

THE IMPACT OF INTERNATIONAL TRADE ON ECONOMIC
GROWTH IN NIGERIA

BY

Goodness Ehizemoya AIKHUELE

DEPARTMENT OF ECONOMICS
FACULTY OF SOCIAL SCIENCE
UNIVERSITY OF BENIN
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CERTIFICATION

This is to certify that this project titled “THE IMPACT OF INTERNATIONAL TRADE ON ECONOMIC GROWTH IN NIGERIA” was carried out by Goodness Ehizemoya AIKHUELE of the Department of Economics, Faculty of Social Sciences, University of Benin. It is found worthy of acceptance in the partial fulfilment of the award of Bachelor of Science (BSc) Degree in Economics.

Prof. (Mrs) E.I. Izilein
(Project Supervisor)

Date

Prof. S.O. Igbinedion
(Project Coordinator)

Date

Prof. Clement .A. Ighodaro
(Head of Department)

Date

DEDICATION

This project is dedicated to Almighty God for the grace of determination, mercies and favour throughout my years of academic pursuits in University of Benin.

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ABSTRACT

This study evaluates the performance of international trade and its contribution to economic growth in Nigeria over a 34-year period (1990-2024), utilizing annual time series data and the Ordinary Least Squares (OLS) estimation technique. The research addresses the persistent challenge of why Nigeria has struggled to achieve significant economic growth despite its participation in global trade and the implementation of an Export-Led Growth (ELG) strategy. The key objective was to examine the impact of export trade, import trade, and Foreign Direct Investment (FDI) on the Real Gross Domestic Product (RGDP).

The empirical results established that international trade exerts a mixed influence on Nigeria's economy. The findings revealed a statistically significant positive relationship between import trade and economic growth, suggesting that the importation of productive capital goods and raw materials is crucial for enhancing domestic production capacity. Similarly, Foreign Direct Investment (FDI) had a significant positive impact on economic growth, underscoring the value of a favorable investment climate. Conversely, export trade exhibited a negative and statistically insignificant

effect on economic growth, which is primarily attributed to Nigeria's overreliance on crude oil and a weak, undiversified export structure.

The study concludes that Nigeria's integration into the global economy has yet to yield optimal developmental outcomes due to these structural inefficiencies. To harness the full potential of international trade, the study recommends that policymakers must adopt a comprehensive strategy focusing on export diversification, promoting productive imports, ensuring exchange rate stability, and cultivating a favorable investment environment.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

International trade has long been recognized as a crucial driver for economic advancement, with its roots tracing back to the mercantilist era when countries exchanged goods, services, and capital, laying the groundwork for modern economies (Krugman & Obstfeld, 2020). Early economic thinkers such as Smith (1776) and Ricardo (1821) underscored the advantages of specialization and comparative advantage, concepts that remain pertinent in today's interconnected global economy. Globalization has further amplified the significance of trade by facilitating the spread of technology, increasing competition, and encouraging industrial specialization, thereby stimulating economic progress (Heckscher & Ohlin, 1991). While these theoretical perspectives highlight trade's potential to foster growth, its actual impact varies depending on specific national characteristics such as institutional frameworks, infrastructure, and industrial policies (Rodrik, 2018).

In countries like China and India, trade has been a significant contributor to rapid economic expansion, aiding their transformation from primarily agrarian nations into significant global economic forces and consequently lifting millions out of poverty (Lin, 2001). However, this pattern is not consistent across all regions, particularly in many sub-Saharan African nations, including Nigeria, where participation in global trade has not resulted in comparable levels of economic growth. This discrepancy raises questions about the reliability of trade as a stand-alone tool for development in such areas (Collier, 2007). In Nigeria's case, international trade, particularly concerning oil and agricultural products, has been a key source of revenue. Historically, Nigeria heavily relied on agricultural exports like palm oil, groundnuts, and cocoa before the discovery of oil. The subsequent shift in focus towards oil has led to a decline in agricultural productivity and an increased dependence on crude oil exports (Ezindu, Nkechi, Victoria, & Chike, 2020).

The necessity of international trade for both global and national economic advancement is well-established. According to Nnadozie (2003),

engaging in international trade fosters specialization, boosts resource productivity, increases overall output, generates employment, creates income, and eases foreign exchange constraints. The positive correlation observed between global trade and economic growth can likely be attributed to the beneficial spillovers that arise when different nations participate in international commerce. The significant role of international trade in driving industrialization and economic progress cannot be overstated. This is because foreign trade facilitates industrial development by providing essential inputs for domestic production, particularly in developing countries like Nigeria where manufacturing heavily relies on imported components. Furthermore, foreign trade expands the market reach for domestically produced goods (exports), which in turn stimulates increased investment, employment, output, and income. By broadening production possibilities and expanding the variety of goods available for consumption, foreign trade enhances the welfare of people in the participating countries (Adewuyi & Adeoye, 2008).

In simple terms, international trade is defined as the exchange of goods and services between countries. This activity requires the involvement of at

least two nations, encompassing all transactions between merchants across borders. Traders engage in these economic activities primarily to maximize profits by leveraging the differences in international economic conditions between countries (Adedeji, 2006). However, Kehinde, Jubril, Felix & Edun (2012) point out that while trade can stimulate supply-side growth, balance of payments issues can reduce the availability of imported inputs necessary for export production, potentially forcing exporters to use more expensive or lower-quality alternatives.

International trade facilitates the exchange of goods and services and promotes positive relationships among nations, regardless of their level of economic development. Countries participating in international trade need not worry about dominance or losing their sovereignty, as it is based on mutual agreement to trade across borders. A nation that does not engage in international trade risks slower economic development, fundamentally because no single country possesses all the resources required for sustainable economic growth.

The importance of international trade stems from the fact that no country can produce all the goods and services its population needs, largely due to

differences in and limitations of resources. Consequently, this trading relationship implies that economies must export goods and services to generate the revenue needed to pay for imported items that cannot be produced domestically.

International trade is also referred to as foreign trade or global trade. It involves the movement of goods and services into (imports) and out of (exports) a country. A nation's imports and exports constitute a significant portion of its gross domestic product (GDP), indicating a correlation between international trade and economic growth. In an open economy, the expansion of foreign trade significantly impacts GDP growth (Li, Chen, & San, 2010). Without international trade, countries would be limited to consuming only goods and services produced within their borders. International trade is directly linked to globalization, as increased cross-border trade activities are fundamental to the globalization process. The globalized nature of an economy enhances its direct participation in the world market, leading to market expansion. As Adam Smith argued, the expansion of a country's market encourages productivity, which inevitably contributes to economic growth.

The importance of international trade in the Nigerian economy has grown rapidly in recent times. According to the 2022 UNCTAD, the aggregate trade openness ratio increased from an average of 35.9% during 1970-1993 to about 52.9% during 1994-2020, as at 2024 it has increased to about 55% due to the unrest in Nigeria's oil producing Niger Delta region which resulted in significant disruption in oil production and shortfalls in oil export from Nigeria. Promotion of economic growth is one of the major objectives of international trade, but in recent times, this has not been the case because the Nigerian economy is still experiencing some elements of economic instability, such as price instability, a high level of unemployment, and adverse balance of payments. Furthermore, the benefits of international trade had not been noticed in the economic growth of Nigeria because some of the goods imported into the country were those that cause damage to local industries by rendering their products inferior or neglected, thereby reducing the growth rate of output of some industries, which later spread to the aggregate economy.

Economic growth is a primary indicator for evaluating a nation's or region's economic advancement. It signifies an expanded capacity to

produce goods and services, typically gauged by the Gross Domestic Product (GDP). GDP represents the total value of all goods and services produced domestically within a specific timeframe (like a year or quarter). A rising GDP over time indicates economic expansion and increased production capabilities (Jalava, 2022). Beyond a mere quantitative figure, economic growth also reflects structural shifts within the economy, such as a move from agriculture or industry towards services or technology. However, it's crucial to recognize that economic growth doesn't automatically ensure equitable prosperity, as rapid growth can exacerbate income inequality with unevenly distributed benefits (Aghion, 2020). To ensure sustainability and avoid harming future generations, the environmental consequences of increased economic activity, like pollution and resource depletion, must be taken into account. A thorough understanding of a country's economic health requires analyzing economic growth alongside social welfare, income inequality, and environmental impacts.

Economic growth serves as a tool for countries to evaluate and track their domestic economic progress, showing continuous improvement over time. Pangeran (2017) defines it as an increase in an economy's production

capacity, reflected in higher national income, and considers it a mark of successful economic development. Ananda (2021) highlights international trade as a significant driver of economic growth, noting its role in expanding markets, boosting investment, and fostering innovation, all of which contribute to increased growth. Economic growth represents sustained positive changes in a country's economic state over time. It signifies an increase in the economy's production capacity, leading to higher national income. This growth not only indicates greater output of goods and services but also suggests improved well-being through higher incomes (Stiglitz, 2024). Economic growth is often seen as proof of successful economic development efforts, with substantial growth indicating progress. Positive economic growth generally benefits various sectors, particularly those directly linked to national income, promoting their development, attracting investment, and creating jobs. Sustainable economic growth is vital for enhancing quality of life and establishing economic stability, providing broad advantages for both society and the economy.

1.2 Statement of the Problem

Nigeria has experienced a long period where its trade balance has worsened, leading to ongoing deficits in its balance of payments. This has occurred despite the government's efforts to boost exports. Contrary to expectations, economic growth rates have decreased significantly, falling from an average of 3.6% annually between 1984 and 2004 to negative growth rates. World Bank data from 2008 shows Nigeria's economic growth declined over the years, even reaching a negative GDP growth of -0.2% in 2000, despite exports of goods and services making up a substantial 26.2% of the GDP that year. In the first quarter of 2024, Nigeria's GDP grew by 2.98% year-on-year, driven by the Services sector. The GDP growth was 3.84% in the fourth quarter of 2024. It appears that Nigeria's GDP growth has consistently lagged behind its export and import performance, suggesting that GDP is influenced by trade trends, tending to decline when both exports and imports fall and vice versa.

The central issue this study addresses is why Nigeria has struggled to achieve a significant economic growth rate of at least 10%, despite implementing an Export-Led Growth (ELG) strategy that promotes exports and opens the domestic market to foreign competition. The research aims to

investigate the reasons behind this development problem. The study posits that Nigeria's involvement in international trade through its ELG strategy should increase the likelihood of achieving rapid economic growth. The main question guiding this research is whether trade genuinely contributes to a country's economic growth. While some studies have examined international trade performance, the specific link to economic growth in Nigeria hasn't been fully explored. This is partly because some aspects of international trade can harm local industries by making their products less competitive or overlooked, thereby slowing down their output growth and subsequently the overall economy. Furthermore, factors like language barriers, transportation difficulties, transit risks, and lack of information about foreign business contacts have been cited as reasons for poor international trade performance.

1.3. Research Questions

Despite these challenges, this study seeks to answer:

1. To examine the role of exports in Nigeria's economic growth.
2. To examine the impact of imports on economic growth in Nigeria.

3. To determine the impact of foreign direct investment on the growth of Nigeria's economy

1.4. Objectives of the Study

The main objective of this study is to evaluate the performance of international trade and its contribution to economic growth in Nigeria.

Specifically, the research work will focus on the following objectives:

1. To identify the impact of export trade on Nigeria's economy.
2. To access the impact of import trade on Nigeria's economy.
3. To ascertain the impact of foreign direct investment on the growth of Nigeria's economy.

1.5. Research Hypotheses

Ho: Export trade does not have a significant positive impact on Nigeria's economic growth.

Ho: There is no significant impact of import trade on Nigeria's economic growth.

Ho: Foreign direct investment does not contribute to the instability of economic growth in Nigeria.

1.6. Significance of the Study

This study was conducted in order to ascertain the extent to which economic growth has been propagated by growing international trade on economic growth in the Nigerian economy. This research work, apart from achieving its main objectives, will contribute immensely to aiding the government, policymakers, economic planners, researchers, and academia in general. This study will be essential to policymakers to know more about the performance of international trade and economic growth. It will also assist in providing the framework of where work has been done by earlier researchers. It will also provide a framework on which further research in international trade could be carried out. This study will also be an invaluable tool for students, researchers, research institutions, and the general public who partake in international trade and want to know more about the impact of international trade on economic growth. This study will provide insight and understanding to the government on how to be prudent in spending public funds to boost international trade in order to bring about economic growth

and development. It helps in providing insight and knowledge to the general public, policy makers. The findings of this study will contribute to the current scenario of international trade in Nigeria and the level of its contribution to the GDP.

1.7. Scope of the Study

The scope of the study will span 34 years, that is, (1990-2024). The empirical analysis shall focus on the impact of international trade on the country's economic growth. The gross domestic product (GDP) shall be used as the indicator for economic growth. The study concentrated on how impact of international trade on economic growth in Nigeria. Annual time series data will be employed by this study to conduct the investigation.

1.8. Limitations of the Study

In the course of carrying out this research, some challenges were encountered. The following constraints in the course of this work include: data constraint or unavailability of data on some variables, relevant information and documents, and finance to facilitate the study. Most of the

data used for this research was obtained from secondary sources, and these secondary sources can be inaccurate, and there is a chance of errors in this data. Other constraints in this study include time constraints.

1.9. Organization of the Study

This study, which explores the relationship between international trade and economic growth in Nigeria, is organized into five distinct chapters, progressing logically from background to conclusion. Chapter one gives an opening introduction of the topic, the research problem, providing background context on international trade and Nigeria's economy, outlines the study's objectives and research questions, states its significance, defines the scope and limitations, and may include the organization of the study itself. Chapter two gives a review of relevant literature, examining existing theoretical and empirical studies related to international trade and economic growth. It helps to understand what is already known, identify different perspectives, highlight research gaps, and establish the theoretical basis for the current study. Chapter three presents the analytical framework and methodology, showing in detail how the research was conducted. It presents the theoretical or conceptual framework guiding the analysis, specifies the

research design (e.g., quantitative), describes the data sources and variables used, and explains the analytical techniques or econometric models employed to analyze the data. Chapter four discussed the empirical results of the research. This chapter is where the findings from the data analysis are presented and interpreted. It typically includes descriptive statistics, the results from the chosen analytical model(s) (often presented in tables or figures), and a discussion of what these results mean to the research questions and existing literature. Chapter five closes out the study with the summary, conclusion, and policy recommendations. This is the final chapter that brings the study together. It summarizes the major findings, synthesizes these findings to draw overall conclusions about the impact of international trade on Nigeria's economic growth, discusses the implications of the results, acknowledges any limitations of the study, and provides actionable policy recommendations based on the research insights.

CHAPTER TWO

LITERATURE REVIEW

2.1. Conceptual Literature

2.1.1. Definition of International Trade

Trade is understood fundamentally as the recurrent exchange of goods facilitated through market interactions. Abebefe (1995) stated that trade involves multiple exchanges of products carried out through market interactions. Transactions occurring beyond the jurisdiction of a sovereign state are considered international trade. Similarly, Nordhaus (2002) argued that the system in which countries import and export products, capital, and services is referred to as international trade. They differentiate between

domestic and global trade based on increased trade possibilities, sovereign nations, and exchange rates, highlighting their practical and economic significance. Foreign trade is driven by the encouragement of specialization, leading to increased production (Ingram & Dunn, 1993; Nordhaus, 2002). Mannur (1995) posited that international trade involves the exchange of products and services among citizens of different countries, serving as a means to facilitate global service flows, trade in goods, and factor movements. It is based on the understanding that no single nation can provide all the goods and services its population requires due to resource limitations and disparities. Similarly, Classical and neo-classical economists viewed foreign trade as an integral to a country's development process and as a source of growth. With globalization and international trade, nations have become increasingly interconnected in recent years. Afolabi, Danladi, and Azeez (2017) noted that foreign trade is the most significant and enduring aspect of a country's international economic relations.

International trade is simply known as the exchange of goods and services between nations of the world. At least two countries should be involved in the activities, that is, the aggregate of activities relating to trading between

merchants across borders. Traders engage in economic activities for the purpose of profit maximization engendered from differentials among the international economic environment of nations (Adedeji, 2006). Foreign or international trade concerns the study of the causes and consequences of the international exchange of goods and services, and of the international movement of factors of production. Foreign trade means an exchange of goods and services across international borders.

The term international trade has been defined as trade across frontiers; that is, with the rest of the world. It has been argued that it plays a prominent role in promoting economic growth and productivity in particular, and these debates have been ongoing for several decades. Furthermore, it has been revealed that internationally active countries tend to be more productive than countries that only produce for the domestic market. As a result of liberalization and globalization, a country's economy has become much more closely associated with external factors such as openness. The benefit of international trade for economic growth and development is difficult to understate. Imports bring additional competition and variety to domestic markets, benefiting consumers, and exports enlarge markets for domestic

production, benefiting businesses. Trade exposes domestic firms to the best practices of foreign firms and to the demand of discerning customers, encouraging greater efficiency. Trade gives firms access to improved capital inputs such as machine tools, boosting productivity and providing new opportunities for growth to developing countries. International trade deals with the economic and financial interdependencies among nations; international trade is part of our daily life, and international trade plays a vital role in shaping economic and social performance and prospects of countries around the world, especially those of developing countries. No country has grown without trade. The working of an economy in terms of growth rate and per capita income has been based on domestic production, consumption activities, and in conjunction with foreign transactions of goods and services. Foreign trade has been an area of interest to decision-makers, policymakers, as well as economists. It enables nations to sell their domestically produced goods to other countries of the world (Adewuyi, 2002).

Economic theorists like Smith have argued that countries engage in external trade to reap the gains that arise from specialized production, with

each country concentrating on the production of those goods and services that involve the least opportunity cost. Various studies on international trade recognize trade as a vital catalyst for economic development. For developing countries, the contribution of trade to overall economic development is immense, owing largely to the obvious fact that most of the essential elements for development, such as capital goods, raw materials, and technical know-how, are almost entirely imported because of inadequate domestic supply. Increased domestic demand invariably solicits a corresponding expansion in exports. To enhance export capacity, therefore, improved technology must be required, and this in turn further pushes up demand for imports.

This circle of activities has the tendency to push imports far ahead of exports and, in consequence, exerts pressure on the balance of payments. Prolonged pressures on the balance of payments constitute constraints to economic development, and thus, appropriate economic policy measures have to be put in place to streamline external trade transactions to conform to the desired goal of economic development. One of such policies is the

external trade policy. External trade policy regulates external trade in line with the domestic requirements of a country.

2.1.2. Benefits of International Trade

There are several economic benefits of trade that could accrue from foreign trade. Comparative cost theory has shown clearly that the greatest possible advantage from trade for all countries would be obtained if each nation devotes itself to what it can produce cheaply. This brings about efficient allocation of resources because each country specializes in producing the commodities in which it has a comparative advantage over others. About this theory, through foreign trade, countries direct their factors of production to areas where they can produce more. Though with foreign trade, the total world output of commodities seems to increase. This increase in the world output also increases the variety of goods available to consumers. And consumers have the chance of exercising their preference. Consequently, the standard of living would also increase. Foreign trade also increases competition. A company shielded from foreign competitors is more likely to have market power, which in turn gives it the ability to raise prices above competitive levels. Opening up trade fosters competition and

gives the invisible hand a better chance to work its magic. The transfer of technological advances around the world is often thought to be linked to foreign trade. Since human capacities vary all over the globe, foreign trade brings about an exchange of ideas. All these ideas and qualities are transported from one country to the other through trade.

In Nigeria, foreign trade helps in no small measure to accelerate economic growth. It has helped in the importation of machinery such as tractors, plows, industrial plants, and equipment. With all this equipment, Nigeria's economy can increase its productivity and thus quicken economic growth. Foreign trade has been a major determinant of foreign investment in Nigeria. Foreign trade has helped in upgrading the socio-economic value of citizens because, through foreign investment, employment opportunities were created. There is an increase in national income, which in turn, raises the level of output and the growth rate of the economy. Thus, the higher level of output through trade tends to break the vicious circle of poverty and promote economic development. A less developed country (LDC) is hampered by the small size of its domestic market, which fails to absorb a sufficient volume of output. This leads to low inducement to investment. The size of the

market is also small because of low per capita income and purchasing power. International trade widens the market and increases the inducement to invest income and savings through more efficient resource allocations. In Smith's 'vent for surplus' theory to the LDCs for measuring the effects of gain from international trade, the introduction of foreign trade opens the possibility of a 'vent for surplus' (or potential surplus) in the primary producing LDCs. Since land and labour are underutilized in the traditional subsistence sector in such a country, its opening up to foreign trade can produce a surplus of primary products in exchange for the import of manufactured products, which it cannot itself produce. Thus, it benefits from international trade (H. Myint 1958).

Many underdeveloped countries specialize in the production of one or two staple commodities. If efforts are made to export them, they tend to widen the market. The existing resources are employed more productively, and the resources allocation becomes more efficient with given production functions. As a result, unemployment and under-employment are reduced; domestic savings and investment increase; there is a larger inflow of factor inputs into the expanding export sector; and greater backward and forward

linkages with other sectors of the economy. This is known as the ‘staple theory of economic growth’ (Watkins, 1963). Foreign trade also helps to transform the subsistence sector into the monetized sector by providing markets for farm produce and raising the income and the standards of living of the peasantry. The expansion of the market leads to several internal and external economies, and hence to a reduction in the cost of production. These are the direct or static gains from international trade.

2.1.3. Trade Policies in Nigeria

Trade policy since the 1960s has witnessed extreme policy swings from high protectionism in the first few decades after independence to its current more liberal stance (Adenikinju, 2005). Attempts were made to use trade policy to promote manufactured exports and enhance the linkages in the domestic economy to increase and stabilize export revenue and scale down the country’s reliance on the oil sector (Olaniyi, 2005). Trade policies were accordingly directed at discouraging dumping, supporting import substitution, stemming adverse movements in the balance of payment,

conserving foreign exchange, and generating government revenue (Bankole & Bankole, 2004). During the first decade of independence, Nigeria pursued an import-substitution industrialization strategy. This involved the use of trade policy to provide effective protection to local manufacturing industries through quantitative restrictions and high import duties. Trade policy between 1970 and 1976 assumed a less restrictive stance, ostensibly because of demands necessitated by the post-war reconstruction. Thus, only items that were regarded as nonessential consumer goods were restricted. Tariff rates on raw materials were reduced, and quantitative restrictions on spare parts, agricultural equipment, and machinery were relaxed.

The 1960s and early 1970s also saw the application of exports such as cocoa, rubber, cotton, palm oil, palm kernel, and groundnut. However, in 1973, these duties were eventually abolished as a result of the oil boom and the need to promote agricultural exports as part of the export diversification strategy. Furthermore, in 1981, there was a policy shift towards export promotion and a move to intensify the use of local raw materials in industrial production. The central objective of trade policy was to provide protection for domestic industries and reduce the perceived dependence on imports; a

means to that objective was a desire to reduce the level of unemployment and generate more revenues from the non-oil sector. Accordingly, tariffs on raw materials and intermediate capital goods were scaled down. In addition, 1986 depicts a significant shift in trade policy towards trade liberalization. This is attributable to the adoption of the structural adjustment program.

Nigeria's trade policies could be discussed under two broad regimes, that is, the period before the introduction of the Structural Adjustment Programme (SAP), and the period after its adoption. Throughout these regimes, trade policies exhibited identical characteristics of being short-term in nature (operational within each fiscal year and reviewed thereafter), and directed at meeting specific objectives such as ensuring balance of payments viability and export promotion. They were also meant to complement other policy initiatives, such as industrialization policy, employment creation, and self-sufficiency policies, etc. The trade policies implemented under the two regimes were as follows:

Pre-SAP Trade Policies

At independence, Nigeria's economy was, in many respects, rural and relatively backward, purely agrarian with a very narrow industrial base. To

modernize the economy, the early political leaders adopted a development planning strategy as an instrument for securing a steady and rapid growth of the economy. Emphasis was placed on the accelerated development of the economy through expansion in the nation's industrial base. Consequently, the trade policies had to be restrictive to moderate the demand pressures. Exchange control measures were then introduced to adjust the demand for foreign exchange to the available supply so as to maximize the use of reserves by ensuring that essential imports were accorded priority over other imports in the use of foreign exchange resources. Also, in order to give effect to the import substitution industrialization policy, trade barriers in the form of import licensing were put in place to complement import tariffs in the control of imports, as well as protect domestic industries that were set up to produce import substitutes. The customs tariff structure was deliberately discriminatory, biased in favor of capital goods and raw materials. Items considered as luxury goods were either put on the import prohibition list or had very high import tariffs placed on them. In terms of directional flow of trade, Nigeria's imports and exports were concentrated in the Western

Hemisphere, although not as a deliberate policy, but due to historical inheritance.

The second National Development Plan (1970-74) came on the heels of the termination of Nigeria's civil war. The major strategy of the plan was to secure economic growth through the replacement of destroyed assets and the restoration of the productive capacity of the country, as well as ensure equitable distribution of the fruits of development. It was also envisaged that by the end of the plan period, Nigeria would have been able to produce its goods and services, finance its development, rely on its labor, as well as strive for the best terms for its exports. Towards this end, the plan was designed to incorporate and enhance the priority areas of the 1962 - 68 plan. That is, enhance agricultural and industrial production, as well as develop high-level and intermediate-level manpower. Additional inputs were therefore required for the execution of the plan, which eventually gave a fillip to import demand. To moderate the pressures, restrictive trade policies were retained and strengthened. Exchange control measures became stringent with the introduction of foreign exchange budgeting in 1971/72 to relate aggregate foreign exchange expenditure, by category, to income.

Similarly, import licensing was intensified, and an increasing number of non-essential items were placed under ban, while some finished consumer items considered not too essential were placed under a specific license so as to keep their importation within the specified quota. Increase in the prices of crude petroleum in 1973 coupled with the country's low absorptive capacity, and the existence of various production bottlenecks in the economy had by 1974 led to a situation whereby the country was faced with surfeit of funds for which it had no immediate investment outlet internally, in the circumstance, it was thought that the exchange control regulations needed further liberalization. Consequently, the restrictions on import payments were removed in 1974. The boom from the crude oil export earnings spilled into the Third National Development Plan (1975 - 80).

The design of the Third National Development Plan was very ambitious, predicated on enhanced earnings from the oil sector of the economy. Trade policies were accordingly relaxed. By the time the Fourth National Development Plan (1981-1985) came up, the economy had started experiencing declines in foreign exchange earnings, which culminated in the oil shock of the early 1980s. Oil prices fell precipitously, but the demand for

imports maintained the upward direction. The external reserves level, which could finance about 24 months of imports in 1974, could only support 1.8 months by the end of 1978, and less than one month in the early 1980s. This was a reflection of the fact that import demand had become price inelastic, and the resultant effect manifested in balance of payments deficits. Concerted efforts were then made to control the import trend through the imposition of stricter trade restrictions. The mounting level of controls administered by innumerable persons further created administrative bottlenecks. The inability of the control measures to effectively secure downward adjustment to import demand against the backdrop of shrinking export earnings gave rise to a serious payment's imbalance, which required urgent and drastic remedial actions from the authorities.

Trade Policies During SAP

The magnitude of the distortions in the economy ushered in by the culture of controls made it imperative for the government to take urgent and drastic actions to ameliorate the situation. Thus, in July 1986, the Structural Adjustment Programme had several strategies to achieve the broad objectives of the SAP. Specific to international trade, the primary focus was

on liberalization of trade and the pricing system, with emphasis on the use of appropriate price mechanisms for the allocation of foreign exchange. The application of import and export licensing became irrelevant in the new dispensation and was consequently abolished. To encourage export activities, the policy that required exporters to surrender their export proceeds to the Central Bank of Nigeria was abolished. Consequently, exporters were allowed to retain 100 percent of their export earnings in their domiciliary accounts from which they could freely draw to meet all their eligible foreign exchange transactions. Furthermore, under the revised duty drawback/suspension scheme, exporters/producers could import raw materials and intermediate products free from import duty and other indirect taxes and charges. The Export Incentive and Miscellaneous Provisions Decree of 1986 was promulgated to encourage exports. Through it, the CBN could provide refinancing and rediscounting facilities to banks to encourage them to provide export financing to their customers. Also, the Nigerian Export Credit Guarantee and Insurance Corporation came on stream in 1988 and was subsequently renamed Nigerian Export-Import Bank (NEXIM) to provide credit and risk-bearing facilities to banks, so as to encourage them to

support exports. In the area of imports, the devalued exchange rate of the naira at the different shades of the Foreign Exchange Market, either SFEM, AFEM, or IFEM, was meant to make imports dearer and thus discourage excessive importation and thereby reduce the pressure on the balance of payments. Import licensing was abolished, and reliance was placed on the use of customs tariffs for the control of imports. The list of items on the import's prohibition list was also drastically reduced.

Trade Policies in Recent Years

Nigeria's tariff policy is mostly governed by the recently revised Common External Tariff (CET) regime of the Economic Community of West African States (ECOWAS). Initially adopted in 2005, the four bands of CET with a maximum rate of 20 percent were revised in June 2009 to include a fifth band of 35 percent, primarily at the behest of Nigeria. Nigeria applies the 35 percent rate to 167 (of 5,671) tariff line items, and the new CET covers about 80 percent of the country's tariff lines that had non-zero import values in 2008; Besides tariff barriers, Nigeria has a long list of prohibited imports

(and a shorter list of prohibited exports), making smuggling prevalent in the country. Smuggled imports typically enter Nigeria from its regional neighbors (Benin, Niger, Cameroon, and Chad). In September 2008, the trade regime was amended to lower tariffs for a wide range of goods and replace a number of import bans with tariffs. Based on the country's latest (2006) MFN Tariff Trade Restrictive Index (TTRI) of 11.4 percent, it ranks 98th (where 1st is least restrictive) of 125 countries. Based on this index, Nigeria is as open to trade as the average sub-Saharan Africa (SSA) country but is more restrictive than the average lower-middle income country (TTRI of 8.6 percent). With the government's aim of enhancing food security, the agricultural sector is afforded a high level of tariff protection (TTRI of 28 percent) compared to the non-agricultural sector (TTRI of 8.5 percent). The country's average MFN applied tariff (including ad valorem equivalents of specific duties) has decreased dramatically from the late 1990s and early 2000s, when it was well over 20 percent, and now stands at 12 percent. The maximum applied MFN tariff (excluding alcohol and tobacco) has also decreased in the last decade and was 50 percent as of 2008. The country's trade policy space, as measured by the wedge between bound and applied

tariffs (the overhang), is very large at 106.4 percent, compared to 48.1 percent on average for its regional neighbors and 29.5 percent for the lower-middle-income countries. The country ranks 91st (out of 148) on the GATS Commitments Index, reflecting ample room for committing to further multilateral liberalization in services trade.

In August 2019, Nigeria implemented a partial to full closure of its land borders, citing concerns over smuggling, particularly of rice and other prohibited items, and to curb insecurity and facilitate the development of domestic agricultural and manufacturing sectors. This was a significant trade policy action with notable impacts on cross-border trade, both formal and informal, with neighboring countries. The borders were gradually reopened starting in December 2020, with a full reopening of four major land borders in April 2022. Efforts have been made to streamline trade procedures and improve the efficiency of customs operations. A notable development is the progress towards implementing the Authorized Economic Operator (AEO) program by the Nigeria Customs Service (NCS) from 2024/2025. This program aims to grant preferential treatment and expedited clearance to businesses that demonstrate a high level of compliance with customs

regulations, thereby reducing delays and costs associated with trade. However, challenges related to port infrastructure, manual processes, and regulatory inconsistencies persist.

2.1.4. Meaning of Economic Growth

Economic Growth is referred to as the increase in output or per capita income over time. It is used in analyzing the economic performance over time of advanced industrialized countries. Lipsey (1986) defined growth as a long-term upward trend in a nation's total output. This indicates a sustained increase in Gross Domestic Product (GDP) over an extended period. GDP is a measure of an economy's total output of goods and services, and is commonly used to describe economic growth. In order to represent the real value of an economy, GDP is adjusted for inflation to gauge economic growth accurately. This Adjustment, known as rebasing, was carried out by Nigeria in 2015 to account for inflation's effects and provide precise measures of growth over time. Economic growth is quantified by increases in the quantity of goods and services over time. Economic growth is the national income increase over three or four years that shows changes in both its productive capacity and in the utilization percentage of this capacity.

Todaro and Smith (2009) see economic growth as the steady process by which an economy's productive capacity is made greater over time to generate rising levels of both income and national output. To this end, economic growth is the consistent increase in net national product over a long period.

Economic growth is one of the main indicators for assessing the progress and economic development of a country or region. This concept refers to the increase in the economic capacity to produce goods and services, which is often measured by Gross Domestic Product (GDP). GDP measures the total value of all goods and services produced within a country's borders in a given period, such as annually or quarterly. The increase in GDP over time reflects how the economy is developing, and the capacity for production is increasing (Jalava, 2022). In addition to being a quantitative measure, economic growth also reflects structural changes in the economy, such as a shift from the agricultural or industrial sector to the service or technology sector. It is important to note that economic growth does not always mean equal prosperity across society. Rapid growth can lead to income inequality, where economic benefits are not always distributed fairly (Aghion, 2020).

The environmental impacts of increased economic activity, such as pollution and natural resource degradation, must be considered to ensure that the growth achieved is sustainable and does not harm future generations. Analysis of economic growth must consider dimensions of social welfare, income inequality, and environmental impacts to gain a comprehensive understanding of the economic health of a country or region. Economic growth not only shows an increase in the number of goods and services produced but also reflects an increase in people's welfare, which is reflected in higher incomes (Stiglitz, 2024).

2.1.5. Relationship between International Trade and Economic Growth

International trade has a significant impact on economic growth by expanding markets, promoting specialization, and enabling economies of scale. International trade allows countries to sell their goods and services to a wider global audience, boosting production and revenue. Trade exposes countries to new technology, ideas, expertise across borders and business practices, encouraging innovation, boosting domestic productivity, and growth. Exposure to international competition from imports can compel

domestic firms to become more effective, innovative, and improve product quality and pricing to remain competitive in both global and domestic markets. Trade openness and the prospect of accessing larger markets encourage foreign direct investment, which brings foreign currency, advanced expertise, and capital into the country. Trade allows countries to efficiently utilize their abundant natural resources for export and import resources they lack, optimizing overall production and consumption possibilities.

2.2. Theoretical Review

International trade and economic growth are elucidated by several economic theories, ranging from the classical and neo-classical theories.

Mercantilism Theory

The mercantilist theory was the first theory in classical economics; it was propounded in the 18th century. The theory talked about the need to expand exports and discourage imports; they believed in the accumulation of wealth in the form of gold, thus strengthening the treasury of the nation. Mercantilism is an economic theory that holds that the prosperity of a nation depends upon its supply of capital (gold, silver, and trade value), so that the

global volume of trade is “unchangeable”. The mercantilist theory recognized the effect of export surplus on employment through the effect of price. Inflow of gold through a favorable balance of trade causes the supply of money to increase, which enhances trade and promotes employment. The aim of this theory was that a country must produce goods in such a large quantity that it exports more and should be less dependent on buying goods and other materials from other countries (imports). The theory is also called the protectionism theory because of how it protects itself.

Absolute Advantage Theory

The Absolute Advantage Theory, introduced by Adam Smith in 1776 in his book “Wealth of Nations”, explains how individuals, firms, or countries can benefit by producing more goods or services using the same number of resources as their competitors (Schumacher, 2012). A country is said to have an absolute advantage when it can produce a particular product more efficiently than another country, that is, using fewer resources. For instance, Nigeria, with its vast fertile land, has an absolute advantage in agricultural production compared to many other nations. This means Nigeria can

produce more food using the same resources or the same amount of food at a lower cost.

According to the theory, countries should specialize in producing goods where they hold this advantage. By doing so and engaging in international trade, countries can enjoy larger trade benefits. Adam Smith contributed significantly to economic growth by enlarging markets and allowing each country to be actively involved in division of labor, he argued that this specialization leads to better resource use, increased production, and ultimately contributes to economic growth and production will increase output. The theory advocated that a country should produce only the goods they have an absolute advantage; it adopted a model of 2 countries, 2 commodities, and labor as the only factor of production (2x2x1 model).

Comparative Advantage Theory

David Ricardo's theory of comparative advantage, which gained prominence in the 19th century, provided deeper insight into the dynamics and benefits of international trade. The theory argues that a country should focus on exporting goods where its relative cost advantage is greater, even if it holds an absolute advantage in multiple areas. For example, imagine

Indonesia and Malaysia: Indonesia produces both electrical appliances and rubber products more efficiently than Malaysia, twice as efficiently in electrical appliances and five times more in rubber products. Although Indonesia has an absolute advantage in both, its comparative advantage is stronger in rubber production. Therefore, it would be more beneficial for Indonesia to export rubber to Malaysia and import electrical appliances from Malaysia, even though it can also produce them effectively. This approach maximizes mutual gain through specialization based on comparative, not just absolute advantages. David Ricardo's theory of comparative advantage (1817) suggests that countries should focus on producing goods they are most efficient at, rather than trying to make everything themselves. Producing items that can be imported at a lower cost is considered an inefficient use of resources. The purpose of this theory is to explore how trade volumes influence a nation's development. Ricardo's model has guided trade practices, especially since the era of trade liberalization, encouraging nations to both export and import strategically. He adopted the Adam Smith model of 2 countries, 2 commodities, 1 factor of production (2x2x1). If countries follow this model, international trade would grow, and

resources would be allocated more effectively. By specializing in certain goods, countries can produce higher-quality products in larger quantities, making them more marketable and contributing to overall economic growth. In this theory, increasing returns to scale are not required, but constant returns to scale may be required in every production process. According to the theory of comparative advantage (Krugman et al., 2018), a country can benefit from international trade by specializing in the production of goods where it holds the greatest relative efficiency compared to its trading partners. This theory builds upon and goes beyond Ricardo's earlier concept of absolute advantage (Ricardo, 1817) by showing that countries gain more when they focus on industries where they are relatively better off, even if they don't have an overall edge. Countries that specialize in such industries can export surplus goods to other nations, while importing goods in which they are less efficient but not severely disadvantaged (Baldwin, 2016). For this model to work effectively, certain conditions must be met: there should be free trade, flexible movement of resources between sectors, differences in opportunity costs among countries, exchange rates within reasonable limits,

affordable transportation, and minimal trade restrictions (Krugman et al., 2018; Baldwin, 2016).

Neo-classical theory

The Neo-classical theory is also called the modern theory; it explains the existence of comparative cost differences between countries. It also introduced capital as the second factor of production. The Neo-classical is a (2x2x2) model, which is 2 countries, 2 commodities, 2 factors of production.

Factor Proportion Theory (Heckscher-Ohlin Theory)

The Factor Proportion Theory, also known as the Heckscher-Ohlin Theory, was introduced in the 1920s by Swedish economists Eli Heckscher and his student Bertil Ohlin. This theory explains international trade based on a country's resources, mainly labor and capital. According to the theory, a country should specialize in producing and exporting goods that make the best use of its most abundant resource, and import goods that rely on scarcer resources. For example, A country with plenty of labor should focus on labor-intensive goods; A country with more capital should focus on capital-intensive goods. The theory also mentions that factor intensity (whether a product requires more labor or more capital) depends on the technology and

methods of production available at the time. However, it assumes that all countries use the same production technology, which is different from older trade theories that focused on differences in productivity. Example: Kenya, with more labor and less capital, would export labor-intensive products. Germany, with more capital, would export capital-intensive products. By trading this way, both countries use their resources efficiently and promote economic growth. The Heckscher-Ohlin theory was modified by Paul Samuelson. The theorem states that “An increase in the price of the labor-intensive product causes an increase in the real-wage rate and a reduction in the real return to capital”. The theory figures out the concept of economic advantages in the context of the cost of factor production and endowments. In 1953, economist Wassily Leontief tested this theory using input-output analysis. Surprisingly, he found that the United States, a capital-rich country, was exporting labor-intensive goods and importing capital-intensive goods, the opposite of what the theory predicted. This result became known as the Leontief Paradox and raised questions about whether the factor proportion theory always applies in the real world.

Export-Based Theory

The idea that trade drives economic growth is rooted in export base theory, which suggests that when a region increases its exports, it benefits not only directly through sales but also indirectly through boosts in productivity and income. At its core, this theory argues that the growth of a region's economy, its output, and job creation are largely influenced by outside demand for its exports, assuming that supplies and demand remain elastic. This export growth then sparks a ripple effect: as income in the region rises, so does demand for local goods, creating further economic expansion (Leichenko, 2000). Earlier, North (1955) expanded this basic idea by emphasizing that a region's growth is largely determined by how successful its export sector is. He pointed out that the location-specific factors that allow certain industries, especially staple goods, to thrive are crucial. According to North, a strong export base sets the foundation for a region's overall income levels and directly influences the development of supporting industries, urban growth patterns, labor force characteristics, and even the region's political and social attitudes. In newly developing regions, this reliance on staple exports is often strengthened by local efforts to cut processing and transportation costs, investments in new technologies, and support from government

infrastructure funding. These areas may also attract reinvestment from outside capital sources. While some regions do evolve to export manufactured goods, this transition isn't necessary for every region's sustained growth. A thriving export sector naturally leads to the rise of secondary and tertiary (service-based) industries, which over time can also expand into export sectors. As income grows, local savings start to flow into new businesses first to meet local needs, and later to serve broader markets. Over time, as trade and technology reduce transport and communication costs, the export bases of regions tend to diversify. Regions become less defined by their original industries, and income levels begin to even out across different areas. This leads to more balanced economic development and a broader spread of industries and opportunities.

The New Trade Theory

Before Krugman's contributions, traditional trade theories like Ricardo's comparative advantage and the Heckscher-Ohlin model primarily focused on trade between countries with distinct characteristics. For example, a less developed nation might export agricultural products to a wealthier one in exchange for manufactured goods. However, by the 20th century, a growing

portion of global trade was happening between countries that were quite similar. This pattern was challenging to explain using the existing comparative advantage framework. In his 1979 paper in the *Journal of International Economics*, Krugman explained this phenomenon, resting on two main ideas: consumers desire a variety of brands, and production benefits from economies of scale. The preference for diversity among consumers accounts for the existence of multiple brands within the same product category, such as Volvo and BMW cars. Yet, due to economies of scale, it's inefficient to scatter the production of, say, Volvos globally. Instead, production is centralized in a limited number of factories, often in just one or a few countries. This explains why individual countries tend to specialize in producing a select few brands of a product type, rather than specializing in entirely different product categories. Krugman's model also incorporated transportation costs, which were crucial for developing the "home market effect." This effect posits that, all else being equal, a country with a greater demand for a particular good will, in equilibrium, produce a disproportionately larger share of that good and become a net exporter of it.

The home market effect was an unforeseen outcome that Krugman initially doubted but ultimately confirmed as mathematically sound within his model.

2.3. Empirical Review

Several empirical studies on the impact of international trade on Nigeria's economic growth have yielded mixed results. Emehelu (2021) and Afolabi, Danladi, and Azeez (2017) all used the ordinary least squares method. Emehelu noted that there is no long-run equilibrium between exchange rates and growth, with a negative and insignificant short-term relationship, while Afolabi et al. observed that there is a positive significance for government spending, interest rates, imports, and exports, but a negative insignificance for exchange rates and FDI. However, studies employing co-integration and vector error correction model, such as Lawal and Ezeuchenne (2017) and Iwuoha and Awoke (2020), generally detected long-term relationships between international trade and economic growth. Lawal and Ezeuchenne (2017) concluded that international trade had a long-term relationship with economic growth, with imports and trade openness being significant in the long run, and exports and trade balance being important in both the short and long terms. Iwuoha and Awoke (2020) indicated that net exports had an

insignificant positive effect, but trade openness, real exchange rates, interest rates, and FDI had a significant negative impact on Nigeria's economic growth. Elias, Igwebuike Agbo et al. (2018) explained that export trade has a significant positive effect on Nigeria's economic growth. However, import trade does not exhibit a meaningful impact on economic growth in the country. Based on these results, the researchers recommended that the government should actively adjust key macroeconomic indicators to foster a favorable environment for international trade. Emphasis should be placed on promoting export activities, while measures should be taken to limit imports, as they tend to place pressure on the economy. Additionally, illicit economic activities such as smuggling, bunkering, child and drug trafficking should be strictly controlled. The study also advised the government to pursue export diversification by boosting non-oil exports and reducing excessive dependence on oil exports. Bayoumi et al. (1999) stated that spillovers and trade contribute immensely to promoting economic growth both in developing and developed nations. Lin (2000) examined the link that existed between trade and economic growth using China's national data for the period between 1952 and 1997. The findings showed a positive connection

between the growth rate of imports, exports, volume of trade, and labor force growth to economic growth.

Arodoye and Iyoha (2014) investigated the link between international trade and economic growth in Nigeria. Their research utilized quarterly time-series data spanning from the first quarter of 1981 to the fourth quarter of 2014, employing a vector autoregressive (VAR) model to account for feedback mechanisms. The study concluded that Nigeria should prioritize exchange rate policies that foster export growth and align with its status as a small open economy. Furthermore, their variance decomposition analysis indicated that most fluctuations in Nigeria's economic growth are attributable to domestic shocks and advancements in international trade. A substantial body of empirical research supports a strong positive association between export performance and economic growth. Krueger (1997), for instance, conducted a comprehensive study across 10 countries from 1954 to 1974, demonstrating a high correlation between export volumes and GDP growth. Expanding on this, Lin and Li (2002) argued that previous assessments of foreign trade's contribution to China's economic growth often underestimated the impact of exports by overlooking their indirect effects on

domestic consumption, investment, government spending, and imports. Using a novel estimation method, they concluded that a 10% increase in exports contributed to a 1% rise in China's GDP during the 1990s when both direct and indirect contributions were accounted for. Furthermore, Wah (2004) reported that Malaysia's remarkable average annual growth of 6.8% from 1961 to 2000 was partly attributable to its successful export-oriented industrialization policies. In contrast, Sachs and Warner (1997) identified insufficient economic openness as a primary determinant of the sluggish growth performance observed in Sub-Saharan Africa. A meta-analysis by Ann Harrison (1991), synthesizing previous empirical studies, concluded that measures of openness generally exhibit a positive correlation with GDP growth rates, indicating that more open economies tend to experience higher growth. Consistent with this, Oyejide (1974) noted that restrictive trade measures imposed a considerable anti-export bias on African economies. Edwards (1998) concluded that economies with less protectionist policies generally achieve significantly faster growth rates than those with higher trade restrictions, even after accounting for factors like capital accumulation, labor growth, and technological differences. Complementing this, Asafu-

Adjaye and Chakraborty (1999) found a weak link between exports and real output in inward-looking countries, suggesting that premature inward-oriented development strategies are ineffective, as exports in such contexts are only weakly exogenous. In contrast, Sinha and Sinha (1996) examined the role of balanced trade (net exports as a share of GDP) in a cross-sectional study, reporting a positive relationship between this measure and economic growth and development.

CHAPTER 3

THEORETICAL FRAMEWORK, MODEL SPECIFICATION AND METHOLOGY

3.1. Theoretical Framework

The theoretical framework of this project is built on classical and neo-classical theories by Adam Smith, David Ricardo (1815), and Heckscher-Ohlin (also known as the modern theory of trade). The theory “The Vent-for-Surplus,” largely associated with Adam Smith and later elaborated by Myint, posits that international trade provides an outlet for a country's unutilized or underutilized productive capacity. This capacity, which cannot be absorbed by the limited domestic market, finds an external demand through exports. It argues that a country can expand its output and utilize idle resources (land, labor, raw materials) by selling surplus production to foreign markets, thereby overcoming the constraints of a small domestic market. This theory holds significant relevance for Nigeria, a country historically endowed with abundant natural resources and a large, but often under-monetized, agricultural sector. Before significant industrialization,

and even presently in various sectors, Nigeria has faced challenges in fully harnessing its productive potential for domestic consumption alone.

The theory suggests that exports can activate dormant resources, such as vast arable land used for cash crops (e.g., cocoa, groundnuts, palm oil) or untapped mineral deposits (e.g., solid minerals like limestone, tin, columbite), by providing a viable international market for these surpluses. This, in turn, can lead to increased output, employment, and overall economic activity that would not have occurred otherwise. A growing and vibrant export sector signals attractive market opportunities and profit potential. This prospect draws in both domestic and foreign investment. Foreign Direct Investment (FDI) is particularly valuable as it often brings not only capital but also advanced technology, management expertise, and access to international marketing networks. The expansion of export-oriented industries in Nigeria can act as a powerful magnet for investment. For example, if Nigeria successfully develops its agricultural export processing capabilities, this could attract significant domestic and foreign investment in processing plants, logistics, and related infrastructure. This inflow of capital directly boosts the country's productive capacity, creates

employment opportunities, and can lead to the development of new industries or the expansion of existing ones, contributing significantly to long-term economic growth.

According to David Ricardo's seminal theory of comparative advantage, nations stand to benefit by specializing in the production and export of goods and services for which they possess a comparative cost advantage. This implies that a country should direct its resources towards producing items with lower input requirements and costs relative to the goods it intends to import. Consequently, nations are advised to produce domestically and export those commodities where they hold a comparative advantage, while importing goods that incur a high internal opportunity cost due to a comparative disadvantage (Nduka, Chukwu, & Ugor & Nwakaire, 2013). The central tenets of this argument are efficiency and specialization in production. The contemporary understanding of international trade, particularly articulated by the Heckscher-Ohlin theory, addresses the rationale for global exchange of factors and outputs. This model asserts that differences in resource endowments among countries are a fundamental prerequisite for trade. For instance, a nation abundant in capital but scarce in

labor should concentrate its production efforts on capital-intensive goods and services.

3.2. Model Specification

This study talks about the frameworks of Feder (1982) and Solow (1957). Feder studied the link between the export sector's performance and economic growth, while Solow argued that the function of aggregate production is a starting point to analyze how international trade trends affect economic growth in Nigeria. The general functional form of the model to be estimated is:

$$RGDP = F (EXP, IMP, FX, FDI)$$

Where:

- RGDP = Real gross domestic product (Dependent Variable)
- EXP = Export Trade (Independent Variable)
- IMP = Import Trade (Independent Variable)
- FX = Foreign Exchange (Independent Variable)
- FDI = Foreign Direct Investment (Independent Variable)

This can be expressed in econometrics form as:

$$RGDP_t = \beta_0 + \beta_1 EXP_t + \beta_2 IMP_t + \beta_3 FX_t + \beta_4 FDI_t + \mu_t$$

Where:

β_0 is the constant term

$\beta_1, \beta_2, \beta_3,$ and β_4 are all the coefficients of the dependent variables, and μ is the stochastic error term.

A priori expectations

$\beta_0, \beta_1, \beta_4 > 0; \beta_2, \beta_3 < 0$

The real gross domestic product is a proxy for economic growth, which is the dependent variable. While import, export, foreign exchange, and foreign direct investment are the independent variables. Exports have a positive influence on the economy, which relates directly to economic growth, while import has a negative impact on economic growth. Foreign exchange has a negative correlation with economic growth; foreign direct investment has a positive link with economic growth because an increase in foreign direct investment will lead to an increase in economic growth in an economy.

3.3. Source of Data

The data used in this research are secondary data, obtained from the Central Bank of Nigeria's statistical bulletin for 2024. The data choice was based on the fact that it is appropriate for this research.

3.3.1. Method of Estimation

To achieve the objectives, Ordinary Least Squares (OLS) is used as the estimation technique

- **Economic (A prior) Criterion**

Our primary goal was to conduct tests that would confirm the expected direction and magnitude of the model's parameters, ensuring their alignment with established economic principles, this involved a thorough examination of the variables included in the model and their hypothesized effects.

Real Gross Domestic Product (RGDP), representing the true output of the economy, is treated as a stochastic variable. Foreign Direct Investment (FDI) is defined as substantial capital infusions from multinational corporations establishing their primary operations in developed countries. This distinct characteristic of multinational firms is expected to positively correlate with economic expansion. The foreign exchange is defined as the value of one currency expressed in terms of another (the foreign currency). Exports represent the sale of a country's goods and services to international markets

at a specified price over a given period, while imports signify the acquisition of goods and services from other countries by a domestic entity during a particular timeframe.

- **Statistical Criterion (First Order Test):**

This test is based on the statistical theory used in evaluating the reliability of the parameter estimates of a given model. It includes the following;

- Standard Error Test:** This test is highly significant because sampling errors inherently influence the parameter estimates derived from any given model. This test helps us to know whether our statistical estimates are significant or not, and if our samples from which we made estimates were from a population whose true parameter value is zero (Koutsoyiannis 1977).
- The T-Test:** This test is carried out to test the statistical significance of the individual parameters in an econometric model.
- F-Test:** This test is used to test the overall significance of the regression model. It is used to test the statistical significance of the R^2 which is the coefficient of determination.

- iv. **R² Test:** This quantifies the proportion of the dependent variable's variability that can be explained by the independent variables(s) in a regression model.
- v. **The Adjusted Coefficient of Determination or Adjusted R-squared:** This is a refined version of R² that accounts for the number of predictor variables in the model in relation to the sample size.
- vi. **Durbin Waston Statistics:** This is used to predict the presence of absence of autocorrelation in a regression model.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF RESULT

4.1 DATA PRESENTATION

4.1.1 Descriptive Statistics

Descriptive statistics summarize datasets and can be categorized into central tendency (e.g., mean and median), variability (e.g., standard deviation), and normality (e.g., skewness and kurtosis) measures. They provide insights into variables such as average values, data spread, symmetry, and distribution shape. Mean represents typical values, median is the middle value, maximum shows the highest point, and standard deviation indicates data variation around the mean. Skewness measures symmetry, with positive skewness indicating a longer right tail and negative skewness a longer left tail. Kurtosis assesses distribution shape, with 3 being standard, higher values suggesting more peakedness, and lower values indicating flatter distributions. The Jarque-Bera statistic is another normality indicator.

The descriptive statistics presented in Table 4.1 below provide an overview of the dataset, showing the behavior of five key variables used in this study: Real Gross Domestic Product (RGDP), Export (EXP), Import

(IMP), Foreign Exchange Rate (FX), and Foreign Direct Investment (FDI). These measures reveal both the central tendencies and the degree of variability in Nigeria's macroeconomic indicators over the 35-year study period.

The mean values represent the average performance of these variables during the period under review. RGDP recorded a mean of ₦46,747.58 billion, reflecting the overall level of Nigeria's economic output. EXP averaged ₦10,713,981 million, while IMP stood at ₦8,893,537 million, indicating that on average, exports slightly exceeded imports, suggesting a relatively favorable trade balance. FX averaged ₦198.87 per U.S. dollar, highlighting the general depreciation trend of the naira over the years. FDI had a mean value of USD 2.90 billion, which reflects the average level of capital inflow into the Nigerian economy during the period.

Examining the median values provides further insight into the distribution of the data. The median RGDP of ₦43,837.39 billion is slightly below the mean, suggesting a mild rightward skew, meaning a few high-growth years lifted the average. EXP and IMP had medians of ₦8,309,758 million and ₦3,911,953 million, respectively. The median FX rate of ₦131.27 per U.S.

dollar is notably below its mean, showing that severe exchange rate depreciation in certain years skewed the distribution. FDI had a median of USD 1.96 billion, lower than the mean, suggesting that while FDI inflows were generally low, there were a few years of exceptionally high investments.

The range of observations also highlights the variability across the dataset. RGDP ranged from ₦21,680.20 billion to ₦80,606.53 billion, reflecting sustained economic expansion. EXP showed wide fluctuations, ranging from ₦109,886.1 million to ₦77,345,848 million, while IMP varied between ₦45,717.9 million and ₦60,592,379 million indicating significant volatility in external trade activities, particularly influenced by oil price shocks and policy changes. The FX rate ranged drastically from ₦8.04 to ₦1,478.97 per U.S. dollar, signifying severe exchange rate instability and multiple exchange rate regimes across the years. FDI ranged from a negative USD 0.187 billion to USD 8.84 billion, showing inconsistent investor participation and capital movement in and out of the economy.

The standard deviation values further demonstrate the dispersion of each variable around its mean. RGDP had a standard deviation of ₦21,292.81

billion, indicating moderate variation in economic output. EXP (₦14,408,607 million) and IMP (₦12,335,838 million) recorded very high deviations, confirming large fluctuations in trade performance. FX had a standard deviation of 263.66, showing significant volatility in the exchange rate system. FDI also exhibited a high standard deviation of USD 2.58 billion, implying unstable foreign investment inflows over time.

The skewness and kurtosis statistics describe the shape of the data distribution. EXP (3.05), IMP (2.46), and FX (3.51) were all positively skewed, suggesting that their distributions were tilted to the right, with more low-value observations and a few extremely high ones. FDI (0.96) also showed positive skewness, while RGDP (0.14) was nearly symmetric, reflecting a balanced growth pattern. In terms of kurtosis, EXP (14.30), FX (17.17), and IMP (10.09) were highly leptokurtic during the study period. Conversely, FDI (2.78) and RGDP (1.40) were platykurtic, showing flatter distributions with less extreme variations.

Finally, the Jarque–Bera normality test results indicate that EXP, FX, and IMP have probability values of 0.000, confirming significant deviations from normality due to extreme trade and exchange rate fluctuations. In

contrast, RGDP ($p = 0.1466$) and FDI ($p = 0.0654$) have probabilities above 0.05, implying that their distributions do not significantly deviate from normality and can be considered approximately normal for estimation purposes.

Table 4.1 Descriptive Statistics

| | EXP | FDI | FX | IMP | RGDP |
|--------------|------------|------------|-----------|------------|-------------|
| Mean | 10713981 | 2.90E+09 | 198.8674 | 8893537. | 46747.58 |
| Median | 8309758. | 1.96E+09 | 131.2700 | 3911953. | 43837.39 |
| Maximum | 77345848 | 8.84E+09 | 1478.970 | 60592379 | 80606.53 |
| Minimum | 109886.1 | -1.87E+08 | 8.040000 | 45717.90 | 21680.20 |
| Std. Dev. | 14408607 | 2.58E+09 | 263.6574 | 12335838 | 21292.81 |
| Skewness | 3.052933 | 0.960379 | 3.509664 | 2.464018 | 0.137006 |
| Kurtosis | 14.30070 | 2.775485 | 17.16949 | 10.08988 | 1.400567 |
| Jarque-Bera | 240.6066 | 5.453756 | 364.6496 | 108.7216 | 3.840184 |
| Probability | 0.000000 | 0.065423 | 0.000000 | 0.000000 | 0.146594 |
| Sum | 3.75E+08 | 1.01E+11 | 6960.360 | 3.11E+08 | 1636165. |
| Sum Sq. Dev. | 7.06E+15 | 2.26E+20 | 2363518. | 5.17E+15 | 1.54E+10 |
| | | | | | |

| | | | | | |
|--------------|----|----|----|----|----|
| Observations | 35 | 35 | 35 | 35 | 35 |
|--------------|----|----|----|----|----|

Source: Author's computation using Eviews 10

4.2 Correlation analysis

Table 4.2 Correlation Matrix

| | LNRGDP | LNEXP | LNFDI | LNFX | LNIMP |
|---------------|---------------|--------------|--------------|-------------|--------------|
| LNRGDP | 1 | | | | |
| LNEXP | 0.919250 | 1 | | | |
| LNFDI | 0.615469 | 0.592172 | 1 | | |
| LNFX | 0.885103 | 0.933067 | 0.527384 | 1 | |
| LNIMP | 0.941234 | 0.983106 | 0.547081 | 0.940858 | 1 |

Source: Author's Computation using Eviews 10

From the correlation results in Table 4.2, Real Gross Domestic Product (LNRGDP) shows a very strong positive correlation with imports (0.9412) and exports (0.9193). This indicates that growth in both import and export activities is closely associated with higher levels of economic performance in Nigeria. The strong relationship between RGDP and exports supports the

export-led growth hypothesis, implying that improvements in external trade earnings particularly from crude oil and other export commodities contribute significantly to real output growth. Similarly, the strong positive correlation between RGDP and imports suggests that Nigeria's economic expansion has been driven partly by the importation of capital goods, machinery, and intermediate inputs that enhance domestic production capacity.

The relationship between RGDP and the foreign exchange rate is also highly positive (0.8851), suggesting that exchange rate movements are closely linked to economic growth. This may imply that moderate depreciation of the naira enhances export competitiveness, stimulates foreign earnings, and consequently supports GDP growth. However, it could also reflect the structural dependence of the economy on import demand, where higher exchange rate levels accompany periods of increased economic activity.

Foreign Direct Investment (FDI) exhibits a moderate positive correlation (0.6155) with RGDP, indicating that inflows of foreign capital have contributed to economic growth, though not as strongly as trade-related variables. This suggests that while FDI supports output expansion through

technology transfer and capital formation, its overall impact remains limited, possibly due to concentration in extractive sectors and weak domestic value chain linkages.

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%.

| LEVEL | | | FIRST DIFFERENCE | | |
|----------|-----------|-------------------------------------|------------------|-------------------------------------|------------|
| Variable | ADF stat. | Prob. Values (at 5% critical value) | ADF stat. | Prob. Values (at 5% critical value) | Conclusion |

| | | | | | |
|--------|-----------|-----------|-----------|-----------|------|
| lnEXP | -1.287502 | -2.951125 | -5.679548 | -2.954021 | I(0) |
| lnFDI | -1.824047 | -2.957110 | -6.802460 | -2.963972 | I(1) |
| lnFX | -0.655878 | -2.951125 | -4.584998 | -2.954021 | I(1) |
| lnIMP | -1.877662 | -2.951125 | -7.684905 | -2.954021 | I(1) |
| lnRGDP | -0.703241 | -2.954021 | -3.010067 | -2.954021 | I(1) |

Table 4.3: Unit Root Test result

Source: Author's Computation using Eviews 10

The unit root test results presented in Table 4.3 were carried out using the Augmented Dickey-Fuller (ADF) procedure to examine the stationarity properties of the variables used in the study. The results indicate that none of the variables export (lnEXP), foreign direct investment (lnFDI), foreign exchange rate (lnFX), import (lnIMP), and real gross domestic product (lnRGDP) were stationary at level, as their ADF statistics did not exceed the 5 percent critical values in absolute terms.

However, after first differencing, all the variables became stationary, as evidenced by their respective ADF statistics surpassing the 5 percent critical thresholds. Specifically, lnEXP recorded an ADF value of -5.679548 against a critical value of -2.954021, lnFDI had -6.802460 compared to -2.963972,

lnFX posted -4.584998 relative to -2.954021, lnIMP had -7.684905 against -2.954021, while lnRGDP achieved -3.010067 compared to -2.954021.

4.3.2 Cointegration Test

It is crucial that we examine the possibility of having a cointegration in our regression results because there are different levels of stationarity, some at level and some at the first difference. To do this, we use the Johansen Cointegration technique

Table 4.4a Johansen co-integration test (Trace)

Unrestricted Cointegration Rank Test (Trace)

| Hypothesized No. of CE(s) | Eigenvalue | Trace Statistic | 0.05 Critical Value | Prob.** |
|------------------------------|------------|--------------------|------------------------|---------|
| None * | 0.636055 | 80.76279 | 69.81889 | 0.0052 |
| At most 1 * | 0.575135 | 50.44020 | 47.85613 | 0.0280 |
| At most 2 | 0.402331 | 24.76068 | 29.79707 | 0.1702 |
| At most 3 | 0.195191 | 9.319137 | 15.49471 | 0.3367 |
| At most 4 | 0.089251 | 2.804643 | 3.841466 | 0.0940 |

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Source: Author's Computation using Eviews 10

The trace test in Table 4.4a indicates the presence of two cointegrating equations at the 5 percent significance level, as the trace statistics for the

first two ranks exceed their corresponding critical values. Specifically, the null hypothesis of no cointegration is rejected.

Table 4.4b Johansen Cointegration test (Maximum Eigenvalue)

The maximum eigenvalue test in Table 4.4b below has also confirms the existence of cointegration, although it identifies two cointegrating equations at the 5 percent significance level. For instance, the null hypothesis of no cointegration is strongly rejected, with a maximum eigenvalue statistic of 70.60506 compared to a critical value of 40.07757.

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

| Hypothesized No. of CE(s) | Eigenvalue | Max-Eigen Statistic | 0.05 Critical Value | Prob.** |
|---------------------------|------------|---------------------|---------------------|---------|
| None * | 0.912372 | 70.60506 | 40.07757 | 0.0000 |
| At most 1 * | 0.783224 | 44.33784 | 33.87687 | 0.0020 |
| At most 2 | 0.576585 | 24.92267 | 27.58434 | 0.1056 |
| At most 3 * | 0.526021 | 21.65117 | 21.13162 | 0.0422 |
| At most 4 | 0.263626 | 8.874513 | 14.26460 | 0.2967 |

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

4.4 Regression Result

Table 4.4 Level regression results

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 5.511654 | 0.716647 | 7.690892 | 0.0000 |
| LNEXP | -0.135296 | 0.094765 | -1.427690 | 0.1641 |

| | | | | |
|-------|----------|----------|----------|--------|
| LNFDI | 0.090850 | 0.036485 | 2.490079 | 0.0187 |
| LNFX | 0.003874 | 0.067394 | 0.057484 | 0.9546 |
| LNIMP | 0.350656 | 0.091578 | 3.829033 | 0.0006 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| R-squared | 0.906934 | Mean dependent var | 10.62274 |
| Adjusted R-squared | 0.894097 | S.D. dependent var | 0.489233 |
| S.E. of regression | 0.159210 | Akaike info criterion | -0.702137 |
| Sum squared resid | 0.735084 | Schwarz criterion | -0.477672 |
| Log likelihood | 16.93633 | Hannan-Quinn criter. | -0.625588 |
| F-statistic | 70.65152 | Durbin-Watson stat | 1.670547 |
| Prob(F-statistic) | 0.000000 | | |

Source: Author's Computation using Eviews 10

From Table 4.4, the Ordinary Least Squares (OLS) regression results reveal the relationship between Real Gross Domestic Product (RGDP) and other variables; export (LNEXP), foreign direct investment (LNFDI), exchange rate (LNFX), and import (LNIMP). The coefficient of determination (R-squared) is 0.906934, indicating that about 90.69% of the variation in RGDP is explained by changes in these variables. The adjusted R-squared of 0.894097 further confirms that even after accounting for degrees of freedom, approximately 89.41% of the variations in economic growth are captured by the model. This shows a very high explanatory power and suggests that the independent variables collectively play a significant role in explaining the behavior of RGDP during the study period.

Examining the individual coefficients, the constant term (C) of 5.511654 suggests that in the absence of changes in exports, foreign direct investment, exchange rate, and imports, RGDP would maintain a baseline growth of about 5.51%, reflecting the underlying strength of the economy. The coefficient for export (LNEXP) is -0.135296, implying that a one percent increase in export is associated with a 0.13% decrease in RGDP. However, this relationship is statistically insignificant at the 5% level ($p = 0.1641$), indicating that exports did not significantly influence economic growth during the study period. This negative relationship contradicts the a priori expectation of a positive sign ($\beta_1 > 0$), suggesting that Nigeria's export structure may not have effectively stimulated broad-based economic growth.

For foreign direct investment (LNFDI), the coefficient of 0.090850 is positive and statistically significant at the 5% level ($p = 0.0187$). This implies that a one percent increase in FDI leads to approximately 0.09% growth in RGDP. This conforms to the a priori expectation ($\beta_2 > 0$) and supports the view that foreign capital inflows enhance productive investment, technology transfer, and employment generation, which in turn promote economic growth. The exchange rate (LNFX) has a positive coefficient of

0.003874, though statistically insignificant ($p = 0.9546$). This suggests that exchange rate fluctuations have had little short-run impact on RGDP. The positive sign deviates from the expected negative relationship ($\beta_3 < 0$), indicating that moderate exchange rate depreciation may have helped competitiveness in some sectors without substantially distorting economic activity.

The coefficient of import (LNIMP) is 0.350656, which is positive and statistically significant at the 1% level ($p = 0.0006$). This indicates that a one percent rise in imports leads to a 0.35% increase in RGDP. Although this finding contradicts the a priori expectation ($\beta_4 < 0$), it implies that imports have played a supportive role in production activities, thereby contributing to output expansion rather than crowding out domestic industries.

The overall significance of the model is confirmed by the F-statistic value of 70.65152 with a probability value of 0.000000, indicating that the explanatory variables are jointly significant in explaining variations in RGDP at the 5% level. The Durbin-Watson statistic of 1.670547 falls within the acceptable range, suggesting the absence of serious autocorrelation among the residuals.

4.5 Diagnostic Tests

Table 4.5 Presentation of diagnostic tests

| Variable | Test Diagnostics |
|-----------------------------|------------------|
| Breusch-Pagan-Godfrey Prob. | 0.4048 |
| Breusch-Godfrey Prob. | 0.1479 |
| Ramsey RESET Prob. | 0.0667 |
| Jarque-Bera Prob. | 0.1741 |

Source: Author's Computation using Eviews 10

The diagnostic test results presented in Table 4.5 provide evidence on the reliability and robustness of the estimated model. The Breusch-Pagan-Godfrey test was used to detect the presence of heteroskedasticity in the residuals. The probability value of 0.4048 is greater than the 5 percent significance level, indicating that the null hypothesis of homoskedasticity cannot be rejected. This implies that the model is free from heteroskedasticity, and the variance of the error terms remains constant over time.

The Breusch-Godfrey Serial Correlation LM test was employed to check for the presence of autocorrelation in the residuals. The reported probability value of 0.1479 exceeds the 5 percent significance level, implying that the null hypothesis of no serial correlation cannot be rejected. This confirms that

the model does not suffer from serial correlation and that the residuals are independently distributed.

The Ramsey RESET test, with a probability value of 0.0667, is slightly above the 5 percent significance threshold, suggesting that the null hypothesis of correct model specification cannot be rejected. This indicates that the model is appropriately specified, and no significant functional form misspecification is detected.

Finally, the Jarque-Bera normality test result, with a probability value of 0.1741, is greater than 0.05, signifying that the residuals are normally distributed. The diagnostic test results reveal that the estimated model satisfies the key econometric assumptions of homoskedasticity, absence of serial correlation, and normal distribution of residuals, thereby confirming the robustness and reliability of the model for policy interpretation.

4.6 Policy Implications

The analysis of the relationship between international trade and economic growth in Nigeria provides several important policy implications. The findings from the OLS estimation reveal that import trade and foreign direct investment have statistically significant positive effects on economic

growth, while export trade and exchange rate show statistically insignificant impacts. These results highlight the areas policymakers must strengthen to ensure international trade contributes more effectively to Nigeria's economic performance.

The statistically significant positive relationship between import trade and economic growth suggests that importation, particularly of productive capital goods, raw materials, and machinery, plays a critical role in enhancing domestic production capacity and technological advancement. Policymakers should therefore focus on promoting productive imports that support industrialization and limit excessive importation of non-essential consumer goods. Improving port infrastructure, simplifying customs procedures, and reducing logistics bottlenecks will further enhance the efficiency of import activities and support growth-oriented production.

The significant positive impact of foreign direct investment (FDI) on economic growth underscores the need to create a more attractive investment environment in Nigeria. Policymakers should implement consistent and transparent regulatory frameworks that promote investor confidence, while also addressing key barriers such as infrastructure deficits,

policy instability, and insecurity. Encouraging foreign investors to participate in strategic sectors such as manufacturing, agriculture, and renewable energy will not only enhance output growth but also foster technology transfer, employment generation, and export competitiveness.

On the other hand, the negative but statistically insignificant relationship between export trade and economic growth suggests that Nigeria's export structure, dominated by crude oil, has limited developmental impact. Policymakers should prioritize export diversification by expanding the non-oil export base through targeted incentives, export financing schemes, and capacity-building programs for small and medium enterprises (SMEs). Strengthening agricultural value chains, improving product quality to meet international standards, and promoting processing industries will help Nigeria derive greater growth benefits from trade.

Similarly, the foreign exchange rate variable, though positive, was statistically insignificant, implying that exchange rate fluctuations have not substantially influenced economic growth. Persistent exchange rate volatility creates uncertainty for investors and exporters, weakening trade competitiveness. Policymakers should therefore adopt exchange rate

stabilization measures through coordinated fiscal and monetary policies. Maintaining adequate foreign reserves, curbing speculative activities in the forex market, and promoting the repatriation of export proceeds will help sustain exchange rate stability and enhance macroeconomic confidence.

The results highlight that Nigeria's economic growth is positively influenced by productive imports and foreign investment but constrained by weak export diversification and exchange rate instability. Policymakers must therefore pursue a comprehensive trade strategy that encourages value-added exports, attracts long-term foreign investments, ensures exchange rate stability, and strengthens the efficiency of import systems. Effective implementation of these measures will enable Nigeria to harness the full potential of international trade as a catalyst for sustainable and inclusive economic growth.

CHAPTER FIVE
SUMMARY OF FINDINGS, RECOMMENDATIONS AND
CONCLUSION

5.1 Summary of Findings

The study investigated the impact of international trade on economic growth in Nigeria, employing the Ordinary Least Squares (OLS) estimation technique to examine how exports, imports, foreign direct investment (FDI), and exchange rate influence real gross domestic product (RGDP). The empirical results yielded the following key findings:

- i. Export (LNEXP) exhibited a negative and statistically insignificant effect on economic growth, indicating that a one percent increase in

export leads to a 0.13% decline in RGDP. This implies that the current export structure, dominated by crude oil, has not effectively contributed to Nigeria's overall economic development. The result suggests limited diversification of the export base and weak value addition, which hinder the potential of exports to drive sustainable growth.

- ii. Foreign Direct Investment (LNFDI) showed a positive and statistically significant relationship with economic growth at the 5% level. This finding implies that a one percent rise in FDI leads to approximately a 0.09% increase in RGDP. The positive coefficient aligns with theoretical expectations, indicating that foreign capital inflows contribute to domestic productivity through technology transfer, employment creation, and capital accumulation, all of which enhance Nigeria's economic performance.
- iii. Exchange Rate (LNFX) recorded a positive but statistically insignificant impact on economic growth. This suggests that exchange rate movements have not substantially influenced output growth within the study period. The positive sign may indicate that moderate

depreciation of the naira could have improved trade competitiveness, but the overall insignificance reflects exchange rate instability and structural dependence on imports that dilute potential benefits.

- iv. Import (LNIMP) had a positive and statistically significant influence on economic growth at the 1% level. A one percent increase in imports results in a 0.35% increase in RGDP. Although this contradicts the a priori expectation of a negative relationship, the result suggests that productive imports—particularly of machinery, raw materials, and intermediate goods—have enhanced domestic production and contributed to industrial expansion.

5.2 Policy Recommendations

Drawing from the empirical findings and economic interpretation, the following policy recommendations are proposed to enhance the contribution of international trade to Nigeria's economic growth:

- i. **Promote Export Diversification and Value Addition:** The negative and insignificant effect of exports on growth underscores the need to reduce dependence on crude oil. The government should promote non-oil exports through targeted incentives, capacity development for

exporters, and improved access to export financing. Establishing export processing zones and encouraging value-added manufacturing in agriculture and solid minerals will help Nigeria build a more resilient and diversified export base.

ii. **Encourage Productive Imports that Support Industrialization:**

Since imports have shown a significant positive effect on economic growth, trade policies should encourage the importation of productive goods such as machinery, industrial inputs, and raw materials. However, measures should be implemented to discourage the excessive importation of finished consumer goods that undermine domestic industries. Enhancing port efficiency, simplifying customs procedures, and strengthening logistics systems will further promote growth-supporting import activities.

iii. **Enhance the Attractiveness of the Investment Climate:**

Given the strong positive effect of FDI, the government should maintain investor-friendly policies by ensuring macroeconomic stability, strengthening property rights, and minimizing bureaucratic bottlenecks. Investment incentives such as tax holidays and

infrastructural support should be directed toward sectors with high growth potential to sustain FDI-led growth.

- iv. **Stabilize the Exchange Rate through Coordinated Policies:** The insignificance of the exchange rate highlights the destabilizing effect of volatility on trade and investment. To strengthen its impact on growth, fiscal and monetary authorities should pursue coordinated policies aimed at maintaining exchange rate stability. Building foreign reserves, improving forex transparency, and promoting the use of local inputs can help stabilize the naira and restore investor confidence.
- v. **Strengthen Trade Institutions and Regional Integration:** Trade policy effectiveness depends on strong institutions. Government agencies such as the Nigerian Export Promotion Council (NEPC) and the Nigerian Investment Promotion Commission (NIPC) should be adequately empowered to implement trade reforms efficiently. Nigeria should also take advantage of the African Continental Free Trade Area (AfCFTA) by positioning local industries to compete regionally and benefit from larger export markets.

5.3 Conclusion

This study established that international trade exerts a mixed influence on Nigeria's economic growth. While foreign direct investment and imports significantly promote growth, exports and exchange rate movements exhibit weak and insignificant effects. These findings imply that Nigeria's integration into the global economy has yet to yield optimal developmental outcomes, primarily due to overreliance on oil exports, import dependency, and structural inefficiencies.

To harness the full potential of international trade, Nigeria must pursue a balanced and strategic trade policy that emphasizes export diversification, productive importation, exchange rate stability, and a favorable investment environment. Addressing institutional bottlenecks, improving infrastructure, and promoting non-oil sectors are essential for transforming trade into a true engine of sustainable economic growth.

Ultimately, achieving long-term economic prosperity requires a coordinated approach among government, private investors, and regional partners to ensure that trade contributes meaningfully to industrialization, employment creation, and inclusive national development.

5.3.1. Suggestions for Further Studies

While this study provides valuable insights into the impact of international trade on Nigeria's economic growth, there are areas that future researchers could explore to enrich understanding of the subject:

- i. Future studies could employ dynamic panel or time-series models such as the Vector Error Correction Model (VECM), Autoregressive Distributed Lag (ARDL), or Panel Threshold Regression to capture long-run and short-run trade-growth dynamics more effectively.
- ii. Researchers could expand the model by incorporating additional variables such as trade openness, inflation, interest rate differentials, infrastructure development, or institutional quality to better understand how these factors mediate trade's impact on growth.
- iii. Comparative studies involving other African or developing economies could be conducted to assess how Nigeria's trade-growth relationship differs from those of similar economies, particularly within the ECOWAS or AfCFTA regions.

- iv. Finally, further research could disaggregate exports and imports into oil vs. non-oil, and capital vs. consumer goods, to determine which components exert stronger influences on growth.

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Null Hypothesis: LNEXP has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -1.287502 | 0.6240 |
| Test critical values: | | |
| 1% level | -3.639407 | |
| 5% level | -2.951125 | |
| 10% level | -2.614300 | |

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

APPENDIX

Null Hypothesis: LNFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -1.824047 | 0.3626 |
| Test critical values: | | |
| 1% level | -3.653730 | |
| 5% level | -2.957110 | |
| 10% level | -2.617434 | |

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

Null Hypothesis: LNFX has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -0.655878 | 0.8445 |
| Test critical values: | | |
| 1% level | -3.639407 | |
| 5% level | -2.951125 | |
| 10% level | -2.614300 | |

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

Null Hypothesis: LNIMP has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -1.877662 | 0.3384 |
| Test critical values: | | |
| 1% level | -3.639407 | |
| 5% level | -2.951125 | |
| 10% level | -2.614300 | |

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

Null Hypothesis: LNRGDP has a unit root
 Exogenous: Constant
 Lag Length: 1 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
| Augmented Dickey-Fuller test statistic | -0.703241 | 0.8323 |
| Test critical values: | | |
| 1% level | -3.646342 | |
| 5% level | -2.954021 | |
| 10% level | -2.615817 | |

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

Null Hypothesis: D(LNEXP) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
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|--|-----------|-----------|--------|
| Augmented Dickey-Fuller test statistic | | -5.179548 | 0.0002 |
| Test critical values: | 1% level | -3.646342 | |
| | 5% level | -2.954021 | |
| | 10% level | -2.615817 | |

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

Null Hypothesis: D(LNFDI) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | | t-Statistic | Prob.* |
|--|-----------|-------------|--------|
| Augmented Dickey-Fuller test statistic | | -6.802460 | 0.0000 |
| Test critical values: | 1% level | -3.670170 | |
| | 5% level | -2.963972 | |
| | 10% level | -2.621007 | |

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

Null Hypothesis: D(LNFX) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | t-Statistic | Prob.* |
|--|-------------|--------|
|--|-------------|--------|

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|--|-----------|-----------|--------|
| Augmented Dickey-Fuller test statistic | | -4.584998 | 0.0009 |
| Test critical values: | 1% level | -3.646342 | |
| | 5% level | -2.954021 | |
| | 10% level | -2.615817 | |

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

Null Hypothesis: D(LNIMP) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | | t-Statistic | Prob.* |
|--|-----------|-------------|--------|
| Augmented Dickey-Fuller test statistic | | -7.684905 | 0.0000 |
| Test critical values: | 1% level | -3.646342 | |
| | 5% level | -2.954021 | |
| | 10% level | -2.615817 | |

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

Null Hypothesis: D(LNRGDP) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=8)

| | | t-Statistic | Prob.* |
|--|-----------|-------------|--------|
| Augmented Dickey-Fuller test statistic | | -3.010067 | 0.0443 |
| Test critical values: | 1% level | -3.646342 | |
| | 5% level | -2.954021 | |
| | 10% level | -2.615817 | |

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

Date: 10/18/25 Time:

05:12
 Sample (adjusted): 1992
 2021
 Included observations: 30 after
 adjustments
 Trend assumption: Linear
 deterministic trend
 Series: LNRGDP LNEXP LNFDI
 LNFX LNIMP
 Lags interval (in first differences): 1 to
 1

Unrestricted Cointegration Rank Test
 (Trace)

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|---|----------|----------|
| 1 | 0.575135 | 47.85613 |
| 2 | 0.402331 | 29.79707 |
| 3 | 0.195191 | 15.49471 |
| 4 | 0.089251 | 3.841466 |

Trace test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

| Hypothesized No. of CE(s) | Eigenvalue | Max-Eigen Statistic | 0.05 Critical Value | Prob.** |
|------------------------------|------------|------------------------|------------------------|---------|
| None * | 0.912372 | 70.60506 | 40.07757 | 0.0000 |
| At most 1 * | 0.783224 | 44.33784 | 33.87687 | 0.0020 |
| At most 2 | 0.576585 | 24.92267 | 27.58434 | 0.1056 |
| At most 3 * | 0.526021 | 21.65117 | 21.13162 | 0.0422 |
| At most 4 | 0.263626 | 8.874513 | 14.26460 | 0.2967 |

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level

* denotes rejection of the hypothesis at the 0.05 level

**MacKinnon-Haug-Michelis (1999) p-values

Dependent Variable: LNRGDP

Method: Least Squares

Date: 10/18/25 Time: 05:07

Sample: 1990 2024

Included observations: 34

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 5.511654 | 0.716647 | 7.690892 | 0.0000 |
| LNEXP | -0.135296 | 0.094765 | -1.427690 | 0.1641 |
| LNFDI | 0.090850 | 0.036485 | 2.490079 | 0.0187 |
| LNFX | 0.003874 | 0.067394 | 0.057484 | 0.9546 |
| LNIMP | 0.350656 | 0.091578 | 3.829033 | 0.0006 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| R-squared | 0.906934 | Mean dependent var | 10.62274 |
| Adjusted R-squared | 0.894097 | S.D. dependent var | 0.489233 |
| S.E. of regression | 0.159210 | Akaike info criterion | -0.702137 |

| | | | |
|-------------------|----------|----------------------|-----------|
| Sum squared resid | 0.735084 | Schwarz criterion | -0.477672 |
| Log likelihood | 16.93633 | Hannan-Quinn criter. | -0.625588 |
| F-statistic | 70.65152 | Durbin-Watson stat | 1.670547 |
| Prob(F-statistic) | 0.000000 | | |

Breusch-Godfrey Serial Correlation LM Test:

| | | | |
|---------------|----------|---------------------|--------|
| F-statistic | 3.477352 | Prob. F(2,23) | 0.1479 |
| Obs*R-squared | 6.965220 | Prob. Chi-Square(2) | 0.1107 |

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Date: 10/18/25 Time: 05:08

Sample: 1990 2024

Included observations: 34

Presample and interior missing value lagged residuals set to zero.

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 0.130862 | 0.504368 | 0.259457 | 0.7973 |

| | | | | |
|-----------|-----------|----------|-----------|--------|
| LNEXP | 0.156739 | 0.075133 | 2.086153 | 0.0465 |
| LNFDI | -0.012681 | 0.025790 | -0.491684 | 0.6269 |
| LNFX | 0.019808 | 0.047521 | 0.416827 | 0.6801 |
| LNIMP | -0.156913 | 0.072399 | -2.167333 | 0.0392 |
| RESID(-1) | 0.605830 | 0.176625 | 3.430027 | 0.0020 |
| RESID(-2) | 0.262411 | 0.189925 | 1.381661 | 0.1784 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| R-squared | 0.540002 | Mean dependent var | 1.04E-15 |
| Adjusted R-squared | 0.437780 | S.D. dependent var | 0.149249 |
| S.E. of regression | 0.111909 | Akaike info criterion | -1.361022 |
| Sum squared resid | 0.338137 | Schwarz criterion | -1.046771 |
| Log likelihood | 30.13738 | Hannan-Quinn criter. | -1.253854 |
| F-statistic | 5.282642 | Durbin-Watson stat | 1.305885 |
| Prob(F-statistic) | 0.001031 | | |

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| | | | |
|---------------------|----------|---------------------|--------|
| F-statistic | 1.043427 | Prob. F(4,25) | 0.4048 |
| Obs*R-squared | 4.291921 | Prob. Chi-Square(4) | 0.3679 |
| Scaled explained SS | 4.306722 | Prob. Chi-Square(4) | 0.3661 |

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 10/18/25 Time: 05:08

Sample: 1990 2024

Included observations: 34

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 0.379465 | 0.143954 | 2.636021 | 0.0133 |
| LNEXP | 0.015105 | 0.019036 | 0.793511 | 0.4339 |
| LNFDI | -0.013093 | 0.007329 | -1.786516 | 0.0845 |
| LNFX | 0.005807 | 0.013537 | 0.428927 | 0.6711 |
| LNIMP | -0.022486 | 0.018395 | -1.222386 | 0.2314 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| R-squared | 0.278871 | Mean dependent var | 0.021620 |
| Adjusted R-squared | 0.179404 | S.D. dependent var | 0.035304 |
| S.E. of regression | 0.031981 | Akaike info criterion | -3.912317 |

Ramsey RESET Test
Equation: UNTITLED
Specification: LNRPDP C LNEXP LNFDI LNFX LNIMP
Omitted Variables: Squares of fitted values

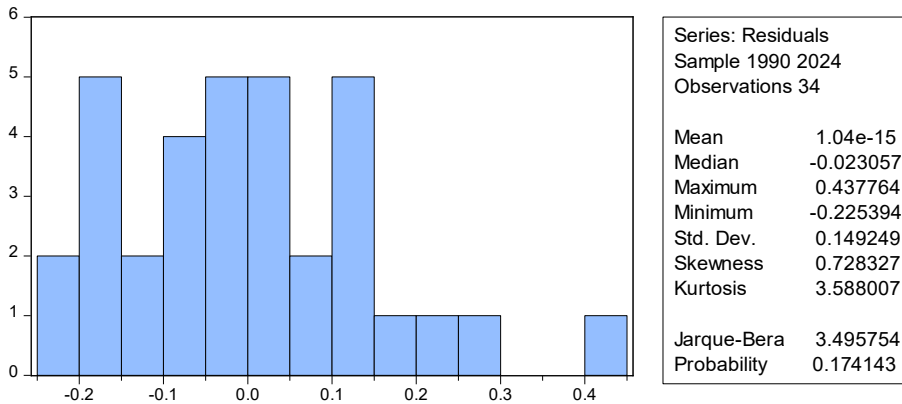
| | Value | df | Probability |
|------------------|----------|---------|-------------|
| t-statistic | 5.522103 | 28 | 0.0667 |
| F-statistic | 30.49362 | (1, 28) | 0.0562 |
| Likelihood ratio | 25.04825 | 1 | 0.0559 |

F-test summary:

| | Sum of Sq. | df | Mean Squares |
|------------------|------------|----|--------------|
| Test SSR | 0.383210 | 1 | 0.383210 |
| Restricted SSR | 0.735084 | 29 | 0.025348 |
| Unrestricted SSR | 0.351873 | 28 | 0.012567 |

LR test summary:

| | Value | | |
|-------------------|----------|----------------------|-----------|
| Restricted LogL | 16.93633 | | |
| Unrestricted LogL | 29.46045 | | |
| Sum squared resid | 0.029660 | Schwarz criterion | -3.687853 |
| Log likelihood | 71.50940 | Hannan-Quinn criter. | -3.835769 |
| F-statistic | 2.803674 | Durbin-Watson stat | 1.075137 |
| Prob(F-statistic) | 0.044049 | | |



Unrestricted Test Equation:
 Dependent Variable: LNRGDP
 Method: Least Squares
 Date: 10/18/25 Time: 05:10
 Sample: 1990 2024
 Included observations: 34

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|----------|-------------|------------|-------------|--------|
| C | 2.233488 | 0.779126 | 2.866657 | 0.0078 |
| LNEXP | 1.511579 | 0.305607 | 4.946159 | 0.0000 |
| LNFDI | -0.948333 | 0.189931 | -4.993030 | 0.0000 |
| LNFX | -0.037414 | 0.048038 | -0.778828 | 0.4426 |
| LNIMP | -3.764070 | 0.747922 | -5.032701 | 0.0000 |
| FITTED^2 | 0.546288 | 0.098927 | 5.522103 | 0.0000 |

| | | | |
|--------------------|----------|-----------------------|-----------|
| R-squared | 0.955451 | Mean dependent var | 10.62274 |
| Adjusted R-squared | 0.947495 | S.D. dependent var | 0.489233 |
| S.E. of regression | 0.112102 | Akaike info criterion | -1.380027 |
| Sum squared resid | 0.351873 | Schwarz criterion | -1.110669 |
| Log likelihood | 29.46045 | Hannan-Quinn criter. | -1.288168 |
| F-statistic | 120.1032 | Durbin-Watson stat | 0.732105 |
| Prob(F-statistic) | 0.000000 | | |
