# Foreign Trade and Economic Growth in Nigeria (1980-2010)

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#### Abstract

Foreign trade plays a very important role in the formation of economic and social attributes of countries around the world. Foreign trade is the exchange of goods and services across national borders. In most countries, it represents a significant part of Gross Domestic Product (GDP). Foreign trade has been in existence for quite awhile, its economic, social and political importance have increased in recent centuries, mainly because of industrialization, advanced transportation, globalization and multinational corporations.

#### **1. INTRODUCTION**

Foreign trade has been and is today an economic force that has spurred commerce, promoted technology and growth, spread cultural patterns, stimulates exploration and brings prospect for world peace and international relationships.

Foreign trade in its early beginnings was necessary, not just because it provided one society with products such as cowries from Africa to other areas; foreign trade also formed the basis for cultural interchange, thus trading not only on product, but also on lifestyles, customs and technology. It has helped to improve the living standard of nations and also, the national income.

Foreign trade means the exchange of goods and services across international borders or between nations of the world. The analysis of an economy in terms of growth rate and per capita income has been based on the domestic production, consumption activities and in conjunction with foreign operation of goods and services. Foreign trade plays a vital role in reorganization of economic and social attributes of countries around the world, particularly, the less developed countries.

Foreign trade has been an area of interest to decision makers, policy makers as well as economists. It enables nations to sell their domestically produced goods to other countries of the world (Adewuyi, 2002). Foreign trade is achieved when it facilitates the national and international mobility of factors of production, the exchange of ideas and improved technology which leads to international allocation and distribution of resources. Foreign trade leads to steady improvement in human status by expanding the range of people's standard of living and preference. Foreign trade plays a vital role in reforming economic and social attributes of countries around the world, particularly, the less developed countries because no country is self sufficient to trade alone.

Before the discovery of oil in 1960's, the Nigerian government was able to carry out investment project through domestic savings, earning from agricultural product exports and foreign aids. Since the discovery of crude oil in 1956 and its exploration in commercial quantity in 1958 however, the oil sector gradually became the dominant sector in the economy, and almost the sole source of export earnings. For instance in 1970's petroleum constituted of about 78% of Federal Government revenue and more than 95% of export earnings (World Bank, 2002). With the oil boom in 1973, the country's foreign exchange earning raised immensely, which translated into higher economic growth, to the extent that there was no fear of expenditure in the part of government even on necessary issues.

Since the advent of oil as a major source of foreign exchange earning Nigeria in 1974 the image has been almost that of general stagnation in agricultural exports. This led to the loss of Nigeria's position as an important producer and exporter of palm oil produce, groundnut, cocoa and rubber (CBN annual report, 2006). Between the year 1960 and 1980, agricultural and agro-allied exports constituted an average of 60% of total export in Nigeria, which is now accounted for, by petroleum oil export, (CBN Annual Report and Account, 2004).

Furthermore, by 1977, export stood at N7, 881.7million. Between 1960 and 1977, value of export grew by 19%. It should be noted that before 1972, most of the export were agricultural commodities like cocoa, palm produces, cotton and groundnut. Thereafter, minerals, especially crude, petroleum, became significant export commodities. Imports also increased in values during the period. By 1960, import were valued at N432 million. They increased to N758.99 million and N813.2 million in 1970 and 1978 respectively, rising to N124, 162.7 million in 1992 and N681, 728.3 million in 1997. Non-oil GDP recorded a growth rate of 8.9%, compared with 8.5% in 2010. The improved performance in the sector was driven largely by the agricultural sector which grew by 5.7%, underpinned by robust growth in all its components.

However, from 1974, food import became obvious in Nigeria's foreign trade. The country had an unfavorable trade balance from 1960 to 1965, partly because of the aggressive drive to import all kinds of machinery to stimulate the industrialization strategy pursued immediately after independence. Thereafter, export of crude petroleum guaranteed a favorable trade balance. The oil sector dominates export while the non oil sector

dominates import. Between 1960 - 1970 oil export grew by 31.6% and 44.6% respectively. Also, for this period, nonoil export showed marginal growth of 1.2% and 6.6%.

Nigeria experienced a growth transition in 2011, which highlighted a gradual shift away from primary production to secondary and tertiary activities. Primary production activities, comprising agriculture, crude petroleum and natural gas, and solid minerals dominated economic activities in 2011 with a share of 55.30% of GDP, compared with 57.09% in 2010. By contrast, secondary production activities of manufacturing, building and construction which have a greater potential to expand the country's productive base recorded a share of 6.25% of real GDP in 2011. The tertiary sectors have shown an upward trend in the last five years, accounting for about 39% of the GDP during 2011 compared with about 37% in 2010. The development of secondary and tertiary sectors showed a gradual expansion of the productive base, resulting in reduction in the dominance of primary activities in the economy. In the merchandise trade, crude oil export continued to dominate total exports, accounting for 92% by end 2011 as against 93% in 2010. Equally, crude oil exports amounted to US\$79.81 billion compared to US\$63.73 billion during the period. It was equally noted that the United States of America was the dominant destination of Nigeria's exports, accounting for 53% of total exports, while Europe and Asia accounted for 23% and 12%, respectively during the period (Annual Performance Report of The Nigerian Economy by NPC 2011).

Although, foreign trade is not perfect in promoting economic growth because the Nigeria economy still experience some element of economic instability and this trade has also turned the country into an import dependent economy. However, the contribution of foreign trade to growth depends a great deal on the context in which it works and the objectives it serves to a country.

The attainment of economic growth is one of the objectives of foreign trade but in recent times, this has not been the case because the Nigerian economy still experience some element of economic instability such as high level of unemployment, price instability and adverse balances of payment to mention a few.

Foreign trade has a drawback to economic growth because some of the goods imported into the country were those that caused damage to local industries by making their product inferior and being neglected by the consumers of such goods or services, this thereby reduced the growth rate of output of such industries. Nigeria's major source of income is through the export of oil and thereby neglecting other sources of revenue such as the agricultural sector. The questions to be asked are what relationship exists between foreign trade and economic growth? And, to what extent does foreign trade stimulate growth in Nigeria?

#### 2. LITERATURE REVIEW

Many researchers have carried out research work on foreign trade and economic growth in various parts of the world. Their works include; Specialization in the exportation of goods and services produced in one country which earns such a country a purchase from another country with its foreign exchange earnings sold in another country (Jafiya, 2004).

Exports are of two broad categories: Firstly, primary commodity exports consisting mainly of agricultural product and minerals. Secondly, manufacturing exports which includes; industrial finished and semi-finished goods.

The present day growth of interdependence among the world economies through the process of globalization and trade liberalization shows that no country can stand alone or live in isolation that is trade must occur across international frontiers. This is because most, if not all, of trade and development theories show the certainty of increased productivity and welfare improvement once an economy engages in bilateral or multilateral trade. It is of importance to know the nature of the trade and as well as the type of commodities that are traded. This is because as emphasized by Todaro and Smith (2009), most African countries engage in the exportation of primary products and not manufacturing exports. The need to diversify the export of their economies is important because not all countries desire a particular product and also if such country desires to grow, it ought not to specialize in one line of production. It is observed that the prices of the primary products are cheaper when compared to that of the manufacturing products.

Shuchin Yang of the World Bank Development Institute also outlined that exports are the major dynamic factors in determining the level of general economic activity in most primary exporting countries. He also argues that if the developing countries do not develop their export, it might mean slow economic growth (Shuchin, 1979).

Kavousssi (1984), after he studied 73 middle and low income developing countries, he found out that the high rate of economic growth was strongly correlated with high rate of export growth. He observed that there is a positive correlation between exports and economic growth for both middle and low income countries but the effects tend to diminish according to the level of economic development of the country.

Obadan (1983) also writes on the impact of export instability on the economic development of Nigeria, during 1960 - 1977. More importantly, the study examines whether or not fluctuations in Nigeria's export earnings have adverse effects on the economy. The results of the study using multivariate analysis as the framework,

confirm the hypothesis that export instability is an important obstacle to Nigeria's economic development. In particular, export instability is found to be highly detrimental to the growth rate of investment as well as resulting in smaller proportions of national income being invested. The result also supports the claim that Nigeria's economic growth is export led. Similarly, Akerele (2004), with the use of appropriate quantitative techniques, he identified sources of instability in export earnings for the Nigeria economy for the period of 17years (1980-1997). He observed that both political and economic factors were the major sources of instability in Nigeria's export earnings. The influence of political factors on export earnings is not surprising, since the period of the study coincided with the imposition of various sanction on Nigeria for failing to adopt western-style democracy.

Ogbokor (2001) analyzed the macroeconomic impact of oil exports on the economy of Nigeria. With the use of OLS technique, he observed that economic growth reacted in an expected way to changes in the variables used in the study. He also found that a 10% increase in oil exports would lead to 5.2% increase in economic growth. He concluded that export-oriented strategies should be given a more practical support. Michaely focused his attention on the improvement between the rate of growth of export and GDP. He found out that the correlation between rates of growth of the economy is particularly strong among the countries with successful growth experience (Michaely, 1977).

Asher (1970) outlined that more than 80% of the foreign exchange of less development countries is earned through exports of goods and services. Massel *et al (1972)* investigated the pattern of economic growth of some selected less developing countries using regression methods. They observed a high degree of association between exports and economic growth. They suggested that countries should aim at 2.5% expansion in export activities to obtain 1% increase in economic performance.

Krueger (1997) expressed in his work additional empirical demonstration of a strong association between export performance and economic growth by undertaking a comprehensive study of the role of exports on the economic growth of 10 countries from 1954 – 1974. A single non – linear regression equation was specifically estimated for each of the chosen countries and he found exports and GDP to be highly correlated. Balassa (1978) studied eleven countries that have an established industrials base. He discovered that the positive correlation between export growth and the GDP growth will provide indication of the total effects of exports on economic growth.

Lin and Li (2002) examined the contribution of foreign trade to China's economic growth and found that the previous reviews on foreign trade underestimated the contribution of exports to GDP growth by overlooking the indirect impacts of exports on domestic consumption, investment, government expenditures and imports. They proposed a new estimation method and found that a 10% increase in exports resulted in a 1% increase in GDP in the 1990's in China, when both direct and indirect contributions were considered.

Wah (2004) in his study reported that for the past forty years (1961-2000), the Malaysian economy grew at an impressive average rate of 6.8% per annum. The rapid growth was attributed, in part, to the remarkable success in the export-oriented industrialization policy. Thirlwall (1997) in his work, explained the possibility that export growth may set up a vicious cycle of growth such that once a country is on the path of growth, it maintains its competitive position in world trade and performs continually better relative to other countries. He also contended that export growth relieves a country of balance of payments constraints so that the faster exports grow, the faster output growth can be without running into balance of payments difficulties. His findings suggested that an export based strategy of development offers the best prospects for economic growth.

Sachs and Warner (1997) found that lack of openness was the most significant contributor to the dismal of economic growth performance in sub – Saharan Africa. Ezenwe (1979) also examines against the background of the current world trade relationships, the importance of foreign trade to Nigeria's economic development and the appropriate policy mix required to realize this role in the1980s and finds that foreign trade is the most dynamic sector of the economy since independence in Nigeria.

Egwaikhide (1991) examined the qualitative effects of export (non-oil) expansion on Nigeria's economic growth over the period, 1960 to 1983. Based on simulation experiment, he observed that a 75% rise in non-oil export led to 1.4% increase in real GDP. In his conclusion he emphasized that, there is need to promote export in order to enhance GDP growth in Nigeria.

Fajana (1979) observed the impact of export and foreign capital on economic growth. He found that export has greater impact on GDP growth than foreign capital inflows over eleven years period, 1964 to 1974. He recommended that Nigeria should not emphasize reliance on foreign capital so that export can be promoted in Nigeria. Ann Harrison (1991) study made a synthesis of previous empirical studies between openness and the rate of GDP growth comparing the results from cross section and panel estimations while controlling for country effects. The study concluded that on the whole, correlations across openness measure seem to be positively associated with GDP growth – the more open the economy, the higher the growth rate or the more protected the local economy

Edwards (1998) explained that after taking into account the roles of all other factors including capital accumulation, growth in labour force including differences in level of technology, countries with lower degrees of protectionism, on the average tend to grow at a much faster pace than countries with higher trade restrictions Oviemuno (2007), studied foreign trade as an engine of growth in developing countries taking Nigeria (1960-2003) as case study, he used four important variables which are export/import, inflation and exchange rate. The findings showed that Nigeria's export value does not act as an engine of growth in Nigeria, Nigeria's import value does not act as an engine of growth in Nigeria. Oyejide (1974) also indicated the impact of restrictive measures was to produce a large anti-export bias in the African countries. More specifically, restrictions on imports translate effectively into a tax on exports by making import substitution effectively more profitable. They increase barriers in these countries by promoting intense economic activity via employment and income too many poor people. He used Nigeria as a laboratory test ground that an increase in export proceeds could lead to an expansion in economic growth.

#### 2.1 THEORETICAL FRAMEWORK 2.1.1 MERCANTILIST TRADE THEORY

# Mercantilist provided the earlier idea on foreign trade. The doctrine was made up of many features. It was highly nationalistic and considered the welfare of the nation as of prime importance. According to the theory, the most important way for a nation to be become rich and powerful is to export more than its import. Some of the mercantilism are; Jean Baptiste Colbert and Thomas Hobbes. It was understood then, that, the most important way in which a country could be rich was by acquiring precious metals such as gold. This was achieved by ensuring that the volume of export was better than the volume of import.

Trade has to be controlled, regulated and restricted. The country was expected to achieve favorable balance of payment. Tariffs, quotas and other commercial policies were proposed by the mercantilism to minimize imports in order to protect a nation's trade position. Mercantilism did not favor free trade. Mercantilism believed in a world of conflict in which the state of nature was a state of war. The need for regulation to maintain order in human affairs and economic affairs were taking for granted. To the mercantilist, the world wealth was fixed. A nation's gain from trade was at the expense of its trading partners that are, not all nationals could simultaneously benefit from trade.

Towards the end of 18th century, the economic policies of mercantilism came under strong attack. David Hume criticized the favorable trade balance as being short run phenomenon which could be eliminated automatically overtime. The other nation is likely to retaliate. Mercantilism was also attacked for their static view of the world economy. Adam Smith also criticized the nation that the world wealth is fixed with the advantages of specialization and division of labor. With specialization and division of labor, the general level of productivity within a country will increase.

Despite the criticism faced by the foundation of mercantilism, mercantilism is still alive today. New mercantilism now emphasized employment rather than holding some gold. They also postulate that exports are beneficial as job is provided domestically. Imports are considered bad as jobs are taken away and transferred to the foreign workers. To the new mercantilist, trade is a zero sum activity which a country must loose for the other to gain. And that there is no acknowledgment that trade can provide benefits to all countries.

### 2.1.2ABSOLUTE ADVANTAGE TRADE THEORY

The theory of absolute cost advantage was propounded by Adam Smith in his famous book (Wealth of Nations in 1776). The theory emerges as a result of the criticism levied against mercantilism. He advocated free trade as the best policy for the nations of the world. Smith argued that with free trade each nation could specialize in the production of those commodities in which it could produce more efficiency than the other nations, and import those commodities in which it could produces less efficiently.

This international specialization of factors in production would result in increase in world output, which would be shared by the trading nations. Thus, a nation need not gain at the expense of other nations, all nations could gain simultaneously.

In other words, according to the theory, a nation should specialize in the production of export of commodities in which it has lower cost or absolute cost advantages over others. On the other hand, the same country should import a commodity in which it has higher cost or absolute cost disadvantage.

### 2.1.3 COMPARATIVE ADVANTAGE TRADE THEORY

Absolute advantage failed to analyze where a country has comparative advantage in the production of two goods, will trade still be necessary or beneficial to the country in question? David Ricardo tackled this question.

Ricardo was the first to demonstrate that external trade arises not from difference in absolute advantage but from difference in comparative advantage. By "comparative advantage" is meant by "greater advantage". Thus in the context of two countries and two commodities, trade would still take place even if one country was more

efficient in the production of both commodities, provided the degree of its superiority over the other country was not identical for both commodities.

Ricardo assumed the existence of two countries, two commodities, and one factor of production, labor. He assumed that labor was fully employed and internationally immobile and that the product and factor of prices were perfectly competitive. There are no transport costs or any other impediments to trade.

In context of a model of two countries, two commodities and one factor of production, Ricardo obtained the result that a country will tend to export the commodity in which it has a comparative disadvantage. Since comparative costs are the other side of comparative advantage, the theory could be expressed in terms of comparative costs.

Specifically, the theory now states that a country will tend to export the commodity whose comparative cost is lower in production and comparative cost is higher in pre-trade isolation.

The theory also assumed the level of technology to be fixed for both nations. Different nations may use different technology but all firms within each nation utilize a common production method for each commodity. It also assumed that trade is balanced and rolls out the flow of money between nations. The distribution of income within a nation is not affected by trade.

Most assumption of the Ricardian theory is unrealistic. The theory is based on labor theory of values which states that the price of the values of a commodity is equal to or can be inferred by the quality of labor time going into its production process. Labor theory of values is based on; labor is the only factor of production. Labor is used in the same fixed proportion in the production of all commodities. Labor is homogenous. This underline proposition is quite unrealistic, because as labor is categorized into skilled, semi-skilled and unskilled labor, there are other factors of production.

Despite its shortcomings, the law of comparative advantage cannot be discarded off because it found application in study of economics. The law is valid and can be explained in terms of opportunity cost in the modern theory of trade

#### 2.1.4 HECKSHER – OHLIN TRADE THEORY

Eli Hecksher and Bertil Ohlin are two Swedish economist that postulated a theory that addressed two issues that the Ricardian theory could not explain; what factors determine the comparative advantaged and what effect does foreign trade have on the factors incomes in the trading nations. The Hecksher – Ohlin theory focuses on the differences in relative factors endowments and factors prices between nations as the most determinants of trade (On the assumption of equal or similar technology and tastes).

Hecksher Ohlin maintained that the sources of the factors endowments determine a nation's comparative advantage.

This arrangement is the basis of the theory to be referred to as factor endowment theory. The theory analyzed the differences in factors endowment on international specialization.

The model was based on two main prepositions; firstly, a country with specialization in the production and export of a commodity whose production requires intensive use of abundant resources. This implies that goods differ in factor requirement. Secondly, countries differ in factor endowment. Some countries have much capital per worker and some have less. Countries could be ranked by factor abundance.

The Hecksher – Ohlin model identified difference in pre-trade product prices between nations as the immediate basis for trade. The price depends on production possibility curve (supply side) and then taste and preferences (demand side) in the trading nations. Production possibility curve depends on technology and resources endowment.

According to the theory, a nation should produce and export a product for which the large amount of the relative abundance resources is used. Such country should import the commodity in which a great deal of its relative scarce and expensive factors is used.

Where a resource is abundant, its cost is less than the cost in country where it is relatively scarce. This scenario facilitates comparative advantage. The effect of factor endowment on comparative advantage is seen as follows; differences in relative resource endowment leading to differences in relative resource prices and later to differences in relative resource prices.

The model suggests that the less develop countries that are labor abundant should specialize in the production of primary product especially agricultural product because the labor requirement of agricultural is high except in the mechanized form of farming. On the other hand, the less developed countries should import capital-intensive product mostly the manufactured goods from developed countries that are capital intensive.

The model assumed two countries, two commodities and two factors. There is perfect competition in both factor and product market. It assumed that factor inputs; labor and capital in the two countries are homogeneous.

Production function also exhibits constant return to scale. Production possibility curve is concave to the origin. Due to the proposition upon which the theory is based, the Hecksher Ohlin suffers some criticisms. Factors inputs are not identical in quality and cannot be measured in homogeneous units. Furthermore, factor endowment differs in quality and variety. Perfect competition does not exist in real world. Products are rather differentiated. Relative factor prices reflect differences in relative factors endowment. Supply therefore outweighs demand in the determination of factor prices.

Conclusively, from the Hecksher Ohlin theory, trade increase total world output. All countries gain from trade. Trade enables countries to secure capital and consumption of goods from other parts of the world. In this way, trade stimulates growth or serves as engine of growth.

#### 2.1.5 THEORIES OF ECONOMIC GROWTH

Economic growth means the steady process by which the productive capacity of the economy is increased over time to bring about rising levels of national output and income. Economic growth could be said to comprise three component; capital accumulation, growth in population and eventual growth in the labor force, and technological progress. Capital accumulation results when some proposition of personal income is saved and invested in order to augment future output and income. Capital accumulation involves a trade-off between present and future consumption, giving up a little now so that more can be had latter.

Population growth, and the associated increase in the labor force, has traditionally been considered a positive factor in stimulating economic growth. A larger labor force means more productive workers, and a large overall population increases the potential size of domestic markets. Technological progress results from new and improved ways of accomplishing traditional tasks. Technological progress could be neutral, labor-saving, and capital-saving.

Neutral technological progress occurs when higher output levels are achieved with the same quantity and combinations of factor inputs. Computers, the internet, tractors, mechanical ploughs and many other kinds of modern machinery and equipment can be classified as products of labor-saving technological progress.

#### 2.1.6 HARROD-DOMAR GROWTH MODEL

This is referred to the economic mechanism by which more investment leads to more growth. It is often referred to as the AK model because it is based on the liner production function with output given by the capital stock K times a constant, often labeled A. In order to grow, new investments representing net additions to the capital stock are necessary. In this theory, investment is considered fundamental in the process of economic growth. Investment according to the theory creates income as well as augments the productive capacity of the economy by increasing the capital stock. In as much as there is net investment real income and output will continue to expand. 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.

According to the theory, 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 ensure full capacity use of a growing stock of capital. It follows that any net addition to the capital stock in the form of new investment will bring about corresponding increase in the flow of national output. Suppose that this relationship, known in economics as the capital-output ration, is roughly 3 to 1. If we define the capital-out put ratio as K and assume further that the national net savings ratio, S is a fixed proportion of national output and that total new investment is determined by the level of total savings, economic growth model could be constructed, net savings (S) is some proportion, S, of national income

(Y), such that we have;

#### S= sY

2.1

Net investment is defined as the change in the change in the capital stock, K and can be represented by  $\Delta K$ ;

#### $I = \Delta K$

2.2

But because the total capital stock, K, bear a direct relationship to total national income, Y, as expressed by the capital output ratio, k, it follows that

$$K = k \text{ or } \Delta K = k$$

Υ ΔΚ

### $Or \Delta K = k \Delta Y$ 2.3

Because net national savings, S, must equal net investment, I, we can write this equality as; S = I 2.4 But from equation 2.4 we know that S = sY, and from equation 2.2 and 2.3;

$$I = \Delta K = k \Delta Y$$

The identity of saving equaling investment in 2.4 could be written as

2.5

2.6

S =

Or simply as

$$sY = s\Delta Y = \Delta K = I$$

$$SY = k \Delta Y$$
  
Dividing both sides of equation 2.6 first by Y and the by k,

$$\Delta Y / Y = s/k$$
 2.7

 $\Delta Y/Y$  represents rate of growth of GDP. Equation 2.7, states simply that the rate of growth of GDP is determined jointly by the net national saving ratio, s, and the national capital-output, k. In the absence of government, the growth rate of national income will be positively related to the savings ratio, that is, the more an economy is able to save and invest out of a given GDP, the greater the growth of that GDP will be, and negatively related to the economy's capital output ratio, the lower the rate of GDP growth. To grow, the economy must save and invest a certain proportion of their GDP.

#### 2.1.7 NEO-CLASSICAL GROWTH THEORY

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 labor 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 labor supply and also a higher level of productivity of labor 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 model treats productivity improvements as an exogenous variable which means that productivity improvements are assumed to be independent of the amount of capital investment

#### 2.1.8 ENDOGENOUS GROWTH THEORY

Endogenous growth economists believed that improvements in productivity can be linked directly to a faster pace of innovation and extra investment in human capital. They stress the need for government and private sector institutions which successfully nurture innovation, and provide the right incentives for individuals and businesses to be inventive. There is also a central role for the accumulation of knowledge as a determinant of growth. Supporters of endogenous growth theory believed that there are positive externalities to be exploited from the development of a high value-added knowledge economy which is able to develop and maintain a competitive advantage in fast-growth industries within the global and maintain a competitive advantage in fastgrowth industries within the global economy.

The main points of the endogenous growth theory are as follows:

The rate of technological progress should not be taken as a constant in growth model, government policies can permanently raise a country's growth rate if they lead to more intense competition in markets and help to stimulate product and process innovation. There are increase returns to scale from new capital investment. The assumption of the law of diminishing returns is questionable. Endogenous growth theorists are strong believers in the potential for economies of scale (or increasing returns to scale) to be experienced in nearly every industry and market. Private sector investment in research and development is a key source of technical progress.

The protection of private property rights and patents is essential in providing appropriate and effective incentives for businesses and entrepreneurs to engage in research and development. Investment in human capital (including the quantity and quality of education and training made available to the workforce) is an essential ingredient of long-term growth. Government policy should encourage entrepreneurship as a means of creating new businesses and ultimately as an important source of new jobs, investment and innovation.

#### 2.2 BENEFITS OF FOREIGN 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 she has comparative advantage over others. In relations to this theory through foreign trade, countries direct their factors of production to areas where they can produce more.

Though with foreign trade, total world output of commodities seems to increase. This increase in the world output, also increase the variety of goods available to consumers. And consumers have the chances of exercising their preference. Consequently 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 competitions 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 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 slam measure to accelerate economic growth. It has helped in the importation of machineries such as tractors, ploughs, industrial plants and equipments. With all these equipment, the Nigerian economy is able to increase her productivity and thus quicken economic growth. Foreign trade has been a major determinant of foreigner's investment in Nigeria. Foreign trade has helped in upgrading socio economic value of citizens, because through foreigner's investment, employment opportunities were created.

#### 2.2.1 DIRECT BENEFITS OF FOREIGN TRADE

A country will specialize in the production of a few goods due to foreign trade and division of labor, it exports those commodities which it produces cheaper in exchange for what others can produce at a lower cost. The gains from foreign trade increases 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 promotes economic development and growth.

#### **2.3 PROBLEMS OF FOREIGN TRADE**

There are many problems in foreign trade. One of the problems is language, when goods are exported to a foreign country, the labels, informative literature, packing technical handout, should be prepared in the language of the country in which the goods are marketed.

There should also be salesmen who are versed with that language and know the habits and likings of the people.

Another problem is the issue of standardized units, in some countries of the world, the units of length; weight, capacity, and voltage are not the same. The exporters therefore shall have to see that the goods are prepared and supplied according to the standard specification of the importing country.

Sales in foreign currency is also one of the issues every country has its own currency, which is not the legal tender in other country. Buyers abroad prefer to buy the goods in his own currency just as sellers prefer to sell in the currency of his own country. The exporter therefore, has to calculate the selling price of the goods into the currency units of country where the goods are sold taking into consideration due fluctuations in the foreign exchange by hedging. Also, when goods are exported or imported a number of documents are to be prepared.

#### 2.4 FOREIGN TRADE AND TRADE RESTRICTIONS

Despite the numerous benefits that accrue to nations as a result of foreign trade, it could be realize that many nations employed different tools which aimed at interfering with the international flow of goods and services. It could be noted that governments, to a large extent impose restrictions on their foreign trade.

However, a nation can try to increase its welfare at the expense of other nations by restricting trade. Trade restrictions could be classified as tariff and non-tariff: The import tariff has received the most attention. This is expressed as a percentage of the value of the imported commodity and is usually imposed to limit the volume of imports. Tariff may be imposed as a means of correcting an adverse balance of payments. If import duties may be imposed on imports to make them clearer and likewise reduce their volume.

Tariff may be imposed to turn the terms of trade and volume of trade in favor of the country imposing the tariff. Also, tariffs may be imposed to raise the level of employment in a country. It is argued that, if a tariff is imposed, more of the national income will be spent on locally produced goods, all other factors being constant. This will encourage local production and more employment opportunities will be created. The extent to which tariff will be effective depends on the degree of retaliation from other countries which are victims of the tools. Its effectiveness will also depend on the elasticity of demand of the product in question as well as the elasticity of demand of the foreign countries goods.

Moreover, non-tariff trade restrictions are import quota, import licensing, embargo, foreign exchange control, devaluation and import monopoly. Import quota is a direct quantitative restriction on the importation of a commodity and has many of the effect of an import tariff. It specifies the quantity of goods that will come from different countries to a country. The country in question would fix the maximum amount of a commodity that can be imported during period of time. When the amount to be imported has been determined, import licenses are then issued either to agents or supplying countries, stating the maximum amount each is permitted to import or supply. Quota and license enable government to restrict import to essential quantities needed. If this instrument is not administered well, it could raise prices of the goods and services.

Devaluation as one of the instrument of trade restriction refers to an increase in exchange rate from one par value to another. This normally stimulates the devaluating nation's exports, reduces its imports and improves the nation's balance of trade and payment. By increasing the price of a unit of the foreign currency, devaluation makes a nation's imports more expensive in terms of the domestic currency and its export cheaper to foreigners in terms of the domestic currency.

Other instruments are embargo, which is a complete ban on the importation of certain goods. It is a straight

forward way of trade restriction. In the case of import monopoly, the government of a country takes over the importation of goods, and imports only those that are extremely essential to the nation.

#### 2.5 WORLD TRADE ORGANIZATION AND TRADE IN NIGERIA

Nigeria became a founding member of WTO with the coming into effect of the Marrakech Agreement establishing the organization, in January 1995. However, Nigeria involvement in the multilateral trading system dates back to 1960, when the country formally joined the then General Agreement on Tariffs and Trade (GATT). The key objective of WTO is continuous liberalization of global trade rules which aimed at greater reduction of tariff and non tariff barriers. WTO is guided by the principle of non-discrimination and increased tariff bindings.

Nigeria is bound by the obligation she has undertaken under the WTO Agreements. By this, it could be inferred that the multilateral trading system must have impacted significantly on Nigeria's trade policy given the WTO's role of harmonizing global trade rules. Nigeria's level of implementations of its WTO obligations has lead to streamlining of trade policy through tariff bindings and this ensures that levels of tariff reduction already attained are not reversed. With the WTO obligations, Nigeria bound all her agricultural tariff lines at the ceiling rate of 150%.

The wide range between the level of agricultural bound rates and the high level of unbound industrial tariffs makes Nigeria's tariff profile highly increased.

Hence, the government's decision to retain high tariffs and the continuous imposition of import band makes trade policy highly uncertain and unpredictable. This is measured against the WTO rules of a consistent, transparent, certain and predicable policy. Thus, this depicts a policy disconnection and contradiction. This disconnection and contradiction against WTO arise due to the government's effort to protect domestic industries.

#### 2.6 TRADE POLICES AND FOREIGN TRADE IN THE NIGERIAN CONTEXT

Trade policy since the 1960's 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 and 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 rated on raw materials were reduced and quantitative restriction 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 export 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 structural adjustment programmes. The period provided for a seven-year (1988-1994) tariff regime with the objective of achieving transparency and predictability of tariff rates. Imports under this regime attached advalorem rates. A new seven-year (1995-2001) tariff regime succeeded the previous regime. The tariff structure over the period 1988-2001 increased import duties on raw material and on intermediate and capital goods, while tariffs on consumer goods were slightly reduced.

Nigeria's trade policy regime as currently contained in the national economic empowerment and

development strategy (NEEDS) and trade policy documents, has been geared to enhancing competitiveness of domestic industries, with a view to encouraging local value-added and promoting as well as diversifying exports. The mechanism adopted to achieve this was gradual liberation of trade.

Current reform packages are therefore designed to allow a certain level of protection of domestic industries and enterprise. This has translated into tariffs escalation, with high effective rates in several sectors and lower imports duties on raw material 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.

Despite various policies adopted in Nigeria in different years, trade policy still suffer some drawbacks. Trade

negotiations are becoming increasingly complex and hence, even more challenging for trade policy formulation. The challenge of institutional and human capacity is daunting. The trade ministry which has statutory responsibility for external trade relations lacks the requisite level of skills to effectively engage in the trade policy negotiation process.

There seems not to be any standard programmed designed for training and skills acquisition in trade negotiations. Training for policy making and trade negotiations requires specially designed programmes.

Furthermore, the ministry, which runs the affairs of trade policy, remains ill equipped owing to lack of infrastructure and lack of a conductive environment for effective operations. This is partly due to poor finding for the ministry. In spite of the elaborate mechanism already put in place, there is lack of co-ordination among government establishments and between government and non-state actors. Co-ordination has not been very effective.

#### **3. RESEARCH METHODOLOGY**

The study is descriptive as well as empirical as it seeks to establish the degree of relationship that exists between foreign trade and economic growth in Nigeria. The data used for this study is the data drawn from the central bank of Nigeria statistical bulletin over the period 1980-2010 (31years).

An econometric approach was applied using the Ordinary Least Square method (OLS method) in estimating the parameter of the specified model, while the E-views statistical package was used in carrying out this analysis

#### **3.1 MODEL SPECIFICATION**

The model is formulated to test the relationship between foreign trade and economic growth in Nigeria which is adapted from the multiple linear regression model ( $Y = \alpha_0 + \alpha_1 X_1 + \alpha_2 X_2 + \mu$ ) is specified below;

GDP = F (NEV, NMV, OEV, OMV, EXRT)

Where;				
GDP	=	Gross	Domestic	Product
NEV	=	Non-oil	export	value
NMV	=	Non-oil	import	value
OEV	=	Oil	export	value
OMV	=	Oil	import	value
EXRT = Excha	nge rate		-	

The linear expression of the above model is presented below;  $GDP=\alpha_0 + \alpha_1 NEV + \alpha_2 NMV + \alpha_3 OEV + \alpha_4 OMV + \alpha_5 EXRT + \mu$ 

A priori Expectation.

The expected signs of the coefficient of the explanatory variable are,

 $\alpha_0 > 0, \alpha_1 > 0, \alpha_2 < 0, \alpha_3 > 0, \alpha_4 < 0, \alpha_5 < 0.$ 

 $\alpha_0$  is expected to be positive because there are other factors that determine the GDP aside from the ones stated in the model.

 $\alpha_1$  is expected to be positive because in macroeconomic theory, non-oil export is regarded as an injection in the economy.

 $\alpha_2$  is expected to be negative because in macroeconomic theory, non-oil import is regarded as a withdrawal from the economy.

 $\alpha_3$  is expected to be positive because in macroeconomic theory, oil export is regarded as an injection in the economy.

 $\alpha_4$  is expected to be negative because in macroeconomic theory, oil import is regarded as a withdrawal from the economy.

 $\alpha_5$  when exchange rate increase, worth of the local currency is expected to decrease, this will bring about inflation and eventually reduces GDP and vice versa. This will lie between 0 and 1.

#### **3.2 MODEL EVALUATION**

The verification of the theoretical and statistical validity of the estimated coefficient, the decision making and evaluation will be based on the following;

- F-statistics: F-calculated is compared with F-tabulated where F- cal is greater than F-tab we reject the null hypothesis (Ho) and conclude that the variable is statistically significant in explaining the dependent variable.
- T-statistics: It is the measure of individual statistical significance of each variable in the model. Tcalculated is compared with T-tabulated where T- cal is greater than T-tab we reject the null hypothesis (Ho) and conclude that the variable is statistically significant in explaining the dependent variable i.e. accept H<sub>1</sub>.
- Adjusted coefficient of determination R-squared: It is a modification of R-squared that adjusts for the

number of explanatory variables in the model.

Coefficient of determination R-squared ( $R^2$ ): It measures the proportion of the total variation in the • dependant variable that is jointly explained by the linear influence of the explanatory variable. The value of  $R^2$  lies between zero and one, that is,  $0 < R^2 < 1$ 

#### 4. DATA PRESENTATION AND ANALYSIS

#### **4.1 DATA PRESENTATION**

The table below consists of the variables; GDP at basic current prices, Non-oil export value (NEV), Non-oil import value (NMV), Oil export value (OEV), Oil import value (OMV) and Exchange rate (EXRT) for the 1 1000 2010

period 198						
	- Data of variables		AT 1	0.1	0.1	F 1
Year	GDP at basic	Non-oil	Non-oil	Oil export	Oil import	Exchange
	current prices	export value	import value	value	value	rate
	(₦'Million)	( <b>N</b> 'Million)	( <b>N</b> 'Million)	(₦'Million)	( <b>N</b> 'Million)	( <del>N</del> /US\$1.0
1000	40. (22.22	554 A	0.0(0.2	12 (22 2	227.4	0)
1980	49,632.32	554.4	8,868.2	13,632.3	227.4	0.5464
1981	47,619.66	342.8	12,719.8	10,680.5	119.8	0.6100
1982	49,069.28	203.2	10,545.0	8,003.2	225.5	0.6729
1983	53,107.38	301.3	8,732.1	7,201.2	171.6	0.7241
1984	59,622.53	247.4	6,895.9	8,840.6	282.4	0.7649
1985	67,908.55	497.1	7,010.8	11,223.7	51.8	0.8938
1986	69,146.99	552.1	5,069.7	8,368.5	913.9	2.0206
1987	105,222.84	2,152.0	14,691.6	28,208.6	3,170.1	4.0179
1988	139,085.30	2,757.4	17,642.6	28,435.4	3,803.1	4.5367
1989	216,797.54	2,954.4	26,188.6	55,016.8	4,671.6	7.3916
1990	267,549.99	3,259.6	39,644.8	106,626.5	6,073.1	8.0378
1991	312,139.74	4,677.3	81,716.0	116,858.1	7,772.2	9.9095
1992	532,613.83	4,227.8	123,589.7	201,383.9	19,561.5	17.2984
1993	683,869.79	4,991.3	124,493.3	213,778.8	41,136.1	22.0511
1994	899,863.22	5,349.0	120,439.2	200,710.2	42,349.6	21.8861
1995	1,933,211.55	23,096.1	599,301.8	927,565.3	155,825.9	21.8861
1996	2,702,719.13	23,327.5	400,447.9	1,286,215.9	162,178.7	21.8861
1997	2,801,972.58	29,163.3	678,814.1	1,212,499.4	166,902.5	21.8861
1998	2,708,430.86	34,070.2	661,564.5	717,786.5	175,854.2	21.8861
1999	3,194,014.97	19,492.9	650,853.9	1,169,476.9	211,661.8	92.6934
2000	4,582,127.29	24,822.9	764,204.7	1,920,900.4	220,817.7	102.1052
2001	4,725,086.00	28,008.6	1,121,073.5	1,839,945.3	237,106.8	111.9433
2002	6,912,381.25	94,731.8	1,150,985.3	1,649,445.8	361,710.0	120.9702
2003	8,487,031.57	94,776.4	1,681,313.0	2,993,110.0	398,922.3	129.3565
2004	11,411,066.91	113,309.4	1,668,930.6	4,489,472.2	318,114.7	133.5004
2005	14,572,239.12	105,955.9	2,003,557.4	7,140,578.9	797,298.9	132.1470
2006	18,564,594.73	133,595.0	2,397,836.3	7,191,085.6	710,638.0	128.6516
2007	20,657,317.66	199,257.9	3,143,725.8	8,110,500.4	768,226.8	125.8331
2008	24,296,329.29	247,839.0	3,803,072.7	9,913,651.1	1,386,729.9	118.5669
2009	24,794,238.66	289,152.6	4,038,990.2	8,067,233.0	1,063,544.2	148.9017
2010	29,205,782.96	396,377.2	5,931,795.2	10,639.417.4	2,073,579.0	150.2980

Source: CBN Statistical Bulletin 2010

#### **4.2 DATA ANALYSIS**

The table above reflects the times series of the various variables (GDP, Non-oil export value, Non-import value, Oil export value, Oil import value and Exchange rate). The GDP at current basic prices shown a steady increase in 1980 from №49,632.32million to №2,801,972.58million in 1997 which was a 98.22% increase, then it fell slightly in 1998 to N 2,708,430.86million. After which it picked up in 1999 with a steady increase of ₦3,194,014.97million to ₦29,205,782.96million in 2010 an 89.06% increase in GDP. The non-oil export value showed a lot of fluctuations during the year period. There were both increases and decreases in the non-oil goods exported to other countries but Nigeria experienced a steady increase in 2000 from N24,822.9million to ₦396,377.2million in 2010. The oil export value was not stable but the highest oil export was in 2010 with N10,639,417.4million and the lowest oil export value was I n 1983 with N7,201.2million. Non-oil import value

also had fluctuations during the time period but came to a steady increase in 2005 with N2,003,557.4million to ₦5,931,795.2million in 2010 and oil import value had an increase from ₦3,170.1million in 1987 to ₦398,922.3 million in 2003. It fell slightly to ₦318,114.7 million in 2004 which increased rapidly in 2005 with ₦797,298.9million. The exchange rate of Naira to US Dollar had a continuous increase from 1980 to 1993. It was for 4years with an exchange rate of №21.8861 (1994-1998). As at 2010, the exchange rate of a US Dollar to Naira was №150.2980.

#### **4.3 MODEL SPECIFICATION AND ESTIMATION**

Using the Econometric views (E-views) for the regression model, the result is shown below:

#### TABLE 2 – Model result

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NEV	39.16596	8.207504	4.771970	0.0001
NMV	0.380500	0.824423	0.461535	0.6484
OEV	1.746343	0.113345	15.40737	0.0000
OMV	-3.713129	1.124892	-3.300874	0.0029
EXRT	6753.426	3688.478	1.830952	0.0791
С	-8849.571	132533.0	-0.066773	0.9473
R-squared		0.996975	F-statistic	1647.680
Adjusted R-squared		0.996370	Durbin-Watson stat	2.235796
S.E. of regression		523906.5	Sum squared resid	6.86E+12

The estimated regression line from above is;

GDP= $\alpha_0 + \alpha_1 \text{NEV} + \alpha_2 \text{NMV} + \alpha_3 \text{OEV} + \alpha_4 \text{OMV} + \alpha_5 \text{EXRT} + \mu$ 

From the above the regression line is therefore; GDP = -8849.571 + 39.16596NEV + 0.380500NMV + 1.7463430EV - 3.7131290MV + 6753.426EXRT

From the regression line, it could be observed that Non-oil export value, Oil export value and Oil import value follow the a priori expectation, that is  $\alpha_1 > 0$ ,  $\alpha_3 > 0$ ,  $\alpha_4 < 0$ . The Non-oil import value and Exchange rate doesn't follow the a priori expectation of the regression model because they both show positive signs respectively along the regression line.

The result shows that Non-oil export value, Non-oil import value and Oil export value (a ratio of total trade to GDP) are positively related to GDP for the period of 1980-2010. A 1% change in Non-oil export will lead to 39% increase in GDP level. A 1% increase in Oil export will lead to 1.7% increase in GDP level. A 1% increase in Oil import value will lead to a 3.7% decrease in GDP level.

### **4.4 MODEL EVALUATION AND TEST OF HYPOTHESIS**

The Coefficient of Determination  $(\mathbf{R}^2)$  shows the extent to which changes in the dependent variable are explained by the independent variables. The  $R^2$  which measures how much of the dependent variable (GDP) that is explained by the independent variables (NEV, NMV, OEV, OMV, EXRT) is 99.7%. This is a good fit and it shows that a total of 99.7% of the variations in the GDP is explained by the variations in the explanatory variables (NEV, NMV, OEV, OMV, and EXRT) for the period (1980-2010). The remaining 0.3% of the variation is unexplained by the regression line, which is explained by variables outside the regression line. The adjusted  $R^2$  is 99.6% meaning that a total of 99.6% of GDP is explained by the five independent variables.

The Standard error of Regression (SE) implies that 523906.5 is the estimate of deviation of the GDP from the regression line.

The sum squared residual is 6.86E+12, which means that 6.86E+12 variations in GDP is not explained by NEV, NMV, OEV, OMV and EXRT

The standard error of Non-export value, Non-import value, Oil import value, Oil export value Exchange rate are; 8.21, 0.82, 0.11, 1.13 and 3688.48 respectively.

DECISION RULE

If: SE  $(\alpha_1) > \frac{1}{2} \alpha_1$ , Accept H<sub>0</sub> and Reject H<sub>1</sub>

If: SE  $(\alpha_1) < \frac{1}{2} \alpha_1$ , Accept H<sub>1</sub> and Reject H<sub>0</sub>

 $H_0$  implies that at the specified level of significance the effect associated independent variable on the dependent variable is not statistically significant at the specified level of significance.

H<sub>1</sub> implies that the parameter estimate is statistically significant at the specified significant level.

SE  $(\alpha_1) = 8.2 < \frac{1}{2} 39.17$  i.e. accept H<sub>1</sub> and reject H<sub>0</sub>

SE  $(\alpha_2) = 0.82 > \frac{1}{2} 0.38$  i.e. accept H<sub>0</sub> and reject H<sub>1</sub>

SE  $(\alpha_3) = 0.11 < \frac{1}{2} 1.75$  i.e. accept H<sub>1</sub> and reject H<sub>0</sub>

SE ( $\alpha_4$ ) = 1.13 <  $\frac{1}{2}$  3.71 i.e. accept H<sub>1</sub> and reject H<sub>0</sub>

SE ( $\alpha_5$ ) = 3688.49 >  $\frac{1}{2}$  6753.43 i.e. accept H<sub>0</sub> and reject H<sub>1</sub>

From the above, the decision rule for the statistical significance of each independent variable shows that Non-oil export value has a statistical significance on GDP, Non-oil import value has no statistical significance on GDP, Oil export value has a statistical significance on GDP, Oil import value has a statistical significance on GDP.

At 5% level of significance and at k-1/n-k degree of freedom.

Where; n = number of observations

k = number of parameters

The F <sub>tabulated</sub> is 2.59. This shows that the F <sub>cal</sub> > F <sub>tab</sub> i.e. 1647.680 > 2.59. This implies that the independent variables joined together exert significance on the dependent variable. In conclusion, foreign trade has an impact on economic growth in Nigeria, which means Nigeria exports non-oil and oil, imports non-oil and oil, and exchange rate of currency since 1980, all still attribute to her economic growth in one way or another.

From the Model result, the T <sub>calculated</sub> for the estimated coefficient, Non-oil export value, Non-oil import value, Oil export value, Oil import value and Exchange rate are 4.77, 0.46, 15.41, 3.30, and 1.83 respectively. To determine the individual significance each coefficient has on the dependent variable GDP, the T <sub>tab</sub> must be derived before the following decision rule will be applied.

### DECISION RULE

If T  $_{cal} < T _{tab}$  Accept H $_0$  and Reject H $_1$ 

If T  $_{cal} > T _{tab}$  Accept H<sub>1</sub> and Reject H<sub>0</sub>

Where  $H_0$  means the individual independent variable does not assert statistical significance on the dependent variable.

While H<sub>1</sub> means the individual independent variable asserts statistical significance to the dependent variable.

T tab will be determined at 5% level of significance and degree of freedom n-k.

Where n = number of observations

k = number of parameters

Hence, degree of freedom (df = 31-6 = 25) at 0.05 level of significance is 1.708. Therefore, the T-test analyses are;

T  $\alpha_1 = 4.77 > 1.708$  i.e. accept  $H_1$  and reject  $H_0$ 

T  $\alpha_2 = 0.46 < 1.708$  i.e. accept  $H_0$  and reject  $H_1$ 

T  $\alpha_3 = 15.41 > 1.708$  i.e. accept H<sub>1</sub> and reject H<sub>0</sub>

T  $\alpha_4$  = 3.30 > 1.708 i.e. accept  $H_1$  and reject  $H_0$ 

T  $\alpha_5 = 1.83 > 1.708$  i.e. accept H<sub>1</sub> and reject H<sub>0</sub>

From the above, the decision rule for the statistical significance of each independent variable shows that Non-oil export value has a statistical significance on GDP, Non-oil import value has no statistical significance on GDP, Oil export value has a statistical significance on GDP, Oil import value has a statistical significance on GDP.

The Durbin-Watson statistics (d) for this model is 2.24.

DECISION RULES

- 1.  $0 < d < d_L$ , there is a positive autocorrelation.
- 2.  $d_L \leq d_U$ , no decision i.e. we cannot say whether or not there is positive autocorrelation.
- 3.  $4-d_L < d < 4$ , there is negative autocorrelation.
- 4.  $4-d_U \le d \le 4-d_L$ , no decision i.e. we cannot say whether or not there is negative autocorrelation.
- 5.  $d_U < d < 4$ - $d_U$ , there is no positive or negative autocorrelation.

The d<sub>cal</sub> is 2.24, d<sub>L</sub> is 1.020 and d<sub>U</sub> is 1.920. Using the modified Durbin-Watson test at 5% level of significance, H<sub>0</sub>:  $\rho = 0$  versus H<sub>1</sub>:  $\rho < 0$ . Reject H<sub>0</sub> at 5% level if the estimated (4 - d) < d<sub>U</sub>, i.e. 4 - 2.24 < 1.920 = 1.76 < 1.920. Therefore, there is statistically significant evidence of negative autocorrelation.

### 4.5 ECONOMIC IMPLICATIONS AND POLICY RELEVANCE OF THE RESULTS

The positive relationship of oil export value on GDP is because of the Nigeria's strong participation in exporting its major source of export i.e. Nigeria is the eighth largest oil exporter in the world and Africa's second largest economy. Oil export accounts 80% of revenue, which the government uses in improving other sectors of the economy. Nigeria will benefit from foreign trade if her export is more than her import.

The negative relationship of oil import value on GDP is based on the fact that Nigeria still imports oil. This implies that the crude oil exported to other countries is been imported as crude oil products from those countries which has a negative effect on GDP.

The positive relationship between non-oil export value and GDP implies that other sectors of the Nigerian economy such as agriculture, manufacturing, building and construction, wholesale and retail trade and services do contribute to the growth rate of the economy. Regardless of the fact that, oil has been a major contributor to the growth of the economy, other sectors do contribute to the economy also at a significant level.

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The positive relationship between non-oil imports on GDP implies that importation of goods and services which are non-oil does have a positive effect on GDP in Nigeria. Though Nigeria is an import dependent country, which means she imports more of goods and services than she exports of goods and services, it still impacts on the growth rate positively provided it does not affect the GDP negatively and the balanced of trade is favorable which means the country should enjoy surpluses. The positive relationship between exchange rate and GDP implies that exchange rate influences the GDP level of the Nigerian economy and the rate to Nigeria's currency is realistic and dependable.

#### 5. SUMMARY, CONCLUSION AND RECOMMENDATION

From the analysis in this work, GDP could be regarded as a term used to describe economic growth, which is one of the macroeconomic objectives. The following summary is made in respect to the findings discovered in the previous chapter.

From the above it is seen that a positive relationship exist between non-oil export value, non-oil import value, oil export value and exchange rate while oil import value exhibits a negative relationship.

- The result of the T-test shows that individual test of significance are 4.77, 0.46, 15.41, 3.30, and 1.83
- The overall test of significance i.e. F-test showed that the F <sub>cal</sub> > F <sub>tab</sub> and the decision rule specified that we accept  $H_1$  and reject  $H_0$ . The acceptance of  $H_1$  implies that foreign trade has a significant relevance on economic growth in Nigeria since 1980 till 2010
- The Durbin-Watson test shows that at 5% level of significance, there is statistical significant evidence of negative autocorrelation.

The study has also thrown some light on the fact that the dependent and independent variable are interrelated and that decisions in one variable will affect the other variable. The study had depicted the pattern of non-oil and oil export and import values and exchange rate in Nigeria right from 1980-2010. The study also made some effort in examining the problems of foreign trade over the years. The project also provides some theories on economic growth. Since foreign trade favors countries that participate in it, this study also made mention of benefits that accrue to this participant. Despite the numerous benefits that accrue to nations as a result of trade, some countries go to the extent of restricting some irrelevant items; this is also examined in this project.

#### **5.1 CONCLUSION**

The result derived from the estimated model showed that foreign trade has a significant relationship with Nigeria's economic growth, while the variables individually shows that Nigeria's oil imports has no significant relationship with her economic growth for the past three decades i.e. 1980-2010. This study has examined the foreign trade in relations to economic growth. In the view of this research, the conclusion that foreign trade exerts positive effects upon Nigeria's economic growth could be drawn.

#### **5.2 RECOMMENDATION**

Based on the analysis carried out during this research work and the conclusion drawn from it, the following recommendations are made regarding the research to the Nigerian economy.

- The government should encourage export diversification i.e. Non-oil sector exports should be encouraged and concentration on oil sector export should be minimal.
- Nigeria is rich both in terms of resources and agricultural produce and as such, the locally based sources of raw materials should be strengthened to avoid the use of relatively expensive foreign raw materials.
- Excise duties should be lowered so as to encourage local industries to export their goods and services.
- The primary goods such as crude oil should be refined within the country so as to oppose the current situation of having to import the refined crude oil from countries, whereby the crude is exported and this will enhance the economic growth of Nigeria.
- The Manufacturing industries should improve on their production so that their output would be competitive in the global market.
- As at now, devaluation of the naira should be de-emphasized, such that the high exchange rate value of the naira would promote export and discourage import.

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#### APPENDIX

Dependent Variable: GDP Method: Least Squares Date: 03/27/13 Time: 10:13 Sample: 1980 2010 Included observations: 31

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NEV	39.24948	7.954808 4.934058		0.0000
NMV	0.373505	0.801931	0.465757	0.6453
OEV	1.747133	0.110547	15.80450	0.0000
OMV	-3.712421	1.103097	-3.365452	0.0024
EXRT	6672.035	3413.949	1.954345	0.0615
R-squared	0.996974	Mean dependent var		5971026.
Adjusted R-squared	0.996509	S.D. dependent var		8695059.
S.E. of regression	513778.4	Akaike info criterion		29.28366
Sum squared resid	6.86E+12	Schwarz criterion		29.51495
Log likelihood	-448.8968	Durbin-Watson stat		2.234526

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