COMPARATIVE EFFECTS OF OIL AND NON-OIL EXPORTS IN ECONOMIC GROWTH IN NIGERIA

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BEING A PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, FACULTY OF SOCIAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY.IN PARTIAL FULFLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.SC) DEGREE IN THE DEPARTMENT OF ECONOMICS, UNIVERSITY OF BENIN, BENIN CITY

NIGERIA

MAY, 2024

CERTIFICATION

This is to certify that the research project titled Comparative Effects of Oil and Non-Oil Exports in Economic Growth in Nigeria was being researched and submitted by me MISS UKPIEBO OSEN FRANCA for the certification of Bachelor of Science (B.Sc) degree in the Department of Economics, Faculty of Social Science University of Benin, Benin city. This research was carried out under the supervision of the following persons;

_____ _____

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(Project supervisor)

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DR. S. O IGBINEDION **DATE**
(Head of Department)

_____ _____

DR. S. O IGBINEDION **DATE**
(Project Co-ordinator)

DEDICATION

This Research work is dedicated specially to God and my family (THE UKPIEBO'S).

ACKNOWLEDGEMENTS

My profound gratitude goes to God for always been my guardian through my days in school, I give him all the glory for the successful completion of this research work, and to my amiable supervisor Mrs Obianuju O. Nnadozie for always taking out her time and patiently guiding me through the period of this research, I will forever be grateful and may God continue to bless and keep you. To all the lecturers of the department of Economic, University of Benin I really appreciate all the good work you all do in this citadel of learning, may you all never run out of knowledge and good health.

I will be remiss not to mention the unwavering love and support from my parents Mr & Mrs Ukpiebo. To my ever lovable siblings and also to my friends.

Lastly, to everyone who has contributed directly or indirectly to the achievement of this great success, I say a very big thank you and may God bless you all.

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ABSTRACT

This study investigates the comparative effects of oil and non-oil exports on economic growth in Nigeria from 1990 to 2022. Using regression analysis, the research examines how changes in investment, oil exports, non-oil exports, and exchange rates impact Real Gross Domestic Product (RGDP). The findings reveal that non-oil exports significantly and positively influence economic growth, emphasizing the necessity of diversifying Nigeria's export base. Conversely, oil exports show a negative but statistically insignificant effect on RGDP, indicating limited impact despite the sector's economic prominence. Additionally, exchange rate depreciations positively affect economic growth by enhancing export competitiveness. However, investment changes do not exhibit a statistically significant effect on RGDP within the model. The study underscores the importance of policies aimed at export diversification, competitive exchange rate management, and investment attraction to foster sustainable and inclusive economic growth in Nigeria. The results suggest that reducing dependence on oil revenues and promoting non-oil sectors are critical for economic resilience and long-term development.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The pursuit of economic growth through export promotion and diversification has become a paramount objective for many developing economies, including Nigeria. The significance of exports lies in their ability to contribute to economic growth by supplying the state's budget with earnings and foreign currency which in turn can be utilized to enhance infrastructure and create an attractive investment climate. The promotion of exports is crucial for improving the current account balance and positioning the nation favorably in the global economy. Furthermore, it plays a vital role in expanding the local market, fostering competition, and driving advancements in production technology.

Historically, Nigeria has relied on both oil and non-oil exports as sources of revenue. However, the discovery of oil in the Oloibiri area of Bayelsa State in 1956 marked a turning point, leading to the dominance of the oil sector in the country's economy. This shift has raised concerns about overdependence on oil, neglecting the non-oil sector and its potential contributions to economic growth. The negative and positive effects of oil exploration have impacted Nigeria's political, social, and economic landscape, and questions have arisen regarding the actual impact of oil proceeds on economic growth. (Fiiwe & Turakpe, 2017)

Before the oil boom in the 1970s, agriculture was the dominant sector, contributing significantly to GDP and employing a large percentage of the population. Non-oil exports, primarily agricultural products such as cocoa, palm products, cotton, groundnut, timber, and rubber, played a substantial role in the country's revenue. However, with the sudden importance of oil in the global economy, especially during the 1970s, Nigeria's economic landscape underwent a structural shift. The share of non-oil exports in GDP declined, leading to an unhealthy dependence on crude oil. (Ajayi, 2016)

The oil industry became Nigeria's largest, providing a substantial portion of foreign exchange earnings and federal revenue. The oil boom of the 1970s resulted in a neglect of other sectors, and by 2002, oil and gas exports accounted for over 98% of export earnings and about 83% of federal government revenue (CBN, 2016). The overreliance on oil left Nigeria vulnerable to the volatility of global oil prices, as evidenced by the economic recession in 2015 following a sharp decline in oil prices.

Despite the challenges posed by the mono-cultural nature of the economy, the importance of exports, both oil, and non-oil, cannot be overstated. Exports of goods and services represent crucial sources of foreign exchange income, alleviating pressure on the balance of payments and creating employment opportunities. The concept of export-led growth emphasizes the role of export expansion in driving economic growth. While practical evidence supporting export-led growth may not be universal, managed openness to trade, especially through non-oil exports, is recognized as a mechanism for

achieving rapid growth. Nigeria, as a developing country, has faced the complexities of political, social, and economic development. The historical shift from agriculture to oil as the mainstay of the economy has made the country susceptible to the effects of oil price shocks. The economic downturn in 2015, triggered by a global fall in oil prices, highlighted the risks associated with overreliance on oil.

Various researchers (Javad et.al, 2014; Kilavuz and Topcu, 2012; Udude and Okulegu, 2012; Safdari and Zaroki, 2012; Oyatoye et.al, 2011; among others) have explored the relationship between exports and economic growth within the neo-classical framework. Some studies support export-led growth, while others find mixed effects or negative relationships. Importantly, there is a need to distinguish between the effects of oil and non-oil exports on economic growth. The present study aims to contribute to this area by examining the extent of the contribution of both oil and non-oil exports to the growth of the Nigerian economy.

The shift from the non-oil sector, which contributed significantly to the Nigerian economy in the 1960s, to the dominance of oil as the mainstay poses challenges for economic stability. Diversification has become a focal point, with increasing recognition of the need to promote non-oil exports as an alternative source of revenue. The study will critically evaluate the effects of non-oil exports on the growth of the Nigerian economy from 1990 to 2022, considering the implications of the mono-cultural reliance on oil and the potential benefits of a diversified export portfolio. In

doing so, the research aims to offer insights and recommendations for a more resilient and sustainable economic future for Nigeria.

1.2 Statement of the Problem

Despite ongoing efforts to diversify Nigeria's economy, the nation remains heavily reliant on oil exports, exposing it to the inherent risks associated with the global oil market, such as price fluctuations and market volatility. This over-dependence on oil has led to economic instability, characterized by high inflation rates and vulnerability to external shocks. While the government has aimed to broaden the export base by promoting non-oil exports, significant challenges persist in both sectors, impacting economic growth. The erratic nature of the global oil market and the finite nature of crude oil resources necessitate a shift towards a more diversified and sustainable export portfolio. However, the path to achieving this diversification is fraught with obstacles.

Several factors contribute to the decline in prices and the overall challenges faced by both oil and non-oil exports in Nigeria. Resource dependency, particularly on oil, has resulted in the neglect of other sectors such as agriculture and manufacturing, limiting the country's overall export competitiveness. Global market dynamics, influenced by supply and demand fluctuations and changes in trade policies, further exacerbate the challenges faced by both oil and non-oil exports.

Infrastructure and productivity challenges, including inadequate transportation networks, power supply, and limited access to credit, hinder the competitiveness and productivity of both oil and non-oil export industries. These challenges not only affect the prices of non-oil exports but also impact the overall growth potential of the Nigerian economy.

Additionally, the economic theory of comparative cost advantages, as articulated by Ricardo, suggests that countries should export commodities in which they have a comparative cost advantage. However, existing distortions in Nigeria's economy raise questions about what needs to be done to fully develop both the oil and non-oil sectors, ensuring sustainable economic growth.

While some studies have explored the nexus between oil exports and economic growth, and others have examined non-oil exports, a comprehensive understanding of the comparative effects of both sectors on economic growth is lacking. Existing research often fails to address the combined impact of oil and non-oil exports, hindering a holistic approach to export diversification.

Sequel to the foregoing discussion, the study seeks to answer the following research questions:

- Does non oil export affect Nigeria’s economic performance?
- What is the effect of oil exports on economic growth in Nigeria?

Addressing these questions will provide a comprehensive understanding of the challenges and opportunities associated with both export sectors and inform strategic measures for achieving a more resilient and diversified Nigerian economy.

1.3 Objectives of the Study

The broad objective of this study is to examine the effects of Non-oil exports and oil exports on economic growth in Nigeria. The specific objectives of the study are to:

- assess the effect of non-oil exports on Nigerian economic performance; and
- examine the influence of oil exports on economic growth in Nigeria

1.4 Research Hypotheses

- Ho: Non-oil exports have no significant effect on Nigerian economic performance.
- Ho: Oil exports do not affect economic growth in Nigeria

1.5 Significance of the Study

The study on the comparative effects of oil and non-oil exports on economic growth in Nigeria holds immense significance for various stakeholders, policymakers, and the broader economic landscape. The findings of this research are expected to contribute valuable insights into the complexities of Nigeria's export sectors and inform strategic measures for achieving a more resilient and diversified economy.

For policymakers and government institutions, the study will provide evidence-based recommendations on how to navigate the challenges posed by over-reliance on oil. Insights into the significance of non-oil exports and their potential impact on economic performance will guide the formulation of policies aimed at promoting a more diversified and sustainable economic base. The study's findings will support informed decision-making for economic development and growth.

Economic planners and development agencies can benefit from the study by gaining a nuanced understanding of the comparative effects of both oil and non-oil exports. This knowledge is crucial for developing comprehensive strategies that leverage the strengths of each sector, address existing distortions, and foster sustainable economic growth. The study's outcomes will contribute to the design of targeted interventions and development initiatives. The comparative effects of oil and non-oil exports on economic growth in Nigeria are of paramount importance for the country's sustainable development. The study's findings have the potential to shape policies, guide investments, and contribute to the collective efforts of various stakeholders towards building a more robust and diversified Nigerian economy.

1.6 Scope of the Study

This study focuses on the comparative effects of oil and non-oil exports on economic growth in Nigeria. The research delves into the historical transition from a

predominantly non-oil economy to one dominated by oil, examining the implications of this shift on economic stability and growth. The analysis covers the period from 1990 to 2022, investigating the contributions of both oil and non-oil sectors to Nigeria's economic performance. Data for the study is sourced from reputable institutions, including the Central Bank of Nigeria (CBN), National Bureau of Statistics (NBS), and other relevant sources. The research provides a comprehensive examination of the challenges and opportunities associated with over-dependence on oil, aiming to offer insights for policymakers, economic planners, investors, and the broader academic community.

1.7 Structure of Study

The remainder of this research work is meticulously structured as follows: Chapter two– which presents the relevant literature review in this work and it cuts across contextual literature review, theoretical and empirical review. Chapter three borders on the research methodology used herein, it encompasses the theoretical framework and model specification while chapter four presents and discusses the results obtained from the empirical investigation. Chapter five concludes the work and provides recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Conceptual Literature Review

2.1.1 Concept of Economic Growth

Economic growth pertains to the escalation in an economy's output level, which often translates to an increase in income levels. Various factors contribute to determining a country's economic growth, including productivity levels, volume of trade, and investments in both human and physical capital. Ochejele (2007) defines economic growth as "the sustained increase in a country's per capita output or income, accompanied by expansions in labor force, consumption, capital, and volume of trade." Similarly, Anyanwu and Oaikhenan (1995) define it as the increase over time in a country's capacity to produce goods and services to enhance citizens' well-being.

Economic growth is conventionally measured by the percentage rate of increase in Real Gross Domestic Product (RGDP), adjusted for inflation to reflect changes in the price of goods and services produced. The growth of RGDP from 2004 to 2008 was primarily driven by non-oil sectors, while industrial output decreased due to poor performance in the oil sector (CBN, 2008).

Henderson and Poole (1991) define economic growth as the increase in output and other measures of material progress over a certain period, whether it's in national output (measured by GDP or GNP) or in the national average standard of living (measured by GNP per capita). Economic growth is characterized by the expansion of productive capacity, which requires increases in natural resources, human resources, capital, and technology. It stems from growth in inputs such as labor, capital, and technological advancements, leading to a positive change in the production of goods and services over time.

In broader terms, economic growth is the process of increasing the size of national economies, including GDP, GNP, and national wealth, both in absolute and relative terms per capita. It involves structural modifications in the economy and is facilitated by the efficient use of available resources and the expansion of production capacity within a country. A dynamic, growing society experiences easier income redistribution, lower unemployment rates, increased job opportunities, and improved standards of living. Ultimately, economic growth is a measure of the well-being of a nation, guiding policymakers toward key economic objectives.

2.1.2 Determinants of Economic Growth

In the late 1980s, the importance of understanding the factors driving long-term economic growth sparked significant advancements in growth theory. During this period, "endogenous-growth" models emerged, focusing on how the rate of growth is

determined within the model itself (Barro, 1999). These models highlight technological progress as a central element, depicting it as a process where purposeful research and application lead to the development and adoption of new and improved products and production methods, both domestically and from abroad.

One of the seminal works in this area is Romer (1990), which spurred empirical estimations of growth models using cross-country and cross-regional data in the early 1990s. Despite being inspired by endogenous-growth theories, the empirical framework primarily drew from older neoclassical models developed in the 1950s and 1960s (Solow, 1956; Cass, 1965; Koopmans, 1965; Ramsey, 1928; Barro and Sala-i-Martin, 1995).

Recent empirical studies combine aspects of the neoclassical model with extensions emphasizing the roles of government policies and institutions (Barro, 1997). These studies investigate various determinants of economic growth, with investment identified as a fundamental factor in both neoclassical and endogenous growth models. While the neoclassical model sees investment's impact as transitional, the endogenous growth model argues for more permanent effects, leading to numerous empirical studies examining the relationship between investment and economic growth (Kormendi and Meguire, 1995; Sala-i-Martin, 1997; Easterly & Levine, 1997; Podrecca and Carmeci, 2001).

Capital accumulation is another crucial determinant of economic growth, involving the process of increasing the capital stock over time. This process, according to Jhingan (2008), includes stages such as rising real savings, mobilization of savings through credit and financial institutions, and investment in capital goods, which facilitate industrialization and market expansion.

Human capital accumulation, influenced by public programs for education and health, has also emerged as a significant contributor to economic growth in both endogenous growth models and neoclassical extensions. Despite some debate, studies generally support the idea that an educated population is a key determinant of economic growth (Mankiw 1992; Barro and Sala-i-Martin, 1995; Levine and Renelt, 1992; Pritchett, 2001).

Innovation and Research Development (R&D) activities are highlighted for their role in increasing productivity and growth by introducing new technologies and products. This relationship between innovation/R&D and economic growth has been empirically supported by various studies (Fagerberg, 1987).

Since the late 1980s, macroeconomists have increasingly focused on the long-term effects of government policies on economic growth. While fiscal and monetary policies matter, attention has shifted towards broader aspects of policy, including political, legal, and economic institutions, which have been empirically shown to be crucial

determinants of differences in economic growth rates across countries (Barro and Sala-i-Martin, 1995). Economic policies can influence various aspects of an economy, such as investment in human capital and infrastructure, and the improvement of political and legal institutions, although there's ongoing debate about which policies are most conducive to growth. Macroeconomic conditions are seen as necessary but not sufficient conditions for economic growth (Fischer, 1993).

In general, a stable macroeconomic environment is conducive to growth as it reduces uncertainty, whereas macroeconomic instability can negatively impact productivity and investment due to increased risk. Various macroeconomic factors affecting growth have been identified in the literature, with significant attention given to inflation, fiscal policy, budget deficits, and tax burdens.

Openness to trade is widely recognized in economic growth literature as a major determinant of growth performance. Theoretical reasoning supports a strong and positive link between openness and growth, as it facilitates comparative advantage exploitation, technology transfer, knowledge diffusion, scale economies, and exposure to competition. Openness is often measured by the ratio of exports to GDP. While many studies have found that more open economies experience higher GDP per capita and faster growth, some scholars criticize these findings on methodological and measurement grounds.

Foreign Direct Investment (FDI) has become increasingly important in internationalizing economic activity and facilitating technology transfer and growth. Endogenous growth theory emphasizes FDI's significant role, with empirical literature consistently showing a positive link between FDI and growth.

The institutional framework is highlighted as another crucial source of growth in the literature. Institutions shape economic performance, and recent empirical studies have examined these factors more consistently. Key institutions such as property rights, regulatory institutions, macroeconomic stabilization, social insurance, and conflict management not only directly influence economic growth but also affect other growth determinants like physical and human capital, investment, and technical changes.

Rodrik (2001) argued that traditional factors wouldn't impact economic performance without a stable and trustworthy institutional environment. Common measures of institutional quality in empirical literature include government contract enforcement, risk of expropriation, corruption, property rights, the rule of law, and bureaucratic quality. The relationship between political factors and economic growth has gained attention since Lipset (1959), who examined how economic development influences political regimes. Political instability can increase uncertainty, discouraging investment and hindering growth. Democracy's impact on growth is complex, as it can both hinder and enhance growth depending on various channels it passes through. Barro (1999)

highlighted the importance of overall maintenance of the rule of law for economic growth and investment among various democracy indicators.

2.1.3 Concept of Oil Exports

The concept of oil export in Nigeria refers to the significant role that the country's oil industry plays in its economy through the exportation of crude oil and related products. Nigeria is one of the largest oil-producing countries in Africa and relies heavily on its oil exports as a major source of revenue and foreign exchange earnings.

Nigeria's oil export industry began in the 1950s, with the discovery of large oil reserves in the Niger Delta region. Since then, oil has become the cornerstone of Nigeria's economy, accounting for a substantial portion of its GDP and government revenue. The process of oil export involves extracting crude oil from oil fields, refining it into various petroleum products such as gasoline, diesel, and jet fuel, and then shipping these products to international markets. Nigeria primarily exports crude oil, but it also exports refined petroleum products.

Oil exportation has brought both benefits and challenges to Nigeria. On one hand, it has brought significant revenue that has been used to fund government projects, infrastructure development, and social programs. It has also created job opportunities and stimulated economic growth in certain sectors. However, the heavy reliance on oil exports has made Nigeria vulnerable to fluctuations in global oil prices. When oil prices are high, Nigeria experiences economic growth and increased government revenue.

Conversely, when oil prices fall, Nigeria's economy suffers, leading to budget deficits, currency depreciation, and economic instability.

Moreover, the oil industry has been associated with environmental degradation, social unrest, and corruption in Nigeria. Oil spills, gas flaring, and pollution have damaged the environment and affected local communities' livelihoods in the Niger Delta region. Additionally, disputes over oil revenue distribution and resource control have fueled conflicts between the government, oil companies, and local communities.

In recent years, there have been calls for diversifying Nigeria's economy away from oil dependence to reduce its vulnerability to oil price fluctuations and address the environmental and social impacts of the oil industry. Efforts to develop other sectors such as agriculture, manufacturing, and services are underway, but oil exportation continues to play a significant role in Nigeria's economy.

2.1.4 Performance of the Oil sector in Nigeria

The Nigerian oil sector can be divided into three main sub-sectors: upstream, downstream, and gas. Historically, the downstream sector, responsible for distributing refined petroleum products to domestic consumers, has been the most problematic. The frequent supply crises led the government to deregulate the downstream sub-sector in 2003. However, the implementation of deregulation has been contentious, as it overlooks the economic realities in Nigeria. Approximately 95% of Nigeria's crude oil

production is carried out by joint venture (JV) companies, with Shell operating the largest JV, followed by Exxon Mobil, Chevron Texaco, ENI/Agip, and Total final Elf. The heavy reliance on oil exports has made Nigeria vulnerable to international market fluctuations, amplifying its significance in the country's economic landscape.

The recent increase in global crude oil prices presents a paradox for Nigeria: while it boosts external earnings, it also raises the cost of imported refined petroleum products. This contradiction underscores the challenges faced by the Nigerian economy, where policies sometimes appear to neglect obvious solutions. Rent-seeking interests often hinder efforts to revitalize domestic refineries, perpetuating the need for imported refined products. Nigeria currently has four refineries with a combined installed capacity of 445,000 barrels per day (bpd). However, these refineries operate well below their capacities due to neglect during the military era, leading to frequent product shortages and reinforcing the argument for downstream deregulation.

The monetization of oil revenue has been a significant factor in liquidity management in Nigeria. The Central Bank of Nigeria (CBN) has faced challenges in maintaining liquidity to prevent adverse effects on key macroeconomic indicators such as interest rates, exchange rates, and inflation rates. Excess revenue from crude oil sales is often monetized, leading to market distortions and inflationary pressures.

Overall, the Nigerian oil sector's challenges highlight the complexities and contradictions inherent in managing a resource-dependent economy. Despite the potential benefits of oil revenue, addressing structural deficiencies and ensuring effective policy implementation remain crucial for sustainable economic development.

2.1.5 Contribution of the Oil sector

Efforts by the Nigerian government to diversify the nation's income sources away from oil appear to be yielding results, as indicated by figures released by the National Bureau of Statistics (NBS). In 2010, the contribution of oil to total exports stood at 70.4 percent, marking an improvement from 84.5 percent, 91.7 percent, and 92.95 percent in 2009, 2008, and 2007, respectively. This decline in oil's contribution to exports aligns with recommendations from financial experts and reflects government policies aimed at growing the non-oil sectors of the economy.

A closer look at the NBS data reveals that the United States (US) accounted for approximately 35.9 percent of total oil exports. This underscores how economic developments in the US directly impact Nigeria's revenue generation from oil. Consequently, analysts at FSDH Securities Limited caution that Nigerian economic managers must redouble efforts to increase the contribution of non-oil exports to insulate the economy from oil market volatility. In their weekly review of the nation's

economy, the analysts emphasize that recent oil price fluctuations serve as a reminder of the importance of maximizing benefits from crude oil sales.

The establishment of the Sovereign Wealth Fund (SWF) is seen as a potential solution to achieving these objectives. However, there are concerns about suboptimal accretion to external reserves, which could undermine efforts to achieve price stability in the Nigerian economy. FSDH recommends that the Federal Government (FG) promote the development of mechanized and commercialized farming to harness the sector's potential for job creation and revenue generation. They suggest ensuring demand for agricultural produce at predetermined minimum prices to incentivize production.

Over the past two decades, the oil sector has contributed significantly to the growth of the Nigerian economy in various ways. Firstly, it has created employment opportunities across various sectors, including construction, transportation, and managerial roles. Secondly, the sector has contributed to the gross domestic product (GDP) through proceeds from oil exports and local sales of natural gas, after deducting factor payments made abroad. This value added includes government revenues from rents, royalties, profit taxes, wages and salaries of local employees, and net retained earnings. Thirdly, the oil sector significantly contributes to government revenue, serving as a major income source for the economy. This increase in government income from crude oil production is attributable to three main factors: rising crude oil prices and improved fiscal arrangements secured over time through enhanced bargaining power. Furthermore,

the oil industry plays a crucial role in building foreign exchange reserves, providing substantial support to the country's reserves. This abundance of foreign exchange reserves positions Nigeria well to finance its development programs. Additionally, the oil sector contributes to energy supply in Nigeria by providing a cheap and easily accessible source of energy for industries and commerce. This is facilitated by the operations of local refineries and the utilization of locally discovered natural gas.

2.1.6 Concept of Non-Oil Export

Non-oil exports refer to goods and services, excluding crude oil and petroleum products, sold in the foreign exchange market to generate revenue. Nigeria's non-oil exports industry comprises four main sectors: agricultural products, manufactured goods, solid minerals, and tourism. This sector encompasses a wide range of commodities, including agricultural commodities, manufactured goods, solid minerals, entertainment and tourism services, among others (Abogan, Akinola, & Baruwa, 2014).

2.1.7 Composition of the Nigerian Non-oil Sector

Over the past five years, significant structural changes have occurred in Nigeria's economy, notably the deregulation of the telecommunications sector, which has led to a surge in employment opportunities. The non-oil sector encompasses various economic activities unrelated to petroleum and gas industries, including manufacturing, agriculture, services, telecommunications, financial activities (banking and insurance),

tourism (hotel, restaurant, park), wholesale trade, medical services, export growth, agricultural runoff, mining, power (conventional and renewable), manufacturing, environmental cleanup, research and development (R&D), and information and communication technology (ICT) (Onwualu, 2012). Each of these sectors comprises diverse business operations that attract a significant workforce.

Tourism, which includes resorts/recreation parks, restaurants, hotels, festivals, the movie industry, cultural events, arts and crafts, and comedy, is an essential component of the non-oil sector (Onwualu, 2012). Despite the prevalent notion that the non-oil sector primarily consists of important agricultural activities, this overlooks other sectors such as mining, which has the potential to be second only to petroleum in revenue earnings (Onuba, 2012). The government has recognized the need for economic diversification to address the challenges posed by the country's dependence on oil revenue, particularly in light of fluctuating crude oil prices in the international market.

Industrialization has become imperative to tackle rising unemployment and economic crises by expanding employment opportunities in the non-oil sector, which harbors vast and largely untapped potentials (Onuba, 2012). The government has implemented various policies to promote industrialization and economic diversification over time. It is essential to understand the primary sectors involved in exporting to grasp the subject matter better.

The agricultural sub-sector's nature is characterized by its contribution to total exports, which is calculated as a percentage of the country's overall exports (Adeloye, 2012). Agricultural exports have historically played a crucial role in bolstering Nigeria's economy and those of other Sub-Saharan African countries, contributing to foreign exchange earnings used for various capital projects. Before independence, Nigeria was a leading producer and exporter of several major commodities, including palm oil, cocoa, and seeds (Osabuohien Okorie & Osabohien, 2018). The quality of local community organizations has a significant impact on agricultural commodity production, particularly rice cultivation, which is a staple food for over 90% of Nigerian families (Osabuohien Okorie & Osabohien, 2018). Despite the sector's historical importance, its growth has slowed in recent years due to the focus on crude oil. Economic liberalization has positively impacted food production in Nigeria, with significant increases in agricultural food production indices during periods of economic deregulation (Osabohien Matthew, Aderounmu, & Olawande, 2019). However, the sector's growth pace has slowed in recent years due to the dominance of the crude oil industry.

The Nigerian manufacturing sub-sector encompasses activities involved in transforming raw materials into finished consumer goods or semi-finished products. Like other industrial endeavors, manufacturing contributes to job creation, supports agriculture, diversifies the economy, and enhances foreign exchange earnings, while also facilitating

skills acquisition among the local workforce. The roots of manufacturing in Nigeria can be traced back to pre-colonial times, where village-based societies such as the Hausa, Benin, and Igbo engaged in small-scale manufacturing for trade and social purposes (Charles-Anyaogu, 2012).

The manufacturing sector comprises various sub-sectors, including production, packaging, distribution lines, marketing, and export operations. However, Nigeria has faced significant challenges in developing its manufacturing sector due to overreliance on oil, leading to a lack of diversity in the economy compared to other countries with rich manufacturing histories (Osakwe, Ibenta, & Ezeabasili, 2019). Limited access to production financing has hindered the sector's growth potential, a common issue in many emerging economies. The pivotal role of the manufacturing sector in driving economic development cannot be overstated, as it has been extensively studied and documented in economic literature. Despite successive Nigerian administrations' efforts to promote industrial growth and provide financing support, the manufacturing sector still contributes a disproportionately low percentage to the country's GDP, posing concerns for Nigeria's ambition to become a leading global economy by 2020 (Bururac, Mikulic, & Palic, 2019).

The manufacturing sector in Nigeria faces numerous challenges, including limited infrastructure, high-interest rates, and reluctance among banks to lend to the sector, despite being classified as a priority area by monetary authorities. As of 2014,

manufactured commodities accounted for only a small percentage of Nigeria's exports, underscoring the sector's ongoing struggles (Idowu, 2016). Addressing these challenges is crucial for unlocking the full potential of the manufacturing sector and achieving sustainable economic growth and diversification in Nigeria.

Nigeria, Africa's leading oil exporter with a rapidly growing economy, has predominantly relied on oil production and exports as its primary revenue source, contributing to a monolithic economy over the years. However, this focus on oil has led to missed opportunities for economic diversification and sustainable development due to the volatility of global oil prices and mismanagement of oil resources, characterized by rent-seeking and bureaucratic inefficiencies (Oladipo, Afees, & Agbalajobi, 2016). Despite experiencing significant economic growth and stability in recent years, Nigeria's development strategy must evolve to include diversification into non-traditional sectors, expansion of export product variety, and engagement with new economic partners. This shift is crucial as Nigeria surpassed South Africa to become the continent's largest Gross Domestic Product (GDP) producer, although GDP alone does not reflect income distribution or population size (Idowu, 2016).

However, this focus on oil has come at the expense of other sectors such as solid minerals and agriculture, which have historically been essential to the economy and significant sources of employment. Stakeholders argue that Nigeria's solid mineral sector holds immense potential to alleviate poverty, create jobs, and reduce dependence

on oil revenue, thereby reducing the country's vulnerability to external economic pressures, particularly from Western institutions like the World Bank (Idowu, 2016). To unlock the potential of the solid mineral sector, Nigeria must implement appropriate policies and create a conducive business environment to attract private investment. The country is rich in mineral resources, with estimates ranging from 34 to 50 varieties, highlighting the sector's vast untapped potential (Idowu, 2016).

However, challenges such as deteriorating infrastructure, unreliable power supply, uncertain government policies, and the lingering dependence on oil revenue have hindered investment in the solid mineral sector. Despite its historical significance, tin production in the Central Plateau region and coal exports from Enugu have declined significantly, reflecting the government's shift towards prioritizing oil exploration over other industries (Olasupo, 2021).

2.1.8 Obstacles Facing the Non-Oil Sector in Nigeria.

The development of the non-oil sector has long been a primary national objective, as reflected in national development plans. However, several factors have hindered the execution of these plans in Nigeria, contributing to the failure to achieve this goal. Some of these factors include:

Weak Infrastructure: Insufficient infrastructure and technological limitations have constrained supply-side capacity, particularly evident in the agricultural sector.

Challenges such as limited human capital development, weak institutional structures, and inadequate access to financing have hindered progress in this sector.

Poor Economic Performance: The efficient implementation of development plans relied on anticipated resource inflows generated from robust economic growth. However, overly optimistic forecasts of resource flows, both domestic and external, proved unsustainable due to various factors such as inadequate development aid, limited capacity in project planning, and constraints on export receipts.

Inadequate Executive Capacity: The lack of integration among government agencies, coupled with deficiencies in decision-making and knowledge utilization, reflects a broader issue of insufficient executive capability within the Nigerian bureaucracy. A shortage of trained personnel and ineffective incentive systems have further impeded performance.

Government Dominance in Economic Activities: The dominance of government in economic affairs, exacerbated by policies like the indigenization programme of the 1970s, has stifled private sector growth. Overreliance on oil revenues, coupled with inefficient allocation of funds towards non-traded goods and urban infrastructure, has hindered private sector development and economic diversification.

Heavy External Debt Burden: Nigeria's resort to external commercial borrowing to finance deficits and development projects has resulted in a substantial burden of

external debt servicing. This has diverted resources away from non-oil sector development and constrained investment opportunities.

Macroeconomic Instability: Fiscal indiscipline and unsustainable deficit financing have led to high inflation, interest rates, and chronic balance of payments deficits. These macroeconomic distortions, compounded by administrative controls on imports and price regulations, have hindered investment and economic growth.

Political Instability: Periods of abrupt leadership changes, characterized by military coups, have created uncertainty and country risk, deterring both domestic and foreign investments.

Delayed Democratization: The delayed transition to democratic governance has hindered policy implementation and decision-making processes. This delay has also contributed to the emasculation of organized labor, human rights abuses, and reduced confidence among private investors.

2.2 Theoretical Literature Review

2.2.1 Mun's and Davenant's ideological perspectives

Mun (1664) and Davenant (1699), in their respective works on international commerce, emphasized the importance of establishing a robust industrial base, which would allow primary states to export a significant portion of their products. They argued that wealth was not solely dependent on gold, advocating for diversification to build wealth portfolios. According to Oser and Blanchfield (1975), Davenant suggested that a

diversified trade approach, incorporating agricultural productivity and the industrial revolution, could lead to increased wealth through exports of finished and semi-finished goods. He believed that an economy with multiple currencies (beyond just gold) could generate greater long-term wealth compared to a mono-currency system.

Ekpo and Umoh (2014) pointed out that Nigeria experimented with Davenant's strategy during the pre-oil era, albeit with notable institutional shortcomings. Raw materials such as agricultural products and minerals were purportedly exported to industrialized nations. The country also pursued Import Substitution Industrialization (ISI) policies, following the pioneer industries initiatives of the 1950s, leading to the domestic production of previously imported consumer goods. Measures such as tariffs, quotas, and other safeguards were implemented to support the expansion of domestic industries. Although Mun was not a staunch bullionist, according to Oser and Blanchfield (1975), his focus on modernization resonated with the arguments put forth by Ekpo and Umoh (2014), explaining the continued interest in his contributions to the discourse.

2.2.2 Resource Endowment Theory:

The principal proponents of this theory include Adam Smith, known for the concept of "absolute cost advantage," and David Ricardo, who introduced the idea of "comparative cost advantage," among others. They argued that nations should specialize in producing and exporting goods according to their comparative advantage. The theory of

comparative advantage suggests that a country benefits the most economically by producing goods at a lower overall cost, especially those it has in abundance or can produce easily. This theory implies that countries can benefit from trade if they recognize and accept the cost advantage of trading partners and focus on producing goods in which they have a comparative advantage. Advocates of the resource endowment theory support free trade, specialization, and the international division of labor based on this principle. They argue that some countries specialize in producing agricultural and mineral commodities while others focus on manufacturing goods, guided by the comparative advantage principle.

2.2.3 The Prebisch and Singer Theory

Raul Prebisch and Hans Singer were among the first scholars to propose a theoretical framework linking export diversification to economic growth (Lugeiyamu, 2016). Their work resulted in the formulation of the "Prebisch-Singer Hypothesis" in 1950, wherein Prebisch (1950) and Singer (1950) argued that the reliance of developing countries on primary product exports could hinder their development, leading to deteriorating terms of trade and increased income volatility.

In their seminal work, Prebisch and Singer (1950) emphasized the significance of diversification for fostering economic growth. They posited that sustained economic growth relies on the production and export of goods, as prices of primary exports tend

to decline relative to manufactured exports over time. The Prebisch-Singer Hypothesis has sparked extensive debate in economic circles, with differing conclusions drawn regarding its validity (Kaulich, 2012). While the Graham paradox and the Prebisch-Singer Hypothesis may not explicitly advocate for diversification, they shed light on the risks associated with specializing in primary production rather than manufacturing. Consequently, these insights may inform decisions regarding a government's sectoral specialization or overall export diversification strategy.

2.2.4 Heckscher-Ohlin theory

According to the Heckscher-Ohlin hypothesis, a country can derive benefits from engaging in international trade by focusing on the manufacturing and exporting of goods in which it holds a comparative advantage (Adel, 2015). Through specialization, both trading partners can expand their levels of consumption and production beyond what is feasible within their respective Production Possibility Frontiers (PPFs) and indifference curves. Consequently, countries endowed with abundant production resources possess a natural advantage in diversifying their exports compared to others. However, in practice, this concept may not always hold true as sources of comparative advantage can stem from ongoing research, innovation, and unique relative factor endowments, as proposed by the H-O hypothesis.

2.2.5 Export-led Growth Hypothesis

The export-led growth hypothesis posits that sustained growth in emerging economies can be achieved through increased exports of non-renewable natural resources. Firstly, proponents argue that although natural resources are finite, export-led development is a long-term phenomenon (Lucas, 1988; Grossman & Helpman, 1991). Secondly, past empirical research has indicated an adverse relationship between non-oil export revenues and long-term economic growth (Duru & Ehidiamhen, 2018). According to the Dutch disease theory, increased profits from non-oil natural resource exports can lead to currency appreciation, reducing the competitiveness of the non-resource tradable sector while increasing demand for imports (Iyoboyi, 2019). In terms of international trade theory, exports contribute to economic growth through various mechanisms. Adam Smith (1776) emphasized that foreign commerce enhances domestic production by expanding market size and enabling economies of scale. David Ricardo further highlighted the importance of comparative advantage in trade, suggesting that countries should specialize in products where they have a relative advantage. This specialization can enhance resource exploitation by stimulating capital formation necessary for improving total factor productivity (TFP).

A study by Sachs and Warner (1997) examined the link between natural resource abundance and economic growth, finding that nations with a high ratio of natural resource exports to GDP experienced slower growth. Even after controlling for other variables, such as initial GDP, openness, investment rates, human capital, terms of trade,

and government institutional efficiency, the study found a negative association between natural resource exports and economic growth. From the Mercantilist era to the present, the focus on exports as a driver of economic growth has evolved. Exports are often viewed as an "engine of growth" (Medina-Smith, 2001) and a key source of economic development (Akmal, Ahmad, & Ali, 2013). The export-led growth hypothesis suggests that expanding exports can fuel overall economic growth, not only through increased labor and capital but also through export expansion. This approach emphasizes that long-term growth depends on exporting resources with finite lifespans (Lucas, 1988).

This theory posits that exports play a crucial role in economic growth, with several theoretical justifications. Firstly, larger exports can lead to higher incomes in the short term through foreign currency multipliers, according to Keynesian theory. Secondly, increased exports can stimulate purchases of machinery, equipment, gasoline, and food, thereby boosting the economy. Thirdly, positive externalities such as learning from foreign firms can improve organizational efficiency. Conversely, negative externalities such as environmental degradation can also occur. Overall, the export-led growth hypothesis suggests that increasing exports can drive economic growth by enhancing resource allocation, economies of scale, and production efficiency.

2.3 Empirical Literature Review

Numerous studies have investigated the export-led growth hypothesis, with empirical evidence suggesting various types of relationships between exports and economic growth. Depending on factors such as the econometric model, data frequency, and the specific country or region under examination, the relationship may exhibit different dynamics. Konya (2004) notes that exports may cause growth, growth may cause exports, there may be bidirectional causality, or there may be no causality at all.

Udude and Okulegu (2012) conducted a study to assess the existence of a bidirectional relationship between exports and economic growth in Nigeria. Additionally, they aimed to evaluate the significant impact of exports on economic growth in the country. Their findings indicated the presence of a long-run relationship between economic growth and exports in Nigeria. After integrating short-run dynamics and long-run equilibrium, it was observed that imports (IMP) and exchange rates were positively correlated with GDP, while exports (EXC) showed a negative relationship with GDP. Furthermore, the short-run dynamics adjusted to the long-run equilibrium at a rate of 0.866% per annum. Oruta (2019) conducted a study to assess the impact of non-oil exports on economic growth in Nigeria. The Ordinary Least Squares (OLS) method was employed for analysis using data sourced from the CBN statistical bulletin covering the period from 1980 to 2010. The findings revealed that non-oil exports generally have a significant influence on economic growth in Nigeria. As a policy implication, it was recommended

that the government should implement measures to regulate spending in the country and foster economic growth.

Gbadebo (2018) utilized the Harrod-Domar theory and Solow's theory of economic growth to investigate the impact of crude oil on the Nigerian economy. Ordinary Least Squares regression and the Cobb-Douglas production function were employed for analysis. The results indicated that crude oil exports contribute to Nigerian economic growth but do not significantly improve it. The study recommended the implementation of policies that encourage private participation in oil activities.

Kawai (2017) examined the impact of non-oil exports on economic growth using the Phillips Perron and Engle Granger Model (EGM). The analysis revealed a positive but insignificant relationship between both variables. The study suggested diversification and investment in the non-oil sector of the economy. Alimi (2017) investigated the impact of globalization on non-oil export performance in Nigeria using time series data. The Autoregressive Distributed Lag (ARDL) approach was employed to analyze the relationship for the period 1970-2014. The results showed a positive relationship between globalization and non-oil exports. The study recommended the adoption of trade policies capable of sustaining growth in the non-oil sector of the Nigerian economy.

Fiiwe and Turakpe (2017) conducted a comparative analysis of the roles of crude oil and non-oil exports in relation to Nigeria's economic growth. Their study utilized data from the period 1980-2015 and employed various econometric techniques such as Ordinary Least Squares (OLS), Augmented Dickey Fuller (ADF), Co-integration, and Error Correction Model. The findings indicated that both the oil and non-oil sectors have a positive impact on GDP, with a long-run relationship observed between oil and non-oil exports and the Nigerian economy. As a recommendation, the study suggested the implementation of export diversification policies and the encouragement of non-oil exports.

Kromtit (2017) examined the contribution of non-oil exports to the growth of the Nigerian economy for the period 1985-2015. They employed the ADF test to check for unit root and stationarity of variables and utilized ARDL regression to analyze the relationship. Although the analysis indicated a positive but not significant relationship between non-oil exports and GDP, the study recommended the formulation of policies to attract Foreign Direct Investment (FDI), provision of credit to non-oil sectors, and active government participation in non-oil sector activities. Similarly, Ajayi (2016) conducted an empirical analysis on the impact of oil and non-oil exports on the Nigerian economy from 1989-2014. The study reviewed literature on macroeconomic policy and assessed the relative contributions of oil and non-oil exports to Nigeria's Gross Domestic Product over the years. While acknowledging the greater contribution of oil

to Nigeria's economic growth, the study highlighted the need to understand the contributions of both oil and non-oil exports to the economy.

Riti, Gubak, and Madina (2016) in their works focused on the growth of non-oil sectors as a key to diversification and economic performance in Nigeria. They utilized Auto-regressive Distributed Lag and VECM Granger causality models to estimate the short-run and long-run parameters and the direction of causality of the variables. The study confirmed the existence of cointegration among the variables and revealed that agriculture and telecommunication components positively contributed to GDP, while the manufacturing component had a negative but significant impact, indicating neglect and lack of exploration in that sector. Adel (2015) also investigated the role of oil and non-oil exports in the Syrian economy from 1975-2010. Various econometric tests such as the ADF unit root test, Johansen co-integration test, Granger causality test, impulse response functions (IRF), and variance decomposition (VD) analysis were employed. The study found that GDP was positively and significantly related to both oil and non-oil exports, with oil exports having the biggest effect on GDP. As a recommendation, the study suggested the encouragement of non-oil exports and increased diversification.

Chukwu (2014) studied the impact of export trading on the Nigerian economy using econometric tools such as Ordinary Least Squares (OLS) and Granger Causality test. The findings indicated that both oil and non-oil exports had a positive and significant impact on the growth of Nigeria's economy during the period under review. Adenugba

(2013) investigated the contribution of non-oil exports to the economic growth of Nigeria from 1981 through 2010. The study evaluated the performance of Nigeria's export promotion strategies and found that non-oil exports performed below expectations. The study recommended measures for diversification and enhancing the productivity and output of non-oil commodities.

Onudogu, Ikpe, and Anowor (2013) in their works examined the impact of non-oil exports on the growth of Nigeria's economy using data from 1981 to 2012. They employed the Augmented Production Function (APT) and the Endogenous Growth Model (EGM) for their analysis. The findings revealed a weak and almost insignificant relationship between non-oil exports and the level of economic growth in Nigeria. So also, Adesoji and Sotubo (2013) studied non-oil exports and the economic growth of Nigeria, focusing on agricultural and mineral resources. Their study assessed the effectiveness of Nigeria's export promotion strategies and found that non-oil exports performed below expectations, indicating the continued dominance of crude oil in the Nigerian economy. The study recommended measures for diversification and enhancing the productivity and output of non-oil commodities.

2.4 Literature Gap

The literature reviewed provides extensive insights into the impacts of both oil and non-oil exports on the Nigerian economy individually. However, a notable gap exists in the

comparative analysis of the contributions of oil and non-oil exports to Nigeria's economic growth. While several studies have separately examined the effects of these two types of exports, few have directly compared their relative significance in driving economic growth. A comprehensive comparative analysis would help policymakers and stakeholders understand the nuanced dynamics between oil and non-oil exports and their respective roles in shaping Nigeria's economic trajectory. This could involve assessing factors such as their overall contribution to GDP, employment generation, foreign exchange earnings, and sustainability implications, providing valuable insights for informed policy decisions aimed at promoting balanced and diversified economic growth.

CHAPTER THREE

THEORETICAL FRAMEWORK AND METHODOLOGY

3.1 Theoretical Framework

Endogenous growth theory provides a robust framework for understanding the potential impact of non-oil exports on the Nigerian economy. According to this theory, economic growth is not solely determined by exogenous factors like capital accumulation or technological progress; rather, it emphasizes the role of endogenous factors such as human capital accumulation, innovation, and knowledge creation in driving sustained economic development. Diversification of the economy away from its heavy reliance on oil exports has been a key policy objective. Endogenous growth theory suggests that the expansion of non-oil exports can contribute significantly to economic growth by stimulating productivity gains and fostering innovation-led development. By investing in sectors such as agriculture, manufacturing, and services, Nigeria can harness its human capital and entrepreneurial potential to drive forward non-oil export activities.

Furthermore, endogenous growth theory underscores the importance of institutions in shaping economic outcomes. Strong institutions, characterized by effective governance, rule of law, and property rights protection, are essential for creating an enabling environment conducive to non-oil export-led growth. By fostering a business-friendly climate and reducing barriers to trade, Nigeria can attract investment, promote

competitiveness, and spur the development of export-oriented industries. Moreover, the expansion of non-oil exports can have positive spillover effects on other sectors of the economy. Increased exports create opportunities for job creation, income generation, and technology transfer, thereby contributing to poverty reduction and inclusive growth. Additionally, by diversifying revenue sources away from oil, Nigeria can enhance its resilience to external shocks and mitigate the volatility associated with commodity price fluctuations.

For this research purpose

RGDP = f (OILX, NONX, OXNOX, EXCR, INV) …….. (1)

Where

RGDP represents Real Gross Domestic Product

OILX represents Oil Exports

NONX represents Non-Oil Exports

OXNOX represents the interaction term which captures the combined impact of both oil and non-oil exports on economic growth.

EXCR represents Exchange Rate

INV represents Investment

3.2 Methodology

3.2.1 Model Specification

The empirical models for evaluating the effects of Non-oil exports and Oil exports on economic growth in Nigeria is given as follows:

$$lnRGDP_t = \alpha + \beta_1 lnOILX_t + \beta_2 lnNONX_t + \beta_3 lnOXNOX_t + \beta_4 lnEXCR_t + \beta_5 lnINV_t + \varepsilon_t \text{....(2)}$$

The primary estimation method employed in this study is the error correction mechanism (ECM). Therefore, the ECM for 2 is specified as follows:

$$\Delta lnRGDP = \alpha_0 + \beta_1 \Delta lnOILX_{t-1} + \beta_2 \Delta lnNONX_{t-1} + \beta_3 \Delta lnOXNOX_{t-1} + \beta_4 \Delta lnEXCR_{t-1} + \beta_4 \Delta lnEXCR_{t-1} + \gamma ECM_{t-1} + \varepsilon \ldots\ldots (3)$$

Economic or A Priori Expectations

OILX (Oil Exports): It is expected that an increase in oil exports will positively influence economic growth in Nigeria due to the significant role of oil in the country's economy. Therefore, the coefficient for OILX (β_1) is expected to be positive.

NONX (Non-Oil Exports): Similar to oil exports, an increase in non-oil exports is anticipated to have a positive impact on economic growth as it reflects diversification and expansion of the export base. Hence, the coefficient for NONX (β_2) is expected to be positive.

OXNOX (Interaction Term): The interaction term captures the combined impact of both oil and non-oil exports on economic growth. Since diversification is crucial for sustainable economic growth, it is expected that this interaction term will have a positive coefficient (β_3), indicating a synergistic effect of oil and non-oil exports on economic performance.

EXCR (Exchange Rate): Changes in the exchange rate can affect the competitiveness of exports and import prices, thus influencing economic growth. A depreciation of the exchange rate is generally expected to positively impact exports and, consequently, economic growth. Therefore, the coefficient for EXCR (β_4) is expected to be negative.

INV (Investment): Economic theory suggests that investment plays a crucial role in driving economic growth by increasing the productive capacity of the economy. Therefore, the apriori expectation is that investment will have a positive relationship with Real Gross Domestic Product (RGDP). Higher levels of investment are expected to lead to higher levels of economic output. Therefore, the coefficient for INV (β_5) is expected to be positive

3.2.2 Estimation Technique

Prior to estimation, the descriptive statistics was carried out. After which the unit root test and co integration test were conducted.

Unit Root Test: The first step involves testing the stationarity of the variables and determining their order of integration. The Augmented Dickey-Fuller (ADF) test is commonly used for this purpose. The ADF test helps determine whether a series is stationary or non-stationary. If a series is integrated of order $I(_1)$, it needs to be differenced once to become stationary. Similarly, an $I(_2)$ series requires differencing twice to achieve stationarity, while an I(0) series does not require differencing, it means it is stationary at levels

Cointegration Test: The next step is to test for the presence of cointegration among the variables of the same order of integration. Cointegration analysis investigates the long-run relationships between variables that may have trends but exhibit a constant difference between them. The study employs the cointegration test developed by Johansen and Juselius (1990) and Johansen (1991), which uses the maximum-likelihood test procedure. The Trace statistic is utilized to determine the number of cointegration vectors, with the null hypothesis testing that the number of distinct cointegrating vectors is less than or equal to a specified value (q).

Error Correction Model (ECM): If cointegration is established among the variables, the study employs an Error Correction Model (ECM) to correct for any short-run disequilibrium. The ECM, originally introduced by Sargan (1964) and popularized by Engel and Granger (1969), models the dynamics of both short-run changes and long-run levels simultaneously. It provides insights into both the short-run and long-run

relationships between the variables. The ECM helps capture the adjustment processes that bring the variables back to their long-run equilibrium in the event of any short-run deviations.

In summary, the methodology includes conducting unit root tests to assess stationarity, cointegration tests to determine the presence of long-run relationships, and implementing the ECM to correct for short-run disequilibrium. These steps allow for a comprehensive analysis of the relationships between the variables in the study.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULT

4.1 Descriptive Statistics

The summary statistics of all the series employed in this study are presented and discussed below. Specifically, the mean, median, minimum, and maximum values, standard deviation as stated in Table 4.1.1. The mean of each of the series is a pointer to the average of the respective variable as it is used in the study. The standard deviation shows how distributed the variable is from the mean.

Table 4.1.1: Descriptive Statistics Results

	EXCR	INV	NONX	OILX	OXNONX	RGDP
Mean	147.32	3.066667	625.4232	7295.658	9381915	44776.45
Median	129.22	2.31	133.595	7191.086	960693	41126.68
Maximum	448.90	8.84	3207.1	24221.6	73390865	75768.95
Minimum	8.04	0.3	3.2596	106.6265	347.5597	21680.2
Std. Dev.	118.57	2.565121	866.9694	6536.845	16804758	20285.21
Skewness	0.90	0.903803	1.728264	0.604095	2.483317	0.202586
Kurtosis	3.12	2.659696	5.286476	2.47834	8.81906	1.400977
Jarque-Bera	4.49	4.65196	23.61638	2.381297	80.47727	3.741426
Probability	0.11	0.097688	0.000007	0.304024	0	0.154014
Sum	4,861.55	101.2	20638.97	240756.7	3.10E+08	1477623
Sum Sq. Dev.	449,890.60	210.5551	24052348	1.37E+09	9.04E+15	1.32E+10
Observations	33.00	33	33	33	33	33

Source: Author's Computation using Eviews 10

Here's an interpretation of the descriptive statistics presented in Table 4.1.1 for the variables: Exchange Rate (EXCR), Investment (INV), Non-Oil Exports (NONX), Oil Exports (OILX), Interaction term (OXNOX), and Real Gross Domestic Product (RGDP):

Exchange Rate (EXCR) had a mean of approximately 147.32 (1$/Naira) and a median of 129.22 (1$/Naira). The maximum observed exchange rate was 448.90 (1$/Naira), while the minimum was 8.04 (1$/Naira), with a standard deviation of 118.57 (1$/Naira). The data for EXCR exhibited a positive skewness of 0.90 and a moderately peaked distribution, with a kurtosis value of 3.12. However, the Jarque-Bera test with a probability of 0.11 indicated a departure from normality. The sum of EXCR was 4861.55 (1$/Naira) with a sum of squared deviations of 449,890.60, based on 33 observations.

Investment (INV) had a mean of approximately 3.07 billion dollars and a median of 2.31 billion dollars. The maximum observed investment was 8.84 billion dollars, while the minimum was 0.3 billion dollars, with a standard deviation of 2.57 billion dollars. The data for INV exhibited a positive skewness of 0.90 and a moderately peaked distribution, with a kurtosis value of 2.66. The Jarque-Bera test with a probability of 0.098 suggested a departure from normality. The sum of INV was 101.2 billion dollars with a sum of squared deviations of 210.5551, based on 33 observations.

Non-Oil Exports (NONX) had a mean of approximately 625.42 billion naira and a median of 133.60 billion naira. The maximum observed value was 3207.10 billion naira, while the minimum was 3.26 billion naira, with a standard deviation of 866.97 billion naira. The data for NONX exhibited a positive skewness of 1.73 and a moderately peaked distribution, with a kurtosis value of 5.29. The Jarque-Bera test with a probability of 0.000007 indicated a significant departure from normality. The sum of NONX was 20638.97 billion naira with a sum of squared deviations of 24,052,348, based on 33 observations.

Oil Exports (OILX) had a mean of approximately 7295.66 billion naira and a median of 7191.09 billion naira. The maximum observed value was 24221.60 billion naira, while the minimum was 106.63 billion naira, with a standard deviation of 6536.85 billion naira. The data for OILX exhibited a positive skewness of 0.60 and a moderately peaked distribution, with a kurtosis value of 2.48. The Jarque-Bera test with a probability of 0.304 suggested no significant departure from normality. The sum of OILX was 240756.7 billion naira with a sum of squared deviations of 1.37E+09, based on 33 observations.

The interaction term capturing the combined impact of both oil and non-oil exports on economic growth (OXNOX) had a mean of approximately 9381915 billion naira and a median of 960693 billion naira. The data exhibited extreme skewness of 2.48 and a heavy-tailed distribution, with a kurtosis value of 8.82. The Jarque-Bera test with a

probability of 0 indicated a significant departure from normality. The sum of OXNOX was 3.10E+08 billion naira with a sum of squared deviations of 9.04E+15, based on 33 observations.

Real Gross Domestic Product (RGDP) had a mean of approximately 44776.45 billion naira and a median of 41126.68 billion naira. The data appeared relatively symmetric with minor skewness and kurtosis. However, the Jarque-Bera test with a probability of 0.154 indicated a departure from normality. The sum of RGDP was 1477623 billion naira with a sum of squared deviations of 1.32E+10, based on 33 observations.

4.2 Correlation Analysis

Table 4.2. Correlation Matrix

	RGDP	EXCR	INV	NONX	OILX	OXNONX
RGDP	1.00					
EXCR	0.886164	1				
INV	0.463522	0.212289	1			
NONX	0.818181	0.873493	0.181398	1		
OILX	0.922811	0.865647	0.50441	0.876905	1	
OXNONX	0.700977	0.81722	0.097964	0.963869	0.831154	1

Source: Author's Computation using Eviews 10

The correlation matrix above reveals the relationships between Real Gross Domestic Product (RGDP) and other variables: Exchange Rate (EXCR), Investment (INV), Non-

Oil Exports (NONX), Oil Exports (OILX), and the interaction term capturing the combined impact of both oil and non-oil exports on economic growth (OXNONX).

For RGDP, strong positive correlations are observed with EXCR (0.886), NONX (0.818), OILX (0.923), and OXNONX (0.701). This suggests that as these variables increase, RGDP tends to increase as well, indicating a positive relationship. Among these, the correlation between RGDP and OILX is particularly noteworthy, indicating a very strong positive relationship, possibly suggesting the significant impact of oil exports on RGDP.

On the other hand, the correlation between RGDP and INV is relatively weaker (0.464), indicating a moderate positive relationship. This suggests that while there is some association between investment and RGDP, it's not as strong as the relationships observed with other variables.

4.3 Preliminary Tests

4.3.1 Unit Root Test

In order to establish the stationarity of the data and to check if they move in the same proportion and the significance of the variables, the Augmented Dickey Fuller (ADF) unit root test was used. The series is not expected to have a unit root; hence, each variable was evaluated at level and at first difference in order to identify correlations between the variables over the long run. If the likelihood at the point is less than 0.05, we can assume that they are stationary at level; otherwise, we check for stationarity at

the first difference. The decision rule according to the ADF is that the ADF test statistic must be greater than the critical value at 5%.

Table 4.3: Unit Root Test result

	LEVEL		FIRST DIFFERENCE			
VARIABLES	ADF TEST STATISTIC	ADF CRIT. VAL. 5%	ADF TEST STATISTIC	ADF CRIT. VAL. 5%	ORDER OF INTEGRATION	REMARK
lnEXCR	-1.835711	-2.957110	-5.249295	-2.960411	I(1)	Stationary
lnINV	-1.876629	-2.957110	-6.917660	-2.960411	I(1)	Stationary
lnNONX	-1.077558	-2.957110	-6.683226	-2.960411	I(1)	Stationary
lnOILX	-1.914905	-2.957110	-5.202771	-2.963972	I(1)	Stationary
lnRGDP	-0.657753	-2.986225	-4.917889	-2.960411	I(1)	Stationary
OXNONX	-4.136739	-2.986225	-	-	I(0)	Stationary

Source: Author's computation using Eviews 10

The unit root test results displayed in Table 4.3 indicate the stationarity properties of the variables under consideration, both in their original levels and after taking first differences.

For the variables lnEXCR, lnINV, lnNONX, lnOILX, and lnRGDP, the Augmented Dickey-Fuller (ADF) test statistics in their levels are all less than the critical values at

the 5% significance level. This implies that these variables are non-stationary in their original form. However, after differencing once, all these variables become stationary, as evidenced by ADF test statistics lower than the critical values. Therefore, these variables are integrated of order one, or I(1), indicating that they exhibit a unit root in their levels but not in their first differences, making them suitable for further analysis.

On the other hand, the variable OXNONX displays a different pattern. In its original level, the ADF test statistic is significantly negative, suggesting that it is stationary without differencing, or integrated of order zero, I (0). This indicates that OXNONX does not possess a unit root in its levels and thus does not require differencing to achieve stationarity.

In summary, the unit root test results indicate that all variables, except for OXNONX, are non-stationary in their levels but become stationary after differencing once. This suggests that these variables exhibit a common stochastic trend and can be analyzed using time series methods suitable for stationary data.

4.3.2 Co-integration Test

The co-integration test examines whether non-stationary time series move together in the long run, indicating a long-term relationship between economic variables. It utilizes two statistics: the Trace statistic and the Max-Eigen Value. If either statistic exceeds the critical value at the given significance level, it suggests co-integration among the

variables. Conversely, if these statistics are lower than the critical values, we infer no co-integration. Both the Trace statistic and Max-Eigen value in our results indicate the presence of cointegrating equations, affirming a long-term relationship between the variables.

Table 4.3.2a Johansen co-integration test (Trace)

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None	0.596898	85.81211	95.75366	0.0083
At most 1	0.536407	57.64660	69.81889	0.3147
At most 2	0.432699	33.81541	47.85613	0.5120
At most 3	0.250915	16.24261	29.79707	0.6951
At most 4	0.165601	7.286633	15.49471	0.5445
At most 5	0.052576	1.674275	3.841466	0.1957

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

The trace test indicates the presence of one cointegrating equation at the 5% significance level. This implies that there exists a long-term relationship among the variables in the model. Therefore, despite short-term fluctuations, these variables are linked together in the long run.

Table 4.3.2b Johansen co-integration test (Maximum Eigenvalue)

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.807177	51.02548	40.07757	0.0020
At most 1	0.517865	22.61548	33.87687	0.5600
At most 2	0.415450	16.64428	27.58434	0.6106
At most 3	0.290517	10.63976	21.13162	0.6831
At most 4	0.216450	7.561540	14.26460	0.4250
At most 5	0.052169	1.660961	3.841466	0.1975

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

Similar to the Trace test, the Maximum Eigenvalue test confirms the presence of one cointegrating equation at the 5% significance level, indicating a long-term relationship among the variables. This finding is consistent with the results obtained from the Trace test, providing further evidence of cointegration in the model.

4.4 Error Correction Model

To determine the error correction model which is also referred to as the short run model, the variables need to be in differenced in their stationary form. The error correction terms, which are the residuals of the long run equation, are then incorporated into the model. The error correction term is however to be lagged one period. The results are shown in the table below:

Table 4.4: ECM Regression Result Summary

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.036459	0.007089	5.142706	0.0021
D(LNINV)	0.01384	0.01137	1.217251	0.2349
D(LNNONX)	0.039447	0.017224	2.290272	0.0307
D(LNOILX)	-0.0253	0.018563	-1.36315	0.1852
D(LNEXCR)	-0.02056	0.025501	-2.80612	0.0018
D(OXNONX)	1.82E-10	5.76E-10	0.315542	0.7553
ECM(-1)	-0.217	0.057236	-3.79126	0.0008
R-squared	0.462674	Mean dependent var		0.039103
Adjusted R-squared	0.333716	S.D. dependent var		0.036494
S.E. of regression	0.029789	Akaike info criterion		-3.99873
Sum squared resid	0.022184	Schwarz criterion		-3.6781
Log likelihood	70.97967	Hannan-Quinn criter.		-3.89245
F-statistic	3.58778	Durbin-Watson stat		1.781534
Prob(F-statistic)	0.010549			

Source: Author's Computation on Eviews10

The ECM regression analysis provides insights into the short-term dynamics and long-term equilibrium relationship between Real Gross Domestic Product (RGDP) and

various explanatory variables, including Exchange Rate (EXCR), Balance of Payment (BOP), Trade Openness (TRPN), Net Export (NET), and Interest Rate (INTR).

The coefficient for the lagged error correction term (ECM(-1)) is -0.217, indicating the system's adjustment towards equilibrium following deviations in the previous period. With a t-statistic of -3.79126 and a probability of 0.0008, this coefficient is statistically significant at the 5% level, suggesting a notable influence on current RGDP from deviations in the previous period.

The regression model exhibits an R-squared value of 0.462674, indicating that approximately 46.27% of the variability in RGDP is explained by the included variables. However, the adjusted R-squared value of 0.333716 suggests that around 33.37% of the variation in RGDP is explained when considering the number of predictors, highlighting the need for further investigation.

Starting with the constant term (C), it has a coefficient of 0.036459 with a t-statistic of 5.142706 and a probability (Prob.) of 0.0021. This indicates that when all other variables are held constant, the model predicts that RGDP will increase by approximately 0.036459 units. The coefficient is statistically significant at the 5% level, suggesting that the constant term contributes significantly to explaining RGDP variation.

For the variable D(LNINV), representing changes in investment, the coefficient is 0.01384 with a t-statistic of 1.217251 and a probability of 0.2349. Although the

coefficient is positive, indicating a potential positive impact of investment on RGDP, it is statistically insignificant at the 5% level. This implies that changes in investment may not have a significant effect on RGDP in this model, contrary to a priori expectations.

Moving to D(LNNONX), which represents changes in non-oil exports, the coefficient is 0.039447 with a t-statistic of 2.290272 and a probability of 0.0307. This coefficient is both positive and statistically significant at the 5% level, aligning with a priori expectations. It suggests that increases in non-oil exports lead to corresponding increases in RGDP, indicating the importance of diversification and expansion of the export base for economic growth.

Regarding D(LNOILX), capturing changes in oil exports, the coefficient is -0.0253 with a t-statistic of -1.36315 and a probability of 0.1852. Despite the negative coefficient, indicating a potential negative impact of oil exports on RGDP, it is statistically insignificant at the 5% level. This contradicts the expectation of a positive impact of oil exports on economic growth.

The variable D(LNEXCR), reflecting changes in the exchange rate, has a coefficient of -0.02056 with a t-statistic of -2.80612 and a probability of 0.0018. This negative coefficient is statistically significant at the 5% level, consistent with a priori expectations. It suggests that depreciations in the exchange rate positively influence RGDP, likely by enhancing export competitiveness.

For D(OXNONX), the interaction term capturing the combined impact of oil and non-oil exports, the coefficient is very close to zero, indicating no significant effect on RGDP. This is supported by the high p-value of 0.7553, making the coefficient statistically insignificant.

The overall model's F-statistic is 3.58778, with a probability of 0.010549, indicating statistical significance at the 5% level. However, considering the apriori expectations and individual variable interpretations, the model's explanatory power may be limited.

The Durbin-Watson statistic of approximately 1.78 suggests the absence of autocorrelation in the model's residuals, indicating that the error terms are not correlated with each other.

4.5 Diagnostic Test

Table 4.5: Diagnostics

Variable	Coefficient
Ramsey RESET Prob.	0.4462
Breusch-Pagan-Godfrey Prob.	0.4447
Breusch-Godfrey Prob.	0.1598
Jarque-Bera Prob.	0.8678

Source: Author's computation using Eviews 10.

Here's the interpretation of the diagnostic results presented in Table 4.5:

The Ramsey RESET test, which examines the presence of specification errors in the regression model, yielded a probability of 0.4462. This result suggests that there is no significant evidence to reject the null hypothesis, indicating that the model is adequately specified without any omitted variables.

Moving on to the Breusch-Pagan-Godfrey test, designed to detect heteroscedasticity in the model's residuals, it produced a probability of 0.4447. This outcome implies that there is no compelling evidence to reject the null hypothesis of homoscedasticity. Therefore, there is no indication of heteroscedasticity in the residuals of the model.

Similarly, the Breusch-Godfrey test, employed to identify serial correlation in the residuals, resulted in a probability of 0.1598. This finding suggests that there is no significant evidence to reject the null hypothesis of no serial correlation. Thus, the residuals do not exhibit substantial serial correlation.

Lastly, the Jarque-Bera test, utilized to assess the normality of the residuals, yielded a probability of 0.8678. This result indicates that there is no substantial evidence to reject the null hypothesis, suggesting that the residuals are approximately normally distributed.

4.6 Test of Hypothesis

To test the research hypotheses using the regression analysis results provided, we'll assess the coefficients associated with the variables of interest:

Ho: Non-oil exports have no significant effect on Nigerian economic performance.

The coefficient for the change in Non-oil Exports (D(LNNONX)) is 0.039447 with a t-Statistic of 2.290272 and a probability (Prob.) of 0.0307. Since the probability value is less than the significance level of 0.05, we reject the null hypothesis. Therefore, there is evidence to suggest that non-oil exports have a significant effect on Nigerian economic performance.

Ho: Oil exports do not affect economic growth in Nigeria.

The coefficient for the change in Oil Exports (D(LNOILX)) is -0.0253 with a t-Statistic of -1.36315 and a probability (Prob.) of 0.1852. With a probability value higher than the significance level of 0.05, we fail to reject the null hypothesis. Thus, there is insufficient evidence to conclude that oil exports significantly affect economic growth in Nigeria.

Ho: The combined impact of both oil and non-oil exports on Nigeria's economic performance is not significant.

The coefficient for the interaction term capturing the combined impact of both oil and non-oil exports (D(OXNONX)) is close to zero (1.82E-10) with a t-Statistic of 0.315542 and a probability (Prob.) of 0.7553. Since the probability value is much higher than the significance level of 0.05, we fail to reject the null hypothesis. Hence, there is no significant evidence to suggest that the combined impact of both oil and non-oil exports significantly influences Nigeria's economic performance.

4.7 Discussion of Findings

The regression analysis offers valuable insights into the nexus between oil and non-oil exports and economic growth in Nigeria.

Firstly, regarding the impact of investment on economic growth, the coefficient for changes in investment (D(LNINV)) is positive, indicating a potential positive influence on Real Gross Domestic Product (RGDP). However, this coefficient lacks statistical significance at the 5% level, suggesting that changes in investment may not substantially affect RGDP within this model. This finding deviates from the expected positive relationship between investment and economic growth.

In contrast, changes in non-oil exports (D(LNNONX)) demonstrate both a positive coefficient and statistical significance at the 5% level. This aligns with expectations and underscores the significance of diversifying and expanding Nigeria's export base to foster economic growth. The results suggest that increases in non-oil exports contribute positively to RGDP, emphasizing the importance of economic diversification for sustained growth.

Conversely, changes in oil exports (D(LNOILX)) exhibit a negative coefficient, implying a potential negative impact on RGDP. However, this coefficient lacks statistical significance at the 5% level, contradicting the anticipated positive effect of oil exports on economic growth. Despite the prominence of the oil sector in Nigeria's

economy, fluctuations in oil exports may not significantly influence overall economic growth, as indicated by the findings.

Moreover, changes in the exchange rate (D(LNEXCR)) show a negative and statistically significant relationship with RGDP at the 5% level. This is consistent with expectations, suggesting that depreciations in the exchange rate positively affect economic growth by enhancing export competitiveness. The findings imply that adopting a more competitive exchange rate regime could stimulate economic growth by bolstering export activities.

Lastly, the interaction term representing the combined impact of oil and non-oil exports (D(OXNONX)) does not exhibit a significant effect on RGDP. The statistically insignificant coefficient suggests that the combined influence of both export types may not substantially impact economic growth in Nigeria.

4.8 Policy Implications

The findings from the regression analysis present several policy implications for fostering economic growth in Nigeria:

Given the significant and positive impact of non-oil exports on economic growth, policymakers should prioritize strategies aimed at diversifying and expanding Nigeria's export base beyond the oil sector. This could involve providing incentives and support

for industries involved in non-oil exports, such as agriculture, manufacturing, and services.

The negative relationship between the exchange rate and economic growth suggests the importance of adopting policies to enhance export competitiveness. This could include implementing measures to stabilize the exchange rate, improving trade infrastructure, reducing trade barriers, and investing in technology and innovation to boost productivity in export-oriented sectors.

While the impact of investment on economic growth was not statistically significant in this model, policymakers should still prioritize creating an enabling environment to attract both domestic and foreign investment. This may involve implementing reforms to improve the ease of doing business, ensuring political stability, and providing incentives for investment in key sectors of the economy.

Despite the lack of statistical significance, the negative coefficient for changes in oil exports suggests the need to reduce Nigeria's dependence on oil revenue. Policymakers should focus on diversifying the economy away from oil by investing in alternative sectors and implementing structural reforms to promote economic diversification and resilience.The insignificant impact of the interaction term between oil and non-oil exports highlights the complexity of Nigeria's economic landscape. Policymakers should adopt a holistic and integrated policy approach that addresses multiple factors

affecting economic growth, including export diversification, investment promotion, exchange rate stability, and structural reforms.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSSION

5.1 Summary of Findings

In summary, the analysis investigated the comparative effects of oil exports and non-oil exports on economic growth in Nigeria. Utilizing regression analysis, the study revealed the following key insights:

- Non-oil exports demonstrated a significant and positive impact on economic growth, as changes in non-oil exports exhibited both a positive coefficient and statistical significance at the 5% level. This underscores the importance of diversifying Nigeria's export base to foster sustained economic growth.
- In contrast, changes in oil exports did not significantly influence overall economic growth, as indicated by a negative coefficient without statistical significance. Despite the prominence of the oil sector, fluctuations in oil exports may not substantially affect Nigeria's economic performance.
- Depreciations in the exchange rate were found to positively impact economic growth, with a negative coefficient showing statistical significance at the 5%

level. This suggests that adopting a more competitive exchange rate regime could stimulate economic growth by enhancing export competitiveness.

- The analysis also highlighted the insignificant impact of investment on economic growth, implying that changes in investment may not substantially affect Real Gross Domestic Product (RGDP). This underscores the need for policies to attract investment in sectors with high export potential.

Overall, the findings emphasize the importance of diversifying Nigeria's export base away from oil, stabilizing the exchange rate, and attracting investment to foster sustainable and inclusive economic growth.

5.2 Policy Recommendations

- Economic Diversification: Given the significant positive impact of non-oil exports on economic growth, policymakers should prioritize strategies aimed at diversifying Nigeria's export base. This may involve providing incentives and support to non-oil sectors such as agriculture, manufacturing, and services to enhance their competitiveness in global markets.
- Export Promotion: To capitalize on the potential of non-oil exports, targeted export promotion policies should be implemented. This could include trade facilitation measures, export financing schemes, and market access initiatives to

help Nigerian exporters penetrate international markets and expand their share of non-oil exports.

- Exchange Rate Management: The findings suggest that maintaining a competitive exchange rate regime is crucial for stimulating economic growth. Policymakers should adopt measures to ensure exchange rate stability and competitiveness, including prudent monetary policies, effective foreign exchange management, and regular review of exchange rate policies.
- Investment Attraction: While changes in investment did not exhibit significant effects on economic growth in the analysis, attracting investment remains essential for fostering economic development. Policymakers should create a conducive investment climate by improving infrastructure, enhancing the ease of doing business, and providing incentives for both domestic and foreign investors.
- Economic Stability: Ensuring macroeconomic stability is paramount for supporting sustained economic growth. This entails maintaining low inflation rates, fiscal discipline, and prudent debt management practices. Sound macroeconomic policies will help build investor confidence, stimulate investment, and promote long-term economic growth.
- Diversification within the Oil Sector: While non-oil exports are crucial for economic diversification, efforts should also be made to diversify activities within the oil sector itself. This may involve promoting value addition, investing

in downstream industries, and enhancing local content development to maximize the economic benefits derived from the oil industry.

- Enhancing Trade Partnerships: Strengthening trade partnerships with other countries and regions can create new market opportunities for Nigerian exports. Policymakers should prioritize trade agreements and partnerships that facilitate access to key markets, promote trade diversification, and support the growth of non-oil exports.

By implementing these policy recommendations, Nigeria can harness the comparative advantages of both oil and non-oil sectors to achieve sustainable and inclusive economic growth, reduce its dependence on oil revenues, and enhance resilience to external shocks

5.3 Conclusion

In conclusion, the comparative effects of oil exports and non-oil exports on economic growth in Nigeria from 1990 to 2022 reveal nuanced dynamics within the economy. While the oil sector has historically played a significant role, contributing substantial revenue to the economy, this study underscores the importance of diversifying Nigeria's export base beyond oil.

The analysis indicates that non-oil exports have a more pronounced and statistically significant impact on economic growth compared to oil exports. Increases in non-oil

exports are associated with corresponding increases in Real Gross Domestic Product (RGDP), highlighting the importance of economic diversification for sustained growth. Conversely, fluctuations in oil exports do not significantly influence overall economic performance, suggesting limited impact on economic growth despite the sector's prominence.

Furthermore, the study highlights the positive role of exchange rate depreciations in enhancing economic growth by improving export competitiveness. This underscores the importance of adopting competitive exchange rate policies to stimulate economic growth and foster export-led development.

Despite the challenges posed by fluctuations in oil prices and global demand, Nigeria can leverage its diverse economic potential by prioritizing policies aimed at promoting non-oil exports, attracting investment, stabilizing the exchange rate, and enhancing trade partnerships. By diversifying its export base, Nigeria can build resilience, reduce vulnerability to external shocks, and achieve sustainable and inclusive economic growth in the long term.

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APPENDICE

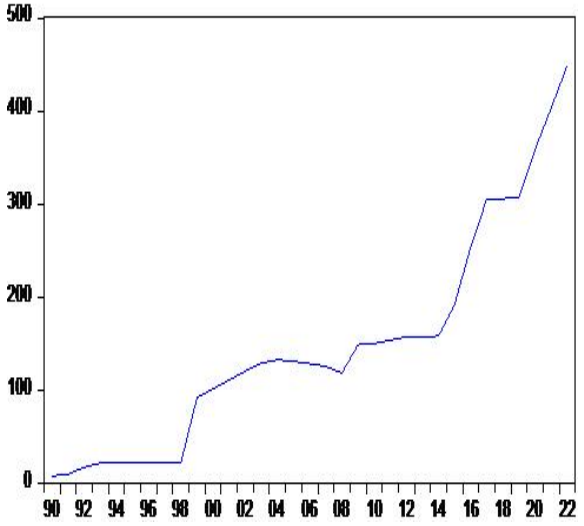
RESEARCH DATA

Year	RGDP	NONX	OILX	OXNONX	EXCR	INV
1990	21680.2	3.2596	106.6265	347.5597394	8.04	0.59
1991	21757.9	4.6773	116.8581	546.5803911	9.91	0.71
1992	22765.55	4.2278	201.3839	851.4108524	17.3	0.9
1993	22302.24	4.9913	213.7788	1067.034124	22.07	1.35
1994	21897.47	5.349	200.7102	1073.59886	22	1.96
1995	21881.56	23.0961	927.5653	21423.14093	21.9	0.34
1996	22799.69	23.3275	1286.2159	30004.20141	21.88	0.5
1997	23469.34	29.1633	1212.4994	35360.48375	21.89	0.47
1998	24075.15	34.0702	717.7865	24455.12961	21.89	0.3
1999	24215.78	19.4929	1169.4769	22796.49626	92.34	1
2000	25430.42	24.8229	1920.9004	47682.31854	101.7	1.14
2001	26935.32	28.0086	1839.94525	51534.29053	111.23	1.19
2002	31064.27	94.73185	1649.44583	156255.055	120.58	1.87
2003	33346.62	94.77644	2993.10995	283676.3056	129.22	2.01
2004	36431.37	113.30935	4489.47219	508699.1757	132.89	1.87
2005	38777.01	105.95588	7140.57892	756586.3232	131.27	4.98
2006	41126.68	133.59499	7191.08564	960693.0142	128.65	4.85
2007	43837.39	199.25794	8110.50038	1616081.598	125.81	6.04
2008	46802.76	525.85918	9861.83443	5185936.167	118.57	8.19
2009	50564.24	500.8646	8105.45512	4059735.536	148.88	8.56
2010	55469.35	710.95375	11300.52212	8034148.578	150.3	6.03
2011	58180.35	913.51134	14323.15465	13084364.2	153.86	8.84

2012	60670.05	879.33523	14259.9909	12539312.38	157.5	7.07
2013	63942.85	1,130.17	14131.84308	15971392.44	157.31	5.56
2014	67977.46	955.06179	12006.96505	11467393.53	158.55	4.69
2015	69780.69	660.67829	8184.48052	5407308.594	192.44	3.06
2016	68652.43	656.79395	8178.81796	5371798.154	253.49	3.45
2017	69205.69	1,074.90	12913.24132	13880467.24	305.79	2.41
2018	70536.55	1,425.37	17281.95313	24633251.85	306.08	0.78
2019	72094.09	3,207.10	16703.43407	53569579.06	306.92	2.31
2020	70800.54	1,555.44	11058.15184	17200301.21	358.81	2.39
2021	73382.77	2,466.83	16737.33963	41288192.44	403.58	2.67
2022	75,768.95	3,029.98	24221.59593	73390865.49	*448.9*	3.12

GRAPHICAL VIEW OF RAW DATA

EXCR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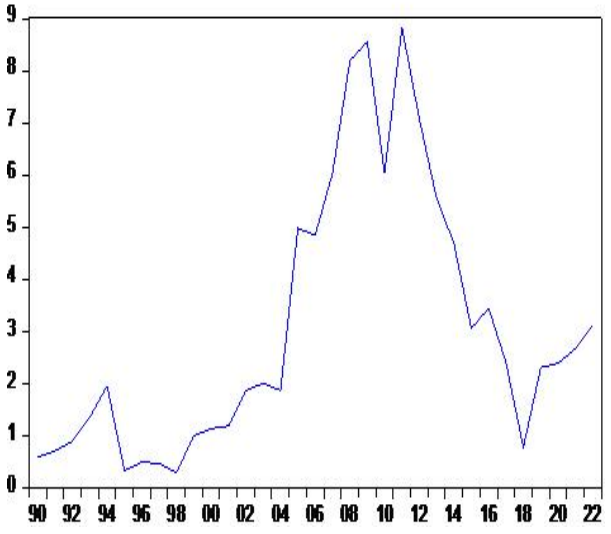
INV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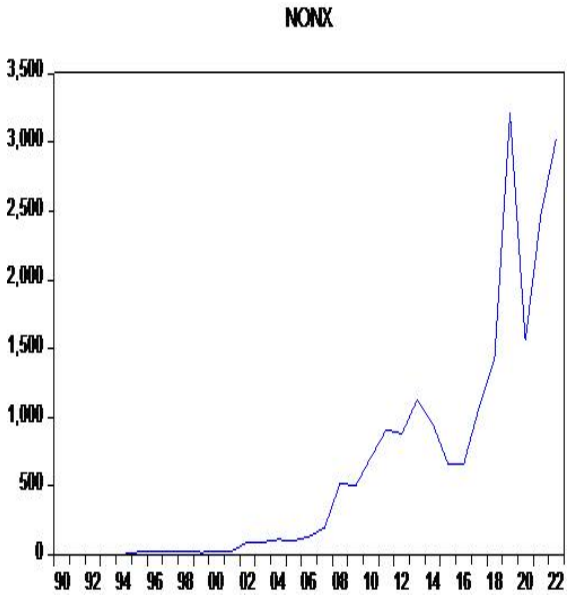
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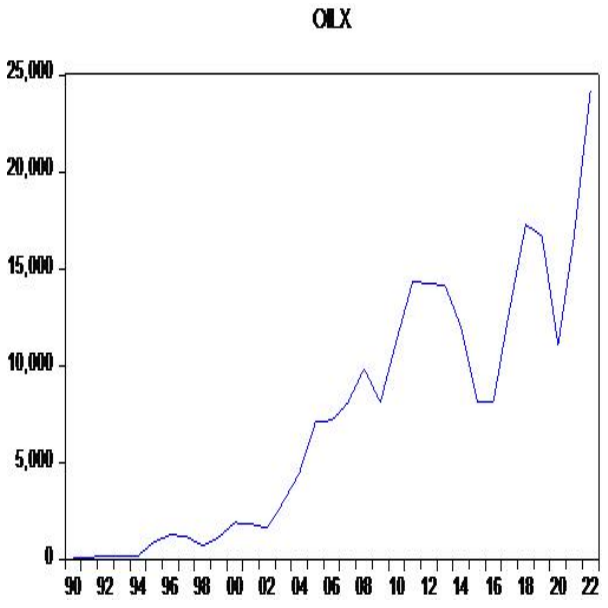
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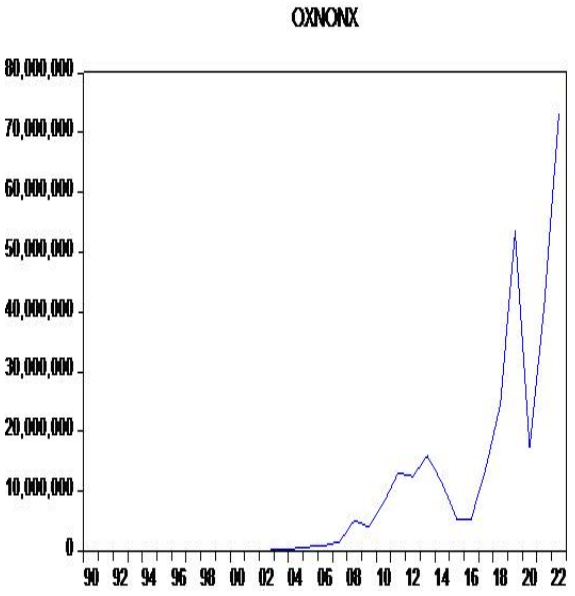
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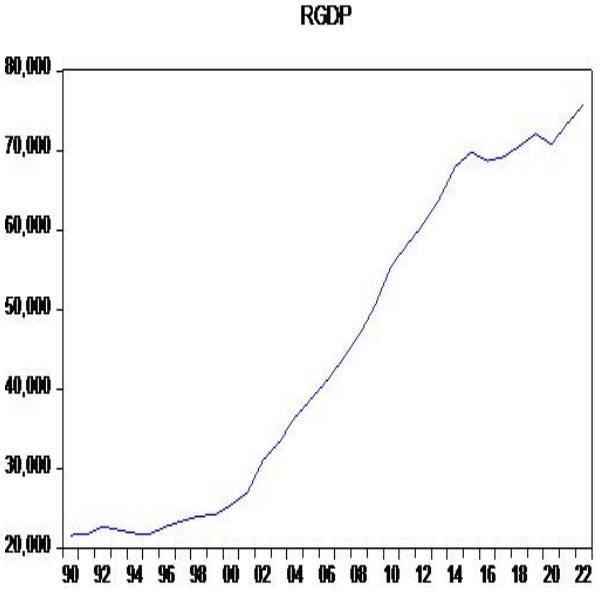
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Ramsey RESET Test

Equation: UNTITLED

Specification: D(LNRGDP) C D(LNINV) D(LNNONX) D(LNOILX) D(LNEXCR) D(OXNONX) ECM(-1)

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	2.102635	24	0.4462
F-statistic	4.421075	(1, 24)	0.4462
Likelihood ratio	5.410468	1	0.1200

F-test summary:

	Sum of Sq.	df	Mean Squares
Test SSR	0.003451	1	0.003451
Restricted SSR	0.022184	25	0.000887
Unrestricted SSR	0.018733	24	0.000781

LR test summary:

	Value
Restricted LogL	70.97967
Unrestricted LogL	73.68491

Unrestricted Test Equation:

Dependent Variable: D(LNRGDP)

Method: Least Squares

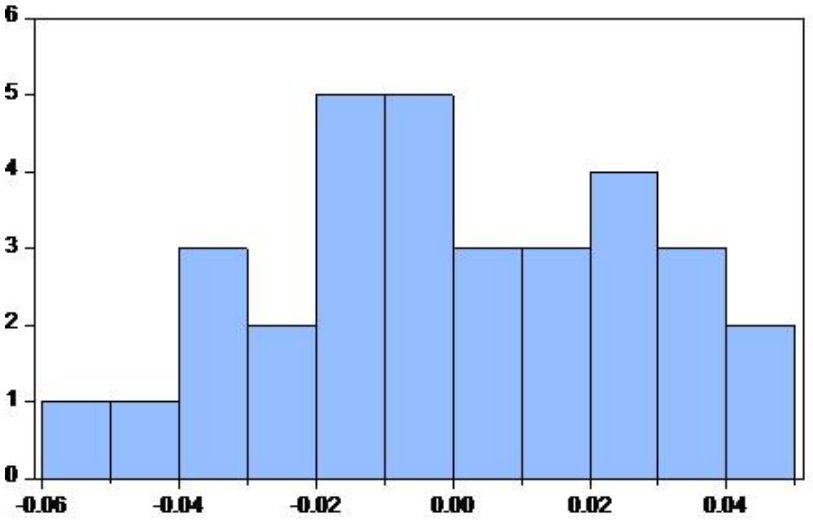
Date: 04/11/24 Time: 23:38

Sample: 1991 2022

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.009625	0.014390	0.668874	0.5100
D(LNINV)	-0.000511	0.012661	-0.040343	0.9682
D(LNNONX)	-0.022811	0.033729	-0.676296	0.5053
D(LNOILX)	0.017372	0.026740	0.649657	0.5221
D(LNEXCR)	-0.017519	0.023961	-0.731153	0.4718
D(OXNONX)	1.23E-10	5.41E-10	0.228086	0.8215
ECM(-1)	0.041657	0.134217	0.310368	0.7590
FITTED^2	15.68309	7.458777	2.102635	0.0462

R-squared	0.546258	Mean dependent var	0.039103
Adjusted R-squared	0.413917	S.D. dependent var	0.036494
S.E. of regression	0.027938	Akaike info criterion	-4.105307
Sum squared resid	0.018733	Schwarz criterion	-3.738873
Log likelihood	73.68491	Hannan-Quinn criter.	-3.983844
F-statistic	4.127648	Durbin-Watson stat	1.317167
Prob(F-statistic)	0.004149		



Series: Residuals	
Sample 1991 2022	
Observations 32	
Mean	1.06e-17
Median	-0.001916
Maximum	0.046690
Minimum	-0.055140
Std. Dev.	0.026751
Skewness	-0.135918
Kurtosis	2.240405
Jarque-Bera	0.867840
Probability	0.647964

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.004035	Prob. F(6,25)	0.4447
Obs*R-squared	6.213686	Prob. Chi-Square(6)	0.3997
Scaled explained SS	2.352138	Prob. Chi-Square(6)	0.8846

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 04/11/24 Time: 23:42

Sample: 1991 2022

Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000692	0.000187	3.706128	0.0010
D(LNINV)	8.79E-05	0.000299	0.293640	0.7715
D(LNNONX)	0.000541	0.000453	1.194190	0.2436
D(LNOILX)	-0.000268	0.000489	-0.548295	0.5884
D(LNEXCR)	1.23E-05	0.000671	0.018264	0.9856
D(OXNONX)	-3.26E-11	1.52E-11	-2.152328	0.0412
ECM(-1)	0.000459	0.001507	0.304770	0.7631

R-squared	0.194178	Mean dependent var	0.000693
Adjusted R-squared	0.000780	S.D. dependent var	0.000784
S.E. of regression	0.000784	Akaike info criterion	-11.27329
Sum squared resid	1.54E-05	Schwarz criterion	-10.95266
Log likelihood	187.3726	Hannan-Quinn criter.	-11.16701
F-statistic	1.004035	Durbin-Watson stat	1.706551
Prob(F-statistic)	0.444733		

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	3.191249	Prob. F(2,23)	0.1598
Obs*R-squared	6.951075	Prob. Chi-Square(2)	0.1309

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 04/11/24 Time: 23:42

Sample: 1991 2022

Included observations: 32

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.003489	0.006700	-0.520823	0.6075
D(LNINV)	-0.008788	0.011079	-0.793218	0.4358
D(LNNONX)	0.002544	0.015982	0.159204	0.8749
D(LNOILX)	0.001686	0.017317	0.097382	0.9233
D(LNEXCR)	0.019106	0.024755	0.771790	0.4481
D(OXNONX)	1.67E-10	5.55E-10	0.300823	0.7663
ECM(-1)	-0.037671	0.055059	-0.684192	0.5007
RESID(-1)	0.507569	0.225109	2.254771	0.0340
RESID(-2)	0.075169	0.219847	0.341913	0.7355

R-squared	0.217221	Mean dependent var	1.06E-17
Adjusted R-squared	-0.055050	S.D. dependent var	0.026751
S.E. of regression	0.027478	Akaike info criterion	-4.118635
Sum squared resid	0.017365	Schwarz criterion	-3.706396
Log likelihood	74.89815	Hannan-Quinn criter.	-3.981989
F-statistic	0.797812	Durbin-Watson stat	2.094911
Prob(F-statistic)	0.610442		