THE IMPACT OF NONOIL EXPORT ON ECONOMIC GROWTH IN NIGERIA 1986-2010

BY

OFFIA NDIDIAMAKA P. EC/2008/624

DEPARTMENT OF ECONOMICS

FACULTY OF MANAGEMENT AND SOCIAL SCIENCES CARITAS UNIVERSITY, AMORJI-NIKE ENUGU

AUGUST, 2012

TITLE PAGE

THE IMPACT OF NON-OIL EXPORT ON ECONOMIC GROWTH IN NIGERIA (1986-2010)

BY

OFFIA NDIDIAMAKA P. EC/2008/624

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLEMENT FOR THE AWARD OF BACHELOR OF SCIENCE (B.SC) DEGREE IN ECONOMICS

DEPARTMENT OF ECONOMICS FACULTY OF MANAGEMENT AND SOCIAL SCIENCES CARITAS UNIVERSITY, AMORJI-NIKE ENUGU.

AUGUST, 2012

APPROVAL PAGE

This is to certify that this research project was undertaken by **Offia Ndidiamaka P.** and duly supervised and approved as having met the requirement for the award of Bachelor of science (B.sc) degree in Economic, from the department of Economic Faculty of Management and Social Sciences Caritas University, Amorji-nike Enugu.

Prof. F.E. Onah (Supervisor)	Date:
Mr. P.C Onwudinjo Esq (HOD)	Date:
Dr. Umeh C.C Dean of Faculty Management and Social Science	Date:
External Supervisor	Date:

DEDICATION

I dedicate this work to Almighty God, for his protection and love throughout my stay in caritas university. Also to my parents Elder/ Mrs. Edison Offia for all their support throughout the pursuit of my academic career.

ACKNOWLEDGEMENT

I wish to tank God Almighty for his wisdom, protection, favour and blessing throughout my stay in Caritas University.

I will also like to say a big thanks to my incomparable and treasured parents, Elder & Elder Mrs. Edison Offia who made my dream come true, also to my siblings Grace, Uche, and Emenike for their prayers and to my Aunty Mrs. Rosemary Egede, my friend, HRH Ude Kenechukuwu. I own you all a lot.

I also expressing my profound gratitude to my supervisor, Prof. F.E Onah, whose advice, stimulating suggestions, support and time he dedicated for my work my gratitude goes to my Dean, HOD and to my lecturers, Mr. Uche E.O., Mr. Ojike R.O, Prof. Udabah S.E, Dr. Umedi, Mr. Ikpe M.N, Odionye J.C, Osodiuru P.E and Mr. Odo A.C, I will never forget you all.

Finally to my friends Efe & Cynthia, my roommates who in one way or the other contributed to my work, I say may God in his kindness reward all of you.

TABLE OF CONTENTS

Title	page	i
Арр	roval page	ii
Dedication		iii
Ack	nowledgment	iv
Tab	le of contents	V
Abs	tract	viii
СН	APTER ONE: INTRODUCTION	
1.1	Background of the study	1
1.2	Statement of problem	10
1.3	Objectives of the study	11
1.4	Significance of the study	12
1.5	Scope and Limitations of the study	13
СН	APTER TWO: LITERATURE REVIEW	
2.1	Theoretical literature	14
2.2	Empirical literature	19
СНА	APTER THREE: RESEARCH METHODOLOGY	32
3.1	Model Specification	33

3.2	Definition of variable	33	
3.3 Assumptions of the error team (U)			
3.4	1 Nature and scope of Data collection		
3.5	Method of Data analysis	36	
3.6	Testing of hypotheses	36	
3.7	Evaluation of model	37	
3.7.1	Evaluation based on economic apriori criteria	37	
3.7.2	Evaluation based on statistical criteria	37	
3.7.3	Evaluation based on econometric criteria	38	
3.8 Sources of data and collection 39			
CHA	PTER FOUR: DATA PRESENTATION AND ANALY	'SIS	OF
RES	ULT		
4.1	Presentation of Result	40	
4.1.1	Interpretation of result	41	
4.2	Evaluation of result	42	
4.2.1	Evaluation based on economic apriori criteria	42	
4.2.2	Evaluation based on statistical criteria	43	
4.2.2	.1 R- Squared	43	

4.2.2	2.2 T-Test	43
4.2.2	2.3 F- Test	45
4.2.2	2.4 Standard error	46
4.2.3	B Evaluation based on econometric criteria	47
4.2.3	3.1 Normality test	47
4.2.3	3.2 - Test for heteroscedasticity	49
4.2.3	B.3 – Test for autocorrelation	50
4.2.3	B.4 – Test for multicollinearity	51
4.3	Hypothesis testing	52
СНА	PTER FIVE: SUMMARY, RECOMMENDATIONS AND	
CON	ICLUSION	
5.1	Summary	54
5.2	Recommendations	54
5.3	Conclusion	57
	References	58
	Appendix 1	60
	Appendix II	61

ABSTRACT

The essence of this work has been to determine the effect of non-oil export on economic growth in Nigeria, during the period of 1986-2010. In carrying out this study, secondary data were collected and empirical analysis was made. To achieve these objectives, multiple regressions were used in analyzing the data. The empirical results reveal that non-oil export is statistically significant to Nigeria economic growth. On the other hand, oil export also has been significant to Nigeria Economic growth of the non-oil export while government expenditure (GEX) has not been significant to Nigeria's economic growth of the non-oil exports. Following this, some recommendations which include encouraging financial institutions, improving in data collection and banking, efficient allocation and use of resources, government base investing in non-oil sector in other to diversify the economy (from monoculture economy to a multicultural economy) and creating economic environment which will help boost the activity of non-oil export sector.

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

There is a number of reasons for a country to be concerned about its rate of economic growth. Economic growth is desired by both affluent and non-affluent economies. Economic growth is the desire for higher levels or real per capital income, real output which must grow faster than the production of the economy in question. Economists, policy-makers, public and private sectors work ceaselessly towards attaining economic growth by the use of development and growth models and policies. Among the policies used are trade policy (Import and export policies, monetary policy, exchange rate policy, fiscal policy, market etc). In this study, the non-oil exports and economic development in Nigeria will be examined.

Non-oil exports are the products, which are produced within the country in the agricultural, mining and querying and industrial *sectors* that are sent outside the country in order to generate revenue for the growth of the economy excluding oil products. These non-oil export products are coal, cotton, timber, groundnut, cocoa, beans etc.

Today, as in the past, the growth of Nigerian economy remains partly dependent upon increasing productivity of the agricultural sector. Helleiner (2002:124) states that no matter how much development and structural transformation achieved, it will remain its relative dominance in the economy to many decades to come. Precisely, it is from agricultural exploits that the economy has received its principal stimulus to economic growth.

Agricultural sector can assist through the exportation of principal primary commodities which will increase the nation's foreign earnings and which can be used to finance a variety of development projects. The growth of the agriculture sector can make a substantial contribution to the total tax revenue, as well as having some implications for intersectional terms of trade. Also in the area of capital formation, the savings generated in this sector can be mobilized in development purposes, while increase in rural income as a result of increasing agricultural activities can further stimulate the product of the modem sector. The needs of the agricultural sector could indirectly influence the creating of additional infrastructures which are indispensable to rapid economic development. (Olaloku. 2001:13).

Another non-oil export to be dwelled on, is industrial sector. It is the fastest growing sector in Nigeria economy. It comprises of many manufacturing and mining. Nigeria has manufacturing base prior to 1960 and shortly after.

The problem was due to lack of modern technology skills, managerial experience of complex organizations and financial back -up. The problem was further aggravated by the colonialists' merchants convincing arguments on the goodness of comparative cost advantage. Nigerians were coaxed into concentrating their efforts in the production of primary agricultural products and exporting them to the metrological industries in Europe.

Our industrial sector took off after independent relied on satellite firms representing British interest. The bank sector, which is constellation of colonial banks branches and some companies that were able to invest in manufacturing were the multi-national that have access to funds, technology and managerial expertise. This greatly hindered the progress of indigenous entrepreneurs.

The Nigerian manufacturing sector has been described by Ikediala (1983) as consisting of more assembling plants. He says that the implication of this is that the industries have very little backward linkage in the economy, since the bulk of the inputs is imported, thus the manufacturing sector depends on imported raw-material the extent of 42%. The capacity utilization of manufacturing industry has always been low in this country. The reasons as put by CBN (1998) are not unconnected with raw materials scarcity, consumers resistance due to high prices, increase in cost of manpower. Others mentioned are equipment breakdown due to poor technology, lack of spare parts. Time lags between, when inputs are ordered for and when they arrive, cash flow problems in industries becomes a permanent features.

The Nigerian Civil war brought about the deterioration of the oil palm grooves and plantation were abandoned and little if any new planting was undertaken. As a result of that, the output of palm oil and palm kernel declined drastically. But according to Onwuka (1985), the problems of palm products are due to the stagnation in the production of this commodity, which is partly explained by the presence of wild palm trees, which are of low-yield quality, and the difficulties experienced in harvesting them. In addition, the old system of pricing which guarantees low producer prices for palm produce discourage substantial investment from being made for further production of this product. Also, the problem marketing boards cannot be over looked. Marketing board is an institution set up by the government with the exclusive right to buy and sell certain agricultural products.

They purchase some products locally export sales are made through the Nigerian marketing company, which is jointly owned by all state, marketing. One of the functions of the marketing board is to stabilize the prizes or our cash crops and hence creates stability of income for farmers and to accumulate funds for development purposes. But the operation has failed to provide incentives to farmers to increase their input. Also, the producers paid unnecessary tax and they took from the producers some money, which should have gone to them as income. They thus reduced the amount of capital available to the producers. This criticism, according to Adenira (1999) made the Federal Government to reform the Marketing Board System with a view to increase producers' prices and income. He said that the essential features of the new reform are the prices, which are now fixed by a single authority while producer taxation (export duty and produce sale tax) has been abolished. Another major innovation in the system is the creation of commodity boards with responsibility of marketing specific products whenever they are produced in the country. These boards are likely to reduce administrative problems and be more economical compared with all oil-produced state Marketing Boards previously in existence.

The major fault of the successive government that are supposed to sustain this sector through the building of macro-economic structures and incentives diverted their attention away from agriculture. The result was sharp in the export/import equation as country started importing even palm oil that was hitherto imploring from Nigeria. The situation was becoming worrisome thus by 1975 there were attempts to recapture the lost of glory of agriculture. General Olusegun Obasanjo's operation feed the nations becomes the first real expressed official attempt in this direction. It was followed by the establishment of two River Basin Development Authorities in 1977. By 1978/1979, the federal Government made budgetary provision to establish 4,000 hectares of mechanized farms in each of the 19 states then, by 1979, there was a re-launch of *"operation feed the nation"* with a new tag "Green Revolution" with various committees set for its implementation (Oko, 1999).

If the efforts of the two leaders-General Olusegun Obasanjo and Alhaji Shehu Shagari's regimes could have brought vigor to the agricultural sector, the activities of the sic-commodity boards did not assist much.. Oko said that fixing export product prices without recourse to cost inputs discourages agriculture therefore remained slow because food demand was growing at the rate of 3.5% per in the 80's while agricultural output was crawling at 11 %. Between 1990 and 1998 GDP in agriculture declined to 6.2%. Then the distributions of agriculture inputs to producers were neglected, infrastructure facilities like motorable feeder roads, and irrigation facilities etc, made it difficult to increase agricultural production. CBN mandate to bank with regard to bank loans to agriculture as priority sector for preferential leading was floated.

THE TABLE BELOW SHOWS YEARLY PALM PRODUCTS PRODUCTION AND COCOA PRODUCTS PRODUCTION IN TONES, WHICH COVER FROM 1990-2004.

Year	Palm Products	Cocoa Products
1990	730	1190
1991	760	1363
1992	792	1321
4191993	825	419
1995	837	503
1995	871	403
1996	920	591
1997	938	635
1998	992	683
1999	1003	721
2000	1411	832
2001	1603	925
2002	114	1160
2003	1701	1165
2004	1770	1200

Source: CBN Annual Report and Statement of Account 2004

1.2 STATEMENT OF THE PROBLEM

Nigeria remained a net exporter of agricultural products between 1960 and 1970. Goods exported included palm oil, palm kernel, cotton, groundnut, etc. agriculture through export of non-oil products has a rosy record contribution up to 80% of the gross domestic product and providing employment for over 70% of the working population. But recently that has been a steady decline in terms of agricultural product, to export and an abandonment of sector by a large percentage of the work force.

But the story of its decline is as pathetic as its impact on industry that relied heavily on the sector for raw material. Thus, the decline come with surge of revenue from oil (oil export). But the discovery of crude oil alone cannot be held responsible completely for the misfortunes or decline of the agricultural sector. The policy instruments put in place by successive government were more of lip service than concrete action. The creation of Marketing Board contributes greatly to the decline of non-oil export since the Board has the dole right to export the commodities. It is also pertinent to say that fixing of export product prices by Marketing Board discourage further private investments in the sector. Furthermore, the sector suffer from inadequate credit facilities, they have no security to back-up their loan applications. Those who are lucky to be given loans do not make proper use of them. Even existence services were neglected, infrastructure facilities not provided, CBN directives on agricultural loans floated.

1.3 OBJECTIVE OF THE STUDY

This research has a particular focus that aims at examining the causes of growth in government revenue using non-oil revenue of the government as an instrument. The non-oil revenue spanning the range of products as agriculture and manufacturing. The major objectives are broadly defined as follows:

(a) To evaluate Nigerian's past and present non-oil exports effect in the promotion of economic growth.

(b) To evaluate government policies or measures towards boosting nonoil sectors contribution to the economy. (c) To evaluate the factors responsible for the decline in the contributions of non-oil revenue to the economy.

(d) To make recommendations on the ways of improving the non-oil sector

1.4 SIGNIFICANCE OF THE STUDY

1.4.1 The study of the contributions of non-oil export to the growth of Nigeria economy is significant and important, for this knowledge, it will enable the policy makers to formulate appropriate policies that will aim at improving on the quote of the total revenue brought about by the non-oil sectors of the economy. This study is also important and significant in that it will examine the various ways of improving non - oil outputs. This study will also evaluate the contributions of non - oil sector towards raising the living standard of Nigerians with in the period under review (1984- 2003).

Since not so much works have been done on the contributions of nonoil exports to Nigerian economic growth, this study will be of great importance.

1.5 SCOPES AND LIMITATIONS OF THE STUDY

This study is an attempt to evaluate and review agricultural products and policies in the economy towards economic growth and development in Nigeria. It intends to cover the periods between 1984 and 2003. It intends to evaluate the contributions of non-oil exports to Nigerian economic growth and development.

CHAPTER TWO

LITERATURE REVIEW

2.1 THEORETICAL LITERATURE

Non-oil export products are those commodities excluding crude oil (petroleum products), which are sold in the international market for the purpose of revenue generation. According to CBN publication (1998) on the Nigerian export product guidelines oil export and non - oil export had to be distinguished because of the great different in terms of volume and value of export earning between the two oil export had taking over the lead in the economy and had over the years contributed greatly to the country's export products accounting for over 92% of total volume of export and 86% of total volume of export and 86% of total volume of export and 86% of total earnings (CBN 2001).

There had been serious concern over the dependency of oil export earnings in the development of Nigeria economy. Following this successive government had tried to embark on diversification of the export base of the country thus; there had been efforts in the past and present time, to increase the non-oil export of Nigeria both in volume and earnings (values). As Soludo (2002) noted that easiest way to fastening over nation's economic recovering and development is to broaden over export base of non-oil exports, which will to invigorate the oiling sector of the economy and help place the economy on the sustainable development path.

According to CBN publication (2001) non-oil export products can be broadly classified into three major groups. These include:

(a) The Agricultural Commodities and Products.

(b) The Solid Mineral Export Products.

(c) The Craft and Manufactured Export Products.

2.1.1 THE AGRICULTURAL COMMODITIES AND PRODUCTS EXPORT

This category of export products was once the major source of export earnings to Nigeria and it was before and immediately after the nation's independence period to the oil boom period of late 1960's and 70's. The value and quality value of quality (volume) of agricultural commodity and products exports in the northern region agric export products like groundnuts and cotton, in the west, we had cocoa and rubber in the mid while in the eastern part we had palm oil and palm kernel products. In recent time we had other exportable agricultural products and commodities like cashew nut, sealer seed, bean seed, etc. The Obasanjo administration in 2004 had declared the nation's readiness to export cassava products worth over \$4 billion (US dollar) to countries in Europe and Asia within four years period. Thus there had been a guite cassava production revolution in the country to meet this demand. More government actions are needed in this direction to achieve this objective. In effect, there had been a concerted effort by the government to boost the agricultural exports of the country to enhance our economic development.

2.1.2 THE MANUFACTURE AND CRAFT EXPORT PRODUCTS

This is another part of non-oil export. In the country, the contribution of this category of export products is not encouraged in the years past. According to Ikpeazu (2001) the problem of manufacturing sector are numerous and these had cost the country to have its own fair share in the export of manufactured goods due to the quality and not meeting international standard. In the observation made by MAN (Manufacturing Association of Nigeria) in their 2002 general meeting, the government can help to revamp the sector by increasing the capacity utilization via infrastructure development programmes and financial assistance to the sector.

There was a boost in the craft and manufactured export product following the launching of the African growth and opportunity act (AGROA) by the United States government in 2001, which allowed for increased export of African goods and commodity to us market in (2004) it was reported by the ministry of commerce that Nigeria exports to us under the (AGROA) programme increased greatly amounting to over & 3.2 dollars Ministry of Commerce Publication (2004). More efforts should be regarded towards this direction to help widen Nigeria export share in the world market thus help to build a solid and sound economy.

2.1.3 THE SOLID MINERAL EXPORT PRODUCT

This is the last category of the non-oil export as discussed by the CBN. It contributed significantly to the export earnings of the country before the advent of oil. Solid mineral like coal, tin ore, columbines, limestone etc, were once the pride of the nation or the part and region where they were mined like coal for Enugu, tin ore for Jos, limestone for Nkalagu etc. their dwelling fortune could be attributed to the high dependences of oil and the neglect of these sector.

The quality of coal and tin had declined greatly over the years. But according to Mrs. Ezekwesiri the Former Minister of Solid Minerals during her acceptance speech in Abuja recently said that the solid mineral hold the key to Nigeria future as if well harnessed the revenue from the sector can conveniently surpasses that of the products its derivatives in the near future, coal for example, Poland and export market in mail, Britain, Poland and other European countries as these had indicates their interesting import of the Nigerian coal which had be adjudged the best in the world as it was surplus free.

2.2 EMPIRICAL LITERATURE

Many writers in Nigeria's export have chosen the stance of relating the behavior of the country's exports to change within the importing countries.

Therefore, they tend to see national income as one of the major determinants of the country's imports from Nigeria. One of such works undertaken by Olayide (1980) covered the pricing of Nigeria's export commodities. He observed that Nigeria export prices are volatile and adopted on econometric approach to empirically obtain the coefficient of f flexibility for prices of numbers of Nigeria.

Agricultural Commodities. Olayide specified his model with which he found only the quantities of palm oil, groundnut and cocoa exported to be statistically significant. The major shortcoming of Olayide's work is that since he sells out to find the degree to which Nigeria export quantities reacted to changes in export to changes in the income of the importing countries.

In 2001, Olayide and Dupe Olatundosun working together conducted another study on the demand for Nigeria's exports for the period 20002001. They included that only groundnuts, groundnut oil, palm oil, palm kernel, and cotton in their investigation. Their interest lied mostly in determine the elasticity of demand for the mentioned non-oil export products and the other factors responsible for fluctuations in the demand for those products. They included changes in income of the importing countries in their model. But again, their work was rendered rather defective by the inclusion of a variable for a measure of export bases. This is because in their result the measure of export control showed a positive sign, which means that higher the export of these products. This dedication could not have been plausible.

Another defect of the Olayide-Olatundosun's work is that total Nigeria Cocoa export was regressed on the means of real income of only four importers. This formulation wrongly presumes that the demand of the four countries whose real income was used constitutes the total demand for Nigeria's exports. It would have been more logical to estimate the individual function in each country. They forget to acknowledge the fact that the conditions that influence the demand for Nigerian Cocoa, for instance, many vary from one country to the other.

Oni (1986) conducted a research in Nigeria's palm oil export. His main point of deviation from other peoples work is that instead of aggregating, he took a separate study of the quantities each of the major trading partners. This new approach will finish information on the demand conditions that might exist in each of the countries importing Nigeria palm oil.

In another work conducted by J. Mars, he discovered that the most important problem encountered when considering ways to bring about the full utilization of Nigeria resources is concerned with export industry. This is because, according to him about one third of the total Nigeria output is for export; the export industry is the core of the money exchange economy of Nigeria, so that Nigeria is sensitive to conditions in the export industry. Mars noticed that by the very nature of Nigeria's exports, she cannot effectively influence the foreign markets, but only can bring about improvement only within the limit sets by conditions of world supply and world demand for the type of goods exported by Nigeria or competing with them. This is because there are many other countries that produce similar products.

Bases on this observation therefore, it means that government cannot adequately improve conditions since it cannot effectively influence foreign demand. At the best, it would only redistribute and various other devices,, but not to influence it by manipulating foreign demand. Therefore, the problem of preventing fluctuation of world demand and supply of exports is an international problem, which only many nations acting in concert could undertake to solve.

As a guide on how to reduce fluctuation, in supply and demand on export mars sub-divided Nigerian export products into five groups according to the income and price elasticity of demand and supply. He suggested that there should be no two groups for which income and price elasticity of demand is above unity. These groups included among other commodity palm oil, palm kernels and cotton seed. The other subdivision in which he included such commodities as Sheepskins, Sheer nuts, Groundnut and Benny seed should be subjected to an international quota scheme because the demand for them is income inelastic.

Akinole (2001) in his study investigated the prospects for Nigerian petroleum, groundnut, Cocoa and Palm oil in the expanded economic commodity. He discovered that the demand for Nigeria oil by the common market countries is price elastic. But the membership of Nigeria in the organization of petroleum exporting countries, a collective bargaining organization makes the exploitation of the high price elasticity of demand unlikely. He said that there exists an effective competition between Nigeria's groundnut and Soya bean in the following common market countries France, Netherlands, Belgium, Luxemburg and United Kingdom. He said that Nigeria groundnut is inferior goods in these countries. But remarkably, groundnut oil and cake are not inferior goods in these markets. He observed that this might be due to the fact that the quantities of these products imported from Nigeria are very small proportions of total quantities observed. As a result, Nigeria should shift from the export of groundnuts to groundnut oil and cake and this should be boasted by an effective export promotion in market currently exploited and/or the search for new market. He also concluded that the demand for Nigeria Cocoa is price

inelastic in Britain but elastic in many other R.E.C countries. He said that the Britain lack response to changes in the Nigeria price of cocoa is a price of valuable information to our policy makers who have long been concerned with the effect of Britain's entry into the common market on Nigeria's cocoa export, therefore the higher tariff of 4% which Nigeria cocoa export to Britain now faces should not be expected to have any serious repercussions on Nigeria's cocoa export to Britain.

He summarized by saying that the prospects Nigeria's petroleum export to the EEC is bright. However, it should be expected that recession or low rate of real growth in the EEC would seriously diminish Nigeria's foreign exchange earnings derived from oil. Since he observed that groundnuts become inferior goods at higher levels of per capital real income, he concluded that the role played in export earnings by groundnuts would diminish significantly over the years. As for groundnut products the relative increase in their export earnings will depend largely on the effectiveness of export promotion shames. He also concluded that future increase in the foreign exchange earnings of cocoa would depend heavily in the growth in per capital real income in the less important cocoa consuming countries of EEC since the income elasticity for cocoa are much higher there.

According to Ojo (1999:13), the major problems constraining the development and growth of non-oil exports in Nigeria include the following: low level of production; there are low levels of production in both the agricultural and industrial sectors, this is attributable mainly to high cost of production which limited the capacity of producer to procure their needed inputs. Cost of production has been pushed up by high interest and exchange rates as well as the poor state of basic infrastructure. The major implications of low level of production are as domestic outputs are not enough to satisfy local consumption, there is hardly an exportation surplus for most goods, also the high cost of production which results in high product prices makes locally produced goods uncompetitive in the world market.

Secondly, inadequate knowledge of exports processes, procedures and incentives. Exports require accurate and timely information on markets, prices and quality standards and exports procedures. Also, exporters are not provided with incentive such as quality inspection and certification, movement of export goods and clearing of imported goods, among other. All these frustrate a lot of exporters out of business because of their implication of production that is high cost of output owing to time cost money wanted.

Thirdly, poor state of disrepair, of infrastructure initiate against the effective manufacturing of products to services export trade and resulting in outright delays or spoilage. The state of power supply and telecommunication facilities among others things is inadequate for the dynamic requirement of foreign trade and these hampers the growth of the non-oil exports in Nigeria.

Ojo, also suggested solutions to the problem. He said that there is need to promote expanded production in both the agricultural industrial sector. He said that a higher level of output will help to achieve satisfy local demand for goods, leave a reasonable balance for exports and reduce the unit cost of production. That export products should be diversified and promoting of foreign private investment also upgrading of basic infrastructure. Research has done much work on the role of agricultural production and export trade on the Nigerian economy.

Onwusi (2000), the availability of an adequate food supply is vital because food storage leads to high prices, which in turn, lead to demand for higher wages. He argue that this could have adverse effect on the level of investment and therefore on the rate of economic growth. In addition, he says that inadequate local commodity supply means that massive importation will take place, which could also be a drag on economic growth, as the nation's foreign exchange will be raised for buying capital equipment, which is necessary for the development programmed. Persistent importation of palm product and other agricultural products cannot fail to have adverse effects on the local production because of the belief that since agricultural products ate imported no pressing need to expand local production.

Helleiner (2002:192), shows that only a small part of total agricultural output of the developing countries receives elaborates local processing; since the bulk is usually sent abroad. He points

out that agriculture normally performs better in the supply of intermediate inputs to other sector than in the use of others intermediate inputs.

Ifeanyi (2002:42), said that government derives revenue through various indirect taxes imposed on agricultural products and used to provide both economic and social infrastructure to the people through tax holdings or concession are allowed from those engaged in the exportation of agricultural products such as cassava now. She maintains that this policy is designed as an export promotion strategy pursued by the government. Also derives revenue from the sales of some locally distributed goods. If eanyi also pointed out that export trading also helps to improve the balance of payment/trade position in favour of the country of origin, as well as stimulate local production and processing. It allows for the exploitation of the principles of comparative advantage and economics of scale in production. According to Olaloku (2001:14), the problem confronting palm produce one shortage of qualified manpower, inadequate supply of palm product inputs, inadequate extension services and the poor condition of feeder roads

and other transport facilities. He also includes lack of effective supporting services such as farm credit, marketing facilities, and the problem of land ownership impose any land tenure system in most part of the country.

In addition, Ekpete (2001:48), remarks that the most pressing problem facing palm product in Nigeria today is that of evolving a feasible level of agricultural mechanization. He goes further and said that mechanization of the projects and programmes comprise irrigation schemes, mechanical system of cultivation,

private of technical and specialist agricultural extension staff and supplies of input such as fertilizers. He believes that cultivation of plant kike cocoa, palm tree, etc. Cut across the ecological zones and their cultivation operations are analogous in many ways ad they requires; seedbed preparation/land clearing planting operations weeding, harvesting and post-harvesting operations that is handling, storage and processing.

Ozochi (2000:63), includes poverty and illiteracy as some of the problems controlling agriculture in Nigeria. He posits that most people in

Nigeria live below that poverty line and therefore engulfed in the vicious circle of poverty. He maintains that the people have limited or lower incomes; lower income encourages

Lower investment and eventually eliminate in low productivity similarity, he says that most Nigerians are illiterates, and about 80 percent of them live in rural areas and they engage in subsistence agriculture. Because they are mostly illiterates, they find it difficult to keep abreast with changes in the modem practice of agriculture.

According to Oduala (1999:43), the reasons for relatives decline of palm produce on the nations export list one firstly, the remarkable growth of petroleum has changed the composition of the nations export. Secondly, the production of palm produce has not expanded to desired level due to the relative neglect of pal produce. Furthermore, an expanding home demand for this commodity has also meant that less is available for export. For example, home demand now accounts for the entire production of palm oil.

Now, government policy and strategies for promoting production of palm product and other agricultural palm produce and agricultural product to be enhanced in Nigeria certain conditions must be fulfilled and strategy adopted. A programme of technical change and innovation must be introduced, and the government must play a leading role in this. It must be necessary to create supportive social institutions.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter is concern with the presentation of research methodology employed in the study that is the acquisition of relevant data and analyzing the same, using appropriate statistical tools.

Modem modeling strategies are data centered as they allow data play strategic roles in the analysis of observation. This is in content with the view of the traditional modeling practices, which sees specification of model as an exclusive domain of theory. Modem modeling approach however, includes the specification searches guided by theory as an integral part of data analysis. Data are therefore allowed to play an active role in determining among rival specifications the best.

In this research work, the Explanatory Data Analysis (EDA) which is one of the modern modeling approaches will be employed. The EDA emphasizes mainly on learning *from* data as to arrive at an explanation. The reason being that data by themselves are useless without an interpretation.

3.1 Model Specification

Now, it is obvious that non-oil export is not the only independent variable that Gross Domestic Product (GDP) in Nigeria. As such, other variables do affect GDP.

Specification of model involves the variables which will be included in the model; the appropriate expectations about the sign and size of the parameter of the function, and (he mathematical forms of the model. There are several economic models that can be used to dive the estimators of the parameters of economic relationships. In this study, a two-way multiple regression model is used to analysis and establish the relationship variable. The two-way multiple regression techniques is used because I gives he best fit, and is an unbiased estimator. 3.2 Definition of Variable

In the Nigerian economy, economy growth (GDP) is associated with Various micro-economic variables. Among these variables included are:

GDP: Gross Domestic Product at current market prices.

Non-oil: Non-oil exports revenue.

Oil: Oil Export Revenue

GEX: Government expenditure

The functional form of this model is as thus:

GDP = f (NON-OIL, OIL, GEX) the learner

functional forms are as thus:

 $GDP = b_0 + b_1 \text{ NON-OIL}, + b_2 \text{ OIL} + \mathbf{b_3} \text{ } GEX + U$

Where t= 1984-2003

B_o = Intercept Term

 B_{1-3} = Regression Co-efficient

U = The error or disturbance term.

3.3 Assumptions of the Error Term (U)

According to Kousoyiannis (2003), the following are the assumptions of the error term (U):

(a) U is a random real variable

- (b) The mean of U is zero at any particular time.
- (c) Homoscedasicity or constant variable of U.
- (d) The variable U has a normal distribution
- (e) The explanatory variables are measure without error.
- (f) U is independent of the explanatory variables
- (g) Non-autocorrelation of U.
- (h) The model is correctly specified.
- (i) The model is correctly identified.
- (j) The macroeconomic variables are correctly specified.

Based on these assumptions, we build our model.

3.4 Nature and Scope of Data Collection

The study makes use of secondary data sourced from institutions like the Central Bank of Nigeria (Annual reports and statistical bulletin). Others include Caritas University Library, Federal Office of Statistics (FOS). The study covers the period, from 1986- 2000

3.5 Method of Data Analysis

The study makes use of ordinary least square (OLS) method of data analysis. We adopt the ordinary least square criterion because the alternative criteria or econometric techniques like the two-stage least square (2 SLS), full information maximum likelihood (FLML) among others, are more sensitive to specification errors of autocorrelation and regression than the OLS. The ordinary least square (OLS) estimator possesses the Blue (Best linear Unbiased Estimate) properties, which include, efficiency, consistency

and unbiasness. The P.C. give 8.0 Computer software was applied for the analysis of data.

3.6 Testing of Hypotheses

The above hypotheses will be tested at 5 percent or 0.05 level of significance. The null hypothesis is acceptable if the probability at which the t-value is significant is greater than the chosen level of significance. Otherwise, the alternative hypothesis will be accepted, for the entire variable included.

3.7 Evaluation of Model

3.7.1 Evaluation based on Economic Apriori Criteria

This test is carried out to check if the signs and magnitudes of the estimated parameters conform to what economic theory postulates.

3.7.2 Evaluation based on statistical criteria

The coefficient of determination (R^2)

Thus R² explains the total variation in the dependent variable (GDP) caused by variations in the explanatory variable included in the model.

The F- Test

This test is used to test whether the variables included on the work are significant or not in determining the level of domestic saving in Nigeria. Each element of s follows the distribution with N-K degree of freedom.

The T- Test

This tests the overall significance of the regression model.

3.7.3 Evaluation based on Econometric criteria

Test for Auto correlation

This is to test whether the errors corresponding to different observations are uncorrelated. The test will adopt the Durbin-Watson statistic because of the presence of the lagged dependent variables as are of the regressors, which indicates that the model is an autoregressive model (Gujarati, 2004).

Test for normality

This test will be carried out to test whether the error term follows the normal distribution. The normality test would adopt the Jarque –Bera (JB) test of normality. The JB test of normality is an asymptotic, or large-sample, test. It will also base on the OLS residuals.

Test for heteroscedasticity

This test would be conducted to ascertain whether the error U, in the regression model have a common or constant variance. The white heteroscedesticity test (with no cross term) will be adopted.

3.8 sources of Data and Collection

Data used for the study are mainly secondary data sourced from institutions like the central bank of Nigeria (Annual reports and statistical bulletin). Others include caritas university library, Federal office of statistics (FOS). These data are gathered for period of 25 years (1986-2010). Hence, the reliability of the estimates depends on how accurate the data gathered through these sources are; variables used for regression (1986-2010) the data used in testing our hypothesis in this chapter is secondary. The findings are presented and analyzed.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULT

4.1 PRESENTATION OF RESULT

We specified a model in chapter three to capture the impact of non-oil exports, oil exports and government spending on the economic growth of Nigeria. In the empirical analysis of the effect of these variable on GDP of Nigeria, the ordering least square (OLS) regression techniques was used. We adopt this method because of its unique estimating properties of unbiaseness, efficiency, consistency and minimum or least variance.

Presentation Of Result

Table	4.1
-------	-----

Variable	Coefficient	Std. Error	T-	T-Prob	R ²		
			value				
С	1-0702et005	2.2736et005	0.471	0.6427	0.0104		
Non-oil	22.820	6.4128	3.558	0.0019	0.3762		
Oil	1.5242	0.17188	8.868	0.0000	0.7892		
GEX	1.3712	0.87242	1.572	0.1310	0.1052		
$R^2 = 0.994426$, $F = (3,21) = 1248.9 (0.0000)$, BW = 2.72							

Result Interpretation

The interpretation of the above result in terms of coefficient is given as follows;

The intercept is 0.994426. This shows that if all the explanatory variables are held constant, GDP will be 0.994426.

The coefficient of non-oil export (Non-oil) is 22.820. This shows that non-oil export is positively related to GDP and that a unit increase in non-oil export will increase GDP by 23% approximately. The coefficient of oil export is 1.5242. this also shows that oil export (oil) is positively related to GDP and that a unit increase in oil export will increase GDP by 15% approximately. For government expenditure (GEX), the coefficient is 1.3712. This shows that government expenditure is positively related to GDP and that a unit increases in GEX will increase GDP by 14% approximately.

4.2 EVALUATION OF RESULT

4.2.1 EVALUATION BASED ECONOMIC APRIORI CRITERIA

Our parameter estimates are expected to conform to apriori expectation as it was discussed in chapter three. The table below shows the outcome of our model parameter on apriori ground.

Table 4.2

Variable	Expected sign	Obtained sign	Conclusion
Non-oil	Positive (+)	Positive (+)	Conforms
Oil	Positive (+)	Positive (+)	Conforms
GEX	Positive (+)	Positive (+)	Conforms

EVALUATION BASED ON ECONOMIC APRIORI CRITERIA

The apriori expectation for the explanatory variables were satisfied showing that all the variables conforms with economic acceptability of the estimates.

4.2.2 EVALUATION BASED ON STATISTICAL CRITERIA

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

4.2.2.1 COEFFICIENT OF DETERMINATION (R²)

In our model, $R^2 = 0.994426$, which implies that approximately 99% of the variation in the dependent variable (GDP) is explained by the variations in the explanatory variables.

Judging by the size of the coefficient of determination (R^2), 99% shows a good fit for the model. Meaning that 99% variation is explained in the model leaving around 1.02 variation in the model unexplained.

4.2.2.2 STUDENT T-TEST

a student T-test is used to determine the significance of the individual parameters estimates. In doing this, we compare the calculated T value in the regression results with the T- tabulated at n-k degree of the freedom (df) and at 5% level of significant.

The test will be carried out under the following:

H₀: β = O (the parameters are statistically insignificant)

H₁: $\beta \neq O$ (the parameters are statistically significant)

 β = Coefficient of the parameter

H_o: null hypothesis

H₁: Alternative hypothesis

Decision Rule

Reject H_0 if T-cal > T- tab or accept H_0 is otherwise

n= 25, k = 4

Therefore, n-k = 25-4 = 21 at 5% level of significant

Table 4.3

Variable	T –cal	T - tab	Decision	Conclusion
С	0.471	<u>+</u> 3.182	T – cal < T- tab	Significant
Non-oil	3.558	<u>+</u> 3.182	T – cal > T- tab	Significant
Oil	8.868	<u>+</u> 3. 182	T- cal > T- tab	Significant
GEX	1.572	<u>+</u> 3.182	T – cal < T- tab	Not significant

The interpretation of the result of the T-test carried out shows that nonoil and oil are statistical significant, while GEX is statistically insignificant.

4.2.2.3 F-TEST

This evaluation carried out is to determine if the independent variables in the model are simultaneously significant or not. If F is greater than the critical F at 0.05 level of significant, then reject the null hypothesis, H_0 & accept the alternative hypothesis H_1 .

 $H_0: \beta = O$

H₁: $\beta \neq O$

H₀: shows that the model is not significant

H1: shows that the model is significant

Decision Rule

From the decision rule, we accept the null hypothesis H_0 and reject the alternative hypothesis H_1 : reject H_0 if F- cal is greater than the F- tab. For the numerators, the degree of freedom is k-1 that is 4-1 =3, for the denominator, the degree of freedom is n-k that is 24-4 = 21 at the 5% level of significant.

Table 4.4

F –cal	F – tab	Decision
1248.9	3.07	Significant

From the result, it is observed that F-cal is greater than F-tab that is 1248.9 > 3.07, thus we accept the null hypothesis.

4.2.2.4 Standard Error

The null hypothesis for test is

H₀: β = O against alternative

 $H_1: \beta \neq O$

If the standard error is smaller than half of the numerical value of the parameter estimates that is (bi) < bi/2, we conclude that this estimates is statistically, significant. We therefore reject the null hypothesis that is

bi = 0 and accept the alternative that bi \neq 0 vice versa. This conclusion of sign of b is based on a two-tier test as 5% level of significant.

Variable	Std error	Coefficient	Decision	Conclusion
		(1/2)		
С	2.2736et005	3.5702	s(bi) < bi/2	Significant
Non-oil	6.4128	11.41	s(bi) < bi/2	Significant
Oil	0.17188	0.7621	s(bi) < bi/2	Significant
GEX	0.87242	0.6856	s(bi) > bi/2	Not significant

Summary of Error Test

4.2.3 EVALUATION BASED ON ECONOMETRIC CRITERIA

4.2.3.1 RESIDUAL NORMALITY

The test is conducted to ascertain if the error term follows a normal distribution. It follows a chi-square (x^2) test with two degree of freedom (second). The hypothesis is stated as:

 $H_0: \mu_1 = 0$ normally distributed

 H_1 : $\mu_1 \neq 0$ not normally distributed

Decision Rule

Reject H_0 if $x^2 > cal x$ tab $^{2(0.05)}$ at 2 degree of freedom and accept H_0 if otherwise.

Test statistics

$$JB = n \left(\frac{s^2}{6} + \frac{(k-3)^2}{24}\right)$$

Where n = sample size

S = skewness coefficient

K=Kurtosis coefficient

For a normally distributed residual, the value of s & k are 0 & 3. Since the JB computed is expected to be zero with a 2 degree of freedom, if the value is close to zero/ the P- value reasonably high the residuals are normally distributed. From the result obtained from Jarque – Bera (JB) test of normality, JB = 9.0827 which is shown in appendix, and from chi-square table X^2 tab. Therefore, since X^2 cal = 9.0827 < 32.671 at 5% level of significant and for this reason, we accept H₀& conclude that the error follows a normal distribution.

4.2.3.2 TEST FOR HETREROSEDASTICTY

This test asymptotically follows a chi-square distribution with degree of freedom equals to the number of regressors (excluding the constant term) the auxiliary model can be stated this:

 $\mu t = \beta_0 + \beta_1 \text{ non } -\text{oil } + \beta_2 \text{ oil } + \beta_3 \text{ GEX } + \beta_4 \text{ non-oil}^2 + \beta_5 \text{ oil}^2 + \beta_0 \text{ GEX}^2 + \mu_1$

Where vi = pure white noise error

This model is non and auxiliary R² from it is obtained. The hypothesis to be tested is H₀: $\beta_1 = \beta_2 = \beta_3 - \beta_n = 0$ (Homosedacity)

H₁: $\beta_1 \neq \beta_2 \neq \beta_3$ - - - - $\beta_n \neq 0$ (Hetrosedacity)

Note: the sample size (n) multiply by the R^2 obtained from the auxiliary regression asymptotically follows the chi-square distribution with degrees of freedom equal to the number of regression (excluding the constant term) in the auxiliary regression. Using Pc – given software package saves the above rigors by calculating the chi-square.

Decision Rule

Reject H₀ if X² cal x² tab at 5% level of significance, if otherwise, accept Ho from the obtained results, calculated x² =12.917 while tabulated x² $0.05^{(8)}$ 15.507. we accept the alternative hypothesis of homosedacity and conclude that error term does not have a constant variables.

4.2.3.3 Test for Autocorrelation

One of the assumptions of OLS regression model is that errors are independent. In the context of time series analysis, this means that an error µt.

The Durbin Watson the test compares the empirical d value calculated from the regression residuals, with dL and du in the table with their transform (4-dL) and (4- du).

Decision Rule:

 If d* < dL, we reject the null hypothesis of no autocorrelation and accept that there is positive autocorrelation of first order.

- If d* > (4-dL), we reject the null hypothesis and accept that there is negative autocorrelation of first order.
- If du < d* < (4-du) we accept the null hypothesis of no autocorrelation.
- 4. If $dL < d^* < du$ or if (4-du) < $d^* < (4-dL)$, test is inconclusive from our regression result, the $d^* = 2.72$

dL = 0.927

du = 1.812

4-dL = 3.073

4- du = 2.188

Hence: $du < d^* < 4$ –du, we accept the null hypothesis and conclude that there is no auto correlation in the model.

4.2.3.4 TEST FOR MULTICOLLINEARITY

This test was carried out using correlation matrix. According to Barry Feldman (1985), criteria multicollinearity is not a problem if no correlation exceeds 0.08.

Table

	GDP	NON-OIL	OIL	GEX	
GDP	1.000				-
Non-oil	0.9692	1.000			М
Oil	0.9890	0.9351	1.000		MM
GEX	0.9860	0.9747	0.9682	1.000	MMM

Where M shows, signifies, the presence of multicollinearity. The pressure of multicollinearity exist in all variables.

4.3 Evaluation of Research Hypothesis

 H_0 : $b_1 = 0$, there is no significant relationship between non-oil export and Nigeria (GDP).

 H_1 : $b_2 = 0$, there is a significant relationship between non-oil export and Nigeria (GDP)

From the regression result, we observed that the coefficient of non-oil export is positive implying a positive relationship with GDP. However, T-test showed that the impact of non-oil export and oil export are significant, while GEX is insignificant. Even though the entire regression is significant as seen from the F-test and the second order test, there is no basis for rejecting H_0 .

We therefore accept H_o and conclude that non-oil export has been significant in Nigeria's economic growth process.

CHAPTER FIVE

SUMMARY, RECOMMENDATIONS AND CONCLUSION 5.1 Summary

The essence of this project work has been to determine the effect of non-oil exports on economic growth in Nigeria between the periods (1986 – 2010). Bearing in mind that non-oil export alone is not the only determinant of economic growth; other variables were added, based on our methodology, as was independent variables. After the analysis, it was discovered that non-oil exports revenue, oil export revenue are significant and government expenditure is not significant. Based on the empirical findings, recommendations are made on how best to improve the contributions of non-oil export to the Nigerian gross domestic product (GDP). In the final analysis, a conclusion is drawn based on the various findings.

5.2 Policy Recommendations

In order to improve on the contribution of non-oil exports to Nigerian GDP, the following recommendations were made.

1. Encouragement of Export Promotion

The government should endeavour to support various export promotion programmes and institutions. This could be achieved by encouraging financial institutions, both formal and informal, to make loans available at reduced rates of interest for investors as to increase the level of investment in this country.

2. Diversification of the Export Base

There should be a quick diversion from monoculture economy to a multicultural one. This is so. Since the oil which Nigeria depends on is prone to shocks beyond the control of the country.

As such, crude oil revenue should be put so as to make Nigeria economy self-sustaining.

3. Reduction or Removal of Imports Tariffs

Tariffs paid on imports of equipment necessary to boost non-oil production in Nigeria are, so high that productions are averse to risk their resources so; there should be. a down ward review of [lie tariff/tax structures to reduce the cost. of production in Nigeria.

4. Efficient Resource Allocation and Use

The resources at the disposal of the government should be efficiently allocated and utilized if Nigeria is non-oil exports are to improve.

5. Proper Policy Implementation

Over the years, a policy has been made without their full implementation. So, to review the economy, proper policies must be. squarely implemented as to promote non-oil exports.

6. Improvement in Data

Collection and Banking Data in modern world play vital roles in planning; the government or policy makers should make provision for a systematic collection of data and their banking, by equipping the ' relevant ministries and parastatals with computers and other ICT gadgets that will improve the collection and accessorily of these data by researchers.

7. Political Stability

The political condition of this country has to remain stable as to attract both foreign and local investments in

Nigeria. This is because; no investor will be willing to invest in an atmosphere of politically instability, where policy changes rapidly.

5.3 Conclusion

The contributions of non-oil exports to the Nigerian economic growth over the years *(1986-2010)* has been declining dative to its level in the 1960s. Most policies and programs of government towards improving the non-oil sector of the economy either failed completely or partly in achieving its goals.

From the result of our study, we therefore concluded that non-oil exports adds positively on the Gross Domestic Product of Nigeria, and as such, effort's should be made to increase the tempo of economic activities in the non oil sectors of the economy. We therefore hope that the results of our findings will be a source of consultations for policy makers and other related bodies in a bid to achieve economic growth in Nigeria.

BIBLIOGRAPHY

- Akinole (2001) *The Role of Government in Promoting Agricultural Production and Export Trade in Nigeria.* Ibadan: Yinela Bola Publishing Company.
- Add lira, A. A (1999) *The Agricultural Sector in Nigeria: Problem and Prospects.* Lagos: Ibabaki Publishers. CBN (1998)
 "Export Guidelines" *CBN* Publication Vol.5 No. 4, June 1998, Abuja.
- CBN (2001) "Annual Statement of Account" December 2001.

Ekpete (2001) "Agricultural Sectors: Problems and Prospects." *The Guardian,* November 10.

- Hell.siner, G. K (2002). *Peasant Agricultural Government and Economic Growtli in Nigeria:* Ibadan; Homewood, Publishers.
- Ikpeazu, C. (2000).' "Tackling the Problems of Manufactory Sector of the Nigeria Economy/' Article of the Nigerian Industry Policy.
- Ifeanyi, N. B. (2002). *Leading Issues in economic Development.* Lagos: ACENA Publishers.
- Olayide, S. (2001). Some Estimate of Supply and Demand Elasticity Selected Commodities in Nigerian Foreign Trade: *Journal* of *Business and Social Studies,* Lagos: Vol. 1.
- Koutesoyiannis, A. (1987). **Theory of Econometrics.** London: Macmillan Press Ltd.

- *Ozochi, 0. (2000)* Economic: A Simplified Approach. Enugu: Fabsa Graphic Production.
- Olaloku, F. A (2001). **Structure of the Nigerian Economy**. Lagos: University of Ibadan Press.
- Onwusi, L. W. (1999). "Nigerian Economy and Prospects of Non-oil Exports Lecture at Savannah Bank," Onitsha May 10.
- Ojo, M. 0. (1999). "A Review and Appraised of Monetary and other Sectors Policy Measures in Federal Government Budget for 1999" **CBN Bulletin** Vol. 23, N0.1
- Oko, A. 0. (1999). "Agricultural Sector: The Impact if Increasing Productivity in Non-oil Products" **The Guardian.** March 20.
- Soludo, C. (2002). "Repositioning Nigeria for Regional Economic Power: A. Paper Presented by the C B N Governor at the seminar Organized by Nigeria. Export Position Council." August 4 2002 Lagos.

APPENDIX I

DATA PRESENTATION

YEAR	GDP	NON-OIL	OIL	GEX
1986	69146.99	552.1	8368.4	16223.7
1987	105222.84	2152	28208.6	22018.7
1988	139085.3	2757.4	28435.4	27749.5
1989	216797.54	2954.4	55016.8	41028.3
1990	267549.99	3259.6	106626.5	60268.2
1991	312139.74	4677.2	116856.5	66584.4
1992	532613.83	4228.3	201384.8	92797.4
1993	683869.79	5022.3	213778.8	191228.9
1994	899863.22	5349	200710.2	160893.2
1995	1933211.55	20102.8	525669.6	248768.1
1996	2702719.13	20059.5	1108187.1	337417.6
1997	2801972.58	25629.3	1065502.1	428215.2
1998	2708430.86	31222.7	657843.5	487113.4
1999	3194014.97	19493	1169476.9	947690
2000	4582127.29	24822.9	1920900.4	701050.9
2001	4725086	28008.6	1973222.2	1017996.5
2002	6912381.25	94731.8	1649445.8	1018178.1
2003	8487031.57	94976.4	2993110	1225988.3

2004	11411066.91	113309.4	4489472.2	1384000
2005	14572239.12	105955.88	7140578.92	1743200
2006	18564594.73	133594.99	7191085.64	1842587.7
2007	20657317.67	199257.94	8110500.38	2348593
2008	24296329.29	247838.99	9913651.13	2880200
2009	24794238.66	289152.57	8067233	3116985.6
2010	29205782.96	396377.16	10639417.37	3845720

Source; CBN Statistical Bulletin Volume 21 Dec 2010

APPENDIX II

The present sample is: 1986 to 2010

Variable	Coefficient	Std. Error	t-value	t-prob	PartRy
Constant	1.0702e+00	2.2736e+00	0.471	0.6427	0.0104
NON-OIL	5 22.820	5 6.4128	3.558	0.0019	0.3762
OIL	1.5242	0.17188	8.868	0.0000	0.7892
GEX	1.3712	0.87242	1.572	0.1310	0.1052

Ry = 0.994426 F(3, 21) = 1248.9 [0.0000] a = 729982 DW = 2.72

RSS = 1.119034064e+013 for 4 variables and 25 observations

APPENDIX III

The present sample is: 1986 to 2010

Testing for Heteroscedastic errors

Chiy (6) = 12.917 [0.0444] * and F-Form(6, 14) = 2.4942 (0.0745)

V01=NON-OIL V02=OIL V03=GEX

Heteroscedasticity Coefficients:

	Con	stant	V01		V02	V03	V0ly	V02y	,	
Coeff.	1.41	2e+010	-7.41e-	⊦006 9.	. 528e+0	05 –1.58	3e+006	-3.39	93 -0.073	393
t-value	e	0.05616	6 - 0.	5382	1.628	0.8871	-0.0	5891	– 1.38	4
coeff: t-value	Ð)3Y)6557 345						
RSS :	=	1.01	1231e+	-025		å = 8.5	0342e	+011		