Banque Internationale du Burkina Faso, which was the largest bank in the country with 40% market share. Currently, UBA has 18 African subsidiaries contributing about 20% of the Group's balance sheet with a target of contributing 50%.

Now fully positioned as a pan-African bank, the UBA Group is firmly in the forefront of driving the renaissance of the African economy and is well positioned as a one-stop financial services institution, with growing reputation as the face of banking on the continent.

5.5.6 Sample Size Determination

From a survey of these banks' staff of manager grade and above and working in Lagos (including regulators), the population is shown in table 5.1 below.

Table 5.1 Population of Bank Staff

S/N	Banks	Population
1	First Bank Plc	123
2	GTBank Plc	83
3	Zenith Bank Plc	95
4	Access Bank Plc	101
5	UBA Plc	119
6	CBN	35
	Total	556

From a preliminary investigation/survey for this study, the population of manufacturers registered with Manufacturers Association of Nigeria (MAN) and having turnover of N500 million and above per annum located in Lagos State is 475 companies (MAN, 2015). These manufacturing companies have their Head Offices also in Lagos State.

For the purposes of this study, since the population is finite Krejcie & Morgan formula as stated in Field (2005) is used to determine the questionnaire sample

size for the bank staff and manufacturers. Below is the formula to determine the sample size for the study.

$$S = \frac{X^2NP(1-P)}{d^2(N-1)+X^2P(1-P)}$$

where:

S = Sample size

X = Z value (e.g. 1.96 for 95% confidence level)

N = Population Size

P = Population proportion (assumed to be 0.5 (50%)

d = Margin of Error (5%)

For Bank Staff

$$S = \frac{(1.96)^2(556)(0.5)(1-0.5)}{(0.05)^2(556-1)+(1.96)^2(0.5)(1-0.5)}$$

S = **227 Respondents**

For Manufacturers

$$S = \frac{(1.96)^2(475)(0.5)(1-0.5)}{(0.05)^2(475-1)+(1.96)^2(0.5)(1-0.5)}$$

S = **213 Respondents**

From the foregoing, the sample size of bank staff and manufacturers for this study comprise of 227 bank staff (Operators and regulators) and 213 manufacturers in Lagos State Nigeria giving a total of 440 respondents that were served questionnaires and the response rate shall be presented later in this chapter.

5.5.7 Method of Secondary/Primary Data Analysis

5.5.7.1 Secondary Data Analysis

For presentation of data and analysis, graphs, descriptive statistics (tables, graphs, means, median, standard deviation, kurtosis, histograms) diagnostic analysis (unit root test) and post estimation test (autocorrelation) are employed. Since the data used for this study are time series data the stationarity or otherwise of a series can strongly influence its behaviour and properties -e.g. persistence of shocks will be infinite for non-stationary series, thus if two variables are trending over time, a regression of one on the other could have a high R^2 even if the two are totally unrelated (Gujarati and Porter, 2009).

Hence if the variables in the regression model are not stationary as it is found in the study, then it can be proven that the standard assumptions for asymptotic analysis will not be valid. In other words, the usual "*t*-ratios" will not follow a *t*-distribution, so we cannot validly undertake hypothesis tests about the regression parameters. Therefore, since all the variables are found not to be stationary, the process of differencing is used to ensure their stationarity. The integrated of order in which there are differences is then used to test the hypotheses.

Again, since the variables have been classified as integrated of order as shown in the unit root conducted, testing for co-integration is thus necessary in this study to check if the modelling has empirically meaningful relationships. Noting that if variables have different trend processes, they cannot stay in fixed long-run relationship with each other, implying that one cannot model the long-run, and there is usually no valid base for inference based on standard distributions (Boo, 2000).

Hypotheses formulated in this study are tested using the autoregressive Distributed lag (ARDL) approach or bound test method. This is a method that tests for the existence of long run relationship. It was developed by Pesaran, Shin and Smith (2001). It analyses long run relationship and dynamic interactions among the variables. It allows the co integration relationship to be estimated by OLS once the lag order of the model is identified. The short run dynamic parameters by estimating an error correction model associated with the long run estimates. Thus:

$$\Delta LMGDP_t = \alpha_0 + B_1(LTABLABS)_{t-1} + B_2(INFR)_{t-1} + B_3(LRER)_{t-1} + B_4(MPR)_{t-1} + u_t \quad \text{(iv)}$$

Where:

$B_I..4$ = the long run multipliers,

α_0 = drift and

u_t = white noise errors.

Bank funding is measured by the total quantum of bank loans and advances granted to the manufacturing sector of the Nigerian economy by the Nigerian banks, while manufacturing sector productivity is measured by the manufacturing sector's contribution to the Nigeria's GDP. Also, control variables are introduced. These variables are interest rate, inflation and exchange rates in line with the works of Beck et al. (2000).

As could be observed from model (iv) above, the variables are in their lag form, this is necessary in the model so as to recognize the time lag of the responses to known leading indicators. The lag structure is designed with the autoregressive Distributed lag (ARDL) approach or bound test method in mind because a dynamic specification of the model will produce interactions among variables. Inflation rate, log of real exchange rate and monetary policy rate are minor

independent variables introduced in the model to improve robustness and avoid simultaneous bias, as highlighted by Gujarati (2004). Also, interest rate, (monetary policy rate), inflation and log of exchange rate were introduced in the model based on two major reasons. Firstly, the variables are introduced to act as control on the effect of total bank loans and advances on manufacturing sector contribution to Nigeria's gross domestic product in line with works of Beck et al. (2000).

As stated by Beck et al. (2000) these variables are important in the model because of their effect on banks' ability to grant loans and advances. This could be observed in Amidu and Wolfe (2008) who found that the Central Bank's prime rate (monetary policy rate), inflation rate and exchange rate affect bank lending. Secondly, the variables are introduced in the model to support and justify the use of primary data (questionnaire) in this study which seek to investigate factors that affect loans and advances to Nigeria's manufacturing sector. An examination of the questionnaire shows that three domain in the questionnaire covered lending rate and funding, inflation rate and funding, and exchange rate and funding (Appendix 1).

Assumptions of the regression according to Sen and Srivastava (2011) that are used in this study are:

1. The sample will be a representative of the population for the inference prediction.
2. The error is a random variable with a mean of zero conditional on the explanatory variables.
3. The independent variables are measured with no error. (Note: If this is not so, modeling may be done instead using errors-in-variable models techniques).

4. The predictors are linearly independent i.e. it is not possible to express any predictor as a linear combination of the others.
5. The errors are uncorrelated that is, the variance –covariance matrix of the errors is diagonal and each non-zero element is the variance of the error.
6. The variance of the error is constant across observations homoscedasticity. If not, weighted least squares or other methods might instead be used.

These are sufficient conditions for the least-squares estimator to possess desirable properties; in particular, these assumptions imply that the parameter estimates will be unbiased, consistent and efficient in the class of linear unbiased estimators (Malakooti, 2013).

Again, the granger causality test is used in determining whether one time series is useful in forecasting another (Kim, et. al., 2011). Thus, the granger causality test is used to determine the direction of relationship between the dependent and independent variables (Bressler and Seth, 2011). Since the secondary data are time series, the granger test is used to predict whether "*X* is said to Granger-cause *Y* if *Y* can be better predicted using the histories of both *X* and *Y* than it can by using the history of *Y* alone."

For this study, a test for the absence of Granger causality is done by estimating the following models:

$$Y_t = a_0 + a_1 Y_{t-1} + ... + a_p Y_{t-p} + b_1 X_{t-1} + ... + b_p X_{t-p} + u_t \quad \text{..... (i)}$$

$$X_t = c_0 + c_1 X_{t-1} + ... + c_p X_{t-p} + d_1 Y_{t-1} + ... + d_p Y_{t-p} + v_t \quad \text{..... (ii)}$$

Then, testing H_0: $b_1 = b_2 = ... = b_p = 0$, against H_A: 'Not H_0', is a test that *Xdoes not* Granger-cause *Y*. Similarly, testing H_0: $d_1 = d_2 = ... = d_p = 0$, against H_A:

'Not H_0', is a test that *Ydoes not* Granger-cause *X*. In each case of the above test, a *rejection* of the null implied there is Granger causality.

5.5.7.2 Primary Data Analysis

For the questionnaire, the total population of 440 comprised of Operators (Commercial bank and CBN staff) that are of manager level and above and manufacturers that have annual turnover of N500 million and above. The total sample size of 227 bank staff (Operators and regulators) and 213 manufacturers in Lagos State Nigeria was determined using the Krejcie& Morgan formula as stated in Field (2005).

Due to the high rate of poor returns associated with postal questionnaire in Nigeria, the researcher did not use the post method. The researcher served the copies of questionnaire on the target population through the management of the five selected banks in Lagos. The researcher identified and discussed with a few senior management staff of the selected banks at their Head Offices in Lagos and the hard and soft copies of questionnaire were given to them for distribution to their qualifying managers and above. These leaders were kind enough and acted as the collation officers for the researcher at their banks. They distributed as well as collected back the completed questionnaires.

For staff of the Central Bank of Nigeria from manager level in Credit and Monetary Policy Department, Research and Development Department and Banking Examination/Supervision Department, the Director of each department served as the collation officer for the research.

While for manufacturers, the researcher was at the office of the Manufacturers Association of Nigeria (MAN) where he obtained the list and locations of the manufacturers that meet the N500 million and above annual turnover criteria. The copies of questionnaires were dropped at the offices of the Managing

Directors of the selected manufacturing outfits. The researcher returned at the agreed time to collect the completed copies of the questionnaires.

Responses of Stakeholders

In this section of the study, the responses of stakeholders (manufacturers, regulators and bank operators) on some selected questions of the questionnaires are presented. The collation report of the responses from the respondents on the administered questionnaires on their opinion and perception on the factors affecting bank funding is presented below.

Table 5.2: Questionnaire Response Rate

Option	Questionnaire Distributed	Questionnaire Returned	% Returned
Bankers	227	219	96
Manufacturers	213	197	92
Total	440	416	95

Table 5.2 revealed that a total of 440 copies of questionnaire comprising 227 to Bankers (Operators and Regulators) and 213 to manufacturers were distributed to the stakeholders of the Nigerian banking and manufacturing sector to gauge their perception on the factors that affect bank funding of the manufacturing sector and its growth. As indicated, of the 227 copies of the questionnaire distributed to Bankers, 219 copies of the questionnaire were filled and returned by the respondents representing 96% return rate. Also, from the copies of questionnaire distributed to selected manufacturers, 197 were filled and returned by respondents representing a response rate of 92%. Respondents were sketchy on their demographic data maybe for anonymity reasons but were unanimous in indicating their sectors, probably also because the questionnaires were administered through their office addresses and emails. However, this did not affect the quality and integrity of their responses to the domain questions. However, the manufacturers' responses on number of employees, annual

turnover, business segment and years in business would have aided further analysis into the possible link between size/experience in business and lending rate concession demands/expectation. Table 6.7 in the analysis and discussion section of Chapter six fully captures details of demographic data collected from the study and explains the limitations of the data as collated.

The survey was successful and recorded a return rate of 95%. This was achieved largely due to the enthusiasm shown by industry operators who showed excitement at the study and also as a result of improvements made in the questionnaire administration strategy sequel to lessons learnt from the pilot study conducted. Appendix 2 contains the aggregate collated responses from the respondents (Bankers, Regulators and Manufacturers).

The primary data was analyzed using tables and factor analysis. Factor analysis is useful tool since the study is investigating variable relationships on bankers' and manufacturers' perception on the factors affecting bank funding to the manufacturing sector and its growth in Nigeria. It therefore allows the investigation of perceptions of respondents on the impact of bank funding on manufacturing sector growth in Nigeria. Measuring perceptions could be cumbersome thus the factor analysis assisted the researcher in measuring directly the perception and opinions of industry key players by collapsing a large number of variables into a few interpretable underlying factors (Child, 2006).

The main purpose of factor analysis is to summarize data to show the relationships and patterns so that the perceptions of respondents can be interpreted and understood. The factor analysis is used to regroup variables into a limited set of clusters based on shared variance. Thus, it helps to isolate constructs and concepts (Yong and Pearce, 2013). According to Bartholomew, Knott and Moustaki (2011), factor analysis operates on the notion that

measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable. The extraction method was adopted and a principal component analysis used to select converge perception of respondents that have a component factor above 0.5. This was based on the assumption that there is a linear relationship between the factors and the variables when computing the correlations (Gorsuch, 1983).

As observed from the econometrics model (equation iv) formulated to test the effect of bank funding on growth of the Nigeria's manufacturing sector, three variables namely monetary policy rate, inflation rate and exchange rate were introduced in the model in estimating the effect of total bank loans and advances on manufacturing sector contribution to Nigeria's gross domestic product (major independent variable). The justifications for their introduction in the model were firstly as control measures and secondly as the basis for the primary data inclusion in this study.

For monetary policy rate, stakeholders are requested to provide possible responses on the extent they consider average lending rate affecting manufacturers in Nigeria; extent banks are ready to extend concessionary lending rates to manufacturers; extent bank lending rate affects manufacturers' willingness to borrow; extent high lending rate could affect adversely product pricing of the manufacturers, and the extent high interest rate could reduce profitability of the manufacturing firms.

To elicit response on the relationship between exchange rate and bank loans and advances, respondents are expected to provide responses on the extent a relationship exists between exchange rate and the financial performance of manufacturing firms; extent machineries and raw materials of the Nigerian manufacturers are import dependent; extent foreign exchange is available and

accessible by the manufacturers; extent exchange rate has been stable in Nigeria; extent local currency has been devalued in the last 10 years; extent banks are willing to take exchange risk in lending; extent volatility in exchange rate affects the product pricing of the manufacturers; extent consumers are ready to accept higher prices occasioned by higher exchange rates and extent banks are willing to lend and fund foreign currency denominated medium and long term loans.

On the relationship between inflation rate and bank loans and advances, respondents are expected to provide responses on the extent banks factor in inflation rate in their lending consideration to the manufacturers;extent pricing of locally manufactured goods affects the rate of inflation in Nigeria; extent inflation rate affects the cost of production of the manufacturer, andextent high inflation rate affects the financial performance of the manufacturers.

These questions are subjective, hence the use of survey design (primary data) in this study. Therefore responses provided will assist in reinforcing and correlating the result of the secondary data in the study.

5.6 Ethical Consideration

In this section of the study, the ethical issues that are considered critical in the course of this study are highlighted. The following issues were considered in course of the study:

a. **Informed Consent:** Informed consent was a major consideration in this study. The researcher ensured that the respondents voluntarily and intentionally gave their consent in the questionnaire. This was achieved by inserting on the introduction page of the questionnaire the use of the information provided. Respondents are guaranteed that answers provided are used for academic purposes only (see appendix 1).

b. Beneficence: For this study, its outcome will not be harmful to the general public. In fact the essence of this study is to ensure that the outcome of the study will provide both practical and theoretical relevance on the impact of bank funding on the growth of the Nigerian manufacturing sector. Thus, the study provides the professional mandate for effective and significant importance to better serve the Nigerian public.

c. Respect for Anonymity and Confidentiality: This ethical consideration is closely tied to beneficence. The identity of the researcher was properly disclosed while respondents were assured of the confidentiality of information provided. Again they were assured that information provided by them shall be used in consolidated form hence no single opinion shall be identified. The researcher also ensured that names and other personal data were not compulsorily required to be supplied by respondents (see appendix 1).

d. Respect for Privacy: For this study, the respondents were assured that information provided is used privately for academic use only. Often, respondents are afraid that providing information can expose them. For a developing economy like Nigeria, this point is especially important given the weakness in the public institutions that protect human rights. Thus, for this study, respondents were assured of their privacy (see appendix 1).

e. Authorship and respect for intellectual property: Again, this issue is considered very important in this research. All works reviewed were properly cited. However, the researcher regrets the non-citation of any material used and not referenced as omission and is not intentional.

f. **Avoidance of controversy:** Efforts were made in this study to avoid misleading, misreporting, misunderstanding and unjustified presentation of information to avoid controversies. The essence of this study is to

provideresearch based results that will not mislead the general public.This consciousness remained highly central in this study. Thus, the major intent in this study is not to misreport, misinform and deceive any one. Consequently, any such misrepresentation found in this study is unintentional and highly regretted.

5.7 Chapter Summary

This chapter has presented and justified the philosophical and epistemological stance underpinning the research, as well as detailing issues associated with the methodology and data used in examining the link between bank funding and manufacturing sector growth. The choice of methodology and methods are aimed at overcoming some of the problems and issues identifiable in researches of this nature.

By taking a critical realist stance, the researcher consequently applies the quantitative and qualitative methodology in the study, using a time series analysis as well as gauging opinion and perception using survey instrument (questionnaire) to examine impact of bank funding on manufacturing sector growth in Nigeria. The chapter then examines the issues associated with time-series analysis, such as the stationarity of the data set, before detailing the methodology used to answer the research questions articulated in this study.

The chapter introduces the model for the estimation in the study variable, as well as the justification for the methodology which is anchored on the endogenous theory as well as the variables used in the analysis. This includes total bank loans and advances, loans and advances to the manufacturing sector, as well as the control variables. Again, the methodology adopted in presenting and analyzing the questionnaire responses was also presented.

CHAPTER SIX

DATA PRESENTATION, ANALYSIS AND FINDINGS

6.1 Introduction

The overall aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. To achieve this aim, this chapter provides a detailed report on the presentation of data generated from the study as well as their analysis in line with the adopted methodology and methods.

Therefore this chapter shall empirically establish the impact of bank loans and advances on the growth of the Nigeria's manufacturing sector. Specifically it establishes the relationship and the direction of causality between bank funding and manufacturing sector growth in Nigeria; evaluates the impact bank loans and advances to the manufacturing sector has on the manufacturing sector's contribution to GDP by using the Johansen co-integration test, granger causality test, autoregressive distributed lag (ARDL) approach or bound test methods. It also identifies factors that affect bank loans and advances to the manufacturing sector using factor analysis to test perception of respondents on the factors affecting bank loans and advances to the manufacturing sector.

6.1.2 Chapter Objective

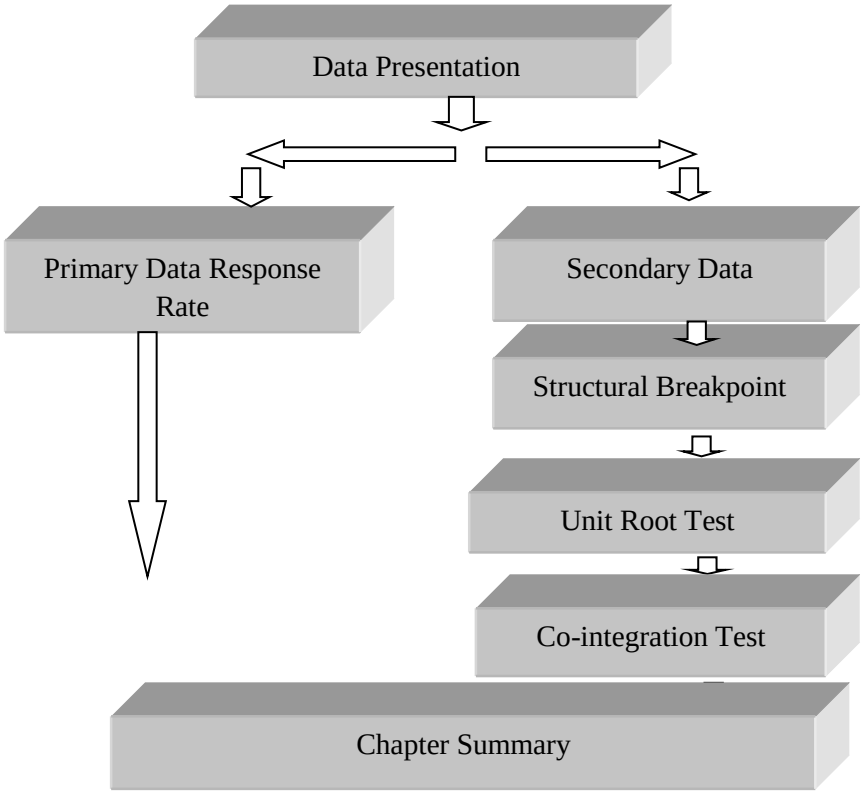
The main objective of this chapter is to present in brief the raw secondary and primary data as well as performing the descriptive analysis of the data. In order to achieve the objective of this chapter, the chapter questions how adequate are the data used for analysis? The adequacy of the data will assist the establishment of the direction of the relationship between financial intermediation and economic growth, and hence the direction of causality in this study. This is aimed at establishing the need to explore the effect of bank based financial system on growth of the Nigeria's manufacturing sector. The adequacy

of the primary data will also assist in gauging the opinion of stakeholders on factors that affect the manufacturing sector's bank funding.

6.2 Chapter Structure

In section 6.3 the data used in the analysis and the model data are presented. In section 6.4 the structural breakpoint test is conducted to test for the possibility of endogenous structural breaks in the data series. Also in section 6.5 the unit root test is carried out to test for stationarity or otherwise of the data. Section 6.6 carries out the co-integration test using the Johansen co-integration test technique to test for the long-run relationship between the variables. Likewise Section 6.7 presents the response rate from the copies of questionnaires distributed to respondents. The chapter ends with summary of the chapter in section 6.8. The outline of the chapter is presented in figure 6.1.

Figure 6.1 Chapter Six Outline



6.3 Data Presentation

This section presents the data used in the analysis and the model data are presented in table 6.1a below. The table presents the quantum values of Nigeria's manufacturing sector gross domestic product, total bank loans and advance, inflation rate, exchange rate and monetary policy rate (MPR) from 1987 to 2015. Table 6.1b is used to explain the movement of the data series for the period of this study.

While the impact of bank loans and advances (bank funding) on the growth of the manufacturing sector was assessed directly and primarily in this study using the sector's GDP contribution, other key economic model proxies like inflation rate, exchange rate and monetary policy rates have been introduced to deepen the analysis as these indicators affect both banks and the manufacturing sector directly.

Table 6.1a Quantum Model Data

Year	Manufacturing Sector GDP(N, billion)	Total Bank Loans and Advances to the Manufacturing Sector (N, Billion)	Inflation Rate (%)	Exchange Rate (USD/Naira)	MPR (%)
1987	43.22	5.0	10.20	91.46	12.75
1988	63.52	6.1	38.30	101.51	12.75
1989	72.90	6.7	40.90	93.86	18.50
1990	84.27	7.9	7.50	82.00	18.50
1991	110.60	10.9	13.00	72.37	15.50
1992	153.47	15.4	44.50	56.45	17.50
1993	221.23	23.1	57.20	72.43	26.00
1994	354.66	34.8	57.00	109.87	13.50
1995	414.13	58.1	72.80	174.83	13.50
1996	477.95	72.2	29.30	226.51	13.50
1997	546.71	82.8	8.50	265.25	13.50
1998	620.20	96.7	10.00	301.04	13.50
1999	713.82	115.8	6.60	74.84	18.00
2000	826.03	141.3	6.90	76.70	14.00
2001	989.11	206.9	18.90	85.78	20.50
2002	1,127.23	233.5	12.90	86.01	16.50
2003	1,304.07	294.3	14.00	80.12	15.00
2004	1,516.05	332.1	15.00	81.84	15.00
2005	1,778.73	352.0	17.90	94.58	13.00
2006	2,082.49	445.8	8.20	100.93	10.00
2007	2,401.19	487.6	6.60	100.00	9.50
2008	2,761.55	932.8	15.10	111.56	9.75
2009	3,170.82	993.5	13.90	104.64	6.00
2010	3,578.64	987.6	13.70	114.46	6.25
2011	4,527.45	1,053.2	10.80	115.03	12.00
2012	5,588.82	1,068.3	12.20	128.73	12.00
2013	7,233.32	1,179.7	8.50	138.38	12.00
2014	8,685.43	1,647.5	8.00	147.62	13.00
2015	8,973.77	1,736.2	10.00	149.72	11.00

Source: CBN Statistical Bulletin, 2015

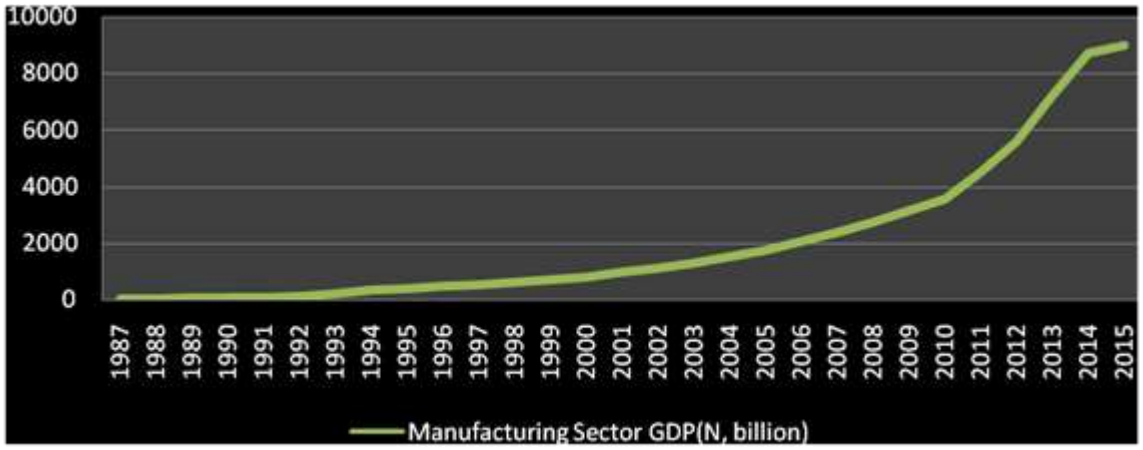
Table 6.1b Descriptive Statistics of Model Proxies

	MGDP (₦, billion)	TBLABS (₦, Billion)	INFR (%)	IRER (USD/Naira)	MPR (%)
Mean	2083.496	435.4414	20.28966	118.5697	13.87931
Median	989.1100	206.9000	13.00000	100.9300	13.50000
Maximum	8973.770	1736.200	72.80000	301.0400	26.00000
Minimum	43.22000	5.000000	6.600000	56.45000	6.000000
Std. Dev.	2581.781	521.6645	17.86843	57.70637	4.100643
Skewness	1.545509	1.147059	1.599491	1.861625	0.641166
Kurtosis	4.329117	3.110744	4.419797	5.868980	4.339489
Jarque-Bera	13.67947	6.374249	14.80126	26.69648	4.154985
Probability	0.001070	0.041290	0.000611	0.000002	0.125244
Sum	60421.38	12627.80	588.4000	3438.520	402.5000
Sum Sq. Dev.	1.87E+08	7619748.	8939.867	93240.70	470.8276
Observations	29	29	29	29	29

Manufacturing Sector GDP Contribution

As revealed from above the mean of manufacturing sector gross domestic product from 1987 to 2015 was ₦2, 0833.49 billion and the median ₦989.11 billion. The year with the maximum manufacturing sector gross domestic product was observed in 2015 while the year with the least manufacturing sector gross domestic product was in 1987. The diagrammatical presentation of the manufacturing sector growth rate from 1987 to 2015 is presented in figure 6.2 below:

Figure 6.2 Manufacturing Sector GDP 1987 - 2015

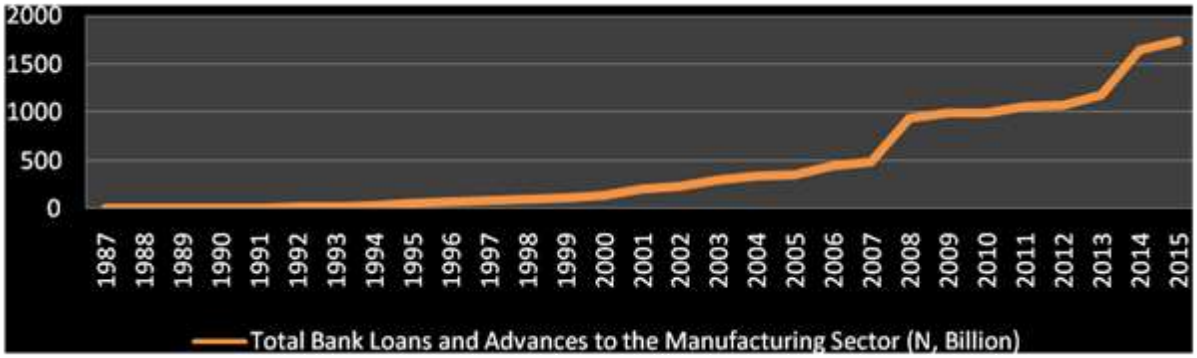


The manufacturing sector's contribution to the nation's GDP stagnated from 1987 to 1993 before it started experiencing some modest growth up till 2010. However, the growth rate trajectory got more exponential from 2011 through 2014.

Total Funding to the Manufacturing Sector

Again table 6.1 presents the quantum values of total bank loans and advances to the manufacturing sector for the period 1987 to 2015. The mean total bank loans and advances to the manufacturing sector is ₦435.44 billion while the median value is ₦206.88 billion. The year with highest total bank loans and advances to the manufacturing sector was observed in 2015 while the year with least total bank loans and advances to the manufacturing sector was recorded in 1987. Figure 6.3 below diagrammatically presents the trend of total bank loans and advances to the manufacturing sector. The total bank funding to the manufacturing sector followed similar pattern of growth witnessed in the sector's GDP contribution discussed earlier. The picture may look different if we account for inflation and local currency devaluation over the period.

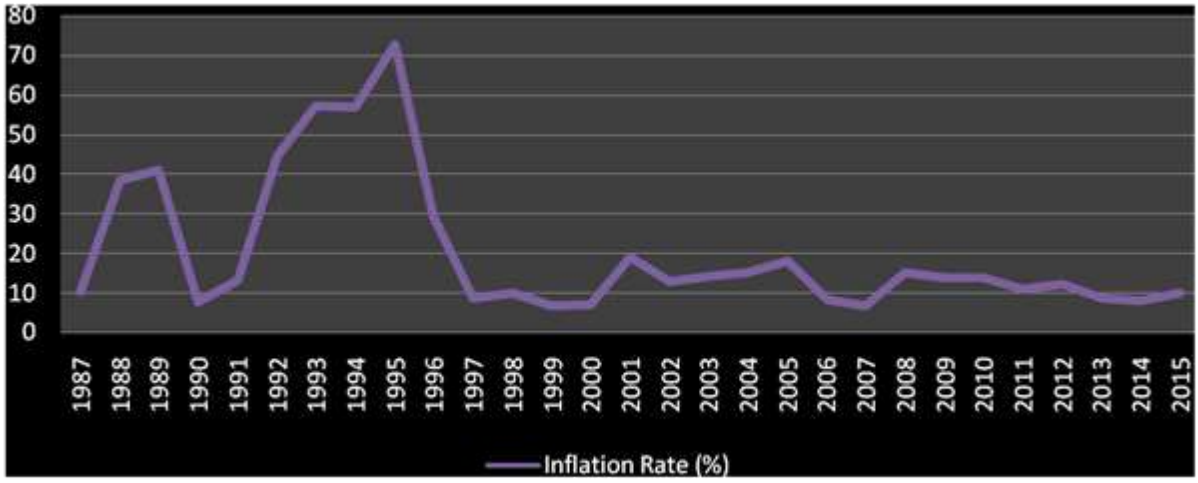
Figure 6.3 Total Bank Loans and Advances to the Manufacturing Sector 1987 - 2015



Nigerian Inflation Rate

From table 6.1 the mean value of inflation rate for the period 1987 to 2015 is 20.28% while the median value is 13%. The year with highest observed inflation rate was 1995 while the year with least total inflation rate was in 1999. Figure 6.4 diagrammatically presents the trend of inflation rate.

Figure 6.4: Inflation rate 1987 – 2015



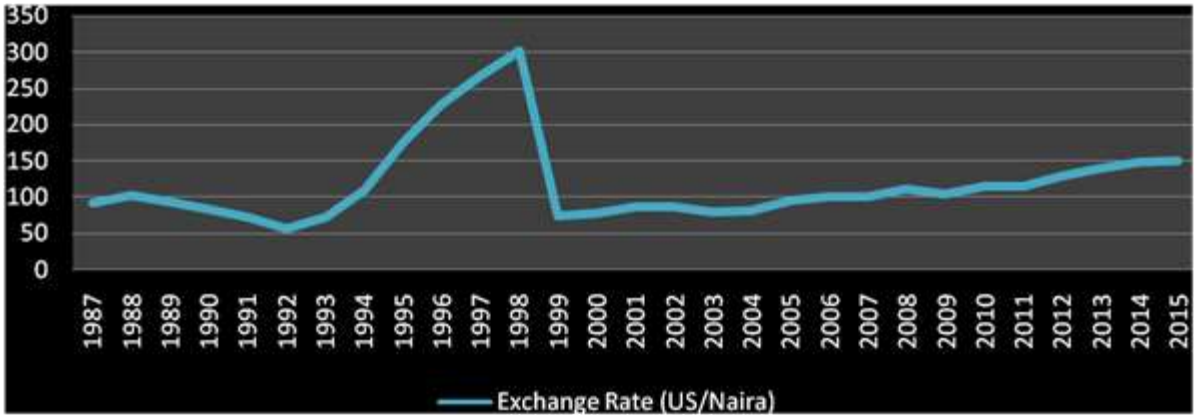
Inflation rate that started with a base rate of 10% in 1987 rose to 40% by 1989 and drastically dropped back to 10% by 1990. However it spiked again from 1992 hitting the all-time rate of above 70% in 1995. This unprecedented rate was tackled with combination of fiscal and monetary policies that crashed it back to about 10% in 1997. Since 1998 till date, inflation has hovered between

10% and 20% with occasional single digit figures therefore reinforcing the volatile nature of inflation rate.

Exchange Rate

From table 6.1 the mean value of real exchange rate for the period 1987 to 2015 was ₦118. 57/USD while the median value is ₦100.93/USD. The year with highest real exchange rate was observed in 2008 while the year with least total real exchange rate was recorded in 1992. Figure 6.5 diagrammatically presents the trend of exchange rate.

Figure 6.5: Real Exchange rate 1987 – 2015

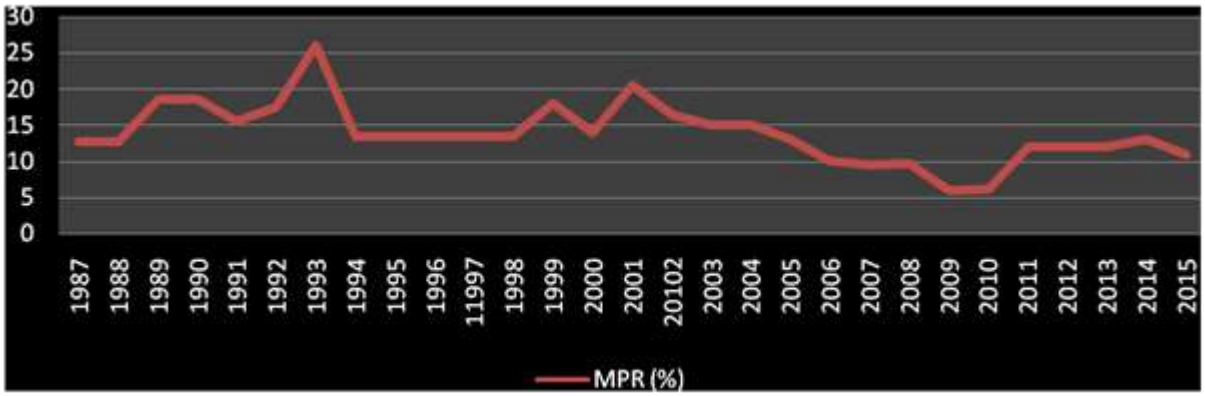


Exchange rate for the nation's currency, the Naira against the USD was a little below ₦100/USD in 1987. It improved from 1989 till 1992 when it hit an all-time low of about ₦52/USD in 1992. However, from ₦72/USD in 1993, the Naira precipitously crashed to N301/USD in 1998 before gaining amazing strength against the USD by crashing the USD to ₦74/USD in 1999. From 2005 to 2015, the exchange rate moderated between N100/USD and N150/USD.

Monetary Policy Rate (MPR)

From table 6.1a the mean value of monetary policy rate for the period 1987 to 2015 was 13.87% while the median value is 13.5%. The highest monetary policy rate was observed in 1993 while the year with least monetary policy rate was 2009. Figure 6.6 diagrammatically presents the trend of monetary policy rate.

Figure 6.6: Monetary Policy Rate 1987 - 2015



MPR which drives other lending rates in the economy during the greater period of this study hovered between 12% and 20%. By implication therefore, the average prime lending rate of banks after applying the 2% plus or minus corridor as statutorily allowed was between 10% and 22%. However, we witnessed an MPR spike of 26% in 1993 which was quickly crashed to 13% the next year through CBN intervention in the market. By 2001, the rate rose again to 20% but was managed down with deliberate and consistent monetary policies that brought the rate to single digit between 2008 and 2010. The MPR has moderated around 12% since 2011 till 2015 as shown in table 6.1a.

6.4 Structural Breakpoint Test

Recognizing that the secondary data are times series in nature, there exists the possibility of endogenous structural breaks in the data which can be described as macroeconomic shifts in the time series data. It is therefore against that possibility that the series are tested for structural breaks using E-views (9)

multiple break point test. The results of both the sequential and repartition structural break point periods test are depicted in table 6.2 below.

Table 6.2: Structural Breakpoint Test

Year/Variables	LMGDP	INFR	LRER	LTBLABS	MPR
1992		•			
1993	•			•	
1996		•			
1997		•			
1999	•			•	
2000				•	
2001	•				
2005					•
2008	•			•	

• = Structural Breakpoint period
LMGDP = Log of manufacturing sector gross domestic product
INFR = Inflation rate
LRER = Log of real exchange rate
LTBLABS = Log of total bank loans and advances granted by the banking sector to the manufacturing sector
MPR = Monetary Policy Rate

It was observed that for INFR there was a structural break point in 1992. This could be attributed to monetary policy measures adopted in 1992 designed to improve the overall economic performance, with the specific aim of achieving a single digit inflation rate (CBN, 1992). In 1993, as observed from the above table, there were also structural breakpoints in LMGDP and LTBLABS. This could have been as a result of the goals of monetary policy to reduce the inflation rate, minimize pressures from the external sector, stimulate growth in production and output, and reduce pressure on the balance of payments to ensure stable exchange and interest rates.

The performance of the Nigerian economy has revealed that the rate of growth of real output as measured by GDP at 1984 constant factor cost declined,

inflation rose and unemployment increased (CBN, 1993). Again in 1996 and 1997 structural breakpoints occurred in INFR which could be attributed to monetary policy focus on improving economic performance, stemming the tide of high and rising inflation as well as improving the balance of payments position.

Likewise, a structural breakpoint occurred for LMGDP again in 1999 and 2001 and LTBLABS in 1999 and 2000. These breakpoints could have occurred as a result of the objectives of monetary policy in 1999, 2000 and 2001 which were to reduce excess liquidity in the banking system, achieve single digit inflation, market based interest and exchange rates system, stable financial sector, non-inflationary growth and favourable balance of payments position (CBN, 1999). In 2000, the rate of growth of bank credit to the domestic economy was 23.1% as against the 27.8% targeted (CBN, 2000) and in 2001 the CBN introduced new monetary policy instruments and made upward reviews of the minimum rediscount rate (MRR) and cash reserve requirements (CRR) (CBN, 2001).

In 2005, a structural breakpoint was observed in MPR which could be attributed to the new monetary policy framework introduced. The ultimate goal of the new framework was to achieve a stable value of the domestic currency through stability in short-term interest rates around an operating targeted CBN monetary policy rate (CBN, 2005). Lastly, structural breakpoints were observed both in LMGDP and LTBLABS in 2008.

In summary, given that the study is assumed to be using nonstationary time series data, the essence of testing for the structural breakpoints of the model proxies was to determine the need and appropriateness of the unit root test methods to be used in the study. For this study we employed two unit root test detectors, the Perron Unit Root Test with structural breakpoints and the

Augmented Dickey Fuller (ADF). While the presence of structural breakpoints necessitated the use of the Perron Unit Root Test with structural breakpoints, the ADF was used on the condition that the model parameters are not stationary at levels. This necessitated differencing/lagging till all model proxies are brought to stationarity which is conducted in the next section.

6.5 Unit Root Test

According to Brooks (2008), determining whether times series is stationary is very important. For the stationarity or otherwise of a series can strongly influence the behaviour and properties of such data set. A series is stationary if the mean and autocovariances of the series do not depend on time. Any series that is not stationary is said to be nonstationary. Thus, since the data for this study is time series data, it is assumed that they are nonstationary, hence the need to employ the unit root test.

The assumption of stationarity in the data used is essential in the analysis of time series data. Thus, the significance of the stationarity of data in time series analysis lies in the fact that conditions of constant covariance, variance and mean need to be satisfied to ensure the accuracy of the estimated models and parameters. Therefore, it is important to consider whether or not the data are stationary prior to estimating the relationship between bank funding and the growth of the Nigerian manufacturing sector. As reported earlier in this study at the review of the operating business environment, the CBN and other monetary authorities intervened severally at the economy using various fiscal and monetary policies to achieve stable economy and economic growth agenda. These periodic interventions and reforms impact and alter the macro variables sometimes immediately and some other times with lag of time. It becomes therefore expedient to harmonize the time series data with common covariance and mean over the years under review with the aim of having a uniformity of

characteristics and then be able to generalize and make reliable projections. According to Phillips and Perron (1986) conducting regressions which employ non-stationary variables may lead to misleading results, showing apparently significant relationships, even where the variables are generated independently. Such cases are known as spurious regression (Patterson 2000).

It is therefore against the forgoing that the study tested for the stationarity of all the model variables. For this study, two unit root test tools were employed. The Perron Unit Root Test with structural breakpoints and the augmented Dickey Fuller (ADF). While the presence of structural breakpoints in all the variables except LRER necessitated the Perron Unit Root Test with structural breakpoints being used to test for unit root of the times series data, the ADF was employed to test for stationarity at first difference. The conventional hypothesis test and confidence intervals process were followed in investigating the stationarity of the variables of interest by performing unit root tests for all the variables, first at level and then at first difference. The result of the unit root test is summarized in table 6.3 below.

Table 6.3: Unit Root at levels

	PP				**Remark**
	t-statistic	**1%**	**5%**	**10%**	
LMGDP	0.55	-6.32	-5.59	5.29	NS
LTBLABS	-2.90	-6.32	-5.59	-5.29	NS
LRER	-5.40	-6.32	-5.59	-5.29	NS
INFR	-8.44	-6.32	-5.59	-5.29	S
MPR	-4.22	-6.32	-5.59	-5.29	NS

where:
NS = Not Stationary
S = Stationary
PP = Philip Perron

As revealed from table 6.3, apart from INFR, none of the model data is stationary at levels I (O) at 5% level critical values. The test statistics for all the variables except INFR were less than the critical values at 5% levels. As such, the null hypothesis is rejected and hence the variables are not stationary. This result was expected, as most time series are non-stationary, owing to the nature of their data generation process. Therefore, it was necessary to conduct the tests using the first difference, with the hope that they would now be stationary.

Having established the fact using Perron Unit Root Test with structural breakpoints, that variables are not stationary at level, this study employed the ADF unit root to test for stationarity at order 1, table 6.4 presents the results of the model data at first difference.

Table 6.4: ADF Unit Root at 1st Difference

Variable	t-statistic	Prob.	1%	5%	10%	Remark
LMGDP	-3.277	0.026	-3.700	-2.976	-2.627	I(1)
LTBLABS	-4.217	0.0029	-3.700	-2.976	-2.627	I(1)
LRER	-4.538	0.0013	-3.700	-2.976	-2.627	I(1)
INFR	-4.351	0.0026	-3.753	-2.998	-2.639	I(1)
MPR	-7.222	0.0000	-3.700	-2.976	-2.627	I(1)

As revealed from table 6.4 the test statistic is more negative than the critical value at 5% and again, the p-value is less than 0.05, thus, we reject the null hypothesis that the data are not stationary at first differences. This implies that at first difference, all of the variables are found to be stationary at 5% level of significance. The results of the ADF test thus indicate that the variables are integrated of order 1 expressed as I (1). Since the data set is found to be stationary at first difference, it was therefore necessary before estimating the regressions to transform the variables of interest by taking their first differences

operator in order to achieve stationarity. The implication of the above is that there may be a possibility of co-integration among the variables.

6.6 Co-integration Test

As revealed from the unit root tests conducted above, the variables are stationary at I (1), thus co-integration exist among the variables. According to Brooks (2008)a set of variables is defined as co-integrated if a linear combination of them is stationary. Thus, having established from the unit root tests that the variables are stationary at their first difference I (1), the co-integration test was carried out using the Johansen (1992) Co-integration test kit. The result of the co-integration test of both trace and maximum Eigenvalue is presented in tables 6.5 and 6.6.

Table 6.5: Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	***Eigenvalue***	***Trace Statistic***	***0.05 Critical Value***	***Prob.*****
None *	0.892199	134.2615	88.80380	0.0000
At most 1 *	0.669828	74.11995	63.87610	0.0054
At most 2 *	0.661914	44.20016	42.91525	0.0370
At most 3	0.310677	14.91985	25.87211	0.5812
At most 4	0.165183	4.874639	12.51798	0.6144

Trace test indicates 3 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The result of the co-integration tests as shown in table 6.5 indicates the presence of co-integration vectors. This means that there are dynamic long-run relationships, involving the indicators of manufacturing sector growth rate and the other variables in the analysis. The trace statistics indicate that there are three co-integrating vector equations in the model at the 5% level of significance.

Table 6.6 Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	*Eigenvalue*	*Max-Eigen*	*0.05 Critical Value*	*Prob.***
None *	0.892199	60.14156	38.33101	0.0000
At most 1	0.669828	29.91979	32.11832	0.0906
At most 2 *	0.661914	29.28031	25.82321	0.0168
At most 3	0.310677	10.04521	19.38704	0.6140
At most 4	0.165183	4.874639	12.51798	0.6144

Max-eigenvalue test indicates 1 cointegratingeqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The Maximum eigen values however indicate over one co-integrating vector equations at the 5% level. The result for the maximum eigenvalue is chosen as they are known to be more reliable and robust.

As revealed from table 6.5 and 6.6 the presence of co-integration suggests that there exists a long-running relationship between manufacturing sector gross domestic product growth and bank funding. Also, by extension, this result implies that causality must exist by definition in at least one direction (Engle and Granger, 1987) between of manufacturing sector gross domestic product growth and bank funding. This will be explored in the test of hypothesis one, having established all these relationships the discussion chapter of this study shall test the hypotheses stated earlier as well as the implications on the impact of bank funding on the growth of Nigeria's manufacturing sector.

6.7 Primary Data Analysis and Discussion of Responses of Stakeholders

In this section of the study, the responses of stakeholders (manufacturers, regulators and bank operators) on some selected questions of the questionnaires are presented. The collation report of the responses from the respondents on the

administered questionnaires on their opinion and perception on the factors affecting bank funding was presented in Table 5.1 earlier.

Table 5.1 revealed that a total of 440 copies of questionnaire comprising 227 to Bankers (Operators and Regulators) and 213 to manufacturers were distributed to the stakeholders of the Nigerian banking and manufacturing sector to gauge their perception on the factors that affect bank funding of the manufacturing sector and its growth. As indicated, of the 227 copies of the questionnaire distributed to Bankers, 219 copies of the questionnaire were filled and returned by the respondents representing 96% return rate. Also, from the copies of questionnaire distributed to selected manufacturers, 197 were filled and returned by respondents representing a response rate of 92%.

While the survey could be said to be successful and recorded very high return rate of 95%, further analysis shows some level of apathy or apprehension by respondents in providing their demographic and bio-data information which were intended to be used in assessing the levels, experience and quality of borrowing/lending decisions. Nonetheless, this did not materially affect the achievement of the major objective of the survey which is to identify the factors that affect bank funding to the manufacturing sector and make recommendations for improvement of lending practice. Appendix 2 contains the aggregate collated responses from the respondents (Bankers, Regulators and Manufacturers).

Table 6.7 below gives breakdown of the stakeholders' responses to questions on their demographic and bio-data information.

Table 6.7 Demographic Characteristics of the Respondents

S/N	Demographics	Characteristics	Breakdown of Respondents	Total Respondents	Total no Respondents that withheld response	Overall Total of Respondents
1	Sex	Male	51	118	298	416
		Female	67			
2	Highest Level of Education	Primary education		152	264	416
		Secondary education				
		Tertiary education	152			
		No formal education				
		others				
3	Position of Respondent	Manager	35	59	357	416
		Senior Management	19			
		Board Member	5			
4	Nature of Work	CBN/Regulator's Executive	14	416	0	416
		Commercial Bank Executive	205			
		Manufacturers Association of Nigeria's Executive	0			
		Manufacturing Firm Executive/Director	197			
5	Length of Service	5– 10 years	5	70	346	416
		11 – 15 years	13			
		16 – 20 years	37			
		Above 20 years	15			

Table 6.7 above reveals that out of a total of 416 respondents, 51 were male and 67 were female representing a total of 118 respondents while 298 withheld information on their gender. On their highest level of education, 152

respondents had tertiary education (i.e, B.Sc, M.Sc, Ph.D) while 264 did not indicate their educational status. Also on their position in their organisations, 35 respondents were managers, 19 respondents were in senior management, and 5 respondents were board members. This represents a total of 59 respondents that indicated their levels while 357 respondents did not indicate their positions in their place of work. For nature and place of work, 14 respondents were from the Central Bank of Nigeria (Regulator), 205 respondents were commercial bank executives, and 197 respondents were manufacturing firms' executives/directors. All respondents indicated their places of work, this may be as a result of the fact that the questionnaires were administered through their employers and or they did not perceive any risk coming from disclosure of their pace of work.

Lastly on length of service in their organisations, 5 respondents had worked for 5-10 years, 13 respondents had worked for 11-15 years, 37 respondents had worked for 16 -20 years and 15 respondents had worked for over 20 years. This represented a total of 70 respondents while 246 respondents did not indicate their length of service. The scanty nature of these demographic data makes it difficult to make an informed and supported analysis of how the stakeholders personal characteristics can influence lending and borrowing decisions.

6.8 Perception of Respondents

The primary data was analyzed using the Factor Analysis test kit. Six domains were critically selected to appraise areas that relate to perception of respondents on factors affecting bank funding and growth of the Nigerian manufacturing sector. These are Funding volume and Output of manufacturing sector, Funding volume and Employment creation of the manufacturing sector, Funding of the manufacturing sector and Lending rate, Funding of the manufacturing sector and Exchange rate, Funding of the manufacturing sector and Inflation rate and

Funding of the manufacturing sector and the Business environment. Questions were raised along these six domains (see Questionnaire Appendix 1). The extract from the factor analysis results is presented in the next subsection.

6.8.1 Funding Volume and Output of the Manufacturing Sector

In this subsection, the responses of stakeholders on the relationship between funding volume and output of the manufacturing sector in Nigeria are presented. The result of the component rotated matrix is depicted in Table 6.8 below. Table 6.8 reveals that 7 items were extracted from 11 factors loaded based on the principal component analysis. The result reveals that stakeholders agreed that manufacturing sector of the Nigerian economy requires financial support from Nigerian banks, that bank loans are some of the ways of funding manufacturing business, that bank loans/funding should be a major source of financing the business/operations of a manufacturing firm, that financial strength of a manufacturing firm helps in attracting bank funding to the firm, that past experience and performance of the existing loans affect the banks' willingness to lend more and lastly that there is a relationship between level of bank funding and productivity of manufacturing firms. The implication of these is that bank funding has the potential of increasing output of manufacturing sector in Nigeria.

Table 6.8 Rotated Component Matrix for Funding Volume and Output of the Manufacturing Sector

	Component
	1
Do you agree that the manufacturing sector requires financial support/funding from the Nigerian banks?	.674
Do you agree that bank loans are some of the ways of funding the manufacturing business?	.927
Do you agree that bank loans/funding should be a major source of financing the business/operations of a manufacturing firm?	.927
Do you agree that the financial strength of a manufacturing firm helps in attracting bank funding to the firm?	.776
Do you agree that the past experience and performance of the existing loans affect the banks willingness to lend more?	.869
Do you agree that the sales volume and number of employees of a manufacturer influence banks' decision to lend?	.909
Do you agree that there is a relationship between level of bank funding and productivity of manufacturing firms?	.909

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

6.8.2 Funding Volume and Employment Creation

This subsection reveals stakeholders responses on the relationship between funding of the manufacturing sector and employment creation ability of the manufacturing firms. Five factors were loaded and four factors extracted based on the principal component analysis. As revealed from Table 6.9 below, stakeholders agreed that there is a relationship between funding and capacity utilization of a manufacturing firm; that a firm increases its employment as it grows its installed capacity and utilization; that there is a relationship between level of bank funding and employment creation of manufacturing firms and that Nigerian banks give preference to granting lending especially for salary/emolument payments.

Table 6.9 Rotated Component Matrix for Funding Volume and Employment Creation

	Component
	1
Do you agree that there is a relationship between funding and capacity utilization of a manufacturing firm?	.987
Do you agree that a firm increases its employment as it grows its installed capacity and utilization?	.987
Do you agree that there is a relationship between level of bank funding and employment creation of manufacturing firms?	.987
Do you agree that Nigerian banks give preference to granting lending especially for salary/emolument payments?	.754

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

6.8.3 Funding Volume and Lending Rate

This subsection reveals stakeholders responses on the relationship between funding volume of the manufacturing sector and lending rate of deposit money banks in Nigeria. Seven factors were loaded and four factors extracted based on the principal component analysis. As revealed from Table 6.10 below, stakeholders agreed that the average lending rate to the manufacturers is unreasonably high; that banks should extend concessionary (lower) lending rates to manufacturers. They also agreed that banks' lending rate affects manufacturers' willingness to borrow and that banks should have a different lending interest rate scheme for the manufacturing sector considering their key role in the economy.

Table 6.10 Rotated Component Matrix for Funding Volume and Lending Rate

	Component
	1
Do you agree that the average lending rate to the manufacturers is unreasonable?	.958
Do you agree that banks should extend concessionary (lower) lending rates to manufacturers?	.763
Do you agree that the banks' lending rate affect manufacturers' willingness to borrow?	.846
Do you agree that banks should have a different lending interest rate scheme for the manufacturing sector considering their key role in the economy?	.913

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

6.8.4 Funds to the Manufacturing Sector and Exchange Rate

In this subsection, the responses of stakeholders on the relationship between funding volume and exchange rate in Nigeria are presented. The result of the component rotated matrix is depicted in Table 6.11 below. As revealed from Table 6.10 below, six items were extracted from nine factors loaded based on the principal component analysis. The result revealed that stakeholders agreed that there is a relationship between exchange rate and the financial performance of the manufacturing firms, that most of the machineries and raw materials of the Nigerian manufacturers are import dependent, that foreign exchange requirements of the manufacturers are not readily available and accessible in Nigeria, that the local currency (naira) has been devalued significantly in the last 27 years, that volatility in exchange rate could affect the product pricing of the manufacturers and that instability of exchange rate and devaluations of the local currency could lead to poor financial performance of the manufacturers and subsequent loan default.

Table 6.11 Rotated Component Matrix for Funds to the Manufacturing Sector and Exchange Rate

	Component
	1
Do you agree that there is a relationship between exchange rate and the financial performance of the manufacturing firms?	.911
Do you agree that most of the machineries and raw materials of the Nigerian manufacturers are import dependent?	.946
Do you agree that the foreign exchange requirements of the manufacturers are not readily available and accessible in Nigeria?	.911
Do you agree that the local currency (naira) has been devalued significantly in the last 27 years?	.911
Do you agree that volatility in exchange rate could affect the product pricing of the manufacturers?	.911
Do you agree that instability of exchange rate and devaluations of the local currency could lead to poor financial performance of the manufacturers and subsequent loan default?	.911

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

6.8.5 Funding of the Manufacturing Sector and Inflation Rate

This subsection reveals stakeholders response on the relationship between funding of the manufacturing sector and inflation rate in Nigeria. Four factors were loaded and two factors extracted based on the principal component analysis. As revealed from table 6.12 below, stakeholders agreed that Nigerian banks factor in inflation rate in their lending consideration to the manufacturers and that Nigerian manufacturing firms factor in inflation rate in their product pricing models.

Table 6.12 Rotated Component Matrix for Funding of the Manufacturing Sector and Inflation Rate

	Component
	1
Do you agree that Nigerian banks factor in inflation rate in their lending consideration to the manufacturers?	.978
Do you agree that Nigerian manufacturing firms factor in inflation rate in their product pricing models?	.978

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

6.8.6 Funding of the Manufacturing Sector and Business Environment

Finally in this subsection the researcher presents stakeholders position on the relationship between funding of the manufacturing sector and business environment in Nigeria. Seven factors were loaded and five factors extracted based on the principal component analysis. As revealed from table 6.13 below, stakeholders agreed that lack of power and other infrastructural facilities affect adversely the productivity and financial performance of the manufacturers; that government's fiscal/taxation policies affect the operations and financial performance of the manufacturers, that monetary policies of the CBN could encourage or discourage lending to the manufacturing sector; that insecurity and insurgencies in Nigeria adversely affect the manufacturers and that the import policies of Nigeria do not protect the local manufacturers from imported goods.

Table 6.13 Rotated Component Matrix for Funding of the Manufacturing Sector and Business Environment

	Component
	1
Do you agree that lack of power and other infrastructural facilities affect adversely the productivity and financial performance of a manufacturer?	.977
Do you agree that government's fiscal/taxation policies affect the operations and financial performance of the manufacturers?	.977
Do you agree that the monetary policies of the CBN could encourage or discourage lending to the manufacturing sector?	.977
Do you agree that the insecurity and insurgencies in Nigeria adversely affect the manufacturers?	.977
Do you agree that the import policies of Nigeria do not protect the local manufacturers from imported goods?	.977

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

In summary, section 6.7 has presented the responses and positions of stakeholders on the six domains created in this study which are funding volume and output of manufacturing sector, funding volume and employment creation of the manufacturing sector, funding of the manufacturing sector and lending rate, funding of the manufacturing sector and exchange rate, funding of the manufacturing sector and inflation rate and funding of the manufacturing sector and the business environment. It was revealed amongst others that funding increases manufacturing output, enhances employment creation, lending rates affect funding, volatility of exchange rate has negative impact on funding/manufacturing sector output and inflation rate is factored in both lending decision and manufacturers' pricing model.

6.9 Chapter Summary

This chapter has presented the data used for analysis. The secondary data were obtained from the Central Bank of Nigeria Statistical Bulletin from the period 1987 to 2015. The data were then subjected to preliminary test such as unit root, structural test and also the co-integration test was conducted to test for the relationship between the variables. Again the responses from the copies of questionnaires administered were collated and analyzed using factor analysis test kit.

CHAPTER SEVEN

INTERPRETATION AND DISCUSSION OF FINDINGS

7.1 Introduction

The overall aim of this study is to examine the impact of bank funding on the growth of Nigeria's manufacturing sector. In furtherance of this objective, this chapter attempts to interpret the results of the hypotheses tested (formulated from the study's research objectives and questions) using the secondary data in this study in line with existing literature with a view to examining the impact of bank loans and advances (funding) on the growth of the Nigeria's manufacturing sector.

7.1.1 Chapter Objective

The objective of this chapter is to appraise and discuss the relationship and direction of causality between bank loans and advances and manufacturing sector growth in Nigeria; impact of bank loans and advances to the manufacturing sector measured by the sector's contribution to Nigeria's gross domestic product (GDP) and corroborate the opinion and perceptions of industry stakeholders on factors affecting bank funding with the sector's performance. Four steps were utilized in testing the hypotheses. These are restating the research hypothesis in null and alternate forms, selecting the decision criteria, presenting the e-view results with interpretation, making a decision and discussion of the results. To achieve this in line with the aim of the study, the following questions will be answered in this chapter. To what extent is there a causality between bank loans and advances and manufacturing sector growth in Nigeria in line with existing literature and to what extent is there a positive and significant impact of these loans to the manufacturing sector on the sector's contribution to Nigeria's GDP in line with literature?. The subsequent sections of this thesis shall attempt to answer these chapter questions.

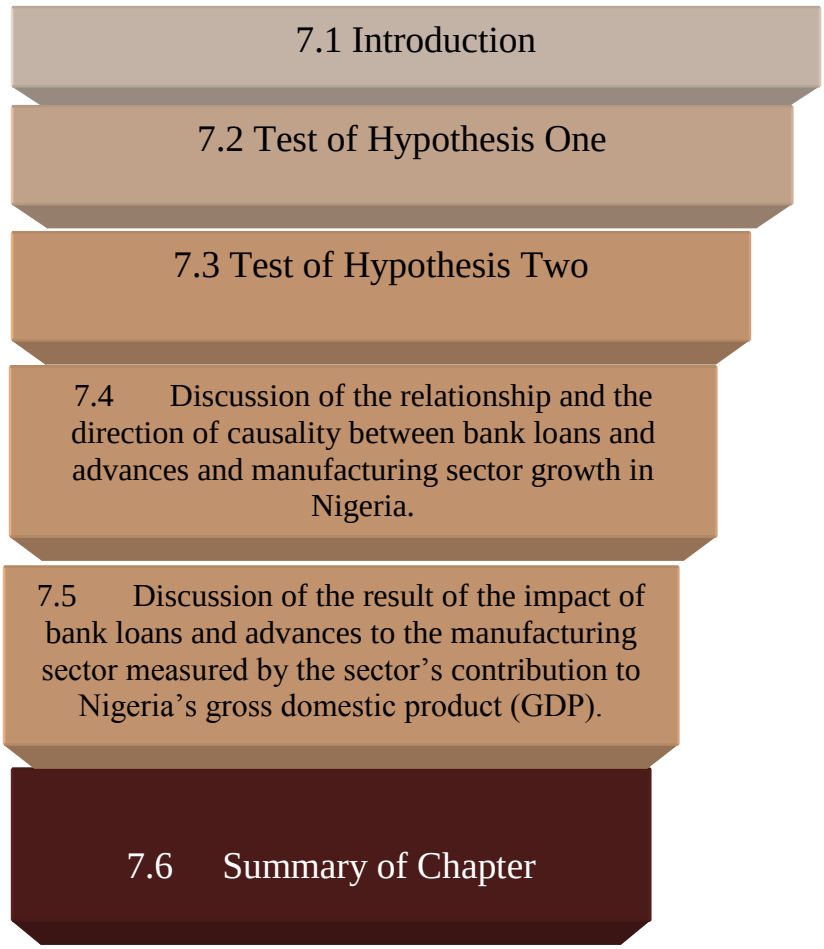
7.1.2 Chapter Structure

Section 7.1 introduces and summarizes the chapter's objectives, its questions and structure. In section 7.2 the research's objective two hypotheses that state firstly that *there is no causal relationship between bank loans and advances and manufacturing sector growth in Nigeria* and findings are carefully discussed. Section 7.3 deals with the discussion of the findings of the second leg of the same objective two of the study which states that *bank loans and advances to the manufacturing sector do not have positive and significant impact on manufacturing sector's contribution to Nigeria's gross domestic product.* Sections 7.4 and 7.5 build on the findings of the tested hypotheses in discussing more robustly the relationship and the direction of causality between bank loans and advances and manufacturing sector growth in Nigeria, especially when measured for impact using manufacturing sector's GDP contribution.

In the course of the discussion, efforts would be made to tie the findings from the research to the relevant key literature earlier reviewed and the responses from the questionnaires administered on the key industry stakeholders. The chapter is concluded with section 7.6 being the chapter summary ahead of the research's contribution, recommendation and conclusion in chapter eight.

Diagrammatically the chapter is outlined as follows:

Figure 7.1 Chapter Seven Outline



7.2 Test of Hypothesis and Discussion of Empirical Findings for Research Objective 2(i): To examine the relationship and the direction of causality between bank loans and advances and manufacturing sector growth in Nigeria.

Step One: Restating the hypothesis in null and alternate forms.

Ho_1: There is no causal relationship between bank loans and advances and manufacturing sector growth in Nigeria.

Ha_1: There is a causal relationship between bank loans and advances and manufacturing sector growth in Nigeria.

Step Two: Decision criteria

Accept Ha and reject Ho where p-value < 0.05 and reject Ha where p-value > 0.05

Step Three: Presentation and Analysis of Data

Table 7.1 Pairwise Granger Causality Tests
Sample: 1987 2015
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
MPR does not Granger Cause LMGDP	27	3.05579	0.0674
LMGDP does not Granger Cause MPR		1.87515	0.1770
INFR does not Granger Cause LMGDP	27	0.27327	0.7634
LMGDP does not Granger Cause INFR		1.06407	0.3621
LRER does not Granger Cause LMGDP	27	0.09585	0.9090
LMGDP does not Granger Cause LRER		0.22333	0.8016
LTBLABS does not Granger Cause LMGDP	27	16.8889	0.00004
LMGDP does not Granger Cause LTBLABS		3.40492	0.0515
INFR does not Granger Cause MPR	27	1.33673	0.2832
MPR does not Granger Cause INFR		7.12402	0.0041
LRER does not Granger Cause MPR	27	0.03681	0.9639
MPR does not Granger Cause LRER		0.04233	0.9586
LTBLABS does not Granger Cause MPR	27	2.35485	0.1184
MPR does not Granger Cause LTBLABS		0.07504	0.9279
LRER does not Granger Cause INFR	27	1.22100	0.3142
INFR does not Granger Cause LRER		4.84361	0.0181
LTBLABS does not Granger Cause INFR	27	0.66949	0.5221
INFR does not Granger Cause LTBLABS		0.25039	0.7807
ITBLABS does not Granger Cause LRER	27	0.04797	0.9533
LRER does not Granger Cause LTBLABS		0.00688	0.9931

The long run coefficients suggest that along run relationship exists between LMGDP and the principal variable of interest LTBLABS as the sign is positive and the magnitude significant (p-value <0.05). Also, the error correction term is rightly signed and is also statistically significant. This validates the existence of a long run relationship between Manufacturing sector GDP and total bank loans and advances granted to the manufacturing sector. However, the direction of causality is bidirectional and it flows from both the manufacturing sector gross domestic product growth rate to total bank loans and advances and vice versa. Thus, there is bidirectional causality between manufacturing sector GDP and total bank loans and advances granted to the manufacturing sector. Again, it is important to note that from the results, MPR granger causes INFR and INFR granger causes LRER. It further reveals that there are no causality relationships between MPR and LMGDP, INFR and LMGDP, LRER and LMGDP, LRER and MPR, LTBLABS and MPR, LTBLABS and INFR and LTBLABS and LRER.

Step Four: Decision

The null hypothesis is rejected while the alternate hypothesis is accepted, thus, there is a causal relationship between bank loans and advances and manufacturing sector growth in Nigeria. There are also causal relationships between monetary policy rate and inflation rate as well as inflation rate and exchange rate.

7.3 Test of Hypothesis and Discussion of Empirical Findings for Research Objective 2(ii):

Objective 2(ii): To evaluate the impact of bank loans and advances to the manufacturing sector measured by the sector's contribution to Nigeria's gross domestic product (GDP).

Step One: Restating the hypotheses in null and alternate forms

Ho_2: Bank loans and advances to the manufacturing sector do not have positive and significant impact on manufacturing sector's contribution to Nigeria's gross domestic product.

Ha_2: Bank loans and advances to the manufacturing sector have positive and significant impact on manufacturing sector's contribution to Nigeria's gross domestic product.

Step Two: Decision criteria

Accept Ha and reject Ho where p-value < 0.05 and reject Ha where p-value > 0.05

Step Three: Presentation and Analysis of Data

Table 7.2 ARDL Result of Hypothesis Two

Dependent Variable: LMGDP
Method: ARDL
Sample (adjusted): 1989 2015
Included observations: 27 after adjustments
Maximum dependent lags: 2 (Automatic selection)
Model selection method: Akaike info criterion (AIC)
Dynamic regressors (2 lags, automatic): INFR LRER MPR LTBLABS
Fixed regressors: C
Number of models evaluated: 162
Selected Model: ARDL(2, 0, 0, 0, 2)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
LMGDP(-1)	2.189304	0.381286	5.741898	0.0000
LMGDP(-2)	-1.597521	0.514638	-3.104168	0.0061
INFR	-1.880518	2.414254	-0.778923	0.4461
LRER	-0.056537	0.707102	-0.079955	0.9372
MPR	1.421075	13.96894	0.101731	0.9201
LTBLABS	0.421224	0.430135	0.979283	0.3404
LTBLABS (-1)	-0.770880	0.624461	-1.234472	0.2329
LTBLABS (-2)	1.836407	0.436055	4.211407	0.0005
C	105.6753	276.3945	0.382335	0.7067

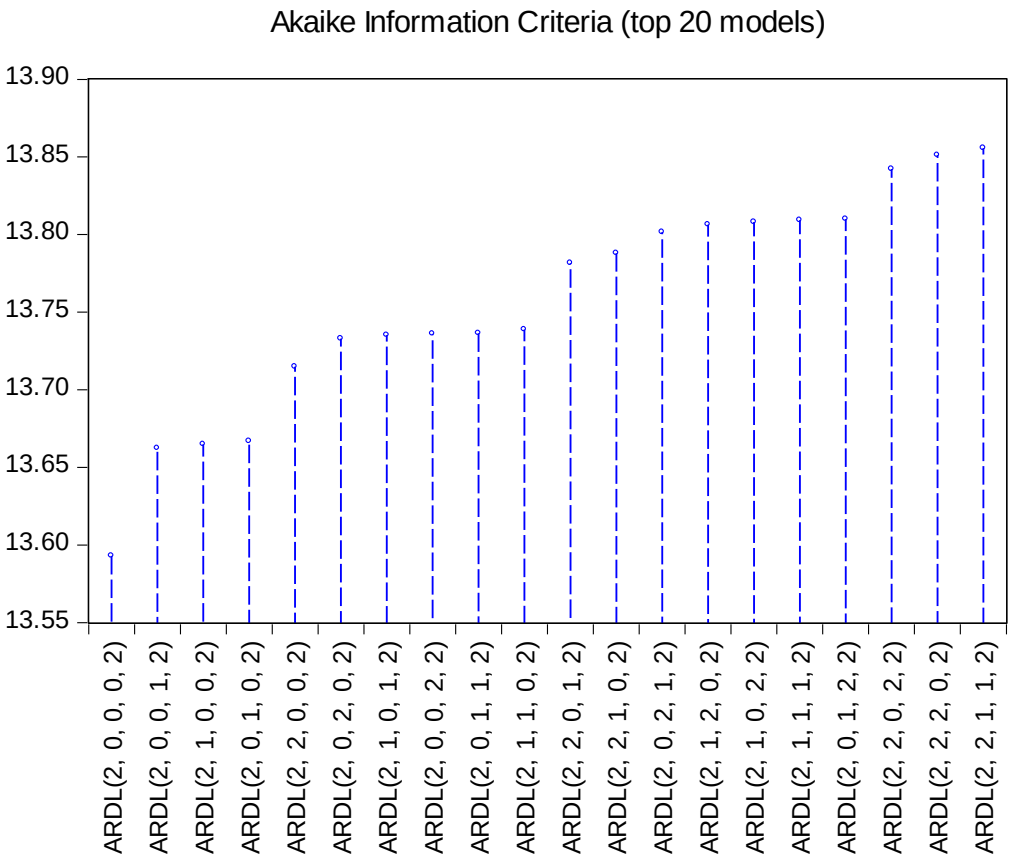
R-squared	0.996346	Mean dependent var	2233.876
Adjusted R-squared	0.994721	S.D. dependent var	2614.920
S.E. of regression	189.9860	Akaike info criterion	13.59298
Sum squared resid	649704.6	Schwarz criterion	14.02493
Log likelihood	-174.5052	Hannan-Quinn criter.	13.72142
F-statistic	613.4326	Durbin-Watson stat	2.920180
Prob(F-statistic)	0.000000		

*Note: p-values and any subsequent tests do not account for model Selection.

The dependent variable responds to its own first and second period lag. This means that it is positive and significant in the first lag but negative and significant in its second lag. INFR, LRER, MPR, LTBLABS and LTBLABS (-1) are non-significant function of the dependent variable. It was however found

out that the second lag of loan and advance to the manufacturing sector showed positive and significant relationship with LMGDP. This implies that the productivity of the manufacturing sector relates with loans to the manufacturers not contemporaneously but with a lapse of time.

Figure 7.2 Akaike Information Criteria



The graph in figure 7.2 showed the choice of the optimal model following the Akaike Information Criteria (AIC). From the top 20 models, ARDL (2, 0, 0, 2) represents the model with the least information criterion hence the optimal model.

Table 7.3: ARDL Cointegrating and Long Run Form

Dependent Variable: MGDP
Selected Model: ARDL(2, 0, 0, 0, 2)
Sample: 1987 2015
Included observations: 27

Cointegrating Form

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LMGDP(-1))	1.597521	0.514638	3.104168	0.0061
D(INFR)	-1.880518	2.414254	-0.778923	0.4461
D(LRER)	-0.056537	0.707102	-0.079955	0.9372
D(MPR)	1.421075	13.968935	0.101731	0.9201
D(LTBLABS)	0.421224	0.430135	0.979283	0.3404
D(LTBLABS(-1))	-1.836407	0.436055	-4.211407	0.0005
CointEq(-1)	-0.408218	0.164452	-2.482292	0.0231

Cointeq = LMGDP - (-4.6067*INFR -0.1385*LRER + 3.4812*MPR + 3.6421*LTBLABS
+ 258.8700)

Long Run Coefficients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INFR	-4.606655	5.693653	-0.809086	0.4290
LRER	-0.138496	1.740988	-0.079550	0.9375
MPR	3.481169	33.917831	0.102635	0.9194
TBLABS	3.642054	0.851207	4.278694	0.0005
C	258.869996	698.866555	0.370414	0.7154

For the bound test, which tested for the existence of a cointegrating relationship it was revealed that for F above the upper band there was cointegration, for F below the lower band, it showed no cointegration and for F with the lower and upper band it showed it was inconclusive. Thus in this case, at 5%, the result is inconclusive. This is shown in table 7.4 below:

Table 7.4ARDL Bounds Test

Sample: 1989 2015
Included observations: 27
Null Hypothesis: No long-run relationships exist

Test Statistic	Value	k
F-statistic	3.394922	4

Critical Value Bounds

Significance	I0 Bound	I1 Bound
10%	2.45	3.52
5%	2.86	4.01
2.5%	3.25	4.49
1%	3.74	5.06

Step Four: Decision

The null hypothesis is rejected while the alternate hypothesis accepted although the results show that the second lag of loan to the manufacturing sector showed positive and significant relationship with LMGDP. This implies that the productivity of the manufacturing sector relates with loan to the manufacturing sector not contemporaneously but with a lapse of time. For the control variables introduced (INFR, LRER and MPR) the result shows that there was no long run relationship and their impact on manufacturing sector growth is immediate.

The implication of this finding for policy makers and lenders is that loans and advances to the manufacturing sector should be long tenured to accommodate the lags in impact and cash flow generation for loan repayment. It also shows that the impacts of adverse inflation rate, exchange rate and lending rate are felt immediately by the borrowers and this of course affects their financial performance and by extension the loan repayment. Later in this study, this

finding shall be related to the responses from stakeholders on impact of these rates on the volume and performance of loans granted to them.

7.4 Discussion of the relationship and the direction of causality between bank loans and advances and manufacturing sector growth in Nigeria.

As earlier stated the main thrust of this study is to investigate the impact of bank funding on the growth of the Nigeria's manufacturing sector. The work is largely hinged on the finance-growth nexus which postulates that a relationship exists between finance and growth of the economy. As submitted by OECD (1996) it is not yet conclusive whether this interaction comes from the entire sectors of the economy or from certain sectors such as the manufacturing sector, agricultural or the services sector. This inconclusive argument informed the test of the *causality between bank loans and advances and manufacturing sector growth in Nigeria*.

As revealed from the results shown earlier, there is a bidirectional relationship between bank funding and growth of the manufacturing sector and this implies that the growth of the manufacturing sector determines the volume of funding available to the sector and the growth of quantum of bank funding also affects manufacturing sector growth.

As could be observed from literature, causality exists between finance and economic growth (Patrick, 1966, Jung, 1986, Crichton and De Silva, 1989, King and Levine, 1993b, De Gregorio and Guidotti, 1995, Rajan and Zingales, 1998, Choe and Moosa, 1999, Agbetsiafa 2003, Waqabaca, 2004, Oreiro and Nakabashi, 2007, Odhiambo, 2011) amongst others. However, the direction of causality has remained inconclusive.

This result implies that as the economy grows over time, industries (sectors) depend on finance to grow the economy and spur the growth of the financial sector. Also, the growth of the financial sector also in turn grows the economy. This will likely occur when the financial market recovers remarkably, then financing conditions especially for businesses and firms are therefore likely to remain difficult in the short term as lenders continue to maintain a cautious approach to credit extension.

From the above, the direction of causality between finance and economic growth is crucial because it has different implications for policy development of nations especially when evidence on direction of causality is inconclusive. As revealed from the findings of this study, there is a bidirectional causality between manufacturing sector GDP and total bank loans and advances granted to the manufacturing sector and the direction of causality runs from both manufacturing sector gross domestic product growth rate to total bank loans and advances granted to the manufacturing sector and from total bank loans and advances granted to the manufacturing sector to the manufacturing sector growth. It could be argued that there is evidence to show that economic growth of nations spurs financial development of nations and financial sector growth also spurs economic growth. Therefore, as the economy grows there would be a demand for financial services thereby forcing the financial sector to innovate with new and attractive products that lead to efficient allocation of financial resources to the most productive sectors of the economy.

This observation is in line with the result of this research finding from key stakeholders. As shown from the result of the factor analysis, stakeholders agreed that manufacturing sector of the Nigerian economy requires financial support from Nigerian banks, bank loans are some of the ways of funding manufacturing business, bank loans/funding should be a major source of

financing the business/operations of a manufacturing firm, that financial strength of a manufacturing firm helps in attracting bank funding to the firm, that past experience and performance of the existing loans affect the banks' willingness to lend more and lastly that there is a relationship between level of bank funding and productivity/output of manufacturing firms. This implies that as manufacturing sector productivity increases, banks lend more to them thereby reaffirming the result of the causality test. Hence for the banking sector to ensure the flow of credit to the real sector of the economy, it must aim at supporting growth in the medium term. It also underlined the need for energizing reforms in critical sectors of the economy such as power and other economic infrastructure, to attract the much-needed private sector/foreign investment and, thereby promoting employment-generating growth.

The granger causality finding of this study also revealed that there is no causal relationship between manufacturing sector GDP and lending rate (MPR), inflation rate (INFR) and exchange rate (LRER). In the same manner, the causality test also revealed that no causal relationship also exists between total bank loans and advances and MPR, INFR and LRER. It also revealed a no causal relationship between LRER and MPR.

However, while industry stakeholders agreed with a few of these findings they could not corroborate some of these results. On the relationship between MPR and LMGPD, there is a departure from the respondents' position on lending rate which they maintain affects loan volume which in turn affects economic growth. But for LMGDP and INFR, the finding is in line with perception of stakeholders who maintained that inflation is not a major factor in loan decision and consequently economic growth. On the relationship between LMGDP and IRER, this result is not in line with respondents' position which maintains that

exchange rate affects business performance which in turn affects their access to loans and consequently affects growth.

On the findings in the relationship between the independent variable of LTBLABS and the control variables of MPR, INFR and LRER, the respondents only agreed with the relationship with inflation but disagreed with the findings on the interaction between loan volume, lending rate (MPR) and exchange rate (LRER). For instance on MPR, respondents believe that high interest rate is a disincentive for borrowing which in turn affects the total loans and advances to the manufacturing sector. Also high exchange rate affects the landing cost of imported raw materials and machineries which in turn affects the financial performance of the loan book and consequently the loan volume. This picture becomes clearer when we relate the stakeholders' responses to the outcome of the second hypothesis testing on impact of these variables on one another.

7.5 Discussion of the Result of the Impact of Bank Loans and Advances to the Manufacturing Sector Measured by the Sector's Contribution to Nigeria's Gross Domestic Product (GDP).

Finance plays a key role in the enhancement of the manufacturing sector in Nigeria. This was buttressed by Sangosanya (2011), Obasan and Adediran (2010) and Eze and Ogiji (2013). The impact of finance on economic growth again informed the testing of this study's second hypothesis which states that *bank loans and advances to the manufacturing sector measured by the sector's GDP contribution do not have significant impact on Nigeria's gross domestic product (GDP).*

The empirical findings of this study's second hypothesis indicate that the second lag of loan and advances to the manufacturing sector showed positive and significant impact on growth of the Nigeria's manufacturing sector. This

implies that the productivity of the manufacturing sector as it relates to loans from Nigerian banks is not and does not take effect immediately but after a lapse of time, that is its effect is shown in subsequent periods from when the loans/advances were granted.

As revealed from the Auto-regressive distributed lag test (ARDL) earlier conducted, the impact of bank funding (loans and advances) to the manufacturing sector is not immediately felt but with a lapse of time, that is its effect on the sector's output is felt after subsequent periods from when the loans/advances are granted. Most funds to the manufacturing sector are for asset financing and raw materials acquisition. Considering the nature of manufacturing business which entails asset conversion, it takes a bite of time for the completion of the asset conversion cycle from machine acquisition to installation, to commissioning, to use for output of finished product, to sales and finally cash. This cycle which in most cases exceed 180 days confirm the existence of lags between the time loans are granted and the time output is felt or seen. This result is supported by the perception of stakeholders that funding has the potential to increase the productivity of the Nigerian manufacturing sector. Respondents reported that increased loans and advances enhances the ability of the manufacturing sector to increase its installed capacity utilization and consequently grow output (GDP).

It thus means that bank loans and advances have positive and significant impact on manufacturing sector growth. This is in line with the works of Demirgu-Kunt and Maksimovic (2000), Arestis, Demetriades and Luintel (2001), Tadesse (2001), Levine (2002) and Beck and Levine (2002) who had supported bank based financial system as having an impact on economic growth.

From the factor analysis result, stakeholders agreed that there is a relationship between funding and capacity utilization of manufacturing firms; firm increases its employment as it grows its installed capacity and utilization; there is a relationship between level of bank funding and employment creation of manufacturing firms and that Nigerian banks give preference to granting lending especially for salary/emolument payments. Hence, the implication from stakeholder's perception supports the economic growth potentials of bank funding to the manufacturing sector.

However, as stated earlier there are certain factors which inhibit the potentials of bank funding in inducing manufacturing sector growth, these factors as submitted by stakeholders include lack of power and other infrastructural facilities which affect adversely the productivity and financial performance of the manufacturers; government's fiscal/taxation policies which affect the operations and financial performance of the manufacturers, monetary policies of the CBN which could encourage or discourage lending to the manufacturing sector; insecurity and insurgencies in Nigeria which adversely affect the manufacturers and the import policies that do not protect the local manufacturers from imported goods dumping. Component matrix result in table 6.13 confirms these perceptions and opinions.

Again and importantly, stakeholders were of the view that average lending rate to the manufacturers is unreasonably high thus banks should extend concessionary (lower) lending rates to manufacturers. They also agreed that banks' lending rate affects manufacturers' willingness to borrow and that banks should have a different lending interest rate scheme for the manufacturing sector considering their key role in the economy.

Important also from the result of the survey is the impact of exchange rate on funding to the Manufacturing sector; stakeholders agreed that there is a

relationship between exchange rate and the financial performance of the manufacturing firms and most of the machineries and raw materials of the Nigerian manufacturers are import dependent, that foreign exchange requirements of the manufacturers are not readily available and accessible in Nigeria. Again, the local currency (naira) has been devalued significantly in the last 27 years, that volatility in exchange rate could affect the product pricing of the manufacturers and that instability of exchange rate and devaluations of the local currency could lead to poor financial performance of the manufacturers and subsequent loan default. This was further confirmed by the ARDL test which revealed that the impacts of exchange rate and interest rate are immediate on the performance of the sector.

7.6 Chapter Summary

This chapter presented and analysed the time series secondary data using ARDL test statistics and tested the hypotheses formulated for this study towards examining the impact of bank funding on growth of the Nigerian manufacturing firms. The results of our findings revealed that there is a bi-directional relationship between bank funding and growth of the manufacturing sector and this runs from both ends.

Again as revealed from the Auto-regressive distributed lag test (ARDL), the effect (impact) of bank funding to the manufacturing sector is not immediately felt but with a lapse of time, that is its effect is shown after subsequent periods from when the loans/advances were granted. However the effects of exchange, inflation and lending rates are felt by borrowers immediately.

The chapter also presented a discussion on the findings of this study. This was achieved using both the secondary and primary data obtained through copies of questionnaires from stakeholders of the Nigerian banking and manufacturing

sectors on factors that inhibit bank funding of Nigeria's manufacturing sector. The result as obtained supported by the perception of stakeholders is that funding has the potential to increase the productivity of the Nigerian manufacturing sector amongst other benefits. The stakeholders went further to identify factors that affect the volume of bank funding, the terms and conditions of bank funding and the resultant impact these terms and conditions have on the contribution of the manufacturing sector towards national development. As revealed there is evidence to show that economic growth of nations spurs financial development of nations. Again as shown in this study finance plays a key role in the enhancement of the manufacturing sector in Nigeria and finally, respondents identified factors that affect bank lending to the manufacturing sector of the Nigerian economy.

CHAPTER EIGHT
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

8.1 Introduction

This thesis investigated the impact of bank funding on the manufacturing sector growth in Nigeria from 1987 to 2015 using time series data and descriptive data from survey design while anchoring the work on the critical realism philosophical stance.

8.1.1 Chapter Objective

The objective of this chapter is to summarize, conclude and make recommendations based on the findings of this study.

8.1.2 Chapter Structure

This chapter is sub divided into six sections. In section 8.2, the study presents summary of findings and conclusion. In section 8.3, the it presents the main contributions of the study. Immediately after that in section 8.3, the study also presents its policy implications and makes recommendations. Section 8.4 briefly outines the limitations of the study and suggestions for further research. While section 8.5 captures the study's contribution to knowledge, the thesis concludes in section 8.6 with its contribution to management practice.

8.2 Summary and Conclusion

The study has provided both theoretical framework and empirical review on the finance-growth nexus. The work examined existing empirical literature on finance and economic growth relationship, specifically within the context of the endogenous growth theory. It therefore focused on studies that have been undertaken to establish this relationship between finance and economic growth. The aim was to provide an empirical background and underpinning for

undertaking this research. A review of empirical literature showed that studies on the relationship between financial development and economic growth have majorly been conducted to test the causal relationship between financial development and economic growth. This informed this study's objective two which seeks to explore the causal relationship between bank funding (measure of financial development i.e. bank based system) and manufacturing sector growth (measure of economic growth). From the review of extant literature, this work considered other studies that focused on the impact of financial development on economic growth using variants of regression analysis. Again this supports the second leg of the study's second research objective which is to examine the impact bank loans and advances to the manufacturing sector has on manufacturing sector's contribution to GDP.

The endogenous theory which postulates that a nation's investment in human, capital, innovation and knowledge are contributors to economic growth and development formed the basis of this study especially as it pertains to the role of capital on economic development. Again, the theory focused according to Romer (1994) on positive externalities and spillover effect of a knowledge-based economy which lead to economic growth and development. It thus holds that the long run growth rate of an economy depends on policy measures that drive innovation as well as creating incentives for growth. Also, Shittu (2012) examined the impact of financial intermediation on economic growth in Nigeria using the endogenous theory. Time series data from 1970 to 2010 were gathered and used from the CBN publications. For the analysis, Shittu used the unit root test and cointegration test was done accordingly and the error correction model was estimated using the Engle-Granger technique. The result revealed that financial intermediation impacts positively on economic growth. This research drew from some of the approaches of Shittu especially in using relevant time

series data from the CBN publications and some of the quantitative tools he used in his investigation.

Patrick (1966) highlighted two ways of interweaving of finance on growth, having named them "demand-following" and "supply-leading". "Demand-following" is a situation when finance is required to attract external financing in terms of supporting economic growth. "Supply-leading" takes place when financial institutions accumulate savings and transform them into investments, which are necessary for the development of modern sectors of the economy. Thus, Patrick (1966) was the first attempt to discuss the problem of causality in the finance–growth nexus literature. This work was also hinged on Patrick's "demand-following" and "supply-leading" finance growth theory. In Patrick (1966) view financial development is able to induce real innovation of investment before sustained modern economic growth gets under way and, as such growth occurs, the supply-leading impetus gradually becomes less and less important as the demand-following response becomes dominant. From the forgoing therefore, it means that as the economy grows over time, industries (sectors) will no longer depend on finance to grow the economy but will develop to spur the growth of the financial sector.

Kuznets (1973) inferred economic growth as an increase in the rate of changes of output of economy overtime and is computed as the percentage speed of improvement in real gross domestic product (GDP). Therefore for such change to be seen as such, there must be changes in GDP or its components. From this inference of Kuznets (1973), one of the questions this study has answered is the question of whether bank funding affects the growth of the manufacturing sector in Nigeria, and if it does, what is the timing of its impact.

The findings from this study established the existence of structural break point for all the variables of interest except real exchange rate. For inflation rate, there were structural breakpoints in 1992, 1996 and 1997. For manufacturing gross domestic product, there were structural breakpoints in 1993, 1999, 2001 and 2008. On total bank loans and advances granted to the manufacturing sector, there were also structural breakpoints in 1993, 1999, 2000 and 2008. While for monetary policy rate, there was a structural break point in 2005. In summary, the essence of testing for the structural breakpoints of the model proxies was to determine the type and appropriateness of the unit root test method used in the study. The common Augmented Dickey Fuller (ADF) test alone could not have given us the correct unit root test result as there were presence of structural breaks in the time series data hence the use of the Perron Unit Root test before engaging the ADF lagging test to bring the time series data to stationarity.

As revealed from the unit root test conducted, apart from inflation rate none of the model data is stationary at levels. Therefore, it was necessary to conduct the tests using the first difference, with the hope that they would now be stationary. The result revealed that at first difference all our variables of interest were stationary. The data at first difference was subsequently utilized to test the hypotheses stated.

The result of the co-integration test indicates the presence of co-integration vectors. This means that there are dynamic long-run relationships, involving the indicators of manufacturing sector growth rate and the other variables in the analysis. This result implies that causality must exist by definition in at least one direction between of manufacturing sector gross domestic product growth and bank funding (bank loans and advances).

The findings from the granger causality tests suggest the existence of long run relationship between manufacturing sector contribution to gross domestic product and total bank loans and advances granted to the manufacturing sector as the sign is positive and the magnitude significant. However, the direction of causality runs from both the manufacturing sector gross domestic product growth rate to total bank loans and advances granted to the manufacturing sector as well as from the total bank funding granted to the manufacturing sector to manufacturing sector gross domestic product growth rate. Thus, there is a bi-directional causality between manufacturing sector GDP and total bank loans and advances granted to the manufacturing sector. This supports both Patrick (1966) demand following hypothesis which suggest that the growth of the economy spurs the development of the financial sector and the supply-led hypothesis that the growth of the financial sector spurs economic growth

The result of the autoregressive Distributed lag (ARDL) approach or bound test indicates supports for the long run relationship between manufacturing sector growth rate and total bank loans and advances granted to the manufacturing sector. The results show that the second lag of loan and advances to the manufacturing sector showed positive and significant relationship with manufacturing sector growth. This implies that the productivity of the manufacturing sector relates with loans to the manufacturing not immediately but with a lapse of time.

From the factor analysis conducted, stakeholders perceptions on some of the model proxy variables was gauged from the domains created in this study which are funding volume and output of manufacturing sector, funding volume and employment creation of the manufacturing sector, funding of the manufacturing sector and lending rate, funding of the manufacturing sector and exchange rate, funding of the manufacturing sector and inflation rate and funding of the

manufacturing sector and the business environment. It was revealed majorly amongst others that funding increases manufacturing output, enhances employment creation, lending rates affect funding, volatility of exchange rate has an impact on funding/manufacturing sector output and inflation is not a major determinant of manufacturing sector output.

From the above summary of findings, it can be concluded that the direction of the causal relationship is bi-directional between bank funding and manufacturing sector growth in Nigeria and bank loans and advances have impacts on manufacturing sector growth which is positive and statistically significant. It also revealed that the impact of bank funding on the manufacturing sector is with a lapse of time to accommodate the long asset conversion cycle of this sector. However, the impact of inflation, exchange and lending rates on the business of the manufacturing sector is with immediate effect. These findings portend critical review of the credit policy and practices of the funding banks and fiscal and monetary policies of government through the CBN. For the manufacturers, the findings also may require them to review their attitude towards loan servicing to encourage further bank advances to this key sector.

8.3 Main Contributions of the Study

This thesis makes a contribution by providing empirical evidence for a developing country on the impact of bank funding on the growth of Nigeria's manufacturing sector using the ARDL as opposed the use of ordinary least squares (OLS) to test the long run relationship between bank loans and advances granted to the manufacturing sector and growth of the Nigerian manufacturing sector. This method has been used by Halicioglu and Ugur (2005) in Turkey, Bahmani-Oskooee and Rehman (2005) for seven Asian Countries, Akinlo (2006) for Nigeria, Samreth (2008) for Cambodia, Long and

Samreth (2008) for Philippines, Baharumshah, *et al* (2009) for China and Achsani (2010) for Indonesia.

Also, the granger causality test was used to test the actual direction of the relationship between finance and growth like in the works of Hao (2006),Vazakidis and Adamopoulos (2009), Ake and Dehuan (2010), and Ake and Ognaligui, (2010).

This study however departs from these studies by using the combination of qualitative perception and quantitative macro-economic data to explore the impact of bank funding on manufacturing sector growth unlike other studies that have basically used the technique majorly on monetary policy related variables such as Halicioglu and Urur (2005) who used the model to analyze stability of the narrow money demand function in Turkey, Bahmani-Oskooee and Rehman (2005) who used it to estimate demand for money and Akinlo (2006) who used it to examine the co-integrating property and stability of M2 money demand for Nigeria.

This study employed variables such as log of manufacturing sector gross domestic product as the dependent variable and log of total bank loans and advances granted by the banking sector to the manufacturing sector as the study's main independent variable. Inflation rate, log of real exchange rate and monetary policy rate are minor independent variables to improve robustness and avoid simultaneous bias, as highlighted by Gujarati (2004). The approach in this thesis is unique since the study also employed the factor analysis to gauge the perception of stakeholders on the factors affecting bank funding of the manufacturing sector and the impact of bank funding on growth of the Nigeria's manufacturing sector. This was done through the creation of six important domains, namely funding volume versus output of manufacturing sector,

funding volume versus employment creation of the manufacturing sector, funding of the manufacturing sector and lending rate, funding of the manufacturing sector and exchange rate, funding of the manufacturing sector and inflation rate and funding of the manufacturing sector and the business environment. This is considered a more robust and integrative approach in the study of bank funding and manufacturing sector growth in Nigeria.

Again, unlike other studies that have explored the impact of finance and economic growth at the national level, the uniqueness of this study is in its emphasis on a key sector like the manufacturing sector. This is in line with the emphasis of the DBA programme which underscores measurable impact on business and practice. Previous studies on the finance-growth nexus have looked at the aggregate level whether bank based, market based, legal based or combined based. This could be seen in the works of Baskaran and Feld (2009), Bittencourt (2011), Greenwood, Sanchez and Wang (2011), Zhang, Wangb and Wang (2012), Cecchetti and Kharroubi (2012), Pradhan, Dasgupta and Bele (2013), Philippon and Reshef (2013), Cecchetti and Kharroubi (2013) and Law and Singh (2014). Thus, this study makes a contribution by providing insight into bank funding and manufacturing sector growth of an emerging and developing economy like Nigeria. The findings from this study are expected to be readily utilized as reference material for policy formulation for the Nigerian banking and manufacturing sectors in a bid to improving the real sector of the Nigerian economy.

8.4 Policy Implications and Recommendations

The empirical findings from this study highlight various policy implications for the handlers of the Nigerian economy and business practitioners. A major policy implication from the results is that there is a positive relationship between bank funding and manufacturing sector growth. Thus, a long run relationship exists

between bank funding and manufacturing sector growth. Again the policy implication is that since the growth of the manufacturing sector spurs the growth and development of the financial sector in line with the demand following hypothesis; to tap into the growth enhancing capacity of the manufacturing sector, it is essential to adopt measures favourable to the manufacturing sector growth and development. The Nigerian government can do so, by creating an enabling business environment that would involve amongst others, putting in place key legislations and executive policy directives to encourage funding volume, employment creation, low lending rate, stable exchange rate, single digit inflation rate and favourable business environment.

In addition, policies to improve financial support from Nigerian banks in terms of intervention funds to manufacturing businesses, policies that will incentivize banks' support and willingness to lend more to the manufacturing sector, enhance capacity utilization of the manufacturing firms so as to improve their employment generation ability should be pursued. This will be in addition to lending rate policies specifically for the manufacturers as it was revealed that banks' lending rate affects manufacturers' willingness to borrow. Hence, it is recommended that banks should have a different lending interest rate scheme for the manufacturing sector considering its key role in the economy.

Also improving exchange rate policies is also important as exchange rate and the financial performance of the manufacturing firms are directly related. Most of the machineries and raw materials of the Nigerian manufacturers are imported and foreign exchange requirements of the manufacturers are not readily available and accessible in Nigeria according to the operators. On funding volume and inflation rate, policy that will address inflation rate especially that will bring inflation rate to a single digit should be considered as

Nigerian manufacturing firms' factor in inflation rate in their product pricing models.

Lastly, Nigerian business environment is difficult for manufacturers, lack of power and other infrastructural facilities affect adversely the productivity and financial performance of the manufacturers; government's fiscal/taxation policies affect the operations and financial performance of the manufacturers, especially multiple taxation. Monetary policies of the CBN could encourage or discourage lending to the manufacturing sector; insecurity and insurgencies in Nigeria adversely affect the manufacturers and the import policies of the country should protect the local manufacturers from imported goods.

In conclusion, in order to strengthen the impact of bank funding on manufacturing sector growth, the government has to implement most if not all of the policy recommendations outlined above through either direct intervention or institutional reforms.

8.5 Limitations of the Study and Suggestions for Further Research

The study's result may be improved by widening the data base. The study was restricted as a result of the unavailability of sufficient long time-series data for employment variable. In course of this study, it was discovered that manufacturing sector employment data was scanty. In Nigeria, there is no data on manufacturing sector employment creation hence it was not included in the model proxy.

In addition, the bank funding indicators which the researcher used in the empirical analysis were constructed proxies, which might not perfectly replicate the functions of banking sector. The data was restricted to deposit money banks and funding volume from other financial institutions such as micro finance banks, specialized government intervention agencies like Bank of Industry

(BOI) was not included as part of bank funding. Also other sources of business funding like equity, foreign direct investment (FDI), trade finances (spontaneous financing) were not considered in this study.

The following areas are suggested for further research to explore the impact of bank funding on manufacturing sector growth. This study is a single-country study with specific bias on a particular sector, with the applications of the study limited to the country studied (Nigeria). A further extension of this research could be to conduct a similar study for other countries, particularly other developing countries in sub Saharan Africa.

Endogenous growth theory posits that there are multiple channels through which finance may impact on growth. In this study they were not examined, so further studies could concentrate on the other possible channels of influence of finance on growth. This will assist in increasing literature available in the finance-growth nexus. Further research could advance this study by extending the data sampling period to cover the entire period of Nigerian economic development. This will especially be true for a study that will cover the period from Nigeria's political independence in 1960 to 2015.

8.6 Contribution to Knowledge

The Nigerian banking industry has been witnessing rapid development dating back to 1892 when the Africa Banking Corporation (ABC) commenced the activities of banking in Lagos (Familoni, 2000). The industry can be said to have grown, however despite the rapid increases in the banking sector activities in Nigeria, there are fewer studies that have examined the impact of bank funding on the growth of the manufacturing sector. This study therefore fills this important knowledge gap using data from Nigeria to empirically assess the impact of bank funding on the growth of Nigeria's manufacturing sector. This

study also contributes by extending the existing work not on the overall economy but specifically targeted at a segment of the Nigerian economy (manufacturing) as well as exposing the issues of bank funding in a developing country like Nigeria especially from the perspective of a practitioners. Secondly, this study contributes to the existing debate on bank funding and growth by providing additional evidence in support of the endogenous growth theories for a single developing country and a single sector, the manufacturing sector.

Furthermore, this study's contribution to knowledge is considered significant in two folds; firstly it radically differs from earlier works in this area of finance and economics, thereby contributing significantly to literature by emphasizing on economic developmental issues rather than economic growth alone. Secondly, it contributes to knowledge geographically by concentrating it on a developing economy like Nigeria conducted using annual time-series data. The choice of Nigeria is based on the location of the researcher and the over 25years experience of the researcher in the Nigerian banking industry.

8.7 Contribution to Management Practice

In more specific terms, the study could be seen to have the following contributions to management practice:

1. **Contributions to Operators**: For bank lending practice, this study shall deepen bankers understanding of the manufacturers' business challenges which shall improve their lending decisions and loan portfolio management, especially as it concerns the tenure and pricing of the loans. The findings of this study shall be available to the Chartered Institute of Bankers of Nigeria which hosts the Bankers Committee, the highest body of Chief Executives of Nigeria's DMBs. Considering the enthusiasm shown by practitioners in responding to the research questionnaire, it is

believed that they will receive the findings of this study as useful guide towards improving lending practice in general and funding the manufacturing sector in particular.

2. **Contributions to Manufacturers:** For the manufacturers' access to funding, they shall hopefully benefit from this study by having a better understanding of the factors that enhance their business attractiveness for bank lending and also ensure proper utilization of funds towards a healthy performance of the loans. Findings of this study may also interest MAN, the Nigerian manufacturers' platform. Hopefully at its annual conference, the findings and recommendations of this research shall be shared amongst member firms.
3. **Contributions to Policy Makers**: Also for the regulators and government, the empirical findings from the analysis of the survey data from this research may form basis of policy initiatives towards addressing the macro and environmental challenges affecting the manufacturers and their access to bank funding. The CBN may be better guided in its monetary policies especially considering the crowding-out effect OMO often has on funds availability to the critical growth driving private sector. Policy makers may also find the findings and recommendations of this study useful in creating special intervention funds for critical growth sectors of the economy.
4. **Contributions to Scholars and Trainers:** Equally for trainers and academics, this work may serve as a reference material. Future researchers may also expand the scope of this study in terms of time, sector and territory covered. The quantitative and qualitative approaches taken in this study shall hopefully broaden the scope of future researches in this area of finance.

Finally, in line with the focus of DBA researches, it is the researcher's expectation that this study shall improve management practice for practitioners in banking and manufacturing sectors, while government policy makers shall also benefit from the findings and recommendations of this work.

Bibliography

Abiola R.O. (2003). Effects of Bank Distress on the Economy: The Nigerian Case. *The Nigerian Banker Journal*, January-March 2003.

Achsani, N.A (2010). Stability of Money Demand in an Emerging Market Economy: An Error Correction and ARDL Model for Indonesia", Research Journal of International Studıes, 13: 54-62.

Adamolekun W., K. Ogedengbe and Pratt B. C (2012). Crisis in Nigeria's Banking and Financial Industry: Government Actions Reassure Skittish, Jittery Publics, in George Amiso M. and Pratt B. Cornelius (Eds.), *Case Studies in Crisis Communication: International Perspectives on Hits and Misses*, New York, Routledge

Adamopoulos, A. (2010). Stock market and economic growth : An empirical analysis for Germany. *Business and Ecionomics Journal, BEJ-1*, 1–12.

Adedipe, B. (2004). The Impact of Oil on Nigeria's Policy formulation. Paper presented at a conference on Nigeria: Maximising Pro-poor growth… organized by overseas Development Institute in conjunction with *Nigeria Economic Submit Group*, June 16th – 17th

Ademola, I.S (2012). Government Expenditure in the Manufacturing Sector and Economic Growth in Nigeria1981 – 2010. *International Journal of Scientific & Engineering Research*, Volume 3, Issue 11

Aderibigbe J.O (2004). An Overview of the Nigerian Financial System, *CBN Bullion*, 28(1).

AFDB, OECD, UNDP (2014), *Nigerian Economic Outlook* 2014

Afolabi J.A. (2004). Implications of the Consolidation of banks for the Nigerian banking System. Paper presented at the *NDIC organized Workshop for FICAN Enugu*

Agbetsiafa, D.K (2003) 'The Finance Growth Nexus: Evidence from sub-Saharan Africa', *Savings and Development*, 28(3), 271-288.

Agu, C. C. (2005). Understanding the A.B.C of the Financial System. *Inaugural Lecture Series, University of Nigeria*, 1–51.

Agu, C. and Chukwu, C. (2008). Toda and Yamamoto causality tests between bank-based financial deepening and economic growth in Nigeria. *EuropeanJournal of Social Sciences*, 7(2):175 - 184.

Ahrens, T. and Chapman, C. (2006). Doing qualitative field research in management accounting: positioning data to contribute to theory. *Accounting Organisations and Society*, 31: 819-841

Aisen, A and Franken, M. (2010). Bank Credit during the 2008 Financial Crisis: A Cross-Country Comparison. IMF Working Paper WP/10/47

Ajayi, M.A (2007), Determinants of Loans and Advances in the financial System: An Emprical Evidence from Nigerian Commercial Banks, *Journal of Business and Social Sciences*, 12: 10-20

Akinlo A. (2003) *Globalization, international investment and stock market growth in sub-Saharan Africa.* Visiting Research Fellow Monograph Series, No.382, Institute of Developing Economies, Japan.

Akinlo, A. E (2006). The stability of money demand in Nigeria: An autoregressive distributed lag approach. *Journal of Policy Modeling*, 28(4): 445-452.

Akinsola, F.A and Odhiambo, .N.M (2017). Inflation and economic growth: a review of the international literature. *Comparative Economic Research*, 20(3):41-56

Alajekwu, U. B. and Achugbu, A. A. (2012). The Role of Stock Market Development on Economic Growth in Nigeria: A Time Series Analysis. *African Research Review*, *6* (1):51-70.

Allen. F and Gale, D (1997). Financial markets, intermediaries, and inter-temporal smoothing. *The Journal of Political Economy,* 105(3)523-546

Allen. F and Gale, D (2004). Financial intermediaries and markets. *Econometrica,* 72(4):1023-1061

Allen, F and Gale, D. (2000). *Comparing Financial Systems*. MIT Press, Cambridge, MA.

Ang, J. and McKibbin, W. (2007). Financial liberalization, financial sector development and growth: Evidence from Malaysia. *Journal of Development Economics Elsevier,* Vol. 84(1), pp 215-233.

Arestis, A. Demetriades, P. and Luintel, K. (2001). Financial development and economic growth: the role of stock markets. *Journal of Money, Credit and Banking*, Vol. 33(1), pp 16 - 41.

Baharumshah, A.Z, S.H Mohd and Mansur M.M.A (2009). The stability of money demand in China: Evidence from the ARDL model. *Economic Systems*, 33(3): 231-244.

Bahmani-Oskooee, M, and Rehman, H. (2005). Stability of the money demand function in Asian developing countries. *Applied Economics*, 37: 773-792.

Balago, G.S (2014). Financial sector development and economic growth in Nigeria: an empirical investigation. International Journal of Finance and Accounting, 3(4): 253-265

Bartholomew, D., Knotts, M andMoustaki, I. (2011). *Latent variable models and factor analysis: A unified approach*. (3rded.). West Sussex, UK: John Wiley & Sons.

Beck, T and Levine, R. (2002) *Stock markets, banks and growth: panel evidence,* NBER working paper, w9082.

Benston. G and Smith, Jr. (1975). A transaction cost approach to the theory of financial intermediation. *Journal of Finance,* 31(2)215-231.

Berger, P. L. and Luckmann, T (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City, NY: Anchor Books.

Bevir, M and R.A.W Rhodes (2002). *Interpreting British Governance*. London: Routledge

Bhagwati J. (1984). Splintering and disembodiment of services and developing nations. *The World Economy*. 7:133-143.

Bhaskar, R., (1975), *The Realist theory of science*, Leeds: Leeds Books Ltd

Bigg, T (2013), *Survival for a Small Planet: The Sustainable Development Agenda*. New York: Earthscan

Bitler, M.P., A. M. Robb, and Wolken, J.D (2001). Financial Services Used by Small Businesses: Evidence from the 1998 Survey of Small Business Finances," *Federal Reserve Bulletin*, vol. 87, pp. 183-205.

Bittencourt, M. (2011). Financial Development and Economic Growth in Latin America : Is Schumpeter Right ? A paper at Pretoria, Stellenbosch, UCT, DPRU-TIPS Lessons in Long-Run Eco- nomic Growth and Development 2010 in Johannesburg, 15th ICMAIF in Crete, 7th VereinfürSocialpolitik in Berlin

Bressler, S.L. and Seth, A.K. (2011). Wiener–Granger Causality: A well established methodology". *NeuroImage*58 (2): 323–329

Brooks C. (Eds.) (2008). *Introductory Econometrics for Finance*, Cambridge University Press.

Bryman A. (2007). Barriers to integrating quantitative and qualitative research'. *Journal of Mixed Methods Research*, 1(1):8-22.

Bryman A and Bell, E (2012). *Business Research Methods, (3rd Edition)*. New York: Oxford University Press

Cameron, R., (1967). *Banking in the early stages of industrialization: a study in comparative economic history*. Oxford: Oxford University Press

Cameron R. (1997). A *concise economic history of the world: from Paleolithic times to the present* New York: Oxford University Press.

Cass D. (1965). Optimum growth in an aggregate model of capital accumulation', *Review of Economics Studies*, 32: 223-240.

Central Bank of Nigeria (2015) *CBN Statistical Bulletin for the year ended 31stDecember 1987*, Abuja: Central Bank of Nigeria Publication.

Ceccetti, S. And Kharroubi, E., (2012). Reassessing the impact of finance on growth. *BIS Working Paper* 381.

Charles, A. N. B. (2012). Investigating the Performance of Monetary Policy on manufacturing Sector in Nigeria. *Arabian Journal of Business and Management Review, 2(1): 12-25.*

Chia R. (2002). The production of management knowledge: philosophical underpinnings of research design', In Partington, D. (ed.) *Essential Skills for Management Research, 1st edition*, London: SAGE Publicaions Ltd., pp 1 -19.

Child, D. (2006). *The Essential s of Factor Analysis*. 3rd Edn. New York: Continuun

Chizea, J. (2012). Stock Market Development and Economic Growth in Nigeria: A Time Series Study for the period 1980-2007. Doctoral thesis, *Northumbria University*, ht tp://nrl.northumbria.ac.uk/10337

Choe C and Moosa I.A (1999). Financial System and Economic Growth: The Korean Experience. *World Development*, 27(6), 1069-1082.

Crichton N and De Silva C (1989) 'Financial Development and Economic Growth: Trinidad and Tobago, 1973-1987', *Social and Economic Studies*, 38(4), 133-162.

Cohen, L., L. Manion, and Morrison, K.R.B (2007) *Research methods in education*, (6th Edition), London: Routledge

Commendatore, P., S. D'Acunto, C. Panico and A. Pinto (2003). Keynesian theories of growth', in N. Salvadori (ed.), *The Theory of Economic Growth: a 'Classical Perspective*. Aldershot, UK: Edward Elgar.

Creswell J (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, Thousand Oaks: SAGE Publications.

Crotty M. (1998). *The foundations of social research: meaning and perspective in the research process*, London: Sage.

DeGregorio, J. and Giudotti, E. (1995). Financial development and economic growth. *World Development*, Vol. 23, pp 433-448.

Delanty G. (2005) *Social Science,* Maidenhead: Open University Press.

Demirguc-Kunt, A. and Maksimovic, V. (2001). Firms as financial intermediaries - evidence from trade credit data. *Policy Research Working Paper Series 2696*, the World Bank.

DeYoung, R., A. Gron and Winton, A (2005). Risk Overhang and Loan Portfolio Decisions. A Working Paper of the *Federal Reserve Bank*

DeYoung, R., W.C. Hunter, and Udell, G.F (2004). The Past, Present, and Probable Future for Community Banks. *Journal of Financial Services Research* 25(2/3)

Dickey, D. and Fuller, W. (1979) 'Distribution of the estimators for autoregressive time series with a unit root', *Journal of the American Statistical Association*, 74: 427-443.

Domar E. (1947). Expansion and employment. *American Economic Review*, 37(1):343-355

Donaldson, B. (2005). Postgraduate Dissertation Handbook (MBA/MSc). *Aberdeen Business School.*

Easterby-Smith, M. Lyles, M. and Tsang, E. (2008). Inter-organisational knowledge transfer: current themes and future prospects. *Journal of Management Studies,* 45(4): 677–690

Easterby-Smith, M., Thorpe, R., and A. lowe (1991). *Management Research: An Introduction.* London: Sage.

Edo, S. and Ikelegbe, A. (2014). The Nigerian Economy Reforms, Emerging Trends and Prospects. *CPED Monograph Series*, (8), 106.

Emefiele G. (2014). 10 Point Agenda of repositioning the Nigerian Banking Sector. The Maiden Address of the Governor of Central Bank of Nigeria. *Central Bank of Nigeria*, Abuja: Nigeria

Engle, R. and Granger C. (1987). Co-Integration and error correction: representation, estimation and testing. *Econometrica*, Vol. 55(2), pp 251 - 276.

Eze, O.R and F.O Ogiji (2013). Impact of Fiscal Policy on the Manufacturing Sector Output in Nigeria: An Error Correction Analysis. *International Journal of Business and Management Review*, 1(3):35-55

Familoni J. A. (2000). *Management of Banks and Financial Institutions in Perspectives*. Lagos: Actec

Field, A. (2005). *Discovering Statistics Using SPSS,* .UK; Sage.

Gerschenkron, A (1962). *Economic backwardness in historical perspective, a book of essays*. Cambridge, Massachusetts: Belknap Press of Harvard University Press

Ghauri, P. and Gronhaug, K. (2005) *Research Methods in Business Studies*, 3rd edition, London: FT. Prentice Hall

Gorsuch, R.L. (1983). *Factor analysis (2nd ed.)*. Hillside, NJ: Lawrence Erlbaum Associates.

Granger, C. (1969). Investigating causal relations by econometric models and cross- spectral methods. *Econometrica*, Vol. 37, pp 424-438.

Gray D. (2009) *Doing Research in the real world,* 2nd Edition, London: Sage Publication.

Greenwood, J., J.M Sanchez and Wang, C. (2013). Quantifying the impact of financial development on economic development. *Review of Economic Dynamics*, *16*(1), 194–215. https://doi.org/10.1016/j.red.2012.07.003

Gujarati, D. (2004) *Basic Econometrics*, 4th edition, New Delhi: Tata McGraw-Hill Publishing Company Limited.

Gujarati, D.N. and Porter D.C (2009). *Basic Econometrics Fifth Edition.* Singapore: Mcgraw Hill International Edition

Guo, K. and Stepanyan, V. (2011). Determinants of bank credit in emerging market economies. *IMF Working Papers*. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1784539

Gurley, J. and Shaw, E. (1955). Financial aspects of economic development. *American Economic Review*, 45(5): 15-537

Halicioglu, F and Ugur, M (2005). On stability of the demand for money in a developing OECD country: the case of Turkey. Global *Business and Economics Review*, 7(2-3): 203-213.

Hao. C (2006). Development of financial intermediation and economic growth: the Chinese experience. *China Economic Review,* 17 (4)347-362

Harrod R. (1939). An Essay in Dynamic Theory. *The Economic Journal*, Vol. 49, pp 14-33.

Harrod R. (1948). *Towards a dynamic economics: some recent development of economic theory and their application to policy*, London: Macmillan.

Holmström B and Tirole J. (1993). Market liquidity and performance monitoring. *Journal of Political Economy*. 101(4) 678–709

Hudson, L. and Ozanne, J. (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14(4):508-521

Ibe, I.G (2014). Impact of Financial Intermediation on Economic development of Sub Saharan African Countries. Doctoral Thesis, http://www.unn.edu.ng/internals/repository/view/MTc2NDQ

Ikpefan O.A (2012). *Issues in Banking and Finance*, Lagos: CIBN Press

Ismail F. (2005). Mainstreaming development in the world trade organisation. *Journal of World Trade*, 39(1): 11-21

Jayaratne. J and Strahan. P (1996). The finance-growth nexus: evidence from bank branch deregulation. *Quarterly Journal of Economics* 111(4)639-670

Jhingan, M.L (2012). *The economics of development and planning 40th edition*. India: Vrinda Publications Ltd

Johansen S. (1991). Estimation and hypothesis testing of cointegration vectors in gaussian vector autoregressive models. *Econometrica*, 59(6): 1551-1580

Johansen S. (1992). Testing weak exogeneity and the order of cointegration in UK money demand data. *Journal of policy Modelling*, 14: 313-334.

Jones, G. (1993). *British Multinational Banking: 1830- 1990*, Oxford, Clarendon Press

Jung W. (1986). Financial development and economic growth: international evidence. *Economic Development and Cultural Change*, Vol. 34, pp 333-346.

King, R. and Levine, R. (1993a). Finance and growth: Schumpeter might be right. *The Quarterly Journal of Economics*, 717-737.

King, R. and Levine, R. (1993b). Finance entrepreneurship, and growth: theory and evidence', *Journal of Monetary Economics*,. 32: 1-30

Koopmans, T. (1965). *On the concept of optimal economic growth: The Econometric Approach to Development Planning*, North-Holland Publishing Co., Amsterdam.

Kuznet S. (1973). Modern economic growth: findings and reflections. *The American Economic Review*, Vol. 63(3), pp 247-258.

Law, S.H and Singh, N (2014). Does too much finance harm economic growth?" *Journal of Banking and Finance*: 41(C):36-44

Lazonick W and O'sullivan, M (1997). Maximising Shareholders' Value: A new Ideology for Corporate Governance. *Economy and Society*, 29(1):13-35

Lee, A. S. (1991). Integrating positivist and interpretive approach to organizational research. *Organization Science*, 2 (4):342-365

Levine R. (2002). Bank-based or market-based financial systems: which is better?*Journal of Financial Intermediation*, Vol. 11(4), pp 398 – 428.

Levine, R. (2003). More on finance and growth: more finance, more growth?*Federal Reserve Bank of St. Louis Review*, 85(3)31–46

Levine, R. Loayza, N. and Beck, T. (2000). Financial Intermediation and Growth: Causality and Causes', Journal of Monetary Economics, 46(1):31-77

Libanio, G (2006). Manufacturing Industry and Economic Growth in Latin America: A Kaldorian Approach. Ms., CEDEPLAR, Federal University of Minas, Gerais (Brazil),

Long, D. and Samreth, S (2008). The Monetary Model of Exchange Rate: Evidence from the Philippines Using ARDL Approach. *Economics Bulletin*, 1-12.

Lopez-Villavicencio, A. and Mignon, V (2011). On the impact of inflation on output growth: Does the level of inflation matter?. *Journal of Macroeconomics*, 33(3):455-464

Loto, M. A. (2012). Global Economic Downturn and the Manufacturing Sector performance in the Nigerian Economy. *Journal of Emerging Trends in Economics and Management Siences (JETEMS)*, 3(1): 38-45.

Lucas R. (1988) 'On the mechanics of economic development', *Journal of Monetary Economics*, Vol. 22, pp 3-42.

Malakooti, B. (2013). *Operations and Production Systems with Multiple Objectives*. London: John Wiley & Sons.

Malthus, T. R. (1836). *Principles of political economy: considered with a view to their practical application*. 2nd edn, London: Pickering

MAN (2014). *Finance and Capacity Utilization of Manufacturing Firms in Nigeria: A survey*, Lagos: MAN

Marsh, D. and G. Stoker (2002). *Theory and methods in political science*, 2nd ed, New York: Palgrave Macmillan

Marshall, A. (1898). *Principles of economics*, MacMillan and Co, London.

Masha, I (2000). New Perspectives on Inflation in Nigeria" in CBN Economic and Financial Review, 38(2)

Mbelede, C. (2012). Cost Engineering in the manufacturing sector of the economy of Nigeria. *Paper presented at the 3rd Annual Technical Conference of Institute of Appraisers and Cost Engineering, Abuja, Nigeria.*

McCaig, B. and Stengos, T (2005). Financial intermediation and growth: Some robustness results. *Economics Letters*, 88(3)306-312

McKinnon R. (1973). *Money and capital in economic development*, Washington, D. C. Brookings Institution.

Mohammed, S. et al (2015). The nature of small and medium scale enterprises (smes): Government and financial institutions support in Nigeria.

International Journal of Academic Research in Business and Social Sciences, 5(3):525 -537

Mudasiru, S. and Adabonyon, O. (2001). The Nigerian Economy under Obasanjo. *Development Policy Management Network Bulletin, VII* (September), 10–13.

N'Zue, F. F. (2006). Stock Market Development and Economic Growth : Evidence from Cote D Ivoire. *African Development Bank*, 123–144.

NBS (2014), *Nigerian Statistics*, Abuja: Nigerian bureau of Statistics

Nkiru-Nzegwe D (1993). *The Banker's Liability*, Ibadan, University Press

Nwankwo G.O (1991), *Bank Management: Principles and Practices*, Lagos: Mathouse Press

Nzotta S. (1999) *Money, banking and Finance: Theory and Practice*, Lagos, Intercontinental Publishing.

Nzotta, S. and Okereke, E (2009). Financial deepening and economic development of Nigeria: an empirical investigation. *African Journal of Accounting Economics Finance and Banking Research*, 5(5): 55-66

Obasan K.A and O.A Adediran (2010). The Role of Industrial Sector in the Economic Development of Nigeria. *Journal of Management and Society*, 1(2):09-16

Odhiambo, N.M (2008). Financial depth, savings, and economic growth in Kenya: a dynamic causal linkage. *Economic Modelling*, 25(4)704-713

Odhiambo, N. M. (2008). Financial Development in Kenya: a Dynamic Test of the Finance-led Growth Hypothesis. *Economic Issues*, *13*, 21–36.

Odhiambo N.M (2010). Stock market development and economic growth in South Africa: An ARDL-Bounds testing approach. A paper presented at the Annual American Business Research Conference, Las Vegas, Nevada, USA.

Odhiambo, N.M., (2011). The impact of financial liberalisation in developing countries: experiences from four SADC countries. *Organisation for Social Science Research in Eastern and Southern Africa (OSSREA), Addis Ababa.*

OECD (1996). *The knowledge-based economy.*General Distribution OCDE/GD (96)102, Paris

Okafor F.O (2012). *50 Years of Banking Sector Reforms in Nigeria*, Enugu: Victex

Oluduro, O. F. (2015). History and Evolution of Banking in Nigeria. *Academia Arena*, *7*(1), 9–14

Olukotun G. A., J. O. Olusegun and Olorunfemi K. (2013). Bank Distress in Nigeria and the Nigeria Deposit Insurance Corporation Intervention, *Global Journal of Management and Business Research Finance,* 13(8) 13-23

Oreiro, J. L. and Nakabashi, L. (2012). The economics of demand-led growth: Theory and evidence for Brazil. *Paper Prepared to Be Delivered at Fourth International Conference: Developments in Economic Theory and Policy to Be Held at the Department of Applied Economics V of the University of Basque Country at Bilbao, Spain, from 5 to 6 of July, 2007*.

Orhunbilge. A.N and Tas, N. (2014). Manufacturing Output in Romania: an ARDL Approach. *Mediterranean Journal of Social Sciences*, *5*(22), 342–353. https://doi.org/10.5901/mjss.2014.v5n22p342

Pagano, M. (1993). Financial markets and growth: an overview. *European Economic Review,* Vol. 37, pp 613-622.

Patrick H. (1966). Financial development and economic growth in underdeveloped countries. *Economic Development and Culture Change*, 14: 174-189

Patterson K (2000). *An Introduction to Applied Econometrics*. New York: St. Martin's Press.

Pesaran, M. Shin, Y. and Smith, R. (2001). Bound testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*. Vol. 16, pp 289-326.

Phillips, P and Perron, P. (1986). Testing for a unit root in time series regression. *Biometrika*, Vol. 75(2), pp 335-346

Polit, D.F. and Hungler, B.P. (1991). *Nursing Research. Principles and Methods*. Fourth ed. J.B. Lippincott Company, Philadelphia, New York, Hagestown

Pradhan, R., Dasgupta, P. and Bele, S. (2013). Finance, development and economic growth in brics: a panel data analysis. *Journal of Quantitative Economics, 11*(July).

Rajan. R and Zingales, L (1998). Financial dependence and growth. *The American Economic Review 88*(5)559-586

Ramsey, F. (1928). A Mathematical Theory of Saving', *Economic Journal*, 38(52):543-559.

Ricardo, D (1917). *The principles of political economy and taxation*. London: Dent

Rioja, F., &Valev, N. (2014). Stock markets, banks and the sources of economic growth in low and high income countries. *Journal of Economics and Finance*, *38*(2), 302–320 https://doi.org/10.1007/s12197-011-9218-3

Rioja, F. and Valev, N. (2004). Finance and the sources of growth at various stages of economic development. *Economic Inquiry*, *42*(1), 127–140. https://doi.org/10.1093/ei/cbh049

Robinson J. (1952). *The rate of interest and other essays*. London: Macmillan

Romer P. (1986). Increasing returns and long run growth. *Journal of Political Economy*, Vol. 94:1002-1037

Romer P. (1994). New goods, old theory, and the welfare costs of trade restrictions. *Journal of Development Economics, Elsevier*, 43(1):5-38

Rostow W. (1960). *The stages of economic growth: a non-communist manifesto,* Cambridge: Cambridge University Press.

Salvadori, N (2003). *The theory of economic growth: a 'classical' perspective*. New York: Edward Elgar Pub

Sangosanya A.O (2011)**.** Firms Growth Dynamics in Nigeria's Manufacturing Industry: A Panel Analysis. *Journal of Applied Econometric Review,* 1(1):1-15

Sanusi, S. L. (2010). The Nigerian Banking Industry : what went wrong and the way forward."*Convocation Lecture at Bayero University, Kano*, (August 2007), 1–23.

Saunders, M. P., Lewis and Thornhill, A. (2007) *Research Methods for Business Students*, Third Edition, Prentice Hall.

Saunders, M. et al. (2013). *Research methods for business students*, 6th Edition, London: Pearson

Sayer, A. (2000), *Realism and Social science*, London: Sage Ltd

Schumpter J. (1911) *the Theory of Economic Development*, Cambridge, MA: Harvard University Press.

Sen A and Srivastava, M (2011). *Regression Analysis: Theory, Methods, and Applications*, Berlin: Springer-Verlag, Berlin,

Shaw E. (1973). *Financial deepening in economic development*, New York: Oxford University Press.

Shittu (2012). Financial intermediation and economic growth in Nigeria. *British Journal of Arts and Social Sciences*, 4(2)164-179

Smith A. (1776). *Wealth of Nations*. London: Methuen and Co., Ltd., ed. Edwin Cannan.

Solow R. (1956). A contribution to the theory of economic growth. *Journal of Economics*, 70:65-94

Soludo C. (2004). *Consolidating the Nigerian Banking Industry to Meet the Development Challenges of the 21st Century*, Being an address delivered to theSpecial Meeting of the Bankers' Committee, held on July 6, at the CBNHeadquarter, Abuja.

Soludo C. (2007). *Nigeria's Financial System Strategy 2020 Plan,* Being an address delivered at the FSS 2020 International Conference, Abuja.

Stolbov, M. (2012). The finance-growth nexus revisited: From origins to a modern theoretical Landscape. *Economics Discussion Papers*, No. 2012-45

Swan W. (1956). Economic growth and capital accumulation. *The Economic Record*, 32:334-361

Tadesse, S. (2001). International Evidence. *William Davison Working Paper Number 449*, (449).

Takáts, E (2010). Was it credit supply? Cross-border bank lending to emerging market economies during the financial crisis. *BIS Quarterly Review*, June.

United Nations Development Programme (2008a). *Human development indices: a statistical update 2008*. New York: United Nations

United Nations Development Programme. (2008b). *Human development report 2007/2008.* New York: United Nations

Uzoaga W. (1981) *Money and banking in Nigeria*, Enugu: Fourth Dimension Publishers.

Vitiols, S. (2005). Changes in German's Bank Based Financial System: Implication for Corporate Governance. *In G. Jackson and A. Moerkes, Guest Editors, Corporate Governance: An International Review. Special Issue on Germany and Japan, Vol. 13, Issue 2, May 2005.*,*13*(2).

Waqabaca C (2004). Financial Development and Economic Growth in Fiji', Working Paper 2004/03, Economics Department, Reserve Bank of Fiji.

World Development Report (1999/2000). Our common future. A Report of the *World Commission on Environment and Development*, United Nations

World Bank (2013) *World economic outlook 2012*, Washington: World Bank

Yin, H, Gong, I. and Zou, H (2006) Inequality and Economic Growth – Kuznets Curve Revisited. *Frontier of Economics in China, June 2006, Vol 1, Issue 2, pp 196 - 206*

Yong, A.G and Pearce, S (2013). A beginner's guide to factor analysis: focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2):79-94.

Zalk, .N. (2014).What is the role of manufacturing in boosting economic growth and employment in South Africa? (Assessed from www.econ3x3.org on 12th June, 2018)

Zhang, J., Wang, L. and Wang, S. (2012). Financial development and economic growth: Recent evidence from China. *Journal of Comparative Economics*, *40*(3), 393–412. https://doi.org/10.1016/j.jce.2012.01.001

APPENDICES

Appendix 1
QUESTIONNAIRE
LETTER TO RESPONDENTS

Dear Respondent,

The Impact of Bank Funding on Growth of Nigeria's Manufacturing Sector

My name is Don Ogbonna and I am a DBA student of Edinburgh Napier University. As part of the requirements for the award of the degree of Doctor of Business Administration, I am undertaking this research for my thesis. The title of of my thesis is the Impact of Bank Funding on Growth of Nigeria's Manufacturing Sector.

The objectives of the research are (i) to contribute to existing literature (ii) to examine the causality between bank loans and advances and manufacturing sector growth in Nigeria (iii) to evaluate the impact of bank loans and advances to the manufacturing sector measured by the sector's contribution to Nigeria's gross domestic product (iv) to investigate possible factors that affect bank loans and advances to the manufacturing sector of the Nigerian economy (v) to highlight policy implications for Nigeria in view of the findings from this study.

This questionnaire is structured in a way that it will be easy to fill and return. I estimate that it can take you about 15 to 20 minutes to complete.

For the purpose of this study, all information provided will be treated with strict confidence and shall be used strictly for academic purpose. Also data collected will only be used in an aggregate format and no individual responses will be identified.

Your kind assistance is hereby requested in filling and returning the attached form to me physically or through my email address at donogbonna@yahoo.co.uk

All further inquiries should be directed to my supervisors, Dr. Janice McMillan and Malcolm Pettigrew (Director of Studies) of Edinburgh Napier University at http://www.napier.ac.uk

Thanks for your co-operation.

Yours faithfully,
Don Ogbonna
(40138533)

Section A
INSTRUCTION: Please select the correct OPTION which best answers each question and tick as appropriate.

BIOATA

1. Sex: (a) Male { } (b) Female { }

2. Highest Level of Education: (a) Primary education { } (b) Secondary education { } (c) Tertiary education { } (d) No formal education { } (e) others { }

3. If others, please specify……

4. Position of Respondent: (a) Manager { } (b) Senior Management { } (c) Board Member { }

5. What is the nature of your work? (a) CBN/Regulator's Executive { } (b) Commercial Bank Executive { } (c) Manufacturers Association of Nigeria's Executive { } (d) Manufacturing Firm Executive/Director { }

6. How long have you been in business or practised your profession? (a) 5 – 10 years { } (b) 11 – 15 years { } (c) 16 – 20 years { } (d) Above 20 years { }

OTHER CHARACTERISTICS OF THE MANUFACTURING FIRM

7. What was your 2014 annual turnover in millions of naira? (a) N500 – N1,000 { } (b) N1,001 – N5,000 { } (c) N5,001 – N10,000 { } (d) Above N10, 000 { }

8. What type of manufacturing business are you engaged in? (a) Food Products { } (b) Agro Allied Products { } (c) Petroleum, Chemicals, Plastics and Rubber Products { } (d) Metals and Non Metallic Products { } (e) Cement and Building Material { } (f) Beverages and Tobacco Products { } (g) Miscellaneous Products { }

9. How many persons does your firm currently employ at all your business locations? (a) 1 – 500 employees { } (b) 501 – 1000 employees (c) Above 1000 employees

Section B

INSTRUCTION: Select the correct OPTION which best answers each question and tick as appropriate.

No	**Question**	**Very High Extent**	**High Extent**	**Moderate Extent**	**Low Extent**	**Undecided**
	FUNDING VOLUMES AND OUTPUT					
10	To what extent does the manufacturing sector require financial support/funding from the banks?					
11	To what extent does manufacturing firms have unlimited access to bank funding?					
12	To what extent is it true that loan is one way of funding the manufacturing sector?					
13	To what extent should bank					

No	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided
	loans/funding be a major source of financing the business operations of a manufacturing business?					
14	To what extent is the level of bank funding adequate for the operation and size of manufacturing business?					
15	To what extent are manufacturers satisfied with the process of assessing bank funding for their business?					
16	To what extent does the financial strength of the manufacturing firm attract bank funding to the firm?					
17	To what extent does the past experience and performance of the existing loans affect the banks willingness to lend more?					
18	To what extent does the turnover and number of employees of a manufacturer influence banks' decision to lend?					
19	To what extent do you agree that loan volume to the manufacturing sector is growing as necessary?					
20	To what extent is there a relationship between level of bank funding and productivity of manufacturing firms?					
	FUNDING VOLUME AND EMPLOYMENT CREATION					
21	To what extent is there a relationship between funding and capacity utilization of a manufacturing firm?					
22	To what extent does employment grow with capacity and its utilization of a manufacturing firm?					

No	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided
23	To what extent is there a relationship between level of bank funding and employment creation of manufacturing firms?					
24	To what extent is the operations of Nigerian manufacturers automated?					
25	To what extent do banks grant working capital facilities especially for salary payments?					
	FUNDING AND LENDING RATE					
26	To what extent do you consider the average lending rate to the manufacturers reasonable?					
27	To what extent are banks ready to extend concessionary lending rates to manufacturers?					
28	To what extent does bank lending rate affect manufacturers' willingness to borrow?					
29	To what extent do you believe that high lending rate could affect adversely product pricing of the manufacturers?					
30	To what extent do you share the opinion that high interest rate could reduce profitability of the manufacturing firms?					
	FUNDING AND EXCHANGE RATE					
31	To what extent is there a relationship between exchange rate and the financial performance of the manufacturing firms?					
32	To what extent are the machineries and raw materials of the Nigerian manufacturers import dependent?					

No	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided
33	To what extent is foreign exchange available and accessible by the manufacturers?					
34	To what extent has exchange rate been stable in Nigeria?					
35	To what extent has the local currency been devalued in the last 10 years?					
36	To what extent are banks willing to take exchange risk in funding?					
37	To what extent does volatility in exchange rate affect the product pricing of the manufacturers?					
38	To what extent are consumers ready to accept higher prices occasioned by higher exchange rates?					
39	To what extent are banks willing to lend and fund foreign currency denominated medium and long term loans?					
	FUNDING AND INFLATION RATE					
40	To what extent do banks factor in inflation rate in their funding consideration to the manufacturers?					
41	To what extent does pricing of locally manufactured goods affect the rate of inflation in Nigeria?					
42	To what extent does inflation rate affect the cost of production of the manufacturer?					
43	To what extent does high inflation rate affect the financial performance of the manufacturer?					
	FUNDING AND ENVIRONMENT OF BUSINESS					
44	To what extent does lack of power and other infrastructural facilities					

No	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided
	affect the productivity and financial performance of a manufacturer?					
45	To what extent does government fiscal/taxation policies affect the operations and financial performance of the manufacturers?					
46	To what extent does the monetary policies of the CBN encourage lending to the manufacturing sector?					
47	To what extent are there incentives from government and the Central Bank of Nigeria (CBN) to banks in support of lending to the manufacturing sector?					
48	To what extent does the CBN's prudential guideline favour lending to the manufacturing sector?					
49	To what extent does the insecurity and insurgencies in Nigeria adversely affect the manufacturers?					
50	To what extent does the import policies of Nigeria protect the local manufacturers from imported goods?					

APPENDIX 2
RESPONSES OF RESPONDENT

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	FUNDING VOLUMES AND OUTPUT						
10	To what extent does the manufacturing sector require financial support/funding from the banks?	267	107	0	42	0	416
11	To what extent does manufacturing firms have unlimited access to bank funding?	44	149	20	203	0	416
12	To what extent is it true that loan is one way of funding the manufacturing sector?	333	44	0	39	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
13	To what extent should bank loans/funding be a major source of financing the business operations of a manufacturing business?	333	44	0	39	0	416
14	To what extent is the level of bank funding adequate for the operation and size of manufacturing business?	105	107	118	86	0	416
15	To what extent are manufacturers satisfied with the process of assessing bank funding for their business?	105	107	118	86	0	416
16	To what extent does the financial strength of the manufacturing firm attract bank funding to the firm?	313	103	0	0	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
17	To what extent does the past experience and performance of the existing loans affects the banks willingness to lend more?	355	61	0	0	0	416
18	To what extent does the turnover and number of employees of a manufacturer influence banks' decision to lend?	333	83	0	0	0	416
19	To what extent do you agree that loan volume to the manufacturing sector is growing as necessary?	153	66	118	79	0	416
20	To what extent is there a relationship between level of bank funding and productivity of manufacturing firms?	333	83	0	0	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	FUNDING VOLUME AND EMPLOYMENT CREATION						0 0
21	To what extent is there a relationship between funding and capacity utilization of a manufacturing firm?	333	83	0	0	0	416
22	To what extent does employment grow with capacity and its utilization of a manufacturing firm?	0	0	333	83	0	416
23	To what extent is there a relationship between level of bank funding and employment creation of manufacturing firms?	0	169	64	183	0	416
24	To what extent is the operations of Nigerian manufacturers	153	44	158	61	0	

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	automated?						416
25	To what extent do banks grant working capital facilities especially for salary payments?	223	83	22	88	0	416
	FUNDING AND LENDING RATE						
26	To what extent do you consider the average lending rate to the manufacturers reasonable?	333	83	0	0	0	416
27	To what extent are banks ready to extend concessionary lending rates to manufacturers ?	158	39	66	153	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
28	To what extent does bank lending rate affect manufacturers ' willingness to borrow?	333	83	0	0	0	416
29	To what extent do you believe that high lending rate could affect adversely product pricing of the manufacturers ?	333	83	0	0	0	416
30	To what extent do you share the opinion that high interest rate could reduce profitability of the manufacturing firms?	289	83	0	22	22	416
	FUNDING AND EXCHANGE RATE						

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
31	To what extent is there a relationship between exchange rate and the financial performance of the manufacturing firms?	0	0	333	83	0	416
32	To what extent are the machineries and raw materials of the Nigerian manufacturers import dependent?	333	83	0	0	0	416
33	To what extent is foreign exchange available and accessible by the manufacturers ?	0	44	245	127	0	416
34	To what extent has exchange rate been stable in Nigeria?	333	83	0	0	0	416
35	To what extent has the local currency been devalued in the last 10	0	0	333	83	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	years?						
36	To what extent are banks willing to take exchange risk in funding?	333	83	0	0	0	416
37	To what extent does volatility in exchange rate affect the product pricing of the manufacturers ?	0	83	0	250	83	416
38	To what extent are consumers ready to accept higher prices occasioned by higher exchange rates?	0	83	0	250	83	416
39	To what extent are banks willing to lend and fund foreign currency denominated medium and long term loans?	333	83	0	0	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	FUNDING AND INFLATION RATE						
40	To what extent do banks factor in inflation rate in their funding consideration to the manufacturers?	333	83	0	0	0	416
41	To what extent does pricing of locally manufactured goods affect the rate of inflation in Nigeria?	333	83	0	0	0	416
42	To what extent does inflation rate affect the cost of production of the manufacturer?	333	83	0	0	0	416
43	To what extent does high inflation rate affect the financial performance of the manufacturer?	0	0	250	166	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
	FUNDING AND ENVIRONMENT OF BUSINESS						0
44	To what extent does lack of power and other infrastructural facilities affect the productivity and financial performance of a manufacturer?	333	83	0	0	0	416
45	To what extent does government fiscal/taxation policies affect the operations and financial performance of the manufacturers ?	333	83	0	0	0	416
46	To what extent does the monetary policies of the CBN encourage lending to the manufacturing sector?	267	107	0	42	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
47	To what extent are there incentives from government and the Central Bank of Nigeria (CBN) to banks in support of lending to the manufacturing sector?	43	149	20	204	0	416
48	To what extent does the CBN's prudential guideline favour lending to the manufacturing sector?	333	44	0	39	0	416
49	To what extent does the insecurity and insurgencies in Nigeria adversely affect the manufacturers ?	333	44	0	39	0	416

	Question	Very High Extent	High Extent	Moderate Extent	Low Extent	Undecided	Total
50	To what extent does the import policies of Nigeria protect the local manufacturers from imported goods?	105	107	118	86	0	416