Performance Evaluation of Foreign Trade and Economic Growth in

Nigeria

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Abstract

Foreign trade plays a vital in restructuring economic and social attributes of countries around the world. The workings of an economy in terms of growth rate and per capita income have been based on the domestic production, consumption activities and in conjunction with foreign transaction of goods and services. Foreign trade has not help 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.

The study focuses on the workings of trade on Nigeria economic growth. In carrying out this objectives, linear multiple regression model analysis was used in assessing various components of foreign trade. Ordinary least square, (OLS) techniques was used as a medium to achieve this objective. Data used in this study were extracted from CBN statistical bulletin, golden jubilee edition.

From the study, it was observed that export, import, and exchanged rate are all negatively related to real output of Nigeria with 19%, 8.7% and 52% respectively and the adjusted R^2 is 71% for the period, 1970 to 2005. With this, it could be said that, foreign trade policies should be reexamined and competitive produces should be produced by local industries.

Keywords: Performance, Evaluation, Foreign Trade, Economic Growth, Nigeria,

1.1 Introduction

Foreign trade has been an area of interest to decision makers, policy maker as well as economists. It enables nations to sell their domestically produced goods to other countries of the world (Adewuyi, 2002). Foreign trade means exchange of goods and services across international boarders. The working 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 transaction of goods and services.

Foreign trade has been regarded as an engine of growth (Adewuyi, 2002). Foreign trade as it has been regarded as an engine of growth, must lead to steady improvement in human status by expanding the range of people's standard and preference. Since no country has grown without trade, foreign trade plays a vital role in restructuring economic and social attributes of countries around the world, particularly, the less developed countries.

Before the discovery of oil in 1960's, the Nigerian government was able to execute investment project through domestic savings, earning from agricultural product exports and foreign aids. Since the advent of oil as a major source of foreign exchange earning Nigeria in 1974 the picture 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 sixty percent 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 #7,881.7 million. Between 1960 and 1977, value of export grew by 19 percent. 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 N8.132 million in 1970 and 1978 respectively, rising to N124, 162.7 million in 1992 and N681, 728.3 million in 1997.

However, from 1974, food import became noticeable in Nigeria foreign trade. The country had an unfavourable 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 favourable trade balance. The oil sector dominates export while the non oil sector dominates import. Between 1960 - 1970 oil export grew by 44.6 percent and 31.6 percent respectively. Also, for this period, non-oil export showed marginal growth of 1.2 percent and 6.6 percent.

In addition, in 2005, Nigeria imported about US\$26 billion of goods. In 2004, the leading sources in import were China (9.4 percent), The United States (8.4 percent), the United Kingdom (7.8 percent), the Netherlands (5.9 percent), France (5.4 percent), Germany (4.8 percent), and Italy (4 percent). Principal imports were manufactured goods, machinery and transport equipment, chemical and food and live anima. Also in 2005, Nigeria exported about US\$52 billion of goods. In 2004, the leading destinations for export were the United State (47.4 percent), Brazil (10.7 percent), and Spain (7.1 percent). In 2004, oil accounted for 95 percent of merchandise export, and cocoa and rubber accounted for almost 60 percent of the remainder. Nigeria export go to almost the same source where her export come from.

1.2. Statement of the Problem

Promotion 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.

One of the motives why benefits of foreign trade cannot be translated into economic growth is the macroeconomic policy distortions resulting from the trade which turned the country into an import dependent economy. The import of the country grew from N0.7 billion in 1970 to over N562 billion in 1996 and later increase to N1, 266 billion in 2001, (CBN Annual Report, 2004). Also as one of the reason why the benefits of foreign trade cannot be translated into economic growth is that most of the goods and services exhibited or respect to service rendered.

The importance of foreign trade in the Nigeria economy has grown rapidly in recent time, especially since 2002. Economic openness, measured as the ratio of export and imports to GDP has risen from just above 3 percent in 1991 to over 11 percent in 2008. The moderation in the growth rate of trade in 2008 partly reflects the unrest in Nigeria's oil producing Niger Delta region, which resulted in significant disruption in oil production and shortfalls in oil export from Nigeria.

Furthermore, foreign trade has not accrued into economic growth because some of the goods imported into the country were those that causes damages to local industries by rendering their product inferior and being neglected, this thereby reduces the growth rate of output of such industries and this later spread to the aggregate economy.

For this reason, it is worthy of note to analyze the influence of foreign trade on economic growth in Nigeria. To this ends, to what extent should Nigeria allows the importation of good and service to avoid damaged to local industries? And what kind of standard should be adopted for upgrading the exportation of goods and services?

1.3 Objective of the Study

The broad objective of this is to evaluate the performance of foreign trade and economic growth in Nigeria. To fulfill the broad objective of this study, the following specific objectives are to be met;

- i. To examine the workings of foreign trade on the economic growth of Nigeria.
- ii. To assess trade policies and its impact on Nigeria foreign trade
- iii. To investigate the problems affecting foreign trade and make suggestion on how they could be resolved.

1.4 Research Questions.

The study shall be guided by the following research questions,

- i. What are the workings of foreign trade on economic growth in Nigeria
- ii. Does trade policies have impact on foreign trade in Nigeria?
- iii. What are the possible ways of resolving affecting foreign trade in Nigeria?

1.5 Justification of the Study

This study will be essential to policy maker to know more about the performance of foreign trade and economic growth. It will also assist in providing the frame work of where work has been done by earlier researchers. It will also provide a framework on which further research in foreign trade could be carried out.

2.0 Literature Review

2.1 Theoretical Review

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 it's import. Some of the mercantilism are Jean Baptiste Colbert and Thomas Hobbes. It was understood then, that, the most important was 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 favourable balance of payment. Tariffs, quotas and other commercial policies were proposed by the mercantilism to minimize imports in order to protect a nations trade position. Mercantilism did not favour free trade. Mercantilism belief in a word 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 is, not all national could simultaneously benefit from trade.

Towards the end of 18th century, the economic policies of mercantilism came under strong attack. David Hume criticized the favourable trade balance as being short run phenomenon which could be eliminated automatically overtime. The other nation is likely to retaliate. Mercantilism was also attack 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 labour. With specialization and division of labour, 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 are provided domestically. Import 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.

2.2.1 Absolute Advantage Trade Theory

The theory of absolute cost advantage was propounded by Adam Smith in his famous book. "Wealth of Nation" 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.

2.2.2 Comparative Advantage Theory

Absolute advantage fails 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 factors of production, labour. He assumed that labour 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 community 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 firm 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 labour 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 labour time going into its production process. Labour theory of values is based on-labour is the only factor of production. Labour is used in the same fixed proportion in the production of all commodity. Labour is homogenous. This underline proposition is quite unrealistic, because as labour is categorized into skilled, semi-skilled and unskilled labour, 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

2.2.3 Hecksher – Ohlin Trade Theory

Eli Hecksher and Bertil Ohlin are two Swedish economist that postulates 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 country have mush 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 prices depends on production possibility curve (supply side) and then taste and prefences (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 are 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 relatives resource prices.

The model suggests that the less develop countries that are labour abundant should specialize in the production of primary product especially agricultural product because the labour 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; labour 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 outweigh 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.

2.3 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 labour 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 labour force, has traditionally been considered a positive factor in stimulating economic growth. A larger labour 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, labour-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 labour-saving technological progress.

2.3.1 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;

$$S=sY$$

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

$$I = \Delta K$$
 2.2

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

$$\frac{K = k}{Y}$$
 or $\frac{\Delta K = k}{\Delta K}$

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

Because net national savings, S, must equal net investment, I, we can write this equality as;

$$S = I$$

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

$$S = sY = k\Delta Y = \Delta K = I$$
 2.5

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Or simply as

$$SY = k \Delta Y$$
 2.6

Dividing both sides of equation 2.6 first by Y and the by k,

$$\frac{\Delta Y}{Y} = s$$
 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, economic must save and invest a certain proportion of their GDP.

2.3.2 Traditional Neoclassical Growth Theory

It expanded on the Harrod-Domar formulation by adding a second factor, labour and introducing a third variable, technology, to the growth equation. Solow's neoclassical growth model exhibited diminishing returns to labour and capital separately and constant returns to both factors jointly. Technological progress because the residual factor explaining long term growth, and its level was assumed by solow and other neoclassical growth theorists to be determined exogenously, that is, independently of all other factors.

According to traditional neoclassical growth theory, output growth results from one or more of three factors; increase in labour quantity and quality (through population growth and education), increase in capital (through and investment), and improvements in technology. Closed economies with lower saving rates (other things being equal) grow more slowly in short run than those with high savings rates and tend to converge to lower per capita income levels. Open economies, however, experience income convergence at higher levels as capital flows from rich countries where capital-labour rations are lower and thus returns on investments are higher. Consequently, by impeding the inflow of foreign investment, the heavy-handedness of less developing countries governments, according to the neoclassical growth theory, will retard growth in the economic of the developing world. In addition, openness is said to encourage greater access to foreign production ideas that can raise the rate of technological progress.

2.3.3 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 fast-growth 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.

2.4 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 though 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, Nigeria 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.

2.5 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 issue, 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.

2.6 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 imports, 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 favour 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. it's 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 form different countries into a country. The country in question would fix the maximum amount of a commodity that can be imported during a 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 devaluing nations exports, reduces its imports and improves the nations 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. Foreign exchange which is the importation power of importers. In the case of import monopoly, the government of a country take over the importation of goods and import only those that are extremely essential to the nation.

2.7 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 traffication or 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 it's 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 percent. 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 tenet arise due to the government effort to protect domestic industries.

2.8 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 it's 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 non-essential 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 shit 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 the regime this, attached ad

valorem 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.

2.9 Empirical Review

Several researchers have carried out research work on foreign trade and economic growth, examples are;

Asher (1970) points out that more than eighty percent of the foreign exchange of less development countries is earned through exports of goods and services. Massel *et al* (1972), upon investigating the pattern of economic growth of selected less developing countries using regression methods 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.

Ghezakos (1973) examines the effect of export instability on economic growth of 18 developed and 50 less developed countries separately. The growth rate of export proceeds has a positive effect in explaining the growth rate of real per capita income.

Michaely (1977) focuses attention on correlation between the rate of growth of export and GNP. Michaely finds that the correlation between rates of growth of the economy is particularly strong among the countries with successful growth experience. Balassa (1978) in his study of eleven countries that have an established industrials base discovers that the positive correlation between export growth and the GDP growth will provide indication of the total effects of exports on economic growth.

Shuchin Yang of the World Bank Development Institute also maintains that exports are the major dynamic factor 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).

Similarly, Bairam (1988) estimates the model for a large sample of developed countries and arrived at the conclusion that the growth performance of a country is a function of the values of its income elasticity of both exports and imports. In the same vein, Perraton (1990) solves the model for 59 developing countries for the period between 1970 and 1984 and reports that the model provides a good fit for almost one half of the sampled countries. This study also suggests that a country growth performance depends on income elasticity of both exports and imports.

Lin and Li (2002) examined the contribution of foreign trade to China's economic growth and found that the previous studies on this subject 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 ten percent increase in exports resulted in a one percent increase in GDP in the 1990s in China, when both direct and indirect contributions are considered.

In another study, Wah (2004) reported that for the past four decades (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 tremendous success in the export-oriented industrialization policy.

In Nigeria, some authors had examined the performance of foreign trade and economic growth. For instance, Oyejide (1974), using Nigeria as a laboratory test ground that an increase in export proceeds could lead to an expansion

of the stock of money in that economy. This was capable of leading to changes in the interest and exchange rates of that country.

Oyejide (1975), drawing a sample from 43 countries (including Nigeria), reported a positive relationship between average growth rates of GDP and export as a percentage of GDP over 1960 to 1967 period. Fajana (1979) investigates the impact of export and foreign capital on economic growth. He finds that export has greater impact on GDP growth than foreign capital inflows over eleven years period, 1964 to 1974. He recommends that Nigeria should de-emphasize reliance on foreign capital while export should be promoted.

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 the 1980s and finds that foreign trade is the most dynamic sector of the economy since independence.

Obadan (1989) 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.

Egwaikhide (1991) examines the qualitative effects of export (non-oil) expansion on Nigeria's economics growth over the period, 1960 to 1983. based on simulation experiment, he observes among others, that a 75 percent rise in non-oil export led to 1.4 percent increase in real GDP. He concludes that there is need to promote export in order to enhance GDP growth in Nigeria.

Akerele (2001), relying on appropriate quantitative techniques identified sources of instability in export earnings for the Nigeria economy for the period 1980-1997. He observed that political as well as economic factors provided sources of instability in Nigeria's export earnings. The influence of political factors 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), investigated the macroeconomic impact of oil exports on the economy of Nigeria. Utilizing the popular OLS technique, he observed that economic growth reacted in a predictable fashion to changes in the regressors used in the study. He also found that a 10% increase in oil exports would lead to 5.2% jump in economic growth. He concluded that export-oriented strategies should be given a more practical support.

Oviemuno (2007), looks at international trade as an engine of growth in developing countries taking Nigeria (1960-2003) a case study, he uses four important variables, which are export, import, inflation and exchange rate. The findings show that Nigeria's export value does not act an engine of growth in Nigeria, Nigeria's import value does not act as an engine of growth in Nigeria and that Nigeria's inflation rate does not act an engine of growth in Nigeria

3.0 Research Methodology

3.1 Model Specification

Open economic is assumed in evaluating foreign trade performance in Nigeria. Gross domestic products at constant prices is the explained variable, while the explanatory variables are export value, import value, economic openness, foreign exchange rate, and per capital income. Economic openness is used as one of the variables to represent trade intensity and this shows the extent in which goods and services are allowed in a particular economy.

Since naira is not used everywhere and transactions is made with different countries, there is the need to include foreign exchange rate as one of the variables in the model. The living status of people who engage in trade also calls for per capital income. Logarithm is used in the model to show elasticity, that is, the degree of responsiveness.

The model expressed as an implicit function will be;

RGDP = F(X, M, EOP, FX, PCI)

Where;

RGDP= Real Gross Domestic Product

X= Export value

M= Import value

E_{OP}= Economic openness

F_X= Foreign exchange rate

P_{CI}= Per capita income

The model expressed in linearized form will be,

 $LogRGDP = \beta_{0+} \beta_1 log X + \beta_2 logM + \beta_3 logE_{OP} + \beta_4 logF_X + \beta_5 logP_{CI} + \mu$

Where.

 $\beta_{0=}$ Intercept

 β_1 = Coefficient of export value

 β_2 = Coefficient of import value

 β_3 = Coefficient of economic openness

 β_4 = Coefficient of foreign exchange rate

 β_5 = Coefficient of per capita income

μ= Stochastic term.

3.2 Measurement of variables

Multiple regressions are used to analyze the data based on three criteria identified by Kutsoyiannis, (1977).

They are;

Economic 'A priori' criteria

Statistical criteria

Economic criteria.

3.3 *a priori* Expectation.

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

 $\beta_0 > 0$, $\beta_1 > 0$, $\beta_2 < 0$, $\beta_3 > 0$ or < 0, $0 \le \beta_4 \le 1$, $0 \le \beta_5 \le 1$.

 β_0 is expected to be positive because there are other factors that determine the GDP aside from the ones stated in the model

 β_1 is expected to be positive because in macroeconomic theory, export is regarded as an injection in the economy.

 β_2 is expected to be negative because in macroeconomic theory, import is regarded as a withdrawal from economy.

 β_3 is expected to be either positive or negative depending on the value of export, import and the gross domestic product. If the values of export and GDP outweigh the value of import then, economic openness would affect economic growth positively and if the values of import and GDP outweigh the value of export then, economic openness would affect economic growth negatively.

 β_4 when foreign exchange rate increase, worth of the local currency is expected to decrease, this will bring about inflation and eventually reduces RGDP and vice versa. This will lie between 0 and 1.

 β_5 an increase in per capita income is expected to lead to an increase in RGDP and vice versa. The value lies between 0 and 1.

3.3.1 Statistical Criteria

The statistical criteria are determined by statistical theory as stated below and are aimed at evaluating parameters of the model.

They are;

Coefficient of determination (R²)

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, $0 < R^2 < 1$

Standard Error (SE)

This will enable one to test for the overall significance of the estimated regression. The higher the value of the F-statistics, the greater the greater the overall significance of the estimated regression. If F-calculated is greater than the F-tabulated, the F-statistics shows a higher degree of association between the dependent variables.

3.3.2 Econometric Criteria

The econometric criteria determine the reliability of the statistical criteria, and in particular the standard errors of the parameter estimates.

Durbin-Watson (DW)

The data employed in this analysis are secondary data. They are drawn from the central bank of Nigeria statistical bulletin over the period 197—2005.

3.4 Sources of Data

The data employed in this analysis are secondary data. They are drawn from the central bank of Nigeria statistical bulletin over the period 1970-2005

3.5 Method of Analysis

The model will be estimated using the ordinary least squares (OLS) method. Time series data is used for all variables over the period, 1970 to 2005.

4.0 Data Analysis and Interpretation

4.1 Data Analysis

From the view 3.1 software package for regression model to analyze, the result is as shown below;

Table 4.2.1

 R^2 = 0.759789 R^2 = 0.719753 Dw= 0.799753 F-Stat= 18.97801

Prob (F-stat) = 0.000000

From the above, restating the model for verification, we have;

 $LogRGDP = \beta_0 + \beta_1 \log X + \beta_2 \log M + \beta_3 \log E_{OP} + \beta_4 \log F_X + \beta_5 \log P_{CI} + \mu$

 $LogRGDP = 8.662760 - 0.193673 logX - 0.087173 logM - 0.260381 logE_{OP} - 0.519117 logF_{X}$

 $+ 1.304110logP_{CI}$

From this, it could be observed that import follow a prior expectation, that is, β_2 <0 and economic openness indicate that the economy observed more of import than export since it's value is less than zero for the period reviewed. Export, foreign exchange rate and per capita income do not follow a priori expectation.

4.2 Result Interpretation

The result shows that export, import, foreign exchange rate and economic openness (a ratio of total trade to GDP) are negatively related to real GDP for the period reviewed. A 1% change in export will lead to 19% reduction in real output. Per capita income is positively related to real output for the period reviewed. A 1% change in per capita income will lead to 130% increment in real output.

The R^2 which measures how much of the dependent variable (RGDP) that is explained by the independent variables (X, M, E_{OP} , F_{X} , P_{CI}) is 75.9789%. This is a good fit and it shows that a total of over 75% systematic variation in the RGDP is explained by the variations in the explanatory variables (X, M, E_{OP} , F_{X} , P_{CI}) for the period reviewed (1970-2005). And the remaining 25% is explained by variables outside the model.

The adjusted R² is 71% meaning that a total of 71% of RGDP is explained by the five variables.

With the Durbin Watson statistic (Dw), the result is 0.79; this means that there is an evidence of serial correlation among the variables. This is because at both 1% and 5% level of significance, the Durbin Watson calculated (d*) is less than the lower level of Durbin Watson test on the 'd' table (d_L).

Prob (F-statistic) measures the probability that all the variables tend towards zero and it is 0.000000, it means that the sum of all the five variable are significant. This means that the probability of the entire coefficient used in the model is equal to 0.000000. At this stage, all the explanatory variables are said to explain the variation in RGDP.

Furthermore, comparing the standard error of the dependent variable with the mean of the dependent variable, it shows that the explanatory variables have impact on RGDP. This is because the mean of the dependent variable is greater than the standard error of the dependent variable. As a result of the smallness of the error relative to the mean value of the dependent variable, the model is preferred.

4.3 Policy Implication

From the result above, export, import, and foreign exchange rate does not act as an engine of growth in Nigeria. These conform to the findings of Oviemuno (2007). This is against the conclusion of Adewuyi (2002) who referred to foreign exchange rate as an engine of growth. The result did not support the claim that Nigeria economy is export-led as Obadan (1989) had said already.

There is negative relationship between RGDP and against the report given by Oyejide (1975) to be positively related to GDP. Ezenwe (1979) finds that foreign trade is the most dynamic sector of the economy since independence

and as far as this study is concern, foreign trade has been dynamic in the sense that most of it's determinant are negatively related to real GDP.

The result is against the study conducted by Bairam (1988) and Perraton (1990) that concluded that growth performance of a country is a function of the values of its income elasticity of both exports and imports. As Shuchin Yang ones said, if the developing countries do not develop their export, it might mean slow economic growth. From this, since the result bas indicated a negative relationship between export and real output, this statement by Shuchin Yang could be said to be-worthwhile.

5.0 Summary, Conclusion and Recommendation

5.1 Summary

From this study, it was discovered that RGDP is the term used to describe economic growth, which is one of the macroeconomic objectives. The study had depicted the pattern of export and import in Nigeria right form the earlier years of independence to present day situation. The study also made some effort in examining the problems of foreign trade over the years. The work also provides some theories on economic growth. Since trade favours 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 work. It could also be observed that Nigeria engages in international trade negotiation so as to stimulate the economy through foreign trade.

From this study, it could be observed that the Nigeria economy employed different strategy in stimulating its economy through foreign trade. This strategies span across different stages of the economic lifecycle with different outcome.

The study had 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. From this study, the components foreign trades are negatively related to real GDP.

5.2 Conclusion

This study has examined the performance of foreign trade in relations to economic growth. It is therefore concluded that, conscious efforts should be made by government to fine-tune the various macroeconomic variables in order to provide an enabling environment to stimulate foreign trade.

5.3 Recommendation

Based on the findings of this research work, it is necessary to provide a set of policy recommendation that would be applicable to the Nigeria economy.

Export promotion strategy should be review and import substitution strategy should also be review so that import and export will change its dimension.

The government should encourage export diversification. Non-oil sector exports should be encouraged and concentration on oil sector export should be minimal.

Nigerian should reframe from excessive consumption of foreign goods and services so that their imports might be cut-off.

Manufacturing industries should improve on their production so that their output would be competitive in the global market.

Excise duties should be lowered so as to encourage local industries to export their goods and services.

Lifting of trade barriers on local output should not be followed by the introduction of new ones.

Only the importation of capital goods that are essential should be encourages, since not all importation are necessary for economic growth.

References

Adenikinju (2005), African Imperatives in the New World Trade Order: Country study of the manufacturing sector in Nigeria, in Ogunkola O.E and Bankole A. (eds) Nigeria's Imperatives in the New World Trade Order, African Economic Research Consortium (Nairobi, Kenya) and the Trade Policy Research and Training Programme (Ibadan, Nigeria)

Adewuyi, and Adeoye . Attainment of Potential Growth Rates in Nigeria under Balance of Payments Constraints: Extent, Obstacle and the way forward.

- Adewuyi, (2002), "Balance of Payments Constraints and Growth Rate Differences under Alternative Police Regimes" Nigerian Institute of Social and Economic Research (NISER) Monograph Series No. 10 Ibadan, Nigeria.
- Akerele, (2004), "Nigeria's Export Trade: Instability and Forecast" J. Development Alternatives and Area Studies, 20: 61-68.
- Asher, (1970), 'Development Assistance', Brookings Institute, Washington D.C., P. 157.
- Bairam, (1988), "Balance of Payments, the Harrods Foreign Trade Multiplier and Economic Growth'. The European and North American Experience, 1970 to 1985 Applied Economics, December.
- Bankole, A.S and Bankole, M.A. (2004), "Industrial Trade and Export Promotion Policies and Revealed Comparative Advantage in Nigeria's Manufactured Export, In Garba, Abdul-Ganiyu et al (eds), Leading Issues in Macroeconomic Management and Development, NES Ibadan.
- Briggs, (2007), Nigeria: Mainstreaming Trade Policy into National Development Strategies: African Trade Policy Centre No 52; Economic Commission for African.
- Carbaugheg. (2009), "International Economics", 12th Edition: South Western (engage learning), Ohio.
- CBN, Annual Report and Account; various issues
- Egwaikhide, (1991). "Economic Growth through Export Expansion: Evidence from Nigeria'. NISERR Monograph Series No 10, NISER, Ibadan.
- Ekpo and Umoh: 'Growth and Direction of External Trade; Google search
- Ezenwe, (1979), "Nigeria and Foreign Trade Policies in the 1980's' The Nigeria Journal of International Studies Vol. 3, Nos 1 and 2, January June, P. 94
- Fajana . (1979), Trade and Growth: The Nigerian Experience" World Development, Vol. 7, Page 73 -79
- Kenen . (2000): "The International Economy", Cambridge University Press, UK.
- Koutsoyiannis,. (1977). "Theory of Econometrics", Palgrave Houndmills, Basingstoke Macmillan Press.
- Lawal, (1982), 'A' Level Economics of West Africa: Heinemann Educational Books (Nig.) Ltd.
- Mankiw, (2007), 'Principles of Microeconomics' 4th Edition: Thomson South Western.
- Massel, . (1972), 'Foreign Exchange and Economic Development'. An Empirical Study of Selected Latin American Countries. Review of Economic and Statistics, Page 208 212.
- Michealy,(1977), 'Exports and Economic Growth. An Empirical Investigation' Journal of Development Economics, Vols 3-4, Page 419-453
- Obadan, (1983), 'Prospects for Diversification in Nigeria's Export Trade' in Annual Conference of the Nigerian Economic Society, Heinemann Press, Ibadan page 33-53, unpublished e mass: press.
- Obiora . (2009), 'Do Trading Partners still matter for Nigeria's Growth? A contribution to the debate on Decoupling and Spillovers' IMF Working Paper.
- Ogbokor, (2001), 'Oil and Economic Growth: An Econometric Analysis' J Development Alternatives and Area Studies, 20: 124 130.

Table4.2.1: Result of variables.

Variable	Coefficient	Std. Error	T-Statistics	Prob
С	8.662760	4.929339	1.757388	0.0891
Log(X)	-0.193673	0.2955116	-0.656260	0.5167
Log(M)	-0.087173	0.630545	-0.138251	0.8910
$Log (E_{OP})$	-0.260381	0.850602	-0.306114	0.7616
Log (F _X)	-0.519117	0.230400	-2.253116	0.0317
Log(P _{CI})	1.304110	0.867517	1.503268	0.1432

Source; E-View 3.1 estimation result

Olaniyi, (2005), 'Nigeria's Trade Policy from 1960-2004: A critical review'. Paper presented at the workshop on capacity building on International Trade, National Assembly in Collaboration with Friedrich Ebert Stiftung (Nigeria), Jos 25-17 July 2005.

Omoke, and Ugwuanyi, . (2010), 'Export, Domestic Demand and Economic Growth in Nigeria; Granger Causality Analysis, European Journal of Social Sciences Volume 13, Number 2.

Oviemuno, . (2007), 'International Trade as an Engine of Growth on Developing Countries: A case study of Nigeria; (1980 - 2003).

Oyejide . (1974); 'Export and Economic Growth in Africa Countries," Economic International 2:177-185

Perraton (1994)"The Harrod Foreign Trade Multiplier and the Developing Countries; 1970 to 1985: An Examination of the Thirwall Hypothesis," University of Nottingliam.

Retrieve from www.wikipedia.com: Economy of Nigeria

Salvatora . (2004): "International Economics Schaum Outline Series, Tata McGraw Hill.

Todaro, and Smith, . (2009), Economic Development; Pearson edu. Ltd

Wah (2004), "The Role of Domestic Demand in the Economic Growth of Malaysia; A Co Integration Analysis" International Economic Journal, Volume 18, Issue 3

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