

## **Export Dimensions and Macroeconomic Stability: The Growth Estimation from Nigeria**

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### **Abstract**

*This study examines Nigerian export dimension and the growth of Nigerian economy. The objective is to investigate whether there is relationship between Nigerian Export structure and the growth of the economy from 1990 – 2023. Time series data were collected from Central Bank of Nigeria (CBN) statistical Bulletin. Nigerian Real Gross Domestic Product (RDGP) was used as dependent variable while oil export (OEX) non-oil export (NOEX), Oil Terms of Trade (OTT), Non-Oil Terms of Trade (NOTT) and Exchange Rate was used as dependent variables. Descriptive statistics and multiple regressions with econometrics view statistical package. Co integration test augmented Dickey Fuller Test (ADF), Granger Causality test and Vector Error correction model were used as predictor variables. Multiple regressions with econometrics view statistical package. Co integration test, Augmented Dickey Fuller Test (ADF), granger Causality Test and vector error correction model were used as estimation techniques. R<sup>2</sup>, Durbin Watson statistics, T-statistics, F-Statistics and  $\beta$  coefficient were used to determine and explain the extent to which the independent variables affect the dependent variable. The study found an R<sup>2</sup> of 97.2% and F-statistics of 26153. Oil export (OEX), non-oil export (NOEX), Oil Terms of Trade (OTT) has positive effect on Nigerian Real Gross Domestic Product. The co integration result revealed long-run co integrating equations between the dependent and the independent variables. The variables were found to be stationary at level while the granger causality test revealed bi-variant relationship running through the variables. It concludes that there is significant relationship between Nigerian Export Structure and the growth of Real Gross Domestic Product. It therefore recommend for effective policies to diversify Nigerian economy and increase in oil export to enhance Nigerian economic growth.*

**Keywords:** *Export Dimensions, Macroeconomic Stability, Growth Estimation, Nigeria*

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## INTRODUCTION

The opinion that export trade has significant role on the economic growth can be traced to the mercantilism in seventeenth and Eighteen centuries which advocate severe restriction in import and aggressive effort to increase export, later to Adam Smith in 1776 that developed the absolute cost advantage. Export is a component of international trade and constitutes an inflow to the National economy. According to the National Income Accounting Principle, export is an injection into the economic income stream while import is a leakage ( $Y = C + I + G + X - M$ ). Export of goods and services represents one of the most important sources of foreign exchange income that ease the pressure on the balance of payment and create employment opportunities (Fouuad, 2005). Export led growth (ELG) hypothesis recognized export as a major driver of economic growth (Ewetan & Okedua, 2012).

Theories such as the absolute cost advantage by Adams Smith, comparative advantage by David Ricardo, comparative advantage by David Ricardo, comparative cost advantage by Hechseher Ohlin and the gravity model explained reasons and gains in international trade. Prior to the discovery of oil Nigerian export was dominated by agricultural commodities such as cocoa, groundnut, cotton, rubber and palm produce (Okoh, 2004; Lucky & Achebelema, 2018). Compared with Nigerian import of machines, manufactured goods and others Nigeria export performance has been lack lust. The export has been dominated by the petroleum products which put the country into monocultural economy with the consequences of depleting external reserves, depreciating Nigerian Naira exchange rate and balance of payment disequilibrium. The neglect of the agricultural sector affected negatively the Nigerian export products. Today oil export account for 90% export and foreign earnings while non-oil account for 10%. Nigerian non-oil terms of trade have been negative (CBN, 2012).

In structure, Nigerian export can be categorized into oil and Non-oil export. Central bank of Nigeria report (2012) showed that, Nigerian export is greater than the import except the oil export, this result to bandwagon effect of export to Nigerian economic. Export promotion policies are poorly implemented and poorly managed. Others are mortgaged with personal interest. For instance the privatization of some industries to attract greater production beyond national consumption has been challenged with personal interest and fraud. Empirical findings have shown that the effect of export on economic growth is transmitted through the impact on economics of scale, including improving allocation of resources, enhancing greater inflows of capital flows, technology transfers, improving managerial and workers skills, enhancing capital formation, job creation and increase in the productive capacity of the economy. The impact of export in the economy is a critical function of the macroeconomic policies, monetary and economic development.

Export if properly managed and policies well implemented have the capacity of impacting positively on the economic growth of the country. For instance the export led economic transformation of the four Asia Tiger in the last three decades can be used as lesson for other countries. The objective of an export led growth (ELG) strategy is to create a mechanism of export incentives driven by modern technologies to assist producer's access and compete in the worlds

market. For instance, the successful economic transformation of Asians and Latin American countries which have export led validate the important role that exports play in economic growth and development process (About- Start, 2005).

The origin of the theoretical Literature between international trade and economic growth are the absolute and comparative advantage as well as the Hechsher – Ohlin theories (Jayme, 2001). The relationship between export trade and economic growth has been beyond theories and assumptions as presented by scholars. The influence of international trade on economic growth cannot be under estimated. This explain the reason the classical economists in the 19<sup>th</sup> century linked trade as the engine of growth and economist has favoured the continual existence of international trade despite the economic implication. Recognizing the important of export in achieving the macroeconomic goals, the Nigerian government embarked on structural, institutional and policy reforms to diversely and promotes Nigerian export. For instance, Nigerian has signed bilateral and multi-lateral trade and investment treaties with other countries and a member of World Trade Organization (WTO), for instance, Nigeria signed investment promotion and trade treaties with India, China, France, United Kingdom, North Korea, United States of America and Turkey (Okoh, 2004), with the objective of facilitating greater openness of the economy.

In 1986, Nigerian economy was deregulated to allow for greater openness, the establishment Export Processing Zones across the country (EPZ). The establishment of Export-Import bank and the National Economic Empowerment and Development Strategy (NEEDS) in 2004, Others are export incentive measures such as duty drawback, export expansion grant and manufacturing under bond and confide manufacturers' scheme and reforms in the financial sectors of the economy. The extents to which these policies have facilitated the realization of the macroeconomic goals remain a knowledge gap in Nigeria as Literature is dearth and findings are controversial and inconclusive (Abou-Stait, 2005) (Bahmani-Oskooe & Alse, 1993) (Chimobi & Uche, 2010). A close examination of Nigeria export index shows that apart from the oil, non-oil export performance is not impressive. The export diversification index computed using the Herfindail-Herschman index concentration ratio reported by UNCTAD 2012 positioned Nigeria among the least with the index of 0.78 and ranked 176 out of 216 countries (Oladeye et al, 2013). This is ridiculous when compared with the numerous export promotion and economic diversification policies in Nigeria. This no doubt can be the reasons for the Nigerian economic backward as Nigerian economy is rated one of the poorest in the world. Past attempts to foster non-oil merchandise exports through export subsidies and other mechanisms have had very limited success as many of the programs have been undermined by fraud (Peter & Olivier, 2005). This study is imperative to examine the economic effect of the export policies on Nigerian exports and its effect on the Economic growth and contribute to the existing body of knowledge on the relationship between Nigerian exports dimension on economic growth.

## LITERATURE REVIEW

### **Overview of Export and Economic Growth in Nigeria**

Growing the economy has become the target of most government in the developing economies of the world. Over the years, these governments have adopted a number of measures aimed at accelerating growth and development in their domestic economy. The need to improve the living standard of the citizenry, reduce unemployment, increase capacity utilization which leads to increased productivity, as well as increase in Foreign Exchange Earnings has led to the introduction of vibrant economic policies in Nigeria and other developing nations of the world. According to Azam (2009) the drift from trade restricted economy to trade liberalization is attributed to positive relationship that exists between export and economic growth. Bhagwati (1973) noted that for efficient utilization of available scarce resources and for expanding global trade volume, freer trade in goods and services is highly beneficial. And so, to enjoy the advantage of this free trade, Nigeria has adopt trade liberalization policy with a view to increase export of goods and services which increases capacity utilization as well as foreign exchange earnings. Economists often assert that trade liberalization improves social welfare and alleviates poverty, because it generate jobs opportunities, fosters economic growth and improves consumer choice and living standard of the societies. Reacting to this Fouad (2005) noted that exports of goods and services represent one of the most important sources of foreign exchange income that ease the pressure on the balance of payments and create employment opportunities, increase productivity and enhance the living standard of the citizenry. Exporting is associated with static gains that include access to larger outside markets, hence exploiting economies of scale. There are also dynamic gains that include efficiency advances as a result of knowledge and technological spillovers from exporting experience. Exporting is also associated with efficiency in resource allocation, employment generation, and relaxing the foreign exchange constraints (Bbaale and Mutenyo 2011).

Therefore, export expansion can be argued to be a stimulus of economic growth (Agosin, 1999; Giles and Williams, 2000; Grossman and Helpman, 1991). Additionally, Verdoorn (1949) dwells on the argument that export growth may generate specialization in the production of export commodities. By extension, specialization is argued to lead to efficiency gains in the export sector owing to the rise in skills due to learning-by-doing. Consequently, resources would flow from the relatively less productive and non-trade sector to the highly productive exports sector, leading to economic growth. On the same vein, Futher, Chenery and Strout (1966), Balassa (1978), Buffie, (1992) and Riezman (1996), dwell on an indirect argument linking exporting to economic growth. They argue that exporting activities generate foreign exchange that is required to import capital goods. Increase in capital goods imports in turn stimulate a country's capacity to produce. This is more pronounced in developing countries that have an extreme disadvantage in the production of capital goods. In the same line of argument, it is suggested that the most up-to-date knowledge and technology is embodied in the capital goods (plants and equipments) imported from technologically advanced countries. This knowledge transfer through international trade may

increase productivity and, by extension, lead to economic growth and development (Hart, 1983 and Chuang, 1998).

### **Nigeria's Export Diversification Efforts and Experience**

The Nigerian Government and her various developmental plans as well as macroeconomic policy frameworks have been attributed, since the independence in 1960 and till date, with the intention and determination to develop the non-oil sector which is aimed at diversifying the economy as well as reducing the various possible external shocks' effect on the economy. These policies, from various periods, had as core framework, Protectionism policy, Trade liberalization policy and Export promotion policy, and most times agencies were established to effectively implement these policies such as Nigerian Export Promotion Council, the Nigerian Export-import bank (NEXIM) and many more which have their existence on promoting the non-oil sector of the economy and also to ensure diversification of the export earning structure of the country. Immediately after the civil war, the export structure of the country changed from the agricultural dominated to Oil dominated; this automatically reduced the agricultural contribution to the gross domestic products. Due to the perceived danger of this and high degree of volatility associated with world Oil prices, the government instituted incentives such as removal of agricultural export taxes and sales taxes to promote agricultural sector and as well, placed high tariffs on agricultural imports. This was the trend between the early 1970s and 1980s (Oyejide, 1986). During this period, the Nigerian export Promotion council was established in 1976 to ensure export development and promotion by generating ideas, suggestions and measures designed to advance the course of Nigeria's export trade; Advise and assist the government in the identification of export oriented industries and to help stimulate the growth of non-traditional exports from Nigeria; Assist the government in the creation of the necessary infrastructures such as export incentives and trade information services. As this was being implemented, the government with the trade liberation policies starting from 1986 with the implementation of the IMF Structural Agreement Programme saw the abolition of the marketing boards, the second tier foreign exchange market (SFEM), as well as various export expansion incentive schemes, as well as establishment of the Nigeria Export- Import Bank etc. these efforts was corroborated by the federal government decree of 11th of July, 1986 which establishment of three funds; Export Development.

Fund, Export Expansion Grant Fund and Export Adjustment Scheme Fund (CBN, 2010). A further attempt at expanding the export diversification trend saw the promulgation of decree no. 34 of 1991 which designated and established the Export Processing Zone (EPZ) in the country. These zones are special enclave outside a nation's normal custom barriers where foreign and domestic firms may manufacture or assemble goods for export without the normal customs duties and procedural documented which are required in normal imports and exports activities. The firms operating the zone are normally exempted from industrial regulation applying within the domestic economy, especially with regards to foreign ownership of firms, repatriation of profits, employments of nationals, access of foreign exchange (Afeikhana, 1996). The restoration of democracy from 1999 occasioned a rapid transformation of the non-oil sector, following Intensified policy support to Small and Medium scale enterprises to enhance the export of their

products (both as raw materials and finished goods). In all considerations, all the various administrations in this dispensation have policies which are aimed at facilitating the diversification of the economy (Adeloye, 2012). Consequent upon these reforms, informed industry position put it that the growth in non-oil exports from \$1billion in 2006 to \$2.3billion in 2010.

It is interesting to observe how persistent efforts of Nigerian exporting companies have led to the acceptance of their products in some of the highly quality conscious customers and markets. Consider a few examples. Ten years after AGOA (African Growth & Opportunity Act) was passed by USA to allow duty free access to products from sub-Saharan Africa, Nigerian exports seem to have achieved a breakthrough. A very positive fall out of the non-oil export expansion has been the emergence of export processing clusters. Challawa industrial estate in Kano has emerged as a major export cluster with modern tanneries situated in this zone (Yusuf, 2012). These developments have impacted positively on economic indices in recent times. According to the 2012 Economic Outlook Report by the National Bureau of Statistics (NBS), the non-oil sector grew at 9.07% in Q4 2011 higher than the 8.93% recorded in Q4 2010. The report also stated that the non-oil sector continued to be a major driver of the Nigerian economy in the fourth quarter of 2011. When compared with the corresponding quarter in 2010, the sector recorded 9.07 percent growth in real terms. This growth was largely driven by improved activities in the telecommunications, Building & construction, Hotel & Restaurant, Business services and other sectors. The performance of the major industries in the non-oil sector in the fourth quarter of 2011 is further analysed to give a better understanding of their contributions to the Nigerian economy.

### **Nigerian Import Prohibition Policies**

From the mid-1970s onwards, Nigeria's main trade policy instruments shifted markedly away from tariffs to quantitative import restrictions, particularly import prohibition and import licensing. As a reflection of this shift, Nigeria's customs legislation established an import prohibition list for trade items and an absolute import prohibition list for non-trade items. While the trade list covers the full range of agricultural and manufactured products, the non-trade list relates to goods and services that are considered to be harmful to human, animal and plant health, as well as public morals. Typical examples of products which feature on this second list include weapons, obscene articles, airmail, photographic printing paper, base or counterfeit coins and second-hand clothing. Furthermore, the customs legislation empowers the government to modify these lists at its discretion, by adding or subtracting items through customs and excise notices and government announcements. Based on this legislation, the government placed seventy-six broad groups of import items on the import prohibition lists in 1978. The number of items placed under import prohibition increased further, particularly during 1982-5. Hence, at the beginning of 1986, roughly 40% of agricultural and industrial products, in terms of tariff lines, were covered by import prohibitions. This sharp increase in the coverage of import prohibitions abated somewhat during the second half of the 1980s; by 1989, import prohibition covered about 29% of agricultural products and 20% of industrial products measured, again, in terms of tariff lines (GATT 1991).

Although particular items moved in and out of the import prohibition lists over the next ten years, the general trend in reduction in the number of items whose importation was prohibited was

broadly sustained. Hence, by 1998, only 127 (out of 5, 147 tariff lines, or 2.5%) remained on the import prohibition list for trade. But with effect from late 2001 and continuing until early 2004, another upsurge in the number of items placed under import prohibition has occurred. In particular, the number of broad product groups under import ban rose from twenty-seven in February 2003 to thirty-five in January 2004. In terms of sectoral coverage, import prohibition has focused on such agricultural products as fruit, vegetables, grains, meat and fish, as well as manufactured products including rubber, wood and cork, textiles and chemicals. In 1989, for example, close to 96% of the tariff lines for textiles and clothing were subjected to an import prohibition regime, with similar coverage ratio for several other sectors being as follows: furniture (93%), wood and wood products (45%), rubber (5%) and chemicals (1%) (GATT, 1991). During 1982-5, the import prohibition coverage ratio for food, beverages and tobacco was over 50%.

The pervasive use of import prohibition as an instrument of trade policy in Nigeria derives from a long-standing import policy regime which was designed to promote industry, employment and balance-of-payments objectives in the context of an import substitution-industrialization strategy (Oyejide 1975). Key elements of this regime include protecting existing domestic industries and reducing the country's perceived dependence on imports, while at the same time ensuring the availability of raw materials and capital goods which cannot be obtained from domestic sources. With specific reference to the agricultural sector, trade policy has generally been aimed at discouraging importation of all food and raw materials that the country is deemed to have the resources to produce. In the case of the manufacturing sector, a major goal has been to increase the local content of Nigerian industrial output through enhanced use of local raw materials. The achievement of this goal is promoted by the government through various measures and incentives, including import prohibition. Sectoral coverage of import prohibition has obviously varied over time. But it has been determined largely by the general policy that imports of certain products could be prohibited either if they are judged to be 'not essential' or when they compete with domestically produced goods that are available in adequate quantities.

The various motivations for using import prohibition have, however, not been fully reflected in the justifications periodically offered by the government when import prohibition notices are issued. For instance in April 1982, when a wide range of products was placed under import prohibition, the Nigerian government notified the General Agreement on Tariffs and Trade (GATT) of the measures taken with the claim that the measures had been necessitated by unfavorable external circumstances, including a deterioration in the terms of trade and sharp declines in the country's oil revenue and foreign exchange reserves. But import prohibition was periodically used for other purposes. The almost permanent ban on the importation of textile and clothing products since the late 1970s can be explained primarily in terms of protecting local industries; while import prohibition applying to such items as gypsum, kaolin, bentonites and barytes reflects attempts to promote local sourcing of raw materials for manufacturing in Nigeria. Thus when in March 1998 Nigeria notified the WTO Committee on Safeguards that the import prohibitions on wheat flour, sorghum, millet, gypsum and kaolin were imposed for safeguard reasons, there was credible reason to question the claim. The pervasive use of import prohibition

in Nigeria has another, perhaps equally important, reason: it is administratively easier. In Nigeria's responses to the questions raised on this matter during discussions at various GATT and WTO fora, it has been argued that import prohibitions are easier to monitor than price-based measures, since the presence of the banned products on local markets is, in principle, sufficient for enforcement.

## **Theories of International Trade**

### **Comparative Advantage Theory**

This theory was propounded David Ricardo. The theory assumed the existence of two countries, two commodities and one factors of production. To him a country export the commodity whose comparative advantage lower and import commodity whose comparative cost is higher. The theory also assumed that the level of technology is fixed for both nations and that trades is balanced and rolls out the flow of money between nations. However, the theory is based on the labour theory of values which states that the price of the values of a commodity is equal to the labour time going into the production process. Labour is used in a fixed proportion in the production of all commodities. But the assumptions underlying is quite unrealistic because labour can be subdivided into skilled, semiskilled and unskilled labour and there are other factors of production. Despite the limitations, comparative cost advantage cannot be discarded because its application is relevant in explaining the concept of opportunity cost in the modern theory of trade.

### **Hecksher-Ohlin Trade Theory**

The theory focuses on the differences in relative factor endowments and factor prices between nations on the assumption of equal technology and tastes. The Model was based on two main propositions; namely; a country will specialize in the production and export of commodity whose production requires intensive use of abundant resources. Secondly, countries differ in factor endowment. Some countries are capital intensive while some are labour intensive. He identified the different in pre-trade product prices between nations as the immediate basis of trade, the prices depends on production possibility curve (supply side) as well as the taste and preference (demand side). But the production possibility curve depends on factor endowment and technology. To him, a nation should produce and export a product for which abundant resources is used be it capital or labour. The model suggests that developing countries are labour abundant and therefore they should concentrate in the production of primary product such as agricultural product and they should import capital intensive product i.e manufactured goods from the developed countries. The model also assumes two countries, two commodities and two factor and that two factors inputs labour and capital are homogenous. The production function is assumed to exhibit constant return to scale. However, the theory is not free from criticism and this because factors inputs are not identical in quality and cannot be measured in homogenous units. Also factor endowments differ in quality and variety. Relative factor prices reflect differences in relative factor endowment-supply therefore outweigh demand in the determination of factor prices. Despite this criticism, trade increases the total world output. All countries gain from trade and it also enables countries to secure capital and consumption of goods from the rest of the world.



### **Theories of Economic Growth**

Economic growth is best defined as a long term expansion of productive potential of the economy. Trend growth is the smooth path of long run national output it requires a long run series of macroeconomic data which could be twenty years or more. The trend of growth could be expanded by raising capital investment spending as a share of national income as well as the size of capital inputs and labour supply, labour force and the technological advancement. There are different schools of thought that have discussed the causes of growth and development and they are:

#### **Neo-Classical Growth**

This was first propounded by Robert Solow over 40 years ago. The model believes that a sustained increase in capital investments increased the growth rate only temporarily, because the ratio of capital to labour goes up. The marginal product of additional units is assumed to decline and thus an economy eventually moves back to a long term growth-path with the real GDP growing at the same rate as the growth of the workforce plus factor to reflect improving productivity. Neo-classical economists who subscribe to the Solow model believes that to raise an economy long term trend rate of growth requires an increase in labour supply and also a higher level of productivity of labour and capital. Differences in the rate of technological change between countries are said to explain much of the variation in growth rates. The neo-classical models treat productivity improvements as an exogenous variable which means that productivity improvements are assumed to be independent of the amount of capital investment.

#### **Endogenous Growth Theory**

To them, they believe that improvements in productivity can be attributed directly to a faster pace of innovation and extra investment in human capital. They stress the need for government and private sector institutions to encourage innovation and provide incentives for individual and business to be inventive. There is also central role of the accumulation of knowledge as a determinant of growth i.e knowledge industries such as telecommunication, electronics, software or biotechnology are becoming increasingly important in developed countries. The proponent of endogenous growth theory believes that there are positive externalities to be exploited from the development of a high value added knowledge economy which is able to developed and maintain a competitive advantage infact growth within the global economy. They are of the opinion that the rate of technological progress should not be taken as a constant in a growth model- g0overnment policies can permanently raise a country growth rate if they lead to move intense competition in markets and help to stimulate product and process innovation. That they are increasing returns to scale from new capital investment and also private sector investment is a key source of technical progress and that investment in human capital is an essential ingredient of long term growth.

#### **Harrod – Domar Growth Model**

Harrod-Domar opined that economic growth is achieved when more investment leads to more growth. They theory is based on linear production function with output given by capital stock (K) times a constant. Investment according to the theory generates income and also augments the productive capacity of the economy by increasing the capital stock. In as much as there is net investment, real income and output continue to expend. And, for full employment equilibrium

level of income and output to be maintained, both real income and output should expand at the same rate with the productive capacity of the capital stock. The theory maintained that for the economy to maintain a full employment, in the long run, net investment must increase continuously as well as growth in the real income at a rate sufficient enough to maintain full capacity use of a growing stock of capital. This implies that a net addition to the capital stock in the form of new investment will go a long way to increase the flow of national income. From the theory, the national savings ratio is assumed to be a fixed proportions of national output and that total investment is determined by the level of total savings i.e  $S = SY$  which must be equal to net investment.

### **Nigerian Export Policy under Needs**

NEEDS is a medium-term economic strategy covering the period 2003 – 2007. It has been described as Nigeria’s plan for prosperity, the vision for a greater tomorrow. Within that perspective, NEEDS focuses on four key strategies: reorienting values, reducing poverty, creating wealth and generating employment. These key visionary goals are, in turn, built into three major macroeconomic frameworks, namely, empowering people, promoting private enterprise and appropriately reordering approaches to governance. The overall long-term vision of NEEDS includes social and economic transformation of Nigeria on a sustainable and competitive basis.

In the trade policy area, NEEDS seeks to deepen Nigeria’s integration with the rest of the world and to maximize the benefits of strategic integration. Accordingly, regional integration and trade are the two instruments identified by NEEDS for maximizing the benefits of globalization. The trade policy objective under NEEDS is to lay a solid foundation for fully exploiting Nigeria’s potentialities in international trade. While aspiring to the above, NEEDS has by no means overlooked the challenges which have so far hampered the realization of these potentialities. A number of constraints are identified, namely: the high cost of doing business; inadequate infrastructure; poorly implemented incentives, especially in regard to fiscal and tariff regimes; widespread smuggling, counterfeiting and dumping; lack of standardization, required for products to compete internationally; and unfavorable international trade rules Under NEEDS, the trade policy thrust is to drastically reduce the uncertainty and unpredictability of the trade policy regime; harmonize trade practices with those of other Economic Community of West African States (ECOWAS) countries and hence facilitate full integration; respect obligations under multilateral and regional trading systems; and create a conducive and competitive environment in which Nigerian enterprises can thrive and effectively compete in the global and regional economy. The following are therefore the strategies and instruments for achieving the NEEDS objectives:

- i. Drastic reduction in domestic cost structure especially infrastructure cost, to enhance a competitive investment climate necessary for production and exports;
- ii. Aggressive promotion of exports and “economic diplomacy”;
- iii. Harmonization of tariffs with the West African Economic and Monetary Union (UEMOA) and others to create the common external tariff (CET);
- iv. Continue to use specific systems of import restrictions in particular circumstances to protect industries and critical sectors against unfair competition;
- v. Rationalizing and strengthening institutions responsible for trade facilitation;

- vi. Co-operation with other African and developing countries to ensure that the WTO trade negotiations address the concerns and interests of Nigeria and Africa, including leadership in the negotiation of Economic Partnership Agreements (EPAs);
- vii. Reform customs and ports to drastically reduce turnaround time and transaction costs at the ports, enhance the prompt collection of government revenues and ensure customs clearance within a 48- hour time frame;
- viii. Develop deep-sea port facilities, inland container depots, Free Trade Zones, and shipbuilding capacity to enhance coastal shipping, international trade and regional integration.

The policy instruments outlined above, which the government has identified for pursuing its trade policy objectives, are indeed far-reaching, although it has been said that trade policy in itself would not be enough, without a sound macroeconomic policy underpinning and effective implementation mechanisms. We now turn to the performance of trade policy under the NEEDS regime in the following section.

#### **Trade Policy under the Needs Era (1999 - 2006)**

As pointed out above, Nigeria's trade policy regime as currently contained in the NEEDS and trade policy documents, has been geared to enhancing competitiveness of domestic industries, with a view to, inter alia, encouraging local value-added and promoting as well as diversifying exports. The mechanism adopted to this end is gradual liberalization of the trade regime. Thus, the government intends to liberalize the trade regime in a manner, which will ensure that the resultant domestic costs of adjustment do not outweigh the benefits. This is the fundamental basis on which to gauge the direction and implementation of policy. The clarion call is "gradual liberalization". This addresses the question as to what is the kind of trade strategy the government has adopted in furtherance of its development agenda. Current reform packages are therefore designed to allow a certain level of protection of domestic industries and enterprise.

Concretely, this has translated into tariff escalation, with high effective rates in several sectors and lower import duties on raw materials and intermediate goods unavailable locally. This policy perspective has also led to the application of relatively high import duties on finished goods which compete with local production. The transformation of Nigeria from a net exporter of agricultural products to a large-scale importer of the same commodities was particularly marked during the period 1973–1982 (Oyejide, 1986). Osuntogun et al (1997), report that nominal non-oil export earnings fell from N363.5 million in 1973 to N203.2 million in 1982. The decline was even more dramatic in real terms as oil exports in contrast rose phenomenally, from about N2 billion to about N8 billion in nominal terms during the same period. Also continued reliance on developed countries as markets for oil and non-oil exports has caused Nigeria great misfortunes, as recessions in developed countries are usually fully transmitted to Nigeria. Onwualu(2009), identifies key impediments to the growth of the non-oil sector as follows :

- Weak Infrastructure – a national challenge.
- Supply side constraints – due to low level of technology. This constraint is particularly prominent in the agricultural sector.
- Low level of human capital development – general.
- Weak Institutional framework – general.

➤ Poor Access to finance - general

Consequently, efforts have been made over the years by Nigerian governments to grow the non-oil sector of the economy by initiating supportive policies and incentives to encouraging the diversification of the economy. These policies can be categorized into three, namely:

**Protectionism Policy (1960 to 1986)** - import substitution industrialization was aimed at expanding the industrial base, enhancing cash crop exports, encouraging farmers to expand their farms and increasing the production of cash crops. The ultimate goal was to protect domestic industries that were set up to produce import substitutes.

**Trade Liberalisation Policy (1986 SAP era)** - trade policies of this era was aimed at deregulation, commercialization, privatization and liberalization of the economy in order to achieve greater openness to and integration with the world economy; and to tackle the challenges of imbalances in the economy and thereby pave way for sustainable economic growth and development.

**Export Promotion Policy (Post SAP period)** - government policies from 1999 till date are aimed at facilitating the diversification of the economy through policy support to SMEs to enhance the export of their products. Export grant, as reported by Onwualu (2012), is given to exporters to cushion the impact of infrastructural disadvantages faced by Nigerian exporters and to make exports competitive in the international market.

**Macro-Economic Indicators and Export under Needs**

In assessing the performance of trade policy, the view has often been expressed that trade policy in itself may not be able to accomplish the desired policy objectives, in the absence of appropriate complementarities. Studies of trade liberalization since the 1980s have shown that trade liberalization has failed in many instances due to lack of appropriate accompanying measures, and not so much as a result of faulty design of the trade policies themselves. Such associated policies are macroeconomic policies, pro-growth regulatory and competition policy, investments in infrastructure, human resource development, governance and the rule of law. (Chiedu Osakwe and Rajapatirana Sarath (2001); Supachai Patnitchpakdi (2002)). Under the NEEDS regime, fiscal policy has continued to be influenced by developments in the oil sector. Petroleum-related taxes account for over 70 percent of public revenue. Increases in crude oil prices in recent times have led to improvements in the fiscal balance. Between 2003 and 2005, federal revenue increased by 48.7 percent on account of increased production and higher world market prices; another 12 contributory factor was the removal of subsidies on domestic crude oil sales to the Nigerian National Petroleum Corporation (NNPC). Public revenue from company income tax, customs and excise duties and value-added tax (VAT) also increased over the same period while aggregate public expenditure rose by 20 per cent on capital items. Concomitantly, the public deficit diminished from 5.0 per cent in 2002 to 1.3 per cent in 2003.

While the aim of monetary policy continues to be fiscal and macroeconomic stability, inflation rates have in recent times remained above the single-digit mark, due mainly to excessive money supply, with adverse effects on the competitiveness of the economy. The growth in money supply was attributed largely to an increase in net foreign assets, and to a lesser extent, on overall banking

sector credits. The inadequacy of stabilization policies has meant sustained high inflation levels, partly also accentuated by a reduction in the minimum discount rate between 2003 and 2005. Overall, the nominal exchange rate appears to be adjusting to the misalignment of the local currency, the naira, vis-à-vis the currencies of the major trading partners, largely due to persistent depreciation and devaluation. Unfortunately however, high inflation rates appeared to have dampened the impact of depreciation on the competitiveness of non-oil export products in particular. At the same time, restrictions in the exchange-rate market have widened the gap between the official and non-official exchange rate, which thus constitutes an indirect tax on non-oil exports, and hence a disincentive to export-oriented activities.

The trade account balance, largely affected by world market prices and domestic production of oil, remains mixed, with improvements during years of favourable oil prices as occurs presently. Fiscal policy has also shown a similar trend due to a high import content of expenditure. Management of the external debt burden still represents a heavy drain on government resources. The external debt stood at 75 per cent of GDP around 1995. The debt burden has seriously challenged the government's resolve to sustainably manage the overhang. Quite recently though, the government's resolute campaign for the cancellation of Nigeria's bilateral foreign indebtedness, eventually yielded results in mid-2005, when the Paris Club of creditors agreed to the cancellation of Nigeria's debt. This is of course assorted with certain conditions to be met by government. It is expected that this welcome move will go a long way in helping the government's poverty reduction agenda.

### **Empirical Review**

Obieche, Onuabi, Evans Jared and Onyechere (2024) examined the effect of export financing on the growth of Nigeria economy using time series data sourced from Central Bank of Nigeria Statistical Bulletin from 1990- 2023. Real gross domestic product was modeled as the function of commercial bank credit to export sector, export import bank credit to exporters, micro export credit, export grant and Nigerian naira exchange rate per US Dollar. The econometrics tools used in this study include; multiple regressions and Granger Causality test which were used to determine the level of impact that one variable has on the other as well as the direction of causality between them. The result arising from our findings indicates that 56.8 % variations in economic growth were explained by export financing variables. commercial banks credit, export import banks, microcredit export credit and export grant have positive effect on the growth of Nigeria economy while exchange rate have negative effect on the growth of the economy. From the findings, we conclude positive effect of export financing and economic growth in Nigeria. We recommend that Nigeria government should encourage the banking sector, especially the Nigeria Export -Import bank to increase their credit to Nigeria export sector to enhance export productivity and in turn improve economic growth. Nigeria should create a special budgetary allocation for production of export goods to enhance economic growth, there should be awareness programme to Nigeria stake holders and investors to invest or increase their investments in production of export goods and export management policies such as export financing subsidies and grant should be accessible by the commercial banks or export-import bank and Nigerian export incentives should be strengthened.

Erickson and Miftahu (2023) examined the effect of export trading on economic growth in Nigeria. This study, as one of the empirical investigations on the impact of export trading on economic growth in Nigeria has provided a good understanding of the level of impact that export has on the growth of Nigeria's economy with particular reference to oil and non-oil export. The study covered the period of 1996 to 2021 and time series data obtained from CBN were used. The econometrics tools used in this study include; multiple regressions and Granger Causality test which were used to determine the level of impact that one variable has on the other as well as the direction of causality between them. The result arising from our findings indicates that oil export positively and significantly impacted on the growth of Nigeria's economy for the period under review. It was also shown in the result that non-oil export has a positive and significant impact on GDP. The result of the granger causality test indicates that there is unidirectional causality between oil export and GDP. This finding is in line with that of Odusola and Akinlo (2015), Ekpo and Egwaikhide(2014) and Idowu(2015) who used the traditional Granger causality test in examining whether the growth led-export hypothesis is valid for Nigeria. The results of the study indicated that a unidirectional relationship between exports and economic growth exists in Nigeria. Based on this, we conclude that growth-led-export hypothesis is applicable in the Nigeria context with particular reference to oil export. Therefore to improve the living standard of the populace emphasis should not be directed only to the export sector of the economy but should be far reaching as the growth in the economy also has the potential to drive the export sector of the economy.

Uche (2019) used the traditional Granger causality test in examining whether the export-led growth hypothesis is valid for Nigeria. The results of the study indicated that a bidirectional (or feedback effect) relationship between exports and economic growth exists in Nigeria. Thus the study validated both the export led growth hypothesis and the growth-driven export hypothesis for Nigeria. Though the study examined the stationarity properties of the variables used, it did not consider the issue of cointegration. The issue of cointegration is very important in determining whether or not to apply the traditional Granger (1969) causality test in the analysis of causality.

Hsiao (2017) examined the impact of deposit money bank credit on the growth of export in Nigeria from 1986 to 2016. It employs the Auto Regressive Distributed Lag (ARDL) bounds testing approach to co-integration analysis to establish the long run relationship between the relevant time series data. The empirical findings showed that deposit money bank credit to export sector has an inverse but significant relationship on the Nigerian export sector while on the short run, deposit money bank credit at lag one and two have direct and significant impact on the Nigerian export sector. This implies that continuous supply of credit to export sector has the tendency to encourage growth of exportation of goods and services in the Nigerian economy. Furthermore, the findings from stability test conducted using the Cumulative Sum (CUSUM) and Cumulative Sum of Square (CUSUM Q) of the residual shown that the ARDL model is stable. The study recommends that interest rates should be reduced to make loanable funds cheaper for investors in the export sector and monetary authority should put in place adequate policies toward deepening the financial sector to encourage supply and reduce the cost of credit to the export sector in the Nigerian economy.

Arikpo and Adebisi (2017) examined the effects of deposit money banks financing on real sector output in Nigeria. The study specifically assessed the effect of private sector credit, interest rate spread, deposit mobilization and banks holding of treasury bills on trade and agricultural sectors

outputs in Nigeria. The study used the Vector Error Correction Mechanism (VECM) for data analysis and revealed that deposit money banks financing have a long term significant effect on the trade sector but does not have any long run effect on the agricultural sector in Nigeria and interest rate spread has an inverse effect on the trade sector output but a positive effect on the agricultural sector output. The study therefore recommended that the spread between lending and deposit rates should be narrowed to trigger savings and enhance banks loan supply and real sector loan demand which consequently will boost productivity in the real sector.

Akeem (2017) undertook a study titled Non-oil export determinant and economic growth in Nigeria. Akeem employed data from CBN for the period 1989 to 2008. He used multi linear regression method and found non-oil export for previous year and consumer price index to positively affect GDP. Multi linear regression was used in this study without carrying out a unit root test. Not carrying out a unit root test may lead to a spurious result.

Adenugba and Dipo (2017) studied Non-oil exports and the economic growth of Nigeria: A study of agricultural and mineral resources. The study evaluated the performance of Nigeria's export promotion strategies as to whether they have been effective in diversifying the productive base of the Nigerian Economy from Crude oil as the major source of foreign exchange. The study was carried out for the period 1981 to 2010. Findings from the study revealed that non-oil exports have performed below expectations giving reason to doubt the effectiveness of the export promotion strategies that have been adopted in the Nigerian Economy. The study revealed that the Nigerian Economy is still far from diversifying from crude oil export and as such the crude oil sub-sector continues to be the single most important sector of the economy. The study made some recommendations for diversification to be achieved and for enhancing the productivity and output of non-oil commodities as well as providing markets for the commodities. Unit root test was not conducted before the estimation. Rahmaddi (2018) examined the exports and economic growth nexus in Indonesia employing vector autoregressive (VAR) model. The findings indicate the significance of both exports and economic growth to economy of Indonesia as indicated in GIRF analysis. It was concluded that exports and economic growth exhibits bidirectional causal structure, which is Export Led Growth in long-run and Growth Led Export in short-run. Gemechu (2015), using co integration and error correction approaches in the regression analysis examined the policies and test for the relationship between exports and economic growth. The result shows that export significantly affected economic growth in the short-run. There is causality runs from exports to economic growth. Samad (2017) tested the hypothesis that there exist relationship between exports and economic growth in Algeria, using VEC Granger causality and block exogeneity Wald test. Augmented Dickey-Fuller test was used to run the regression. The result shows that the variables are non-stationary. It was concluded that there is causal relationship between economic growth, exports and imports. The findings of the studies are well established, the variables focused on specific factors while this study focused on disaggregated effect of export dimension and economic growth in Nigeria.

### **Methodology**

Research design is a master plan specifying the methods and procedures for collecting and analysing needed information. Baridam (2001) suggested that the choice of a design is influenced

by the purpose of the study, the study setting, unit of analysis and time horizon. This study used quasi experimental research design approach for the data analysis. This approach combines theoretical consideration (a prior criterion) with the empirical observation and extract maximum information from the available data. It enables us therefore to observe the effects of explanatory variables on the dependent variables. The data for this study are secondary data sourced from the Central Bank of Nigeria (CBN) statistical bulletin 2023 publication various years, Economic and Financial Report and National Bureau of statistics.

### Model Specification

$$RGDP=f(OEX, NOEX, OTT, NOTT, EXR) \quad (1)$$

It is empirically stated as

$$RGDP= \beta_0 + \beta_1 OEX + \beta_2 NOEX + \beta_3 OTT + \beta_4 NOTT + \beta_5 EXR + \mu \quad (2)$$

Where:

RGDP = Nigerian Real Gross Domestic Product Proxy for dependent Variable

OEX = Oil Export

NOEX = Non-Oil Export

OTT = Oil Terms of Trade

NOTT = Non-Oil Terms of Trade

EXR = Nigerian Naira Exchange Rate per US Dollar

$\beta_0$  = Regression Intercept

$\beta_1 - \beta_6$  = Coefficient of the independent variables to the dependent variable

$\mu$  = Error term

### Data Analysis Method

The technique used in this study is the Ordinary Least Square (OLS) estimation technique. The test instruments in the OLS are the T-statistics and F-test which were used to test the significance of variables and the overall significance of the regression respectively. Other test instruments also employed were the Durbin Watson test which was used to test the presence or absence of auto correlation between and among the explanatory variables and the adjusted R square used to test the percentage variation of the dependent and the independent variables.



## Estimation Techniques

### Stationarity Test:

Time series data are assumed to be non-stationary and this implies that the result obtained from Ordinary Least Square (OLS) may be misleading (Suleman and Azeze, 2012). It is therefore necessary to test the stationarity of the variables using the Augmented Dickey Fuller 1979 test to both level and first difference. The ADF test constructs a parameter correction for higher order correlation by assuming the times series follows an auto regressive process. Mathematically expressed as

$$\Delta y_t = c + \beta_t + \alpha y_{t-1} + \sum_{j=1}^k \gamma_j \Delta y_{t-j} + \varepsilon_t \dots\dots\dots 3$$

$$\Delta y_t = c + \alpha y_{t-1} + \sum_{j=1}^k \gamma_j \Delta y_{t-j} + \varepsilon_t \dots\dots\dots 4$$

Equation 1 is used to test for the null hypotheses of non stationarity of unit root against trend stationarity alternative in  $Y_t$  where  $y$  refers to the examined time series. Equation 2 tests the null hypotheses of a unit root against a mean stationarity alternative.

#### i. Johansen Cointegration Test

The cointegration test established whether a long run equilibrium relationship exist among the variables. It is generally accepted that to establish a cointegration, the likelihood ratio must be greater than the Mackinnon critical values. The model can be stated as

$$\Delta X_t = \mu + \Psi_1 \Delta X_{t-1} + \Psi_2 \Delta X_{t-2} + \dots + \Psi_{p-1} \Delta X_{t-p} + \varepsilon_t \dots\dots\dots 5$$

Where  $\mu$  is a constant term.

$\Delta X_t$  Represents the first cointegrating differences

#### ii. Granger Causality

To determine the direction of causality between the variables, th4e study employed the standard Granger causality test (Granger, 1969). The test is based on Vector Error Correction Model (VECM) which suggest that while the past can cause or predict the future, the future cannot predict or cause the past. Thus, according to Granger (1969) X Granger cause Y if past value of X can be used to the past value of Y, the test is based on the following regression model.

$$Y_t = \alpha_o + \sum_{i=1}^n \alpha_1^y Y_{t-1} + \sum_{i=1}^n X_{a1} X \mu \dots\dots\dots 6$$

and

$$X_t = \beta_o + \sum_{i=1}^n \beta_1^y Y_{t-1} \sum_{i=1}^n X_{\beta_1} X Y_t \dots\dots\dots 7$$

iii. Vector Error Correction Model

Co-integration is a prerequisite for the error correction mechanism. Since co-integration has been established, it is pertinent to proceed to the error correction model. The VECM is of this form:

$$\Delta y_t = \alpha \beta y_{t-1} + \sum_{i=1}^{j-1} \Gamma_j \Delta y_{t-1} + \pi + \zeta_t, t = 1, \dots, T \dots\dots\dots 8$$

Where  $Y_t$  is a vector of indigenous variables in the model.  $\alpha$  is the parameter which measures the speed of adjustment through which the variables adjust to the long run values and the  $\beta$  is the vectors which estimates the long run cointegrating relationship among the variables in the model.  $\pi$  is the draft parameter and is the matrix of the parameters associated with the exogenous variables and the stochastic error term.

## RESULTS AND DISCUSSION

**Table 1: Regression Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.93286	803.0438	-0.013614	0.9892
OEX__	0.001812	0.001124	1.613094	0.1188
NOEX__	0.006233	0.000824	7.560254	0.0000
OTT__	0.001608	0.001422	1.130148	0.2687
NOTT__	-0.008452	0.001112	-7.602004	0.0000
EXR__	-50.14664	21.26325	-2.358371	0.0262
R-squared	0.980503	Mean dependent var		11780.50
Adjusted R-squared	0.976754	S.D. dependent var		20206.15
S.E. of regression	3080.771	Akaike info criterion		19.07111
Sum squared resid	2.47E+08	Schwarz criterion		19.34593
Log likelihood	-299.1377	Hannan-Quinn criter.		19.16221
F-statistic	261.5103	Durbin-Watson stat		1.166972
Prob(F-statistic)	0.000000			

### Analysis of the Results

The result of the estimated regression model formulated in chapter three of this study revealed a negative of -10.93286 as the regression intercept. This means that without the country's external relations in terms of trade, the economic growth will fall by 10.9%. Nigerian Oil export, non oil export and oil terms of trade have positive effect on the growth of Nigerian economy proxy by Real Gross Domestic Product. The positive coefficient of 0.001812OEXR 0.006233NOEX and 0.001608OTT implies that an increase of 1% will add 0.06%, 0.01% and 0.01% to the growth of the economy. However, non-oil terms of trade and exchange rate have negative relationship with economic growth. With the negative coefficient of -0.008452NOTT and -50.14664EXR –proved that an increase of 1% will lead to decrease of 0.08% and 50.1%. The extent to which the independent variables can explain changes in the dependent variable is revealed by the  $R^2$  and the adjusted R: From the result, the  $R^2$  and the adjusted  $R^2$  of 0.980503 and 0.976754 revealed that

98.0% and 97.6% variation in the growth of Nigerian Real Gross Domestic Product can be explained by variation in the explanatory variables in the model. The large explained variation shows the important of international trade on the economic growth. The F-Statistics of 261.5103 at the probability of 0.00000 show the fitness of the model. The Durbin Watson (D.W) statistics of 1.166972 shows the presence of negative serial autocorrelation between the variables in the time series. The means dependent variation and standard deviation of the variables shows high rate of fluctuation and deviation from the static point of equilibrium. This allows testing the stationarity of the data using the Augmented Dickey Fuller Unit Root Test.

**Table 2: Stationarity Test (ADF at Difference)**

Variable	ADF Statistics	Mackinnon Value 1%	Critical 5%	10%	Order of Integration	Of
RGDP	-4.423456	-3.724070	-2.986225	-2.632604	1(1)	
OEX	-4.423917	-3.724070	-2.986225	-2.632604	1(1)	
NOEX	-4.645868	-3.724070	-2.986225	-2.632604	1(1)	
OTT	-5.101755	-3.724070	-2.986225	-2.632604	1(1)	
NOTT	-4.896806	-3.724070	-2.986225	-2.632604	1(1)	
EXR	-5.307602	-3.724070	-2.986225	-2.632604	1(1)	

From the results, the stationarity test at difference shows that the variables RGDP, OEX and NOEX are integrated of in order of 1(0) which OTT, NOTT and Exchange Rate are integrated of 1(1). This indicates the non-stationarity of the variables at first differencing.

**Table 3: Test For Causality (PARIWISE)**

VARIABLES	PROBABILITY	REMARK
OEX → RGDP	1.E -05	No Causality
RGDP → OEX	1.E - 07	No Causality
NOEX → RGDP	0.1912	No Causality
RGDP → NOEX	0.0808	No Causality
OTT → RGDP	0.4883	No Causality
RGDP → OTT	0.0096	No Causality
NOTT → RGDP	0.0055	No Causality
RGDP → NOTT	0.0931	Causality
EXR → RGDP	0.0880	Causality
RGDP → EXR	0.9816	No Causality

**Table 4: Presentation of Unrestricted Cointegration (TRACE)**

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.994972	429.7559	95.75366	0.0001
At most 1 *	0.984937	281.5584	69.81889	0.0000
At most 2 *	0.946560	164.0836	47.85613	0.0000
At most 3 *	0.874729	82.06602	29.79707	0.0000
At most 4 *	0.522615	23.90226	15.49471	0.0022

At most 5	0.107938	3.198140	3.841466	0.0737
Unrestricted Cointegration Rank Test (Maximum Eigenvalue)				
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.994972	148.1975	40.07757	0.0001
At most 1 *	0.984937	117.4748	33.87687	0.0000
At most 2 *	0.946560	82.01758	27.58434	0.0000
At most 3 *	0.874729	58.16376	21.13162	0.0000
At most 4 *	0.522615	20.70412	14.26460	0.0042
At most 5	0.107938	3.198140	3.841466	0.0737

Max-eigenvalue test indicates 5 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

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

The unrestricted cointegration trace test revealed at least from integrating equations proving the presence of long-run relationship between the dependent and the independent variables. This denote the rejection of null hypotheses of no co integration and accept the alternate with probability of 0.0737 greater than 0.05.

**Table 5: Normalized Cointegration Equation**

Normalized cointegrating coefficients (standard error in parentheses)

RGDP__	OEX__	NOEX__	OTT__	NOTT__	EXR__
1.000000	-0.010192	-0.001588	-0.000818	0.002176	-15.50700
	(0.00104)	(0.00019)	(4.8E-05)	(0.00019)	(0.77115)

The equation above revealed that all the independent variables have negative long-run relationship with the dependent variable except non-oil Terms of Trade

**Table 6: Presentation of Error Correction Models**

C	6844.752	367033.8	3599782.	2355729.	1777112.	
Error Correction:	D(RGDP__)	D(OEX__)	D(NOEX__)	D(OTT__)	D(NOTT__)	D(EXR__)
CointEq1	3.610288 (3.84772) [ 0.93829]	133.1985 (108.399) [ 1.22878]	1522.643 (700.922) [ 2.17234]	-54.14055 (91.0983) [-0.59431]	450.1079 (232.627) [ 1.93489]	0.067542 (0.02644) [ 2.55441]
CointEq2	0.100063 (0.11543) [ 0.86688]	0.111645 (3.25187) [ 0.03433]	22.20027 (21.0270) [ 1.05580]	-3.484397 (2.73286) [-1.27500]	16.73827 (6.97857) [ 2.39852]	0.001404 (0.00079) [ 1.77055]
CointEq3	-0.041367 (0.03315) [-1.24793]	-0.674494 (0.93387) [-0.72226]	-12.18482 (6.03849) [-2.01786]	2.389715 (0.78482) [ 3.04493]	-6.905153 (2.00409) [-3.44552]	-0.000602 (0.00023) [-2.64314]
CointEq4	0.012009 (0.00594) [ 2.02236]	0.357068 (0.16729) [ 2.13447]	4.089620 (1.08169) [ 3.78077]	-1.480441 (0.14059) [-10.5305]	3.297749 (0.35900) [ 9.18597]	0.000145 (4.1E-05) [ 3.55063]
CointEq5	0.034087 (0.03160) [ 1.07863]	0.280424 (0.89030) [ 0.31498]	8.368509 (5.75678) [ 1.45368]	-2.839760 (0.74820) [-3.79544]	4.472934 (1.91060) [ 2.34112]	0.000496 (0.00022) [ 2.28354]
D(RGDP__(-1))	-14.40397 (5.56601) [-2.58784]	-267.1307 (156.808) [-1.70356]	-2670.433 (1013.94) [-2.63373]	79.12993 (131.780) [ 0.60047]	-1200.631 (336.512) [-3.56787]	-0.112705 (0.03825) [-2.94657]
D(RGDP__(-2))	-0.419204 (2.79704) [-0.14987]	-19.36080 (78.7992) [-0.24570]	-579.5222 (509.524) [-1.13738]	-426.3273 (66.2224) [-6.43781]	-276.7081 (169.104) [-1.63632]	-0.015171 (0.01922) [-0.78930]
D(OEX__(-1))	-0.033333 (0.09152) [-0.36421]	0.938467 (2.57837) [ 0.36398]	-7.039702 (16.6721) [-0.42225]	2.096701 (2.16685) [ 0.96763]	-11.06855 (5.53323) [-2.00038]	-0.000962 (0.00063) [-1.52901]

D(OEX__(-2))	0.084705 (0.03100) [ 2.73216]	1.936619 (0.87342) [ 2.21727]	13.94444 (5.64766) [ 2.46906]	3.875948 (0.73402) [ 5.28042]	1.385700 (1.87438) [ 0.73928]	-0.000420 (0.00021) [-1.97261]
D(NOEX__(-1))	0.047215 (0.03040) [ 1.55333]	0.693617 (0.85632) [ 0.80999]	11.01741 (5.53709) [ 1.98975]	-2.061161 (0.71965) [-2.86411]	7.698937 (1.83769) [ 4.18947]	0.000583 (0.00021) [ 2.79030]
D(NOEX__(-2))	0.020963 (0.01444) [ 1.45144]	0.478459 (0.40690) [ 1.17587]	5.513619 (2.63105) [ 2.09559]	-0.831814 (0.34196) [-2.43252]	4.310879 (0.87321) [ 4.93681]	0.000331 (9.9E-05) [ 3.33623]
D(OTT__(-1))	-0.006785 (0.00762) [-0.89001]	-0.460399 (0.21476) [-2.14377]	-3.979850 (1.38867) [-2.86594]	-0.356303 (0.18048) [-1.97415]	-2.881278 (0.46088) [-6.25166]	-0.000103 (5.2E-05) [-1.96891]
D(OTT__(-2))	-0.014866 (0.00667) [-2.22930]	-0.774666 (0.18787) [-4.12341]	-5.500088 (1.21479) [-4.52761]	-1.062994 (0.15789) [-6.73271]	-2.829465 (0.40317) [-7.01800]	-4.44E-05 (4.6E-05) [-0.96963]
D(NOTT__(-1))	-0.034019 (0.02592) [-1.31226]	-0.238244 (0.73034) [-0.32621]	-6.858112 (4.72249) [-1.45222]	3.030200 (0.61378) [ 4.93697]	-5.539533 (1.56733) [-3.53437]	-0.000511 (0.00018) [-2.86811]
D(NOTT__(-2))	-0.021274 (0.01315) [-1.61802]	-0.432541 (0.37041) [-1.16774]	-5.463467 (2.39510) [-2.28110]	1.091746 (0.31129) [ 3.50718]	-4.159024 (0.79490) [-5.23213]	-0.000293 (9.0E-05) [-3.24142]
D(EXR__(-1))	79.42072 (89.2366) [ 0.89000]	-4545.429 (2514.00) [-1.80805]	-20698.87 (16255.8) [-1.27332]	-55547.78 (2112.75) [-26.2916]	2496.939 (5395.09) [ 0.46282]	2.137634 (0.61323) [ 3.48585]
D(EXR__(-2))	202.2850 (81.5271) [ 2.48120]	-1002.303 (2296.81) [-0.43639]	1514.895 (14851.4) [ 0.10200]	-45211.19 (1930.23) [-23.4228]	7877.427 (4928.99) [ 1.59818]	2.486722 (0.56025) [ 4.43857]
C	-1193.345 (2153.74) [-0.55408]	131884.3 (60676.0) [ 2.17358]	739343.9 (392338.) [ 1.88446]	1567845. (50991.8) [ 30.7470]	-76735.41 (130212.) [-0.58931]	-33.61499 (14.8005) [-2.27121]
R-squared	0.986528	0.991263	0.989125	0.999520	0.996264	0.907737
Adj. R-squared	0.961080	0.974759	0.968583	0.998613	0.989208	0.733462
Sum sq. resids	10999148	8.73E+09	3.65E+11	6.17E+09	4.02E+10	519.4252
S.E. equation	1105.499	31144.46	201383.6	26173.65	66836.53	7.596967
F-statistic	38.76649	60.06289	48.15187	1102.022	141.1830	5.208649
Log likelihood	-212.6975	-302.8326	-353.2302	-298.1378	-323.4502	-78.22930
Akaike AIC	17.08870	23.76538	27.49853	23.41762	25.29261	7.128096
Schwarz SC	17.95259	24.62927	28.36242	24.28151	26.15650	7.991987
Mean dependent	2003.509	65072.92	477256.9	281694.5	145510.0	5.539774
S.D. dependent	5603.633	196032.1	1136169.	702751.0	643362.3	14.71501
Determinant resid covariance (dof adj.)		3.26E+36				
Determinant resid covariance		4.48E+33				
Log likelihood		-1275.908				
Akaike information criterion		104.7339				
Schwarz criterion		111.3571				

Error correction model presented in the above shows that equation 3 is well signed with negative coefficient of -0.41367 while the T-statistics is -1.24793; this means a shift from equilibrium that will take 2 years and 7 months. The time measures the speed of adjustment to equilibrium. However, the variables are represented by R<sup>2</sup> of 98.6%RGDP, 99.1%NOEX, 98.9%NOE, 99.9%TT, 99.6%NOTT and 90.7%EXR.

### Discussion of Findings

The important of international trade has long been advocated by the classical economists, this lead to the formulation of theories explaining the reasons and gains from trade. Nigerian government over the years has embarked on structural and institutional policy reforms to enhance greater

openness of to deepen the productive capacity of the economy beyond National consumption, for instance the deregulation of the economy in the last quarter of 1986 (Onoh, 2002, Onoh, 2007), the establishment of National Investment Promotion Council (NIPC), the establishment of exports processing zones and the overhauls in the macroeconomic, monetary policy and the investment environments. The study is motivated to examine the effect of Nigerian export structure on the economy using time series data of 34 years. Findings from the study revealed that export structural used as independent variables in this study have significant relationship with Nigerian economic growth measured by Real Gross Domestic Product. The  $R^2$  and the adjustment  $R^2$  of 98.0% and 97.6% explained variation from the dependent variables; this is also confirmed by the significance of the model measured by the F-statistics. However, the independent variables such as non-oil export, Oil Terms of Trade and Oil Export have positive relationship with the growth of Nigerian economy. This finding is in line with the expectation of the results. It confirms the policy of deregulation of the economy in 1986 following the adoption of the structural adjustment program which was recommended by the International Monetary Fund (IMF). The finding also confirms the policy of the national Economic Empowerment Development Strategies founded in 2006 with the objective of repositioning Nigerian Economy for greater productivity. The finding confirm the theories of International Trade such as the Absolute Advantage by Smith, Comparative advantage by Divide Ricardo and deepen the reasons economists have always advocated the continued existence of International Trade despite the perceived negative economic growth of Nigeria. It also confirms the findings of Chen (2007) on the positive effect of Oil Export on the growth of Nigerian economic. A close examination of Central Bank of Nigerian Annual Report shows that Oil Export and Revenue accounted for over 80% of the total revenue. However, the findings revealed that non-oil Terms of Trade and Exchange have negative relationship with Nigerian economic growth which contrary to the A-priori expectation of the result. Non-oil Terms of trade is expected to have a positive effect on the income stream. Exchange Rate is also expected to have a positive effect because of the depreciating value of Nigerian Exchange against Key currencies such as the United State Dollar. The negative effect of non-oil terms of trade can be traced to the marginal performance of the non-oil sector which account for less than 20% total export and foreign earnings while the negative effect of the exchange can be traced to inconsistency exchange rate policies and the monetary and macroeconomic instabilities within the period covered in this study. For instance Nigeria had over ten (10) different rate policies in less than 20 years. Some are re-introduced after few years of abolishment (Onoh, 2007).

## CONCLUSION AND RECOMMENDATIONS

### Conclusion

The objective of this study was to investigate the impact of Nigerian Export Structure on the economic growth using time series data covering 34 years. The data were sourced from the publications of Central Bank of Nigeria Real Gross Domestic product as the function of Nigerian Real Gross Domestic Product as the function of Nigerian Oil Export Non –Oil Terms of Trade, Non-Oil Terms of Trade and Exchange Rate. The coefficient of determination ( $R^2$ ) which measured to extent to which the independent variables can explain changes on the dependent variable show that 98.0% and 97.6% variation in Nigerian Real Gross Domestic Product can be

explained by the independent variables. This is confirming by the F-statistics of 261.5103 at the probability of 0.00000. From the findings of this study, that oil export has positive and insignificant effect on the growth of Nigerian economic growth. Non-oil export has positive and significant effect on the growth of Nigerian economic growth which confirms the A-priori expectation of the study. Oil Terms of Trade have positive and insignificant relationship with Nigerian Real gross Domestic Product. The finding is confirmed to the expectation of the result. Non-Oil Terms of Trade have negative and significant relationship with Nigerian economic growth proxy by Real Gross Domestic Products while exchange have negative and significant effect on Nigerian economic growth which is contrary to the expectation of the results. The independent variables in the dependent variable by 93.2% and 91.6% while the F-statistics was found to significant at the f-statistics was found to significant at 5% level. The test using Augmented Dickey Fuller was found to be stationary at level and first difference. The co integration reveals the presence of long-run co integrating equations which led to the rejection of null hypotheses. The Granger Causality Test revealed is variant relationship running from the independent to the dependent and from the dependent to the dependent variables.

### **Recommendations**

From the findings of this study, we recommend as follows:

- i. There should be plans to deepen Nigerian Oil Export to enhance Nigerian Economic growth. The policies of diversifying Nigerian Economy from monoculture oil economy should be made achievable to enhance non-oil export that will increase economic growth.
- ii. Nigerian exchange rate policies should be properly managed to avert its negative effect on the economy. Monetary and macroeconomic policies should properly be integrated to enhance the productive capacity of the economy beyond national consumption.
- iii. The business environment should be made invest able to attract foreign investors that will produce goods and services for export. Export management policies such as export financing subsidies and grant should be accessible by the commercial banks or export-import bank.

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