EXPORT VERSUS IMPORT LED GROWTH: THE NIGERIAN EXPERIENCE

BY

APERE EMBELEAKPO

PG/12/13/214909

BEING A DISSERTATION PRESENTED TO THE SCHOOL OF POST GRADUATE STUDIES, FACULTY OF SOCIAL SCIENCES, DEPARTMENT OF ECONOMICS IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTERS OF SCIENCE (M.SC) DEGREE IN ECONOMICS, DELTA STATE UNIVERSITY, ABRAKA, DELTA STATE

APRIL, 2016

CERTIFICATION

This is to certify that this project work was carried out by Mr. Apere Embeleakpo in the Department of Economics, Faculty of Social Sciences, Delta State University, Abraka, Delta State, Nigeria.

_____ _____

PROF B.U. OMOJIMITE **DATE**
(SUPERVISOR)

_____ _____

DR. B.O. ISHIORO **DATE**
(H.O.D, ECONOMICS)

_____ _____

EXTERNAL EXAMINER **DATE**

DECLARATION

I declare that this is the original research work carried out by me in the Department of Economics, Faculty of Social Sciences, Delta State University, Abraka, Delta State, Nigeria.

_____ _____

MR. APERE EMBELEAKPO **DATE**

(Researcher)

DEDICATION

This work is dedicated to God Almighty for his mercies and protection.

ACKNOWLEDGEMENT

No doubt, the success of this research was due to the support of many people. My heart felt appreciation goes to God Almighty for his divine mercies and protection throughout the period of this research. I sincerely appreciate the effort of my supervisor, Prof. B.U. Omojimite who made himself readily available to me at all times throughout the research work. His guidance was behind the success of this research. I am also grateful to Prof C.O. Orubu and Prof. P.C. Egbon for their support throughout the research work. I also appreciate the of Dr. Edjedegba, and other lecturers in the Department of Economics.

My sincere gratitude goes to my wife Mrs. Beauty Apere for her support and understanding throughout the period of the research. I am also grateful to my children Mr. Apere Ebiakpor, Miss. Apere Tamarakarela-Emi, Master Apere Oyindebamo, Master Apere Tamaratare and Master Apere

Ebieyerin. I am grateful to my elder brother Dr. T.O. Apere of the Department of Economics, Niger Delta University for his support during the research and to many others too numerous to mention.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The major objective of the research has been to empirically assess whether the growth process in Nigeria is export-led or import-led. The study covered the period between 1981 and 2012. This period is significant because it covered the Pre-SAP and SAP era. The cointegration technique with its implied ECM and the Granger causality test were used for the study. The result shows that import has a positive and significant impact on the level of economic growth in Nigeria. The high elasticity of import indicates that the growth process in Nigeria seems to be more of import-led than export-led because although exports is significant, it has a low elasticity. The result also indicates a bi-causal relationship between imports and economic growth and non-such relationship between exports and economic growth. A confirmation that the growth process is more of import led than of export led. The result also shows causality running from imports to exports indicating that exports have a high import content. This explains the huge import bill in Nigeria which has been a source of drain to valuable foreign exchange. The result indicates a long run relationship among the variables and a satisfactory speed of adjustment. The result recommends amongst other policies to increase non-oil exports and government programmes such as SURE-P be focused more on the expansion of SMEs in Nigeria.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The export growth hypothesis which is based on the premise that export expansion is one of the major determinants of economic growth is gathering momentum in the field of international trade and finance. The general argument here is that the overall growth of countries could be generated not only by increasing the amount of labour and capital but also by expanding oil and non-oil exports as in the case of Nigeria. The positive association between free trade and economic growth is usually ascribe to classical writers of the nineteenth century. Worthy of mention in this regard include the originator of the idea, Adam Smith; and others including Ricardo, James Mill, Torrens, John Stuart Mill who added value to this idea.

Whether or not trade policy of import substitution and export promotion promote economic growth and development has been the subject of debate in the economic literature; and especially in 1950s and 1960s most developing countries followed import substitution, which then was regarded as the recipe for economic growth and development. Advocates of import substitution based their argument on the need for developing countries to carve a niche for themselves by developing trade policy that will encourage local technology. This seems to suggest the need to encourage indigenous technology and expertise through 'learning by doing' in the real sector of the economy (Todaro and Smith 2003). This policy of import substitution was abandoned in Nigeria as in most developing countries in favour of export expansion. The proponents of export expansion argue that expanding exports benefits the domestic economy. It increases efficiency in resource use and allocation, creates substantial economies of scale in production, generates employment and hence economic growth (Egwaikhide, 1997).

The success story of the Asian Tigers clearly shows that albeit free market and outward oriented policy is desirable, sound domestic economic policy by the state which complements export led growth initiatives. This is because the governments of Taiwan, Singapore, Hong Kong (China) and the Republic of Korea were able to achieve high rates of economic growth and development based not only on encouraging free market but also outward- oriented policies (Tang and Nair, (2002).

Their domestic production and export composition was not left to the forces of demand and supply alone, but a product of carefully planned intervention by the respective states. As rightly observed by Amsden (1989) the success story of the Asian Tigers is highly attributed to a focused and strong state whose domestic policy composition is structured in such a way that it protects domestic industries and also provide an array of incentives to encourage foreign participation.

Nigeria's aggregate imports have grown substantially since the country's independence in 1960; from an average growth rate during the 1960s of 2.5% to an average of 3.3% per annum between 1970 and 1989. The growth of imports is attributable to several factors. These include the need to pursue economic development, the expansion in crude oil export that considerably raised foreign exchange earnings and the over-valuation of the local currency, which artificially cheapened imports in preference to local production. The astronomical expansion of domestic demand is a key factor as well; during this period goods were in short supply. Trade statistics show that consumer goods dominated aggregate imports up to 1965, when they accounted for 41% of the total, this fell to 27% between 1980 and 1990. The import of capital goods, which at the time was second to consumer goods, fluctuated between 24% and 40% during the 1960s, while the share of raw materials generally increased from 10% to 23%. From 1970 the distribution pattern of imports changed

dramatically, with the import of capital goods leading and followed by raw materials after 1980 (Egwaikhide, 1997)..

Over the last two decades there has been a dramatic shift in the stance of development policy. Through to the mid-1970s development policy rested on the import-substitution model which encouraged countries to build up their own domestic manufacturing capacity and substitute domestically produced goods for imports. In the period since policy has shifted in favour of the export-led growth model which recommends the exact opposite. Rather than focusing on production for domestic markets, countries are now advised to focus on production for export.

This shift away from import-substitution toward the export-led growth was driven significantly by the economic troubles that emerged in the 1970s. At that time many developing countries, which had prospered under regimes of import-substitution, began to experience slower growth and accelerated inflation. This led to claims that the import-substitution model had exhausted itself, and that the easy possibilities for growth by substitution had been used up. A second factor fostering adoption of the export-led model was the shift in intellectual outlook amongst economists in favour of market directed economic activity. Import-substitution requires government providing tariff and quota protections, and economists increasingly came to portray these measures as economic distortions that contribute to productive inefficiency and rent seeking.

1.2 Statement of the Problem

Owing to both external and internal factors, the growth performance of the Nigeria economy has been less than satisfactory during the past three decades. Since the first oil price shock of 1974, oil has annually produced over 90% of Nigeria's export income. From 1970 to 1999, oil generated almost $231 billion in rents for the Nigerian economy and these rents

have constituted between 21% and 48% of Gross Domestic Product, but yet these rents have failed to raise Nigeria incomes and has done little to reduce poverty. Since 1970, Nigeria's per capita income has fallen by about 4% (Obadan, 2012).

As an import-dependent economy, Nigeria's international trade has remained unbalanced as the volume of import continues to surpass that of export. This is as the container market in Nigeria in the recent past has been strongly dominated by imports. Nigeria's import to export ratio has remained at 92 percent import to 8 percent export, as noted by Jan Thorhauge, managing director, Maersk Nigeria Limited (MNL) and head of the Central West Africa Cluster, in a trade report released by Maersk Nigeria Limited. The containerized import market to Nigeria is estimated to have ended at about 159,000 Forty Foot Equivalent units (FFE) compared to 155,000 forty foot equivalent recorded within the same period in 2012. The report shows that most of Nigeria's laden containers come from the Far East, mostly China, while the export commodities have been going into Europe (MNL).

"Major products coming from the Middle East are industrial raw materials, chemicals, electronics, iron and steel and tyres, while industrial raw materials, frozen fish and cars are the goods that come mainly from Europe," he said. There was an increase in sourcing pattern, which was attributed to better pricing from these regions, increase in the age limits of imported automobiles from five to 10 years, increased construction as well as growing demands for finished products by Nigerian populace. Charcoal and agricultural produce including cocoa, sesame, cashew nuts and cotton were the commodities mostly exported out of the country in the first half of the year. According to the report, charcoal export rose by 76 percent when compared to the volume in the same period in 2012. The report attributed the rise in volume to the longer winter season experienced in Europe (MNL).

Also, since early 1970, the government has annually received over half of its revenues from oil sectors which are about 85%. These oil revenues are not only large but highly

volatile and causing the size of government programs to fluctuate accordingly. From 1972 to 1975, government spending rose from 8.4% to 22.6% of GDP, by 1978, it dropped back to 14.2% of the economy. This fluctuation has made the government unable to adhere to wise fiscal policies during the 1970s and 1980s, when oil prices fluctuated sharply, the ability of these governments to spend their funds wisely, and limit corruption has been low (Aminu, J. 1997).

Although large proceeds are obtained from the domestic sales and export of petroleum products, its effect on the growth of the Nigeria economy as regards returns and productivity is still questionable, hence there is a need to evaluate the relative impact of oil export on economic growth in Nigeria.

Exporting is not always an easy endeavor, developing countries like Nigeria often faces both formal and informal trade barriers that hinder the export of its computer tablets. Formal trade barriers are barriers to trade that are intentionally created for the express purposes of making it harder for an exporter to sell goods in a foreign market, while informal trade barriers are not necessarily created to hinder imports of goods but have the effect of doing so. A common barrier is a tariff, which is a special type of tax that is imposed on goods imported into a country. Tariffs often make the imported goods more expensive than its domestic equivalent. For example, a tariff imposed on the country's goods may make it more expensive than a domestic tablet when it would have been cheaper if the tariff was not imposed. Thus, tariffs are often imposed to protect domestic companies.

Developing countries often face import quotas, which are limits on the number of a specific product that can be imported into a country during a specific period of time. For example, a neighbouring country may restrict the number of tablets imported from other countries. This means that the country can only export so many goods to that country. Sometimes a fixed quota will be imposed, which is an absolute limit on the quantity of

exports. On the other hand, sometimes a country will impose a tariff surcharge on imports that exceed a certain level. The problem now is despite all the strategy of encouraging exports growth and development as well reduction of imports in the Nigerian economy, the economy still imports a lot. That means the problem still remain the same in this regards, the research therefore attempts a comparative analysis between exports led growth versus import led growth in the Nigerian economy.

1.3 Objectives of the Study

The broad objective of the study is to empirically examine the contributions of exports and imports to economic growth in Nigeria. The specific objectives include to:

1. establish the impact of export on the level of economic growth in Nigeria
2. assess the impact of balance of payments on the level of economic growth in Nigeria
3. evaluate the impact of imports on economic growth in Nigeria and
4. assess the impact of trade openness on economic growth in Nigeria

1.4 Research Hypotheses

The following hypotheses will be tested:

1. **Ho:** there is no significant relationship between export and the level of economic growth in Nigeria
2. **Ho:** there is no significant relationship between balance of payment and the level of economic growth in Nigeria
3. **Ho:** Import has not significantly influenced the level of economic growth in Nigeria
4. **Ho:** Trade openness has not significantly influenced the level of economic activities in Nigeria.

1.5 Significance of the Study

Exporting and importing helps grow national economies and expands the global market. Every country is endowed with certain advantages in resources and skills. For example, some countries are rich in natural resources, such as fossil fuels, timber, fertile soil or precious metals and minerals, while other countries have shortages of many of these resources. Additionally, some countries have highly developed infrastructures, educational systems and capital markets that permit them to engage in complex manufacturing and technological innovations, while many countries do not.

Export growth is often considered to be a main determinant of the production and employment growth of an economy. This so-called hypothesis of export-led growth is as a rule, substantiated by the following four arguments. First, export growth leads, by the foreign trade multiplier, to an expansion of production and employment. Second, the foreign exchange made available by export growth allows the importation of capital goods which, in turn, increase the production potential of an economy. Third, the volume of and the competition in exports markets cause economies of scale and an acceleration of technical progress in production. Fourth, given the theoretical arguments mentioned above, the observed strong correlation of export and production growth is interpreted as empirical evidence in favour of the export led growth hypothesis.

Countries want to be net exporters rather than net importers. Importing is not necessarily a bad thing because it gives us access to important resources and products not otherwise available or at a cheaper cost. However, just like eating too much candy, it can have bad consequences. If you import more than you export, more money is leaving the country than is coming in through export sales. On the other hand, the more a country exports, the more domestic economic activity is occurring. More exports means more production, jobs and revenue. If a country is a net exporter, its gross domestic product

increases, which is the total value of the finished goods and services it produces in a given period of time. In other words, net exports increase the wealth of a country.

1.6 Scope of the Study

The study covered the period between 1981-2012. The choice of this period is to enable us capture a comparative analyses of export led growth versus import led growth in both the pre- Structural Adjustment Programme (SAP) and the SAP era. This research will be restricted to variables which are relevant in the explanations of Nigerian economy. The variables that will be of paramount interest shall include Gross Domestic Product, export, import, balance of payment and trade openness.

1.7 Operational Meaning of Terms

The following terms are of relevant to the study:

Imports: Total goods and services bought from the outside world

Exports: Total goods and services sold to the outside world

Balance of Payments: A record of a country's total receipts and payments with the rest of the World.

OPEN: This is a measure of the openness of an economy to the outside World. It is proxied by the ratio of exports plus imports to Gross Domestic Product

RGDP: This is the Real Gross Domestic Product. It is the Gross Domestic Product deflated by the general price level

Unit Root: It is used to test whether a variable is stationary or not and the order of integration

Cointegration: It is a test of the long run relationship among variables.

Parsimonious Error Correction Mechanism (ECM): This is the preferred ECM generated from an overparameterize ECM

CHAPTER TWO
LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Literature Review

Over the last two decades there has been a dramatic shift in the stance of development policy. Through to the mid-1970s development policy rested on the import-substitution model which encouraged countries to build up their own domestic manufacturing capacity and substitute domestically produced goods for imports. In the period since policy has shifted in favour of the export-led growth model which recommends the exact opposite. Rather than focusing on production for domestic markets, countries are now advised to focus on production for export. This shift away from import-substitution toward the export-led growth was driven significantly by the economic troubles that emerged in the 1970s. At that time many developing countries, who had prospered under regimes of import-substitution, began to experience slower growth and accelerated inflation. This led to claims that the import-substitution model had exhausted itself, and that the easy possibilities for growth by substitution had been used up.

A second factor fostering adoption of the export-led model was the shift in intellectual outlook amongst economists in favour of market directed economic activity. Import-substitution requires government's provision of tariff and quota protections. Economists increasingly came to portray these measures as economic distortions that contribute to productive inefficiency and rent seeking. Finally, the shift in policy stance was also propelled by the empirical fact of Japan's spectacular success in growing its economy in the twenty five years after World War II, and by the subsequent growth success of the four East Asian "tiger" economies - South Korea, Taiwan, Hong Kong, and Singapore. All of these economies relied on increased exports, and their success is evidenced. As a result of these factors, export-led growth has become the standard model of development that the International Monetary Fund

(IMF) recommends to all its client countries. With seventy- five developing countries (Sachs 1998) now subject to permanent IMF programs, this means it has become the defacto global development model. Yet, even as the export-led growth model has been increasingly applied around the world, world economic growth has slowed - and this is especially so in low and middle income countries.

This deterioration in economic performance has opened the export-led growth model to challenge, just as it had earlier challenged the import- substitution model.

2.1.1 Impact of Export Led Growth

Export-led growth is an economic approach that many developing nations attempt to put in place to modernize their societies and increase standards of living. It is based on the principle of finding a market for something on the international stage that cannot be easily or efficiently supplied by other nations. As the developing nation makes a name for itself in this market, it is able to bring in positive cash flow that can fuel the import of goods and services that it cannot produce for itself. Good examples of export-led growth nations are the petroleum-exporting nations of the Middle East, and rapidly developing economies such as India and China.

An economic strategy of export-led growth is usually attempted with either manufactured goods and information services, or raw materials (Chang, 2002). The former offers more flexibility to expand exports, as raw materials sell at reduced prices and eventually become scarce commodities. In the decades of the 1 960s up to the 2000s, Asian-sector nations have focused on manufactured goods exports, whereas some Latin American and African nations have tended towards raw materials. While the former approach has led to greater internal productivity and influxes of cash in the past, a downturn in global economic conditions as of 2011 now puts this model for growth into doubt.

China as a pre eminent example of export-led growth has been successful with the policy since 1978 because of its access to negotiations through the World Trade Organization (WTO), an abundance of cheap labor, and an aggressive internal program of industrialization. While China's growth rate continues at a high level to very low consumption rate per household and reinvestment of profits by corporations has kept it from developing a strong consumer economy to modernize lifestyles in general. Export-led growth in China has mostly benefited the government in terms of tax collection and Chinese corporations in terms of paying off investments in capital goods, while per-capita incomes have remained low. China's high savings rate, therefore, which is paralleled by the export-led growth model in India, ends up being invested in foreign markets instead of directly benefiting the citizenry (Chang, 2002).

Key international trade factors have led to the success of the export-led growth model for many nations. These include an open US marketplace to imported goods and services as the largest consumer economy in the world, the reduction of trade barriers through globalization processes, and a standardization expansion across many industries so that goods and services could take on universal utility (Palley, 2002). Changes in these factors has begun to put the system in doubt, as the US and world economy undergoes a protracted downturn as of 2011, and excess production capacity for manufactured goods now exists in many developing nations that have adopted this economic strategy (Blecker, 2000.). Other factors said to be limiting export-led growth include rising energy costs and increasing scarcity of natural resources, as well as a slowdown in technological innovation in electronics, which has been a primary area fueling such growth.

Developing nations such as India are approaching the limits to the old export model with a hybrid approach to a solution by exporting information services, which require very limited resources and support long-term growth models. Financial account imbalances

between developing export-led growth nations that produce manufactured goods and industrialized consumer nations with large debt loads that buy them are also seen as unsustainable in the long term (Manova and Zhang, 2008). This is forcing developing nations to focus more on domestic growth as export avenues dry up, and consumer nations try cut back on wasteful spending. The United Nations Conference on Trade and Development (UNCTAD) sees higher wages in developing nations and reductions in unemployment figures overall as the key conditions to be addressed if export-led growth is to continue to be a successful model for the developing world.

Exports of goods and services represent one of the most important sources of foreign exchange income that ease the pressure on the balance of payments and create employment opportunities. An export led growth strategy aims to provide producers with incentives to export their goods through various economic and governmental policies. It also aims to increase the capability of producing goods and services that are able to compete in the world market, to use advanced technology, and to provide foreign exchange needed to import capital goods. Exports can increase intra-industry trade, help the country to integrate in the world economy and reduce the impact of external shocks on the domestic economy. Experiences of Asian and Latin American economies provide good examples of the importance of the export sector to economic growth and development, which led economists to stress the vital role of exports as the engine of economic growth.

The role of exports in the economies of developing countries has been subject to a wide range of empirical and theoretical studies. However, there have been disagreements among economists concerning the applicability and validity of the Export Led Growth theory. The argument concerning the role of exports as one of the main deterministic factors of economic growth is not new. It goes back to the classical economic theories by Adam Smith and David Ricardo, who argued that international trade plays an important role in economic

growth, and that there are economic gains from specialization. It was also recognized that exports provide the economy with foreign exchange needed for imports that cannot be produced domestically. The Export Led Growth paradigm has received renewed attention following the highly successful East Asian export-led growth strategy during the 1970sand 1980s, and especially if compared to the overall failure of import substitution policies in most of Africa and Latin America.

Given the huge size of the export-led growth literature, we have limited our literature review by referring first to some highly influential studies that provide a useful framework for the analysis of the Export Led Growth paradigm. Second, some of the major studies specifically for developing countries, and third, some empirical studies. The empirical studies are further divided based on their purpose and approach (Panas and Vamvoukas, 2002).

From the growth-theory literature point of view, export expansion is the key factor promoting economic growth. There are various explanations that have been put forward to relate these two variables to each other. First, the growth of exports has a stimulating effect on total factor productivity growth through its positive impact on higher rates of capital formation. Second, the growth of exports helps relax the foreign exchange constraints, thereby facilitating imports of capital goods and hence faster growth. Third, competition from overseas ensures an efficient price mechanism that fosters optimum resource allocation and increases the pressure on industries that export goods to keep costs relatively low and to improve technological change, thereby promoting economic growth. Clearly, these arguments lead us to hypothesize that exports contribute positively to economic progress (Santos and Muse, 2013).

In contrast to the export-led growth hypothesis, it can also be argued that causality runs from the growth of output to the growth of exports. When we

consider a growing economy, some industries face substantial changes in terms of learning and technological innovation, which are related to the accumulation of human capital, manufacturing experiences and the technology transfer or real capital accumulation arising from foreign direct investment. Such unbalanced growth has nothing to do with outward-oriented policies. That is, output will still continue to grow even in the absence of these policies.

Under such unbalanced growth, the growth of domestic demand will lag behind the growth of output in these prosperous industries and it is likely that the producers will sell their goods in overseas markets. Therefore, economic growth will promote the growth of exports. Santos and Muse (2013) asserted that Nigeria, a developing nation, had employed several policy measures which include the Import Substitution Industrialization (ISI) strategy. A strategy that aimed at replacing imported items with the locally produced ones. The ISI strategy among others was targeted at reducing importation and subsequently the depletion of foreign exchange reserves in the early 1980s. The ineffectiveness of these measures led to the adoption of Structural Adjustment Programme (SAP) in 1986 of which Export Promotion Industrialization (EPI) strategy is key component. This strategy is now pursued with the aim that it will translate into economic growth and efforts have been made (and are still being made) to encourage domestic production for exports especially in other sectors of the economy apart from oil sector so as to increase the number of products in the country. On the present trends of the structure of Nigerian economy, it is unlikely that the country will be able to take the advantage of increased trade openness in order to achieve trade induced growth. Despite the increase in Nigeria's total exports earnings, the country has been confronting a considerable amount of balance of payment deficit over the years. Thus it is imperative and worthwhile to examine whether export growth can enhance economic growth to help reduce this deficit, and also to know if there is casual relationship between exports and economic

growth in Nigeria. Focusing on international markets (Lee and Huang, 2002). This is part of consensus among economists about the gains of economic openness that took hold in the 1970s, which rests on a fusion of three lines of argument; the first, based on Hecksher- Ohlin-Samuelson comparative advantage theory. This is about the benefits from trade between countries with different capital- labour ratios; the second concerns the benefits of openness for controlling rent seeking and the third which was developed later, concerns the benefits of openness for growth. Trade encourages technology diffusion and knowledge spill-over that contribute faster productivity growth. A contradictory posit that economic growth leads to the growth of exports is also expressed for some countries, especially nations that are at their early stages of economic development (Santos and Muse, 2013).

2.1.2 Impact of Import Led Growth

Various empirical studies tried to determine the significant factors determining economic growth and most of these studies were associated with the determinants or sources of economic growth with different methodologies, data, and cases. Tong (1995) explored the relationship between economic growth and import, and he recognized that import at different times contributed to economy differently, but as a whole, there was a positive correlation between import and economic growth. Frankel and Romer (1999) in their study on cross-country data found that higher trade contributes to long-term economic growth, after accounting for the effect of growth on trade. Although they considered total trade (export plus import), their research methodology attributed the same response to import that it applies to export; that is, import causes economic growth. Humpage (2000) on the other hand, stressed that import does not lower economic growth. He believed that import and economic growth are positively correlated, with causality running in both directions. Faster economic

growth does indeed lead to higher import, but the countries that are opened to trade tend to grow faster than those with a closed economy or less accessible.

Liu (2001) in his research revealed that import has a strong role in the promotion of national economy by analyzing the data of China from 1980 to 1998. Howard (2002) examined the relationship between export, import and income in the economy of Trinidad and Tobago, using the methodology of Granger causality and error correction modeling. The results showed that there is unidirectional Granger causation from export to income (GDP), and bidirectional causation between export and import, and causality running from GDP to import. Chen (2009). In a different study stated that, import is often recognized as a leakage of revenue of which will lead to unemployment rather than economic growth.

But he stressed that the impact of import on economic growth on the other hand, should not be ignored. Import is an important means to break the bottleneck of economic development and promote economic growth. Therefore, the research on the relationship of import and economic growth is necessary. Gao (2004) showed that the relationship between foreign trade and economic growth is one of the main debating problems in the economic field. Based on his study, he found that both export and import improve economic growth, while the promoting effects on economic growth of export are much weaker than those of import. Shirazi and Abdul Manap (2005) found the feedback effect running from import to GDP growth in Bangladesh as the consequences of technology transfer. Ghorbani and Motallebi (2009) studied and analyzed the import demand function in Iran for the year 1960 to 2005, and found that import demand is elastic related to increasing in gross domestic income.

Alam, Uddin and Taufique (2009) in their paper attempted to explore the import of Bangladesh which is one of the most significant factors responsible for unfavourable trade balance of the country. The paper examined the existence of the gravity theory for the import

of Bangladesh with its eight major trading partner countries such as India, China, Singapore, Japan, Hong Kong, South Korea, USA and Malaysia by using yearly panel data from 1985 to 2003. The paper found mixed results for the impact of Bangladesh GDP on its import. If population is not considered, GDP shows positive relationship with import.

In addition, its major trading partner countries' GDP has significant positive impacts on the import of Bangladesh. Azgun and Sevinc (2010) in a different study explained that in the smaller and open economies, import and foreign trade play major roles in economic development and growth. Engle Granger test was conducted, but the results showed no causal relationship between import and export.

2.1.3 Trade openness and Economic Performance

Economists generally see the concept of trade openness as the integration among the nations of the world. It is likened to openness of the world economy where nations link together to the extent that they have free trade, free movement of capital and financial activities (Igudia, 2004). Economic analysis informs that openness to trade, flow of factors, ideas and information stimulate economic and political progress (Aboagye, 2006). Thus, openness to trade can be said to be the platform of globalization while trade, finance, investment and entrepreneurs constitute the heart (Obadan, 2004; Uwatt, 2004). It also involves economic liberalization that has generated new markets for various economic actors within the global space and it has simultaneously brought about intense competition among them.

The inability of developing countries to fully embrace trade openness in their economic and developmental process is making them to participate somewhat marginally in the world economy. The modes and indicators of trade openness include the rapid growth of international trade, foreign direct investment (FDI) and international flows of capital and

information. This could be one of the reasons for the formation of various regional economic groups around the world such as European Union (EU), Organization of Economic Co-operation and Development (OECD), Organization of Petroleum Exporting Countries (OPEC), with a view to harmonizing policies in order to reap the gains of economies of scale. Hence, the countries in West Africa have come under one umbrella Economic Community of West African States (ECOWAS), to maximize their potentials in order to reap the gains of trade openness.

Academic debate on trade openness has been informed by two strands of research with opposing perspectives. Some economists argue that trade between nations is a mechanism by which the wealthy nations exploit the poor ones through extraction of economic surpluses; others are of the opinion that although trade between countries may not necessarily impact a country negatively, its impact is too weak to provide the essential stimuli that would generate growth. These groups of scholars prescribe that nations should look inward for solutions to their development problems. Their argument is that trade between nations can be likened to a game where the gains that accrue to one nation (usually the developed countries) are as a result of the deficiency of their trading partners usually the LOCs. This scenario to them (e.g. Myrdal, 1984) etc is peculiar to the Latin American and African economies where the centre (LOCs) exploit their surpluses from the periphery (LOCs). Hence, to them, for the LOCs to benefit from trading they need to be taken in to consideration as part of the global process instead of keeping to their fate by merely providing the inputs via exports.

The second group of scholars favour outward-oriented economic strategies or the exponents of export promotion, arguing that free trade amongst nations of the world would equally benefit the LDCs by expanding their activities via trade that would not have been possible from their domestic economies alone. It is also seen as a means of helping them

through specialization and transfer of technology; and as result increases their citizens' welfare through enhancement of their aggregate national income (Adjasi, 2006; Kuada, 2006).To them (e.g. Grabowski and Shields, 1996 etc) openness to trade is very crucial to any economy because of differences in technology; proportion of potentially mobile resources (capital and labour) and availability of specific, non-mobile factors (land and other natural resources). In this wise, the gains to trade are in two forms: production and consumption gains.

Following this perspective, degree of a nation's openness to trade is believed to rub off on the nation via economies of scale, externalities associated with information and knowledge transmission as well as spill over effects that trickle to productive knacks of such an economy. And in the long run, it is believed to make the nation perform better economically. Said differently, trade openness can be described as the increasing integration of economic activities of the human societies around the globe. It could also connote the process of denationalization of economic, political and social activities that allows the flow of capital across national boundaries (Igudia, 2004). Thus, it involves the growing economic interdependence of countries worldwide through the increasing volume and varieties of cross-border transactions; international capital flows; as well as rapid and widespread technological change. World Bank (1992) had observed that global integration of markets is capable of turning the economies of developing countries with labour cost advantages into low-cost suppliers of certain manufactured goods. Sala-iMartin (1997) further affirmed positive relationship between openness to trade and economic growth. This view is in line with economic orthodoxy which presupposes that the greater the intensity of competition resulting from openness to trade, the better will be the level of economic performance of nations (Hoeffler, 2002). Ajayi (2001) noted that a more open economy based on a single but influential premise, economic integration, would improve economic performance; offer new

opportunities via expanded market and the acquisition of new technologies and ideas. Uwatt (2004) examined the link between globalization and growth using panel data for forty-one (41) African nations for the period 1980-1999.Though the study had mixed results the author suggested that African nations must stand up to face the demands of trade openness through meaningful policies that would promote and engender increased trade and capital inflows.

Sachs and Warner (1995) argued that countries that were open had experienced economic growth at a rate of 4.5 percent annually in the 1970s and l980s while countries that were closed, barely managed to grow at a rate of 0.7 percent. Using the Sachs and Warner (1995) binary measure of openness, Hoeffler (2002) confirmed that openness to trade had a significant and positive impact on growth of nations via increased investment. In the same vein, Ndiyo and Ebong (2004)using vector autoregressions (VARs) model empirically investigated the dynamic influence of trade openness, foreign direct investment (FDI), and other macroeconomic influence on growth, established a negative influence of openness, exchange rate, fiscal deficit, average world prices and balance of payments disequilibria on growth in Nigeria. Alege and Ogun (2005) explored the link between openness to trade and industrialization by examining the impact of various indices of globalization such as degree of openness, volume of trade, inflow of foreign direct investment and increased technological innovations on aggregate manufacturing production in Nigeria. The study indicated thatopenness to trade, volume of trade, and increased information technology (IT) had significant influence on the level of manufacturing output. The above was similar to Akinlo's (2003) conclusion, using growth rate of exports and FDI as proxy for degree of openness, that a 1% point growth in exports increases stock market by 0.19% point in Sub-Saharan African economies.

Empirical studies of trade openness have adopted a variety of methods. Scholars differ in their opinions on which of these methods provide a good assessment of the link

between trade openness and economic performance. Scholars such as Kavoussi (1984) and Fosu (1990a) based their studies on cross-country data. Others like Abdulai and Jaquet (2002) did a country- specific study on Cote d'Ivoire (1961-1997) by examining the causality between the growth rate of export and economic growth. They argued that cross-country aggregate analyses of growth generally tend to presume that the countries included in the analyses have common economic framework.

2.1.4 Balance of Payment in Relation to Economic Growth

The balance of payments is the sum of the results of the trade balance and the balance on the capital account. It is the accounting balance after calculation of a country's total inflows and outflows, whether in terms of trade movements, investment, loans, repatriation of capital or migrants' remittances. The balance of payments is said to limit economic growth when the rate of that growth is restricted by the availability of external resources. This difficulty is supposed to be determined by the production structure of the peripheral countries and by the system's tendency to reproduce the characteristics of that structure, hence the term structuralism. The balance of payments is important because it will tell you whether a country has enough savings and other financial transactions to pay for its consumption of imports. It will also tell you if it is producing enough economic output to pay for its growth.

A country with a balance of payments deficit probably imports more goods, services and capital than it exports. It also borrowing from other countries to pay for its imports. This can be good for a while, so the country can fuel economic growth. However, if it continues for years, then the country may be seen as a net consumer, not producer, of the world's economic output. It may have to sell off its assets, such as natural resource and commodities, to pay for its consumption. Eventually, other countries may wonder if their investments will pay off.

A country with a balance of payments surplus is probably exporting much of its production. In addition, its government and residents are savers, providing enough capital to finance this production and even lend to other countries. This is a great scenario to boost economic growth, in the short term. However, in the long term, this country needs to encourage its residents to spend more and build a larger domestic market. This will keep it from being too dependent on export-driven growth. it will also allow its companies to refine goods and services, using the domestic population as a giant test market. Finally, a large domestic market can also inoculate the country from the volatility of exchange rate fluctuations.

Mainstream economic theory regards the balance of payments to be self- adjusting, meaning that the impact of the balance of payments on the growth and development process is neither considered nor analysed. In contrast, the author emphasizes the importance of integrating monetary considerations into trade theory and argues that the balance of payments consequences of trade policy need to be carefully addressed. This approach has a number of implications for important issues such as the sequencing of trade liberalisation; the role of the exchange rate in equilibrating the balance of payments; the case for protection; and the way in which the importance of export growth is articulated. Some of the ideas expressed have a long and distinguished ancestry, but they are not part of the mainstream orthodoxy and need airing in a world increasingly divided into rich and poor countries. No country can grow faster than rate consistent with balance of payments equilibrium on current account in the long run, unless it can finance ever- growing deficits which, in general, it cannot. Ratios of deficit to GDP of more than 2%.-3% to make the international financial markets nervous and all borrowing eventually have to be repaid. A country's balance of payments equilibrium growth rate can be modelled by stating the balance of payments equilibrium condition specifying multiplicative (constant elasticity) import and export demand functions in which

imports and exports are a function of domestic and foreign income, respectively, and of relative prices, and substituting these functions in the equilibrium conditions. Since imposts are a function of domestic income, the model can be easily solved for the growth of income consistent with balance of payments equilibrium.

Nureldin-Hussain (1995) applied this model to Africa to contrast the experience of slow growing African countries with the faster growing countries of Asia over the period 1970-90. He uses an extended model which also includes terms of trade effects and the effects of capital flows. The major explanation of the difference in growth rates between Africa and Asia turns out to be the difference in the growth of exports. He finds that the average growth of the African countries, excluding oil exporters, was 3.4 percent per annum, and of the Asian countries 6.6 percent. The contribution of export growth in Africa was 1.99 percentage points and in Asia 5.91 percentage points.

Differences in capital flows and terms of trade movements made only a minor contribution to growth rate differences. Thus, he concluded that exports are unique as a growth inducing force from the demand side because it is the only component of demand that provides foreign exchange to pay for the import requirements for growth. In this sense, it allows all other components of demand to grow faster in a way that consumption-led growth or investment-led growth does not.

2.1.5 A Brief History of Export-Led Growth

The last thirty years have seen tremendous spread of the export-led growth paradigm. The strategy was pioneered by Germany and Japan in 1950s and 1960s. In the 1970s and 1980s it was adopted by the four East Asian Tigers—South Korea, Taiwan, Hong Kong, and Singapore. In the 1980s and 1990s it spread further, being adopted in South East Asia by Thailand, Malaysia, and Indonesia. In Latin America it was adopted by Mexico. In the 2000s

China has exemplified the paradigm. The model has not been constant, but has instead evolved to fit changing global circumstances and to fit individual country conditions. This evolution can be thought of as involving four stages. Stage I was kicked off by Germany and Japan and can be thought of as running from 1945-1970. Both countries had their owning indigenous industrial base and export growth was driven by an undervalued exchange rate. Growth also benefited from U.S. aid made available after World War II as part of reconstruction and the Cold War.

Stage II captures the experience of the four East Asian tigers and runs from 1970-1985. Once again countries relied on an under-valued exchange rate but now there was need for more foreign technology acquisition. This was done via strategic planning and benefited from the fact that technology was becoming more mobile. Stage III is epitomized by Mexico's engagement with export-led growth. The major change from stage II is that countries now started turning themselves into export production platforms for foreign multi-nationals rather than developing their own indigenous industrial capacity. This changed strategy was feasible because of increased mobility of technology and capital. The key elements of the new strategy were (a) integration into the global economy (b) an undervalued exchange rate (c) suppression of wages and social standards. The goal was to enhance international competitiveness so as to become attractive to multi-national corporations (MNCs) as a site for foreign direct investment (FDI) that was export-oriented. However, the benefits have also proved much more elusive. The new strategy is exemplified by Mexico's experience which began with the trade liberalization of 1986. That set the path to North American free trade area (NAFTA) and the creation of a North American free trade area in 1994. The inauguration of North American free trade area in January 1994 was marked by a peso crisis that resulted in massive devaluation of the peso vis-à-vis the US dollar, providing Mexico with an under-valued currency.

This third stage of export-led growth represents the beginning of the modem era of corporate globalization, and a critical feature is that export-led growth is no longer a purely national strategy. Instead, it is a partnership between developing countries, multinational corporations, and developed countries. Governments and multi-nationals promoted the new system using the traditional language of free trade and claimed the goal was creation of a global market place. However, the real goal was not to promote traditional trade, but rather to create a global production zone in which corporations could establish export production platforms that would export back to developed country markets.

North American free trade area is the template for the new model and it Is massively significant from a historical standpoint. By unifying the US, Canada, and Mexico into a single free trade zone NAFTA created for the first time a free trade production zone that unified developed and developing economies. This template was then extended globally via the establishment of the WTO in 1996 and the admission of China into the WTO in 2001. There are three important features of the NAFTA-corporate globalization model.

First, it promotes trade but not the classical trade of balanced exports and imports. Second, it promotes a new type of export-led growth based on relocating existing production and diverting new investment that benefits emerging market economies by creating jobs, transferring technology, and relieving balance of payments constraints on growth. However, these economies do not own the industrialization process as was the case in stages I and IL Third, it does considerable damage to developed economies via deindustrialization, creation of international financial imbalances, and undermining the wage- productivity growth link which in turn undermines the coherence of the domestic income and demand generation process.

Stage IV is an extension and augmentation of the stage III model and is exemplified by China. China's model makes three major adjustments to Mexico's NAFTA model. First, it

is characterized by asymmetric global engagement with China maintaining greater tariffs on imports. Second, there is managed under-valuation of the exchange rate that is maintained with capital controls. Third, there is a strategy for building an indigenous national technological base via forced technology sharing, joint ventures in which MNCs may be minority shareholders, and technology theft. China's policies toward banking and automobile production are prime examples of this.

MNCs have also changed their strategy. Thus, they are now willing to engage in joint-ventures and also license and source from foreign producers rather than own facilities. In the case of China that is the price of entry, with corporations hoping they will be paid back by future profits from China's large market. Licensing and joint ventures also benefit corporations by reducing their capital investment. However, the basic structure of dependence on multinationals for exports remains intact so that stage IV Chinese export-led growth remains distinct from the earlier stage I and II experiences of Germany, Japan, and the East Asian Tigers. This dependence is illustrated in Table 1 which provides a decomposition of Chinese exports and imports by ownership structure. Foreign-owned firms account for 50.4% of Chinese exports, and that rises to 76.7% if joint ventures are included.

2.1.6 Export-Led Growth Nexus

In the last decade there has been a surprising and impressive resumption of activity in the economic growth literature triggered by the endogenous growth theory, which has led to an extensive inventory of models that stress the importance of trade in achieving a sustainable rate of economic growth. These models have focused on different variables such as the degree of openness, exchange rate, tariffs, terms of trade and export performance, to verify the hypothesis that open economies grow faster than closed ones (Edwards, 1998).

Although most models emphasis the nexus between trade and growth, they stressed that trade is only one of the variables that enter the growth equation. However, advocates of export led hypothesis (ELGH) have argued that trade was in fact one of the major determinant of growth in South-East Asia. They argue that Hong Kong, Taiwan, Singapore and the Republic of Korea, the so called Four Asian Tigers, have been successful in achieving high rate of economic growth since the early 1 960s because of consistently pursuing free market and outward oriented economies (see World Bank, 1993).

The extensive literature concerning the relation between trade and growth is also the consequences of the many changes that have taken place in the field of development economics and international trade policy in the last two decades. An example of these changes is the tremendous modification for inward-oriented policies to export-promotion strategy. By the early 1980s export-led orientation and export promotion strategy had already secured a wide concession among researchers and policy makers to such an extent they have become 'conventional wisdom' among most economists in the developing world (Tyler, 1981 and Balassa, 1985).

Advocates of export-led growth hypothesis anchor their argument on the slow rate of growth of countries mostly in Latin America who adopted the policy of Import Substitution Strategy (ISS). Some of them on the average showed a complete lack of growth, while income decline between 1960s and 1980s. These facts were partly responsible for the substantial change that occurred in the trade literature in the 1980s, for example, Bruton (1989) states that as the first stage of import substitution came to an end, those countries that continued with this strategy, especially in Latin American countries, or that were unable to shift to a more outward approach became increasingly vulnerable to external events. Most of them became increasingly dependent on external capital inflow, in particular from private banks, in order to maintain their level of imports and thus of consumption. This was

particularly the experience of most Latin American countries that were greatly affected by the debt crisis of early 1980s.

Thereafter, many developing countries including Nigeria were forced to stimulate their export orientation even more because most of them had to rely on multinational organization to implement adjustment and stabilization programmes to correct imbalance in their basic macroeconomic indicators. The strategy was to encourage free market through policies that rely heavily on export promotion as the most suitable and trustworthy mechanisms. The argument was that promoting exports would enable developing countries to correct imbalances in the external sector and at the same time ensuring that their domestic economies make full recovery.

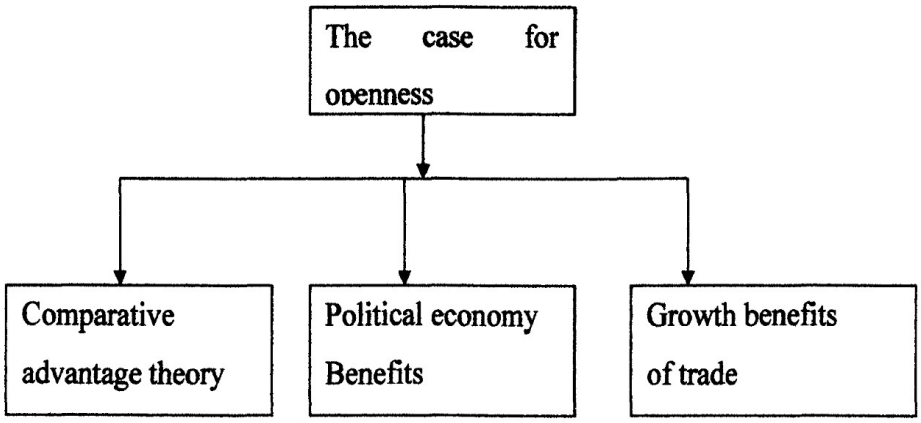
Consequently, by the mid-1980s, economic literature concerning development economics, economic growth, adjustment and stabilization programmes had quickly rejected the inward-oriented approach and increasingly placing emphasis on export-led strategy. Most macroeconomic theorist and policy makers quickly embraced the new wisdom, on the assumption that by following this scheme their countries will return to the path of desired growth rate. Each strategy has been subject of an extensive theoretical survey and the literature examining the trade growth nexus has increased substantially in the last decades with impetus provided by the endogenous growth theory.

2.1.7 The Rise of Export -Led Growth

The export- led growth paradigm rose to prominence in the late 1970s when it replaced the import- substitution paradigm that has dominated development policy thinking (especially in Latin America) in the thirty years after World War II. Export – led growth is a development strategy aimed at growing productive capacity by focusing on foreign markets. It is part of a new consensus among economists about the benefits of economic openness that took hold in the 1970s.

This new consensus rests on a fusion of three strains of argument that is illustrated in Figure 1. The first strain based on Hecksher – Ohlin- Samuelson comparative advantage theory is about the gains from trade between economies with different capital- labour rations (Ohlin 1933: Samuelson 1948: Dornbuseh et al. 1980). The second strain concerns the benefits of openness for controlling rent seeking a problem that import- substitution development was strongly criticized for (Krueger, 1974). The third strain. Which developed later, is the benefits of openness for growth. The claim is trade encourages technology diffusion and knowledge spillovers that contribute to faster productivity growth (Grossman and Helpman 1991).

Figure 2.1 Arguments supporting the new consensus on openness.



Export-led growth represents a subsidiary branch within this new consensus that applies to developing countries. The argument is self-conscious policy focused on external markets helps capture the economic benefits of openness for developing countries by encouraging best practice adoption; promoting product development; and exposing firms to competition. The success of the four East Asian Tiger economies (South Korea, Hong Kong, Singapore, and Taiwan) appeared to provide empirical support for these claims.

According to economists, export-led growth generates a win – win outcome for developing and industrialized economies. All benefit from the global application of the

principle of comparative advantage, while developing countries gain extra benefit from an external focus. Moreover, industrialized economies supposedly benefit even if developing countries subsidize their exports so as to win additional exports. That is because countries which subsidize their exports are giving a gift to countries receiving those exports. However, that latter claim rests on two highly questionable assumptions.

First, there is no long-term dynamic cost to industries displaced by such subsidies. Second, there is scarcity of resources and full employment (i.e. no Keynesian unemployment) which makes the subsidies a gift. These arguments about the benefits of trade and economic openness played an important role in propelling the new agenda of international economic integration. That is because they dovetailed with the economic interests of large corporations who were looking to establish a new global economic structure that has since become known as globalization. Corporations therefore embraced economists' ideas as they helped power their global economic integration. That is because they dovetailed with the economic interests of large corporations who were looking to establish a new global economic structure that has since become known as globalization. Corporations therefore embraced economists' ideas as they helped power their global economic agenda. That created a corporate elite opinion alliance which bonded trade theory with corporate globalization, and that alliance which bonded trade theory with corporate globalization, and that alliance drove expansion of the GATT and the subsequent establishment of the WTO in 1996. With regard to developing countries, the IMF and World Bank played a special role spreading the new agenda. That is because developing countries needed financial assistance after the 1970s oil shocks, and the IMF and World Bank made access to assistance conditional on governments embracing the openness agenda.

2.1.8 Empirical Review on export led growth

There are plethora of studies on the impact of trade on economic growth.

The earliest study on the export growth nexus such as Emery (1967, 1968); Syron and Walsh (1968); Serven (1968); Kravis (1970); Heller and Porter (1978); Bhagwati (1978) and Krueger (1978) among others argue that export expansion is the single most important determinant of growth in a two variable framework. They used a bivariate correlation test in a cross-country format to show the superiority of export growth hypothesis.

Another group of scholars, which include Balassa (1978, 1985); Tyler (1981); Feder(1983); Kavoussi (1984); Ram (1985, 1987) and Moschos (1989) investigated the relationship between export and output within the neoclassical framework. In most of these studies the major purpose of including the export variable was to capture the productivity gains generated by this sector which stimulated the domestic economy and also to take care of broad externality issues. The major defect being that export was included as an explanatory variable in an ad hoc manner and the general objectives of these studies was to demonstrate using OLS the desirable properties of adopting export promotion strategies.

As observed by Kugler (1991), Henriques and Sadorsky (1996) studies that focus on individual developed countries such as Canada. France, Switzerland, USA among others support the hypothesis that export expansion stimulate economic growth. Bother (1996) presented rather interesting result. He showed that internal forces rather than export expansion were the main stimulant of economic growth in Japan.

Ram (1987) in his cross sectional analysis for low and middle income countries argues that export led growth hypothesis is valid but cautioned that because of huge inter country differences and diversity the result should be interpreted with some caution. Other cross sectional studies that support the export growth hypothesis includes Fosu (1990) and Lussier(1993) for African countries, Kugler (1991); for industrialised countries. Moreover,

most of the earlier studies, which include Syron and Walsh (1968); Heller and Porter (1978) among others argue that the positive effect of exports on growth flourish only after countries have achieved a certain level of economic development. Thus, their results indicate that countries heavily dependent on agricultural commodities are less likely to benefit from exports when compared to countries that have a high level development and whose export contains a high domestic value added.

Albeit these studies have their individual merits they are however deficient in the sense that by assuming the same production function across countries, technological differences are highly ignored. Thus, empirical result so obtained are merely averages and do not capture the specifics of each country. A second defect of cross sectional analysis is that the sample is rather small (about twelve countries), example Balassa (1978);

Bhagwati (1978); Chow (1987, 1989) among others. The third one is the argument that even studies with large sample size were limited to specific type of developed countries and exclude low-income countries and major oil exporters.

For country specific case studies Khan and Saqib, (1993); Serletis, (1992); Henriques and Sadorsky, (1996); Al-Yousif (1997); Begun and Shamsuddin, (1998) all support the export growth hypothesis. Khan and Saqib (1993) investigated the relationship between export and growth for Pakistan using 3 stage least Squares estimation technique. Their results support the export growth hypothesis. Serletis (1992) for Canada, Al-Yousif (1997) for Arab Gulf countries and Begun and Shamsuddin (1998) for Bangladish support the hypothesis that export expansion stimulates economic growth.

Shan and Sun (1998) agree that cross section studies based on bivariate models or ad hoc production function are consistent with exports growth hypothesis, empirical results obtain by researchers involved in country case studies differ between nations and periods of time studied. These findings mean that albeit cross sectional studies are empirically attractive

to researchers, they could impair useful insights into inter country differences and therefore assume away vital information about the behaviour of certain countries. It is therefore clear that cross sectional studies may be an unreliable source of information for scholars and policy makers alike in developing countries.

Recent time series study that have attempted to use econometric methodology of co-integration for developing countries have not been able to establish without doubt that a robust relationship exists between export and economic growth in the long run, that is the variables are co-integrated (Islam, 1998). Al-Yousif (1997) attempted to remedy the lack of empirical evidence related to major Arab Gulf countries, namely Saudi Arabia, Kuwait. United Arab Emirates and Oman. His findings support the hypothesis in the short run but failed to support the existence of a long run relationship between exports and economic growth. One simple explanation to this may be that exports are concentrated on oil and petroleum derivatives and therefore exports; terms of trade and government expenditure are skewed together in countries that depend on a single mineral resource to finance imports.

It is generally accepted that many East Asian countries have achieved higher rates of economic growth through export-led industrialization; however the empirical evidence is mixed. Ghartey (1993), using a vector-autoregressive model for Taiwan, USA and Japan, finds export-led growth in Taiwan, economic growth Granger causes export growth in the USA, and feedback causal relationship exists in the case of Japan. In contrast, Kwan et al (1996) find mixed results for Taiwan. Grupta (1985) finds bidirectional association between exports and economic growth for Israel and South Korea. Ghatak and Wheatley (1997) discovered that export growth is Granger caused by output growth in India. Rana (1985) estimates an export-augmented production function for 14 Asian developing countries. The evidence shows that export is a significant factor in economic development.

Anwar and Sampath (2000) examined the export-led growth hypothesis for 97 developing countries for the period 1960 to 1993. Their results indicate a unidirectional causality in the case of Pakistan.

Albeit, the findings of the cited literature are mixed, they indicate, in general, that the level of development is important in determining the export-growth nexus. The cited studies also implicitly assume that countries that are rich in resource endowment and are homogenous in export structure can implement the export expansion at a fast rate. Developing economies, such as Nigeria, where there are abundant domestic resources, export expansion requires the importation of raw materials, plant and equipment's as well as technology that are needed to drive the export sector. It does appear that export and import play vital role in economic growth, so that if we study the long run relationship and causality structure without including import may lead to invalid inference.

2.1.9 Trade Strategies for Development: Export Promotion versus Import Substitution

A convenient and instructive way to approach the complex issues of appropriate trade policies for development is to set these specific policies in the context of a broader less developed countries strategy of looking outward or looking inward,' In the words of Paul Streeten, outward-looking development policies "encourage not only free trade but also the free movement of capital, workers, enterprises and students, the multinational enterprise, and an open system of communications." By contrast, Inward- looking development policies stress the need for LDCs to evolve their own styles of development and to control their own destiny. This means policies to encourage indigenous "learning by doing in manufacturing and the development of indigenous technologies appropriate to a country's resource endowments. According to proponents of inward-looking trade policies, greater self-reliance can be accomplished only if trade is restricted, the movement of people and communications,

and if you keep out the multinational enterprise, with its wrong products and wrong want-stimulation and hence its wrong technology."

Within these two broad philosophical approaches to development, a lively debate has been carried out in the development literature since the 1950s. This is the debate between the free traders, who advocate outward-looking export promotion strategies of industrialization, and the protectionists, who are proponents of inward-looking import substitution strategies. The balance of the debate has swung back and forth, with the import substitutes predominating in the 1950s and 1960s and the export promoters gaining the upper hand in the late 1970s and, especially among western and World Bank economists in the 1980s and 1990s. However, the philosophical foundations of import substitution and collective self-reliance remained almost as strong in the 1990s as they were in prior decades,

Basically, the distinction between these two trade related development strategies is that advocates of import substitution (IS) believe that Less Developed Countries should initially substitute domestic production of previously imported simple consumer goods (first stage Import Substitution) and then substitute through domestic production for a wider range of more sophisticated manufactured items (second stage Import Substitution) all behind the protection of high tariffs and quotas on these imports. In the long run, Import Substitution advocates cite the benefits of greater domestic industrial diversification (balanced growth") and the ultimate ability to export some previously protected manufactured goods as economies of scale, low labor costs, and the positive externalities of learning by doing cause domestic prices to become more competitive with world prices.

By contrast, advocates of export promotion (EP) of both primary and manufactured goods cite the efficiency and growth benefits of free trade and competition, the importance of substituting large world markets for narrow domestic markets, the distorting price and cost effects of protection and the tremendous successes of the East Asian export-oriented

economies of South Korea, Taiwan, Singapore, and Hong Kong. They stress that firms in these economies and more recently in China have learned a great deal from the firms in the United States, Japan, and other economies that have been their long-term customers.

In practice, the distinction between Import Substitution and Export Promotion strategies is much less pronounced than many advocates would imply. Most Less Developed Countries have employed both strategies with different degrees of emphasis at one time or another. For example, in the 1950s and 1960s, the inward-looking industrialization strategies of the larger Latin American and Asian countries such as Chile, Peru, Argentina, India, Pakistan and the Philippines were heavily Import Substitution oriented. By the end of the 1960s, some of the key sub-Saharan African countries like Nigeria, Ethiopia, Ghana, and Zambia that began to pursue Import Substitution strategies and some smaller Latin American and Asian countries also joined. However, since the mid 970s, the Export Promotion strategy has been increasingly adopted by a growing number of countries The early EP adherents—South Korea, Taiwan, Singapore, and Hong Kong—were thus joined by the likes of Brazil, Chile Thailand, and Turkey, which switched from, an earlier IS strategy. It must he stressed, however, that even the four most successful East Asian export promoters have pursued protectionist IS strategies sequentially and simultaneously in certain industries, so it is inaccurate to call them free traders, although they are definitely outward- oriented.

2.1.10 Commercial Policy and Economic Development

Commercial policy plays an important part in the economic development of an LDC. Commercial policy may be defined as one that helps in accelerating the rate of economic development by enabling the underdeveloped country to have a larger share of the gain from trade, by augmenting the rate of capital formation, promoting industrialization and maintaining equilibrium in the balance of payments.

Various arguments have been put forth in support of such a commercial policy which inevitably aims at the adoption of protection.

The Terms of Trade Argument: The increase in the gains from trade of an underdeveloped country is based on the terms of trade argument. A shift in the terms of trade in favour of an underdeveloped country is tantamount to an increase in its national income. If a country imposes a tariff that brings about a fall in import prices or a rise in export prices, it will result in improving its terms of trade. This will naturally help in financing economic development. For, its income will increase and it will be in a position to import larger quantities of capital goods.

On the face of it, this argument sounds logical, but it is not without certain reservations. First, an improvement in the terms of trade will have little relevance to capital formation, if the increased income is not saved but dissipated on domestic and imported goods. Mere saving is not enough. What is required is its investment in capital goods. Secondly, for such a tariff policy to be successful, the tariff- imposing country should have sufficient monopoly or monopoly power. But this is not possible unless the underdeveloped countries act as a united economic group.

In reality, such a policy is impracticable because of the small size of the domestic market for an importable commodity, and the ability of the developed countries to develop local substitutes for the natural products of such countries. Third, a tariff policy of this type is effective only if the "foreign offer curve" is inelastic. But in the case of underdeveloped countries, the foreign offer curve is usually elastic. As a result, they supply less exports and demand less imports as the price of imports rises. The higher is this elasticity, the greater will be the fall in the volume of trade as a result of the imposition of tariff. These price elasticity of supply and demand act as one of the important limitations to the terms of trade argument.

However, discounting all these limitations it is likely that the gain * from trade would be only a short-term gain which would be eliminated quickly by retaliatory measures by other countries, changes in elasticity's or by changes in the government's "expenditures of customs revenue or an internal redistribution of income.

Balance of Payments Argument: One of the principal objectives of commercial policy in an underdeveloped country is to prevent disequilibrium in the balance of payments. Such countries are prone to serious balance of payments difficulties to fulfil the planned targets of development. An imbalance is created between imports and exports which continue to widen as development gains momentum. This is due to increase in imports and decline in exports. To establish economic infrastructure like power, irrigation, transport projects, etc. and directly productive activities like iron and steel, cement, electrical, etc. underdeveloped countries have to import capital equipment, machinery, raw materials, spares and components in large quantities thereby raising the import content of their foreign trade.

Another cause of the rise in imports is the growing demand for food grains necessitated by a rapidly growing population. For instance, India had been importing on an average 3 million tonnes of food grains every year. So food imports are an important factor in creating an unfavourable balance of payments in underdeveloped countries (World Bank, 1993).

Apart from food grains many essential consumer goods are imported to meet the domestic demand because it cannot be met adequately by indigenous production. This equally applies to capital equipment needed by the private sector of the economy.

Another important factor responsible for growing imports of such countries is the policy of import substitution. It requires the establishment of such industries within the economy which ultimately replace imports. This policy, in itself, necessitates the imports of large quantities of machinery, capital equipment, spares, raw materials, etc., to set and operate such industries.

Almost all underdeveloped countries have emerged as independent nations after a long spell of colonial rule. They, therefore, prize their hard won independence above everything. For this, they prepare themselves to ward off any external invasion and internal rebellion. This had led to heavy, imports of defense equipment's.

Another important cause of the balance of payments difficulties in such economies is inflation. As the economy moves on the path to development heavy investment expenditures flowing from deficit financing lead to strong inflationary pressures. Rise in domestic incomes, costs, and prices encourage imports and discourage exports. This makes the balance of payments position serious.

Further, balance of payments disequilibrium arises when a developing economy needs foreign exchange to service foreign borrowings. Such economies have to pay back the principal and interest on borrowings from the developed 'economies. Besides, they have to make payments for the services of invisible items, i.e., transportation and insurance charges on imported goods. All these require larger foreign exchange which, being already scarce, accentuates the balance of payments position.

On the other hand, exports lag behind imports. Exports of underdeveloped countries lack variety and resilience. These countries produce primary products, mainly raw materials and agricultural 'commodities. Hence their markets are limited and highly competitive. Moreover, they are unable to export more on account of increased domestic consumption of exportable products due to rising income and increase in income elasticity of demand for consumer goods. Another problem is their high cost of production due to inflationary pressures. In the face of highly competitive international markets, high cost is a big hurdle to exports. Again, tariff barriers, quota restrictions and regional economic groupings also keep down the exports of underdeveloped countries. Lastly, bad quality of exportable' goods and the absence of Proper credit facilities to sell goods in foreign countries have been

instrumental in keeping their exports low. Thus the above factors have tended to keep exports down and imports high thereby creating a perpetual problem of balance of payments in underdeveloped countries.

2.2 Theoretical Framework

The idea that export expansion drives economic growth is rooted from the classical and neoclassical orthodoxy of Adam Smith, David Ricardo, John Mill, Cordon's supply driven model, Variety hypothesis of Walkins (1968) as well as the Staple growth theory (Nyong 2005). Since then the justification for free trade and various indisputable benefits that international specialization bring to the productivity of nations have been widely discussed and document in economic literature (Bhagwati, 1978, Krueger, 1978).

Adam Smith argues that the existence of idle resources of land and labour leads to the use of excess resources to produce surplus goods for exports and thereby venting a surplus productive capacity that would otherwise been unused. This means that trade promotes efficient international allocation of resources. David Ricardo theory of comparative advantage suggests that trade optimizes production through specialization. John Stuart Mill identified in its static gains of trade, dynamic gains including those that expand the market, induces innovations and increase productivity, have educative effect in instilling new ideas and in the transfer of technology, skills and entrepreneurship (Nyong, 2005).

The Staple theory of trade argues that trade leads to bringing into production or cultivation of previously idle resources, creating a vent for surplus returns to those resources. This theory is structurally similar to the Vent-for-Surplus theory to the extent that resources formally exist and are subsequently exported. It also has some close affinity with Lewis theory of economic development with unlimited supplies of labour to be vented through trade. In this case it is labour not the natural resources to be vented. It also has some

similarity with Rostow's theory of growth to the extent that the leading sector is the staple-export sector which grows more rapidly, propelling the rest of the economy along its growth path. It follows that gains from trade is not once-over change in resource allocation but are also merging with gains from development. In this way international trade increases and transforms the domestic production frontier as well as the productivity of the domestic economy.

Thus the central thesis of the Staple growth theory is that when a country has comparative advantage in primary goods production, this result in the expansion of primary based export commodity. This in turn induces higher rate of growth in income per capita. Furthermore, the export of primary commodities affects the rest of the economy by diminishing underdevelopment and underemployment, by inducing higher rate of domestic savings and investments, by attracting inflow of factor inputs into expanding export sector, and by establishing linkages with other sectors of the economy. These processes increase the supply responses of the domestic economy and thus the productivity of the export sector. The theory submits that extensive growth of the primary commodities (staple) leads to diversification and industrialization, which results in these important benefits: improved utilization of existing resources, expanded factor endowment and linkage effects.

Cordon's supply driven model replaces the demand driven model of Staple growth theory by emphasizing on the growth of factor supplies and productivity. Cordon (1971) argues that nations that engage in international trade are most likely to benefit from trade. He classified these benefits into five. Namely the static gains from trade leading to increase in income, the capital accumulation effects arising from investing the static gains from trade, the substitution effect resulting from possible fall in relative price of investment goods to consumption goods if investment goods are imports intensive in the production of exports. And lastly the factor weight effect which considers the relative productivity of factors (labour

and capital), noting that the rate of exports will rise rapidly and faster if it uses the faster growing factor of production.

2.2.1 Theoretical/Empirical review on imports and Growth

Quite, a number of recent studies identified' various determinants of aggregate import demand in Nigeria by using different types of variable as the determinant factors. In the study, the variables used were chosen in order to survey the literature that is directly relevant to theme chosen for the study. In the Oxford Dictionary of Economics, second edition (Handwork of John Black; 2003), imports refers to goods and services bought by residents of a country but provided by non-residents. We have visible and invisible imports. Visible imports are goods physically brought into the country. In Nigeria visible imports is classified into: Consumer good like: food, clothes, foot wear, electrical appliance and capital good like: Machinery, transport equipment, building material and miscellaneous items like chemicals, drinks, cooking utensils and stationery. Invisible imports are services like shipping, Insurance and Banking brought from other countries.

The Nigeria's economy is highly dependent on import for both consumption and production. Virtually all the major industrial raw materials are sourced from abroad while the country depends wholly on foreign supply for intermediate and capital goods. Production for exports is highly elastic because the major non-oil export products are basically primary produce whose prices have been on downward trend and exogenously determined. Besides, these exports, are slow in responding to exchange rate adjustment. The implication is that the economy is highly prone to external shocks and in the event of a crash in oil price, the economy may face decline in foreign exchange earnings which may destabilize the exchange rate. Import substitution industrialization, a strategy for the industrialization of less developed countries (LDCs), of concentrating initially on replacing imports with domestic ally produced

substitutes has been pursued vigorously since the late 1950s in Nigeria. It was envisaged that this strategy would have Ilirshman type linkages with the rest of the economy, and consequently, import substitution was equated with development. Nigeria has historically and generally maintained high protective trade regimes partly to support this development policy Ekuerhare, 1980; Forest, 1982).

Trade policies were also substantially influenced by the periodic balance of payments difficulties and the need to generate revenue (Oyejide, 1975). The Hechsher-Ohlin theory, postulates that the immediate cause of international trade is the difference in relative policy, caused by the differences in relative demand and supply of factors (factor prices) as a result of differences in factor endowment between countries. Therefore, commodities that use large quantities of scarce factors should be imported because their prices are high while those using abundant factors should be exported because their prices are low (Jinghan, 2002).

Empirical evidence has shown that several authors have attempted to estimate the various specifications of the import demand model both in developed and developing countries. It is convenient to start with the empirical evidence in some other countries in the world and end it with that of Nigeria.

From the empirical literature surveyed from other countries, Mwega (1993) investigates the short run dynamic import function in Kenya using an error correction model. Import demand exhibits low elasticity with respect to relative price and income. Mwega (1993) stressed further that stabilization and exchange rate polices would not bring about rapid amelioration of the external disequilibrium, and foreign reserves appear to be the main determinant of imports while the chow test reveals the stability of function.

Tang and Nair (2002) evaluate the stability of the import demand function in Malaysia using the bounds test. Import demand, income and relative price are found to be counteracted. Their study derives long-run income elasticity of 1.5 percent and relative price

elasticity of 1.3 percent. Further empirical studies criticized the use of different import model by other researchers. Burgess (1974) argued that although the traditional import demand model is able to provide measures of income and price elasticity, it assumes that total imports consist of final commodities that are not separable from those other goods that serve as input to the consuming sectors.

Learner and Stem (1970) stated that, there are no well-defined criteria for choosing a particular functional specification. Rather, it is the researcher who decides what functional form to use (this is probably influenced by theoretical position selected) provided the choice is not detrimental to the results obtained.

Thursby and Thursby (1984) verified the appropriateness of alternative specifications, using five countries (United States of America, United Kingdom, Germany, Canada and Japan) as case study. It is observed that three hundred and twenty four (324) alternative specifications were derived from the nine (9) models explored from total import demand. The general conclusion from this detailed research is that there is no single functional form that is universally appropriate across countries and over time. It is observed that all the countries mentioned accepted logarithmic specification model except Canada. This corroborates an earlier finding by Khan and Ross (1977) for United States of America. Japan and Canada that logarithmic functional form is more appropriate model for aggregate import demand model and its determinants.

The pioneering effort of Olayide (1968) gathers sixteen years data (1948-. 1964) of selected Nigeria's import. Using multiple regression analysis. Its results show that terms of trade, real income (measured by GDP) and index of the trade restriction had fairly good parameter estimates.

Ajayi (1975) collected ten years data (1960 to 1970) of Nigeria's import. The results of the estimation show that real income, relative prices and foreign exchange were the major determinants of aggregate or total imports.

Ozo-Eson (1984) investigated the determinants of imports in Nigeria using a monetarist import demand model. Empirical results of the research show that relative prices and money supply significantly influenced or determined import demand while the coefficient of the real income was not statistically significant. The result obtained implies that there is disequilibrium in the money market which directly affects total imports. Thus, any reduction in money supply will result in reduction in total imports.

Olopoenia (1991) in his findings concluded that real expenditure and real exchange rate are the appropriate determinants of total imports. This is because his findings from an over parameterized import demand model using an error correction specification shows that each of these variables, not only possessed expected sign, but was also statistically significant at 5% level.

Egwaikhide (1999) in his studies suggest that import determinants include level of aggregate income, relative price, foreign exchange reserves/receipts and exchange rates variation. Arize (1987) estimates elasticity the import demand function in Nigeria from 1960 to 1977 using the Cochrane-Orcutt and two-stage least square methods. The income elasticity of import demand was high, as it is to be expected in an oil exporting country. The study also inspects the structural stability of the estimated function according to the Brown -'Durbin-Evans test.

2.3 Summary of literature Reviewed

The analyses on the relationship between export led growth and import led growth is complex. Various empirical studies tried to determine the significant factors determining

economic growth and most of these studies were associated with the determinants or sources of economic growth with different methodologies, data, and cases. Tong (1995) explored the relationship between economic growth and import, and he recognized that import has a positive correlation with economic growth. Studies by Kugler (1991), Henriques and Sadorsky (1996) focused on individual developed countries such Canada, France, Switzerland, U.S.A amongst others. Their studies support the hypothesis that export expansion stimulates economic growth.

The knowledge gap in the literature reviewed is that the authors neglected the comparative and simultaneous analyses of export led growth and import led growth. This research intends to fill this gap.

CHAPTER THREE
RESEARCH METHOD

This chapter explores the method used in analyzing the data. Other than this introductory section, the rest of the chapter includes nature and sources of data which is followed by the method of data analysis. The chapter made an attempt to explain the research approach and methods of achieving the stated objectives. Specifically, the chapter explains the model specification, variables for study and source of the data to be used for the estimation. Taken into cognizance the fact that two main forms of data exist-primary and secondary sources- for the purpose of this research work, the secondary source of data was used.

3.1 Research Design

The data requirements for this research are secondary in nature. They were collected from the Central Bank of Nigeria (CBN) Statistical Bulletin, several issues and the National Bureau of Statistics (NBS). The data will include those on Import, Export, Balance of payment and Trade openness. The series are annual data covering 1981- 2012. The regression analysis, specifically the cointegration technique was used for the study.

3.2 Model Specification

The model for export led growth versus import led growth in Nigeria' s economic growth is based on the augmented Cobb-Douglass production function. The novelty of augmented Cobb-Douglass production function is that it allows in addition to the traditional inputs of production such as capital and labour, the inclusion of non traditional inputs like exports and imports to capture their contribution to economic growth. This model is used by, among others, Feder, (1983) and Fossu, (1990). Following the adoption of the augmented

Cobb-Douglass production function, the general models to be estimated for Nigeria are defined as follows:

CGDP = F(IMP, EXPT, BOP, OPEN)

This could be linearly specified below as:

$PGDP = \alpha_0 + \alpha_1 IMP + \alpha_2 EXPT + \alpha_3 BOP + {}_4OPEN + V_t$

$\alpha 2, \alpha 3\ \alpha 4 > 0, \alpha I \gtrless 0$

Where:

RGDP = real gross domestic product

IMP = Imports

EXPT = Exports

BOP = Balance of Payments

OPEN = Degree of Openness which is a proxy for trade liberalization

OT =Error term

3.3.1 Method of Data Analysis

The method of data analyses used for the study is the cointegration and its implied Error Correction Mechanism (ECM) and the Granger Causality test, the Augmented dickey fuller (ADF) unit root test, short run dynamics (over parameterized and parsimonious error correction model). The work will also explore Granger causality tests. Such an exercise will provide an understanding of the interaction among the variables in the system and will shed light on the direction of the causality.

One of the objectives of the method is to investigate the long-run dynamic relationship among exports, imports, BOP and Gross Domestic Product GDP. To do this we explore the co-integration theory/error correction mechanism. Given data instability in Nigeria occasioned by policy instability, political and economic disruptions amongst others,

it becomes increasingly useful to test the time series property of the variables for meaningful economic results. Studies have shown that OLS regression estimates with non stationary time series data often produce spurious results, even though the overall results may indicate a high degree of fit (as measured by coefficient of multiple correlation, R^2 or adjusted coefficient of R^2 (Gujarati, 2004).

Moreover, many economic variables have a strong tendency to trend over time, such that the levels of these variables can be characterize as non stationary, since they do not have a constant mean over time. Yet many analyses of unadjusted non stationary series have been carried out on the assumption that non stationary series do not matter. Difficulties may arise while performing regression with clearly non stationary series, thus leading to the so called 'spurious' regression (Granger and Newbold, 1974). Given two completely unrelated but integrated series, regression of one on the other will tend to produce an apparently significant relationship when, in fact, they are not related.

The pre-requisite of the ECM estimation is the determination of the characteristics of the time series variables in the model as to whether they are stationary or non-stationary. The use of this is facilitated when variables are first differenced, stationary and co-integrated. So, the reason for the above determination (stationary or otherwise) is to ascertain the order of integration and if not, present a number of times a variable has to be differenced to make it stationary. Since there is possibility for the data used; total imports, Real Gross Domestic Product, balance of payment and trade openness, to drift away on their own irrespective of the correlation result, we subject these variables to a co-integration test and if co-integrated, we proceed to the Error correction Model (ECM). Another justification for adopting the co-integration technique with its implied ECM is that it has certain advantages over the partial adjustment model, i.e. it is central to econometric modelling of integrated variables and data consistency will be achieved.

3.3.2 Estimation Techniques

The conventional approach to time series econometrics is based on the implicit assumption of stationarity of time series data. A recent development in time-series econometrics has cast serious doubts on the conventional time series assumptions. There is substantial evidence in the recent literature to suggest that many macroeconomic time series may possess unit roots. That is, they are non-stationary processes. A time-series integrated of order zero 1(0), is level stationary, while a time series integrated of order one, 1(1), is stationary in first difference. Most commonly, series are found to be integrated of order one, or 1(1). The implication of some systematic movements of integrated variables n the estimation process may yield spurious results. In the case of a small sample study, the risk of spurious regression is extremely high. In the presence of 1(1) or higher order integrated variables, the conventional t- test of the regression coefficients generated by conventional OLS procedure is highly misleading (Granger and Newbold, 1977). Resolving these problems requires transforming an integrated series into a stationary series by successive differencing of the series depending on the order of integration (Box and Jenkins, 1970). However, Sargan (1964), Hendry and Mizon (1978) and Davidson, Hendry, Sbra and Yeo (1978) have argued that the differencing process loses valuable information in data, especially in the specification of dynamic models. if some, or all, of the variables of a model are of the same order o integration, following the Engle—Granger theorem, the series are cointegrated and the appropriate procedure to estimate the model will he an error correction specification. Hendry (1986) supported this view, arguing that error correction formulation minimizes the possibilities of spurious relationships being estimated as it retains level information in a non- integrated form (Hendry, 1986). Davidson, Heudry, Sbra and Yeo. (1978) proposed a general autoregressive distributed lag model with a lagged dependent variable, which is known as the ‘error-correction’ term. Davidson, Hendry, Sbra and Yeo

(1978) also advocated the process of adding lagged dependent and independent variables up to the point where residual whiteness is ensured in a dynamic specification. Therefore, error correction models avoid the spurious regression relationships. To guard against the possibility of estimating spurious relationships in the presence of some non-stationary variables, estimation is performed using a general-to specific Hendry-type error correction modelling (ECM) procedure, This procedure begins with an over-parameterised autoregressive distributed lag (ADL) specification of an appropriate lag. ‘1 he consideration of the available degrees of freedom and type of data determine the decision on lag length. With annual data, one or two lags would be long enough, while with quarterly data a maximum lag of four can be taken. Under ibe ECM, the long run relationship is embedded within the dynamic specification.

The Johansen (1991, 1995) technique has become an essential tool in the estimation of models that involve time series data. This approach is preferred as it captures the underlying time series properties of the data and is a systems equation test that provides estimates of all cointegrating relationships that may exist within a vector of no stationary variables or a mixture of stationary and no stationary variables (Harris, 1995).

The Johansen technique has several advantages over other cointegration based techniques, which will be discussed in the following sections. This technique is preferred in this study as it allows us to estimate a dynamic error correction specification, which provides estimates of both the short and the long run dynamics. There are several steps that have to be followed in implementing the Johansen methodology. Harris (1995) and Seddigh, Lawler and Katos (2000) both outlined the eight steps that are involved in applying this methodology. Because these steps are so detailed and highly interrelated, only some of the most relevant issues in these steps were discussed. The first issue is to determine the stationary (order of integration) of all the variables. The next is performing cointegration tests in order to identify

any long run relationships in the variables, a short run vector error correction model, then estimated on condition of finding cointegration in the previous step. This is followed by an estimate of a parsimonious and overparameterize model and finally, residual diagnostic checks form the last step. Each of the steps are reviewed in the following sections with the aim of considering alternative tests that can be employed in each step and choosing those to be applied in this study. However, before discussing these steps, it is necessary to mention that impulse response or variance decomposition analyses (or both) vi 11 also the employed if our estimated models pass the residual diagnostic tests, These analyses arc therefore discussed in this chapter, as they may be used in the following chapters to provide more information on our model.

Co- integration Analysis

The concept of cointegration according to Komolafe (1966) creates the link between integrated process and the concept of steady state equilibrium. Although economic variables may be individually non- stationary, they may be co-integrated. Non- stationary variables are said to be co-integrated if a linear combination of these variables assumes a lower order of integration rendering the linear combination stationary 1(0). This suggests the existence of a mechanism of theoretical link that prevent some of the variables from diverging significantly from each order, the existence of a co-integrating relationship implies that the regression of a non- stationary series in their level will yield meaningful, and not spurious results. However, as noted above, for integration to exist the non- stationary series must be integrated of the same (higher) order. By testing for and establishing co-integration, we verify that the necessary condition has been established.

Testing for the existence of co-integration involve using the Engle- Granger two step procedures. Firstly, unit root tests are concluded on the individual series as analysed above and if the variable are 1(1), a static model is estimated for the co-integrating regression

(Egwaikhide, Chete and Falokun, 1994:23). The second stage is to evaluate the order of integration on the residuals generated from the static model. In this study, the second approach is applied after testing for stationarity of the individual variables.

CHAPTER FOUR

PRESENTATION, ANALYSIS OF DATA AND DISCUSSION OF FINDINGS

Introduction

This chapter estimates the model that was specified in the previous chapter using the cointegration technique with its implied Error Correction Mechanism (ECM). The policy implications of the result forms part of the chapter.

4.1 Presentation of Data

The data to be used for the study are presented in the table below:

Table 4.1: Summary of Macroeconomic Indicators in Nigeria

Years	BOP (NM)	EXPT (NM)	IMP (NM)	RGDP(NM)	OPEN
1981	157.5000	11023.30	12839.50	205222.1	0.276708
1982	-339.0000	8206.400	10770.50	199685.3	0.413320
1983	-527.2000	7502.500	8903.700	185598.4	0.436189
1984	1293.600	9088.000	7176.300	183563.0	0.046878
1985	1868.900	11720.00	7062.600	201036.3	0.501114
1986	2402.200	8920.600	5983.600	205971.4	0.386737
1987	-3020.800	30360.60	17861.70	204806.5	0.308925
1988	-1398.300	31192.80	21445.70	219875.6	0.272822
1989	-301.3000	.57971.20	30860.20	236729.6	0.121272
1990	354.9000	109886.1	45717.90	267550.0	0.215544
1991	349.1000	121535.4	89488.20	265379.1	1.986049
1992	-784.3000	205611.7	143151.2	271365.5	0.378462
1993	159.2000	218770.1	165629.4	274833.3	0.421407
1994	-22941.00	206059.2	162785.8	275450.0	0.581588
1995	8.727000	950661.4	755127.7	261407.4	0.676090
1996	18498.20	1309543.	562626.6	293745.4	0.654814
1997	5959.600	1241663.	845716.6	302022.5	0.559640
1998	-65271.80	751856.7	837416.7	310890.1	0.409893
1999	13615.90	1188970.	862515.7	312183.5	0.882360
2000	-42623,30	1945723.	985022.4	329178.7	0.692699
2001	-196316.3	1867954.	1358160.	356994.3	0.744968
2002	-53162.00	1744178.	1512695.	433203.5	2.356230
2003	1076.300	3087886.	2080235.	477533.0	0.642291
2004	-220675.1	4602782.	1987045.	527576.0	0.63904
2005	326634.3	7246535.	2800856.	561931.4	0.682767
2006	314139.2	7324681.	3108519.	595821.6	0.471164
2007	24738.70	8309756.	3911953.	634251.1	0.608943
2008	-56383.9	.10161490	5189803.	672202.6	0.420778
2009	-162298.4	8356386.	5102534.	718977.3	0.689488
2010	1124157.	11035794	8005374.	775525.7	5.783403
2011	-20408.70	14240232	10235174	834000.8	4.143003
2012	9387.760	15002868	9109032.	888893.0	0.439010

Source: Central Bank of Nigeria's Statistical Bulletin, 2012 Edition

The import bill of Nigeria exceeds her exports gains in the early parts of the 1980s. For example, in 1981, the total imports outweighed the total exports. Both exports and imports however declined at the beginning of the second quarter of the 1980s with exports exceeding imports in some instances. At the inception of the Structural Adjusted Programme (SAP) in 1986, the total exports outweighed the total imports. In most part of

the 1990s, the total exports were greater than the total imports. Except for 2004, exports also outweighed imports between 2000 and 2012. The level of economic growth was high in most of the study period and the country experienced a favourable Balance of Payments except in few years. The openness of the Nigerian economy to the outside world fluctuated throughout the study period due probably to unsteady trade relations between Nigeria and the rest of the World.

4.2 Analysis of Data

The result used for the study are presented in sections. The first is the descriptive statistics which is shown below:

Table 4.2 : Results of Descriptive Statistics

	RGDP	OPEN	IMP	EXPT	BOP
Mean	236818.7	88028.95	479987.6	844805.9	15155.14
Median	251054.4	9902.250	38289.05	83928.65	83.11350
Maximum	561931.4	724422.5	2800856.	7246535.	1124157.
Minimum	15919.70	1230.900	1737.300	4925.500	-563483.9
Std. Dev.	145213.4	160129.2	740216.5	1576204.	247822.8
Skewness	0.214561	2.425578	1.632339	2.672750	2.579252
Kurtosis	2.769487	9.069276	4.820321	10.33789	14.55109
Jarque-Bera	0.316375	0.793120	0.293489	1.559319	0.383838
Probability	0.853690	0.000000	0.000090	0.000000	0.000000
Sum	7578198.	2816926.	15359602	27033790	484964.3
Sum Sq. Dev.	6.54E+11	7.95E+11	1.70E+13	7.70E+13	1.90E+12
Observations	32	32	32	32	32

The result in table 4.1 shows the descriptive statistic among the variables. The skewness which measures the asymmetry of the distribution of the series around its mean has values greater than 0. This indicates skewness to the right which implies that the distribution has a long right tail. The kurtosis which measures the peakedness or flatness of the distribution with an expected value of 3.0 shows that the Real Gross Domestic Product satisfied that condition. However, those of import, export, Balance of payments and openess are leptokurtic (greater than 3). The Jarque-Bera test was used to test whether the random variables with unknown means and dispersion are normally distributed. It measures the difference between skewness and kurtosis. The Jarque-Bera test has the null hypothesis of normally distributed residuals. The probability value indicates an acceptance of the null hypothesis that the errors are normally distributed.

Unit Root Test

The Augmented Dickey Fuller (ADF) unit root test will be used to test whether the variables are stationary or not and their order of integration. The ADF is preferable to the Dickey Fuller (DF) because it amongst others correct for possible autocorrelation in the variable. The summary of the ADF unit root test is shown below:

Table 4.3: Summary of ADF unit root test result

Variables	Level data	First difference	1% Critical value	5% Critical value	10% CV Critical value	Order of Integration
OPEN	-3.96*	-6.38	-3.67	-2.97	-2.62	I(0)
RGDP	2.13	4.20*	-3.67	-2.97	-2.62	I(1)
IMP	2.21	-3.51**	-3.67	-2.97	-2.62	I(1)
EXPT	2.54	-3.32**	-3.67	-2.97	-2.62	I(1)
BOP	-1.12	-8.25*	-3.67	-2.97	-2.62	I(1)

NB: (1) * Indicates significance at the 1% level, while ** indicates significance at the 5% level.

The result shows that all the variables except Openness were originally non-stationary. They however became stationary after the first difference was taken. Following Harris (1995),

both I(1) and I(0) variables can be carried forward to test for cointegration which forms the basis of the next stage.

Cointegration Test

The Johansen Cointegration test was used to test for the existence of long run relationship among the variables. The Johansen cointegration methodology has amongst others the advantage of allowing for more than one cointegrating vector. The result of the Johansen cointegration test is shown below:

Table 4.4: Summary of Johansen Cointegration Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.745896	82.12151	68.52	76.0-7
At most 1	0.551380	42.39118	47.21	54.46
At most 2	0.285356	19.14536	29.68	35.65
At most 3	0.259897	9.402209	15.41	20.04
At most 4	0.022980	0.674182	3.76	6.65
Hypothesized No. of CE(s)	**Eigenvalue**	**Max-Eigen Statistic**	**5 Percent Critical Value**	**1 Percent Critical Value**
None **	0.745896	39.73033	33.46	38.77
At most 1	0.551380	23.24582	27.07	32.24
At most 2	0.285356	9.743151	20.97	25.52
At most 3	0.259897	8.728027	14.07	18.63
At most 4	0.022980	0.674182	3.97	6.65

The result of both the trace statistic and the Max-Eigen statistic indicate one cointegrating equation each. This suggests the existence of a long run relationship among the variables.

Vector Error Correction (VEC)

The result of the Vector Error Correction in this case was used to identify the true cointegrating equation. The summary of the relevant section of the VEC is shown below:

Table 4.5: VEC Result

CointegratingEq:	CointEq1	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value	
LRGDP(-1)	1.000000	82.12151	68.52	76.0-7	
		42.39118	47.21	54.46	
LIMP(-1)	2.609696	19.14536	29.68	35.65	
	(0.35366)	9.402209	15.41	20.04	
	[7.37906]	0.674182	3.76	6.65	
LEXPT(-1)	-2.750770				
	(0.34441)				
	[-7.98698]				
LBOP(-1)	0.148543				
	(0.02458)				
	[6.04379]				
OPEN(-1)	-0.217805				
	(0.12034)				
	[-1.80985]				
C	-1 0.23706				
Error Correction:	**D(LRGDP)**	**D(LIMP)**	**D(LEXPT)**	**D(LBQP)**	**D(OPEN)**
cointEq1	-0.036420	-0.528985	-0.045999	-3.847693	-0.603775
	(0.03399)	(0.29233)	(0.35253)	(4.51217)	(0.86153)
	[-1.07147]	[-1.80957]	[-0.13048]	[-0.85274]	[-1.86155]

The VEC indicates that the openness equation represents the true cointegrating equation. The rest are statistically flawed.

Overparameterize and Parsimonious ECM Result

The overparameterize ECM result involves two lags each of the independent variables. The Scharz Criterion (SC) and the Akaike Information Criterion (AIC) will be used to select the appropriate lag length. The result of the overparameterize ECM result is shown in the table below:

Table 4.6: Summary of Overparameterize ECM Result
Dependent Variable: DLR GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLIMP	0.483666	0.105695	4.577960	0.0001
DLIMP(-1)	-0.035352	0.043687	-0.809222	0.4310
DLIMP(-2)	0.908106	0.089434	10.15393	0.0000
DLEXPT	0.048695	0.050354	0.967053	03489
DLEXPT(-1)	0.416753	0.138104	3.017669	0.0047
DLEXPT(-2)	0.044857	0.043528	1.030526	0.3191
DLBOP	-0.002212	0.002272	-0.973600	0.3457
DLBOP(-1)	0.915973	0.058119	15.76026	0.0000
DLBOP(-2)	-0.002624	0.002599	-1 .009527	0.3287
OPEN	0.407183	0.059263	6.870795	0.0000
OPEN(-1)	0.004129	0.012419	0.332430	0.7442
OPEN(-2)	0.005150	0.012557	0.410152	0.6875
ECM(-1)	-0.401634	0.200313	-2.005027	0.0634
C	0.035473	0.020241	1.752510	0.1001

R^2 = 0.88, Fstatistic = 24.06, DW = 2.12, AIC = 2.94, SC = 2.28

The parsimonious model was gotten by deleting insignificant variables from the overparameterize ECM model and re-estimating the model.

Table 4.7: Summary of Parsimonious ECM Result
Dependent Variable: DLR GDP

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLIMP	0.576772	0.212428	2.715139	0.01 12
DLIMP(-2)	0.241508	0.065204	3.703880	0.0019
DLEXPT(-1)	0.187952	0.048026	3.913570	0.0007
DLBOP(-1)	0.173256	0.056385	3.072751	0.0044
OPEN	0.222398	0.046341	4.799160	0.0001
ECM(-1)	-0.361535	0.175061	-2.065189	0.0509
C	0.050644	0.014435	3.508371	0.0020

R^2 = 0.76, R^2 = 0.65, Fstatistic = 31.61, AIC = -3.24, SC = -2.91, DW = 2.11

The result of the parsimonious (preferred) ECM result indicates that import at both the current and two periods lag were statistically significant. The elasticity of import is relatively high. The result shows that export is statistically significant in explaining the changes in the level of economic growth. The result indicates that the Balance of Payments is statistically significant in explaining the changes on the level of economic growth. The result shows that the openness of the Nigerian economy to the outside world is statistically significant in explaining the changes in the level of economic growth. Overall, the

Parsimonious ECM result shows that in Nigeria, the growth seems to be more of import-led, than export-led judging by the high elasticity of imports which is almost unity and the low elasticity of exports in the current period. This is not too good for Nigeria.

The ECM indicates a satisfactory speed of adjustment. It shows that about 36 percent of the errors is corrected each period.

Diagnostic Checks

The result of the diagnostic checks are shown below:

Table 4.8: Diagnostic Checks Result

Jarque-Bera			
Jarque-bera	1.91	Probability	0.38

Breusch-Godfrey Serial Correlation LM Test			
Fstatistic	0.15	Probability	0.86

White Heteroskedasticity Test			
Fstatistic	1.98	Probability	0.10

The Jarque-bera normality test indicates the validation of the null hypothesis that the residuals are normally distributed. The Breusch-Godfrey Serial Correlation Langrange Multiplier (LM) test indicates that the residuals are not serially correlated. The result of the White heteroskedasticity test indicates that the residuals are homoscedastic. That is, they have a constant variance.

Stability Test

The result of the Cumulative Sum of Recursive Residuals (CUSUM) and Cumulative Sum of Squares of Recursive Residuals (CUSUMQ) are shown below:

Fig 4.1: CUSUM Stability Test

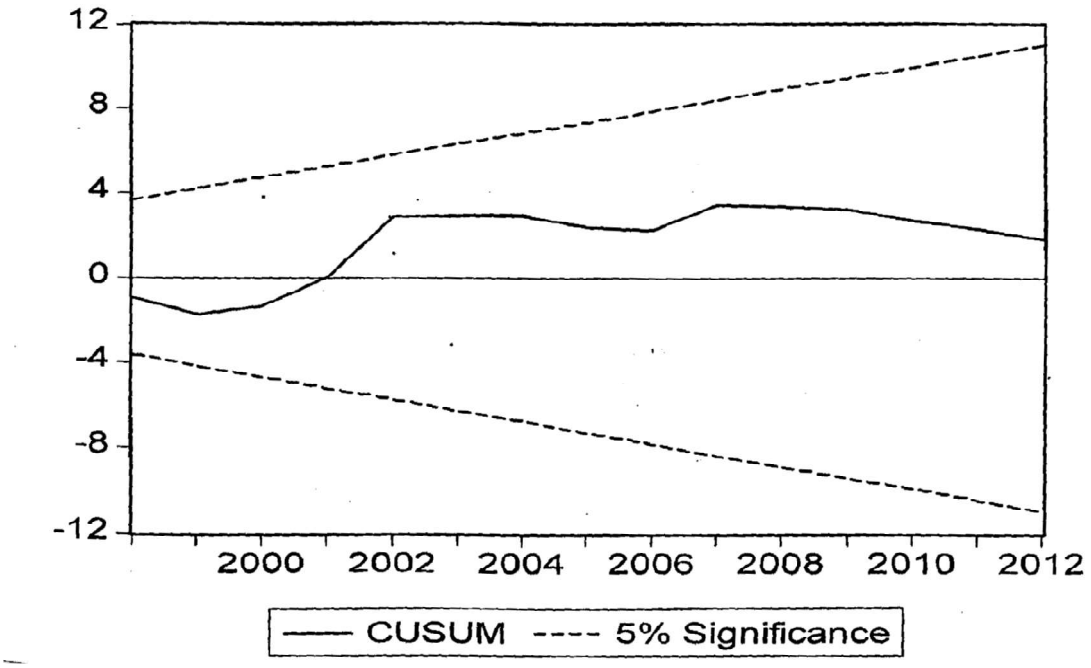
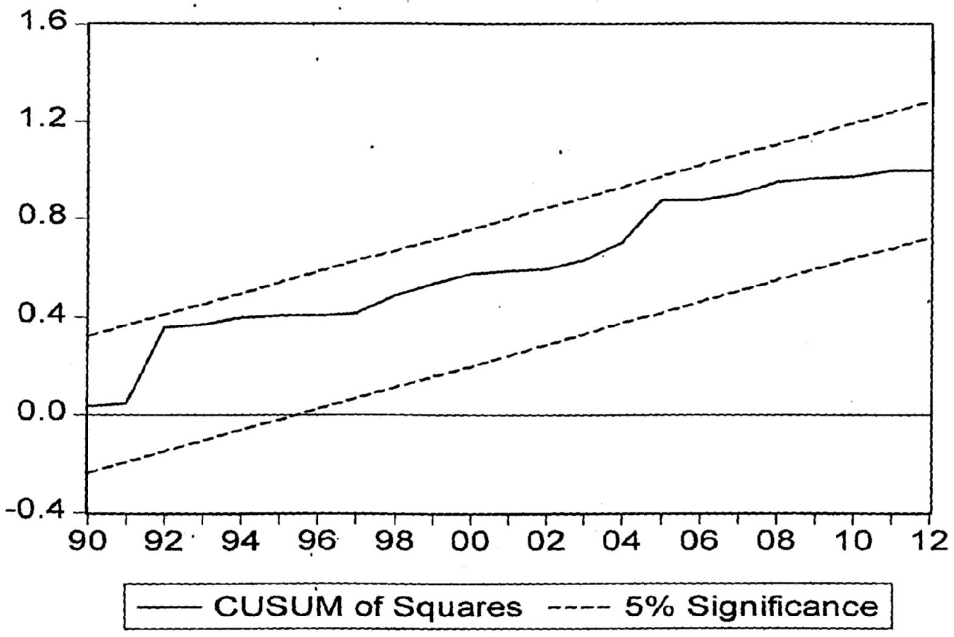


Fig. 4.2: CUSUMQ Stability Test



The result of both the CUSUM and CUSUMQ stability tests indicate residual stability since both the CUSUM and CUSUMQ lines fell in-between the two 5 percent lines.

Variance Decomposition

The result of the Cholesky Variance decomposition is shown below:

Table 4.9: Cholesky Variance Decomposition

Variance Decomposition of LRGDP

PERIOD	S.E.	LRGDP	LIMP	LEXPT	LBOP	OPEN
1	0.045791	100.0000	0.000000	0.000000	0.000000	0.000000
2	0.080636	97.97900	0.136663	0.010336	1.393479	0.480517
3	0.112757	93.16139	0.137144	0.641128	3.667454	2.392882
4	0.139409	92.48913	0.198815	0.871760	4.254071	2.186221
5	0.165439	92.06326	0.143338	1.151922	4.843216	1.798258
6	0.186581	92.44036	0.128240	1.253896	4.346741	1.830763
7	0.207169	92.44578	0.149078	1.279076	4.242904	1.883167
8	0.225379	92.20462	0.143596	1.376434	4.425005	1.850343
9	0.241641	92.18433	0.133003	1.467061	4.398518	1.817084
10	0.256779	92.31037	0.151024	1.486969	4.256631	1.795004

Variance Decomposition of LIMP

PERIOD	S.E.	LRGDP	LIMP	LEXPT	LBOP	OPEN
1	0.393805	6.867929	93.13207	0.000000	0.000000	0.000000
2	0.516163	11.05144	81.29932	0.358422	2.750687	4.540129
3	0.647594	9.837618	82.89271	0.426394	3.516932	3.326350
4	0.795534	6.739751	83.00399	0.296399	7.718814	2.241045
5	0.897468	5.996981	84.94223	0.236636	6.504220	2.319932
6	0.976986	5.064129	65.41753	0.205549	6.920849	2.391945
7	1.068271	4.236844	84.89014	0.175760	8.382412	2.314846
8	1.156549	3.633300	85.37834	0.153826	8.507446	2.327088
9	1.224812	3.239591	85.84767	0.137878	8.500311	2.274552
10	1.289938	2.930606	85.77681	0.131166	8.906180	2.255240

Variance Decomposition of LEXPT

PERIOD	S.E.	LRGDP	LIMP	LEXPT	LBOP	OPEN
1	0.474908	0.244144	73.47050	26.28536	0.000000	0.000000
2	0.614665	1.845334	71.73415	25.72604	0.024614	0.669870
3	0.702019	1.536944	75.41193	22.31586	0.037100	0.698169
4	0.780064	1.308410	77.01970	20.50794	0.597656	0.566288
5	0.871468	1.063037	76.82406	20.66279	0.479835	0.970280
6	0.958935	0.999520	77.18968	20.01090	0.965244	0.834649
7	1.030793	0.901563	78.36796	18.66346	1.343833	0.723180
8	1.092048	0.846195	79.01369	18.23211	1.204512	0.703489
9	1.150626	0.899739	78.82211	18.37985	1.192065	0.706232
10	1.212769	0.892388	79.09755	17.86279	1.476678	0.670596

Variance Decomposition of LBOP

PERIOD	S.E.	LRGDP	LIMP	LEXPT	LBOP	OPEN
1	6.078545	1.994524	6.074987	40.89260	51.03789	0.000000
2	6.973016	5.246551	6.150076	48.35187	40.07743	0.174076
3	7.392078	5.468187	5.502603	48.67181	40.17915	0.178249
4	8.020388	4.649415	5.518000	48.44000	41.19378	0.198807
5	8.676663	4.041996	5.726156	50.97624	39.00418	0.251431

6	9.075402	3.720379	5.302129	52.85079	37.89153	0.235171
7	9.618742	3.343172	4.851859	53.14659	38.43967	0.218701
8	10.05121	3.140054	5.041882	53.94231	37.66352	0.212241
9	10.45239	2.908993	4.856970	54.75271	37.28506	0.196267
10	10.88114	2.687230	4.629882	55.37008	37.12333	0.189484

Variance Decomposition of OPEN

PERIOD	S.E.	LRGDP	LIMP	LEXPT	LBOP	OPEN
1	1.160601	1.083805	1.089761	10.72832	29.85881	57.23931
2	1.366185	1.275600	2.791692	10.95841	21.86792	63.10637
3	1.595697	1.627477	2.330254	16.18562	27.10536	52.75129
4	1.757826	1.902882	5.034616	1619346	25.04528	51.82376
5	1.881684	2.361659	5,250288	15.58402	24.01728	52.78675
6	2.001146	2.787592	4.894668	17.33400	21.44272	53.54102
7	2.124453	2.484013	4.891476	18.34882	19.03210	55.24360
8	2.206413	2.323541	4.553242	18.54256	17.98869	56.59196
9	2.284428	2.478736	4.295293	19.51927	16.79889	56.90782
10	2.377776	2.368945	3.970104	20.16203	15.61024	57.88868

The result of the variance decomposition indicates that shocks to import explained about 0.14 percent of changes in economic growth in the second period which increased to 0.15 percent in the last period. The result indicates that shocks to exports explained about 0.64 percent of the changes in economic growth in the third period which increased to 1.49 percent in the last period. Shocks to exports explained about 0.36 percent of shocks to import in the second period which decreased to 0.14 percent in the ninth period. The shocks to import explained about 73.47 percent of changes in exports in the first period which increased to 79 percent in the last period. An indication that exports in Nigeria has a high import content.

Pairwise Granger Causality Test

The result of the pairwise granger causality test is shown in the table below:

Table 4.10: Pairwise Granger Causality test
Lags: 2

Null Hypothesis:	LRGDP	LIMP	LEXPT
LIMP does not Granger Cause LRGDP	30	5.93575	0.01560
LRGDP does not Granger Cause LIMP		4.41091	0.02744
LEXPT does not Granger Cause LRGDP	30	1.15316	0.33186
LRGDP does not Granger Cause LEXPT		0.13728	0.87238
LEXPT does not Granger Cause LIMP	30	3.85264	0.04658
LIMP does not Granger Cause LEXPT		4.03946	0.03137

Table 4.11: Pairwise Granger Causality test
Lags: 4

Null Hypothesis:	LRGDP	LIMP	LEXPT
LIMP does not Granger Cause LRGDP	28	4.38463	0.01689
LRGDP does not Granger Cause LIMP		6.67135	0.00989
LEXPT does not Granger Cause LRGDP	28	0.33574	0.85046
LRGDP does not Granger Cause LEXPT		0.85284	0.50954
LEXPT does not Granger Cause LIMP	28	3.56160	0.05333
LIMP does not Granger Cause LEXPT		6.50965	0.01932

At lag 2 and lag 4, the granger causality test indicates a bi-causal relationship between import and economic growth. At both lag 2 and lag 4, the result of the granger causality test indicates the validation of the null hypothesis that exports and economic growth does not granger cause each other. The result at both lag 2 and lag 4 indicates a bi-causal relationship in both imports and exports. On the aggregate, the result indicates that the growth in Nigeria is more of import-led than export-led. The result also indicates that Nigeria's exports have high import content.

4.3 Discussion of Findings

The result has important implications on whether the growth process in Nigeria is export led or import led. The result indicates that the growth process has been highly import driven. This is because imports have higher elasticity than exports. Also causality runs from imports to economic growth and did not run from exports to economic growth. This paints a grim picture of a country with the highest population and recently claimed to be the largest

economy in Africa. The result indicates further that the exports from Nigeria involve huge imports of raw materials for export related production. This has even increased the price of Nigeria's export and Nigerian products seem unattractive at the international market. Even the recent devaluation of the Nigerian currency due to a fall in the international price of crude oil seems not to be producing the desired result. This is not proper for the Nigerian economy since crude oil is the major export of Nigeria and given that Nigeria even import refined petroleum products.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

The research has been on export-led growth versus import-led growth in Nigeria. The research covered the period between 1981 and 2012. This period is significant because it included both the Pre-SAP and SAP era. The research which is made up of five chapters began with an introductory chapter. The second chapter is on the review of related literature, while the third chapter explores the research methodology. The fourth chapter analysed the result, while the fifth chapter concludes the research. The cointegration technique with its implied ECM were used for the study. The following are the findings:

(1) The cointegration result shows a long run relationship among the variables.

(2) The Parsimonious ECM result indicates that export has a significant and positive impact on the level of economic growth.

(3) An increase in exports by 100 percent increased economic growth by 19 percent.

(4) The result shows that import has a positive and significant impact on the level of economic growth.

(5) An increase in import by 100 percent increased the level of economic growth by 58 percent in the current period and 24 percent in the two periods lag.

(6) The result of the granger causality test indicates a bi-causal relationship between imports and economic growth. Exports and economic growth did not granger cause each other. Exports and imports granger cause each other.

(7) The ECM result indicates a satisfactory speed of adjustment. It indicates that about 36 percent of the errors are corrected each period.

(8) The Jarque-bera test indicates residual normality, while the Breusch-Godfrey Serial Correlation LM test indicates the absence of serial correlation in the model. The

White heteroskedasticity test indicates that the residual is homoscedastic while the result of the stability test indicates residual stability.

5.2 Conclusion

The developed and emerging economies of the world have made significant efforts in increasing their total exports while reducing their imports bill. The discovery of crude oil in Nigeria has hindered the growth of the non-oil sector in Nigeria. This has reduced total exports of Nigeria and increased the level of imports. This has led to valuable loss of foreign exchange in financing great import bills. This is worsened since crude oil exports is the major foreign exchange earner of the country. The result indicates that import which is statistically significant has a higher elasticity than exports. This provides a signal that what obtains in Nigeria is more of import-led growth. The low elasticity of exports which is also significant confirms that the growth in Nigeria is more of import-led. The results also indicate that it is the changes in imports that cause changes in the level of economic growth. Exports did not granger cause economic growth. A confirmation that the growth process in Nigeria is more of import-led than of export led. The result also showed that exports in Nigeria have a high import contents which has hindered the export capacity of Nigeria. The result also suggests a long run relationship among the variables.

5.3 Policy Recommendations

The following recommendations for policy purpose were made from our results:

(1) The government should make concerted efforts to increase the level of exports in Nigeria. This could be through an expansion of non-oil exports which will go a long way in improving the level of economic growth in Nigeria and make the country less import dependent..

(2) Government programmes such as the Subsidy Reinvestment and Empowerment programme (SURE-P) should be directed more towards projects that will make the country less reliant on imports. This could be done through channelling the fund from SURE-P to the establishment of more small and Medium Scale Enterprises (SMEs) in Nigeria.

(3) The government should further open up the Nigerian economy to the outside world through further liberalization of trade. If backed by increase production, opening of the economy could be more beneficial to the development process in Nigeria.

5.4 Recommendations for Further Studies

This research was affected by the difficulties associated with the collection of time series data. Time was another constraint faced by the researcher since the researcher has to combine the research with a tight work schedule. A proper study of import versus export led-growth would have been better assessed if extended to other African cou. It is thus recommended that further studies be carried out to assess export-led growth, versus import-led growth in Sub-Saharan Africa.

5.5 Contributions to Knowledge

This study has added to knowledge in the following ways:

(1) The study revealed that contrary to the generally held view that exports have contributed more to the economy, over the period of study, import contributed more significantly to the growth of the economy.

(2) The result of the granger causality test conducted revealed that imports are highly linked to the growth of the Nigerian economy.

REFERENCES

Aghevli, B.B. and C. Sassanpour (1982): "Price, output and the balance of trade in Iran" *World Development* .

Ajayi S.L (1975): "Econometric analysis of Import demand function for Nigeria". *The Nigeria Journal of Economic and Social Studies, 17(3).*

Al-Yousif, Y.K. (1997), "Exports and economic Growth: Some empirical evidence from Arab Gulf States", Applied Economics, 29(6).

Aminu, J. (1997). "Nigeria and the World of Oil". In V. Eromosele, V.E. (Ed.), *Nigerian Petroleum Business: A Handbook.* Lagos: Advanced Communications.

Amsden, A. (1989), *Asia's Next Giant: South Korea and Late Industrialization,* Oxford: Oxford University Press.

Anwar, M. S. and Sampath, R. (2000), "Exports and economic growth", *Indian Economic Journal*, 47, 3.

Balassa, B. (1978), "Exports and economic growth: further evidence", *Journal of Development Economics*, 5, 2.

Balassa, B. (1985), "Exports, policy choices, and economic growth in developing countries after the 1973 oil shock", *Journal of Development Economics*, 4, 1,

Begun, S. and Shamsuddin, A. F. M. (1998), "Exports and economic growth in Bangladesh", *Journal of Development Studies*, 35 (1).

Bhagwati, J. (1978), Anatomy and Consequences of Exchange Controls Regime: Liberalization Attempts and Consequences. Cambridge, M. A: Ballinger.

Bhagwati, J. (1958). "Immizeriing Growth: A Geometrical Note." *Review of Economic Studies*, 58.

Blecker, R.A. (2000), "The Diminishing Returns to Export-Led Growth," paper prepared for the Council of Foreign Relations Working Group on Development, New York.

Blecker, R.A. and A. Razmi. (2010). "Export-led Growth, Real Exchange Rates and the Fallacy of Composition," in: Setterfield, M. (ed.), *Handbook of Alternative Theories of Economic Growth*, Cheltenham, UK: Edward Elgar.

Boltho, A. (1996), "Was Japanese growth export-led?", Oxford Economic Papers, 48 (3).

Box, G,E.P. and G. M. Jenkins, (1970). Time series analysis, /Forecasting and control, San Francisco: Holden-Day.

Brewer, A. (1985). "Trade with Fixed Real Wages and Mobile Capital." *Journal of International Economics*, 18.

Brooks, C., (2002). *Introductory econometrics for finance.* Cambridge:

Bruton, H. J. (1989), "Import substitution as a development strategy", in Handbook of Development Economics, 11, edited by H. B. Chenery and T. N. Srinivasan. Amsterdam: North Holland.

Burgess, D.F. (1974): "A cost minimization approach to import demand equations", *Review of Economics and Statistics*, 56.

Chang, H.-J. (2002). Kicking *Away the Ladder: Development Strategy in Historical Perspective*, London, U.K.: Anthem Press.

Chow, P. C. Y. (1987), "Causality between export growth and industrial development: Empirical evidence from NICs", Journal of Development Economics, 26, 1, 55- 63.

Darrat, A. (1987), "Are Exports an Engine of Growth? Another Look at the Evidence," *Applied Economics*, 19.

Davidson, J., Hendry, D., Sbra, F. and Yeo, S. (1978). "Econometric modelling of the aggregate time series relationship between consumers" Expenditure and Income in the United Kingdom', *Economic Journal,* 88(352).

Doornik, J. A., (1995). Testing general restrictions on the cointegrating space. Unpublished paper. Oxford: Nuffield College.

Dornbusch, R., S. Fischer, and P.A. Samuelson. 1980. "Heckscher–Ohlin Trade Theory with a Continuum of Goods," *Quarterly Journal of Economics*, 95 (September).

Edwards, S. (1992), "Trade orientation, distortions and growth in developing countries", *Journal of Development Economics*, 19(2).

Egwaikhide F.G. (1997): "Import substation industrialization in Nigeria: A selective review", *The Nigerian Journal of Economic and Social Studies, 39.*

Egwaikhide, F.G. (1999): "Determinants of Imports in Nigeria: A dynamic Specification" *African Economic Research Consortium, (AERC)*, 91.

Emery, R. F. (1967), "The relation of exports and economic growth", Kyklos, 20(2)

Emery, R. F. (1968), "The relation of exports and economic growth: A Reply", Kyklos,21(4).

Engle, R. F .and Granger, C.W. (1987): "Cointegration and Error Correction: Representation, Estimation and Testing" *Econometrica* 55(2)

Feder, G. (1983), "On exports and economic growth", Journal of Development Economics, 12(2).

Forrest, T. (1982): "Recent development in Nigerian industrialization". In M. Fransman, ed., Industry and Accumulation in Africa. London: Heinemann.

Fosu, A. K. (1990), "Exports and economic growth: The African case", World Development, 18(6).

Frankel, J. A. and Romer, D. (1999), "Does trade cause growth, American Economic Review, 89(3).

Fuller, W.A. (1976): *Introduction to Statistical Time Series*. New York:

Ghartey, E. E. (1993), "Causal Relationship between Export and Economic Growth: Some Empirical evidence in Taiwan, Japan and the US", Applied Economics, 25,.

Ghatak, S. and Wheatley, P. S. (1997) "Export Composition and Economic: Co- integration and Causality evidence from India", Weltwirtschaftliches Achiv: Review of World Economics, 133(3).

Granger, C.W. and Newbold, P. (1977). "The time series approach to econometric model building", In Obadan, MI. and lyoha, M.A. eds. (1996) .Macroeconomics

Analysis: TooIs, Techniques and Applications. NCEMA. Ibadan: Polygraphics Venture Ltd.

Granger, C.W.J. and Newbold, P. (1974), "Spurious regression in econometrics", *Journal of Econometrics*, 2 (1).

Grossman, G.M. and E. Helpman. (1991). "Trade, Knowledge Spillovers and Growth," *European Economic Review*, 35 (May).

Grupta, S. (1985), "Export Growth and Economic Growth Revisited", The *Indian Economic Journal,* 32.

Gujarati, D. N. (2004), *Basic Econometric*. Tata McGraw-Hill publishing Company, India.

Gujarati, D. N., (1995). *Basic Econometrics (3e). New York*: McGraw-Hill Inc. Gujarati,

Harris, R., (1995). Using cointegration analysis in econometrics, London: Prentice Hall.

Heller, P. S. and Porter, R. C. (1978), "Exports and economic growth: An empirical re-investigation", *Journal of Development Economics,* 5 (2)

Hendry, D.F. (1986). "Econometric Modelling with Cointegrated Variables: An overview", *Oxford Bulletin of Economic and Statistics*, 48(3)

Hendry, D.F. and Mizon, G., (1978). 'Serial Correlation as a Convenient Simplification, not a Nuisance: A comment on a study of the demand for money of the Bank of England", *Economic Journal,* 88(351).

Henriques, I. and Sadorsky, P. (1996), Exports-led growth or growth-driven exports? The Canadian case", *Canadian Journal of Economics,* 29,(3).

Islam, A. M. and Ahrned, S.M. (1999). "The purchasing power parity relationship: causality and cointegration tests using Korea-U.S. exchange rate and prices". *Journal of Economic Development.* 24 (2).

Islam, M. N. (1998), "Exports expansion and economic growth: Testing for co- integration and causality", *Applied Economics*, 30 (3).

Jhingan, M. L. (2002): "International economics", 5th revised edition. Delhi: Vrinda publication Ltd..

Jhingan, M. L. (2004): *"Monetary Economics", 5th revised edition.* Delhi: Vrinda publication Ltd ..

Johansen, S. (1988): "Statistical Analysis of Co integration Vectors", *Journal of Economic Dynamics and Control* 12.

Johansen, S. and Juselius, K. (1990), "Maximum Likelihood Estimation and Inference on Co-integration with application to the demand for money", *Oxford Bulletin of Economics and Statistics*, 52 (2).

Johansen, S. and Juselius, K. (1990). "The full information maximum likelihood procedure for inference on cointegration-with applications to £he demand for money". *Oxford Bulletin of Economics and Statistics*. 52.

Johansen, S., (1991. "Estimation and hypothesis testing of cointegration vectors in Gaussian vector autoregressive models". *Econometrica*. 59.

Johansen, S.(1995). *Likelihood-Based Inference Ii Cointegrated Vector Autoregressive Models*. Oxford: Oxford University Press.

Johansen, S., and Juselius, K. (1990): "Maximum Likelihood Estimation and Inference on Cointegration with Applications to the Demand for Money," *Oxford Bulletin of Economics and Statistics*, 52.

Johansen, S., and Juselius, K., (1992). "Testing structural hypothesis in a multivariate cointegration analysis of the PPP and the UI? fee UK', *Journal of Econometrics, 53.*

John Black (2003): Oxford Dictionary of Economics, second edition, Reissued with Correction and a new cover.

Johnson, H. (1954). "Increasing Productivity, Income-price Trends and Trade Balance, *Economic Journal*, 64.

Kavoussi, R. M. (1984), "Exports expansion and economic growth: Further empirical evidence", *Journal of Development Economics,* 7(3)..

Kelejian, I—I. H., (1982). An extension of a standard test for heteroskedasticity to a systems framework. *Journal of Econometrics.* 20.

Khan, A. H. and Saqib, N. (1993), "Exports and economic growth: The Pakistan experience", *International Economic Journal,* 7(3).

Khan, M. and K. Ross. (1977): "The functional form of the aggregate import equation". *Journal of International Economics, 7.*

Kravis, I. B. (1970), "Trade as a handmaiden of growth: Similarities between the ninetieth and twentieth centuries", *Economic Journal,* 80.

Krueger, A. O. (1978), Foreign Trade Regimes and Economic Development: Liberalization Attempt and Consequences. Cambridge, M. A.: Ballinger.

Krueger, A.O. 1974. "The Political Economy of Rent-seeking Society," *American Economic Review*, 64.

Krugman, P. (1994), "The myth of Asia's miracle", *Foreign Affairs*, 73(6).

Krugman, P. (1984). "Import Protection as Export Promotion: International Competition in the Presence of Oligopoly and Economies of Scale,"

Kugler, P. (1991), "Growth, exports and co-integration: An empirical investigation", Weltwirtschaffliches Archive,.

Kwan, A., Cotsomitis, J. and Kwok, B. (1996), "Exports, Economic Growth and Exogeneity: Taiwan 1953-88", *Applied Economics*, 28(3).

Leamer, E.E. and R.M. Stern (1970): *Quantitative International Economics*. Boston: Allyn and Bacon, Inc.

Luintel, K. B. and KLan, M., (1999). "A quantitative reassessment of the finance- growth nexus evidence from a multivariate VAR'. *Journal of Development Economics.* 60.

Lussier, M. (1993), "Impact of exports on economic performance: A comparative study", *Journal of African Economics,* 2(1).

Lutkepohl, H. and Reimcrs, H. (1992,. "Granger-Causality in cc-integrated VAR processes: The case of the tern stri. oftre". Econooeic Left", 40.

Lutkepohl, H., (1991). *Introduction To Time Series Analysis*. New York: Springer—Verlag.

Mackinnon, J. C., (1991). Critical analysis of cointegration tests. . R. F. and

Mackinnon, J. G., (1996). "Numerical distribution functions for unit root and cointegration tests". *Journal of Applied Econometrics.* 11.

Manova, K., and Z. Zhang (2008). "China's Exporters and Importers: Firms, Products, and Trade Partners," unpublished manuscript, Department of Economics, Stanford University, CA, June.

Mark, N. (1990). "Real and nominal exchange rate in the long—run: An empirical investigation". *Journal of international Economies,* 28.

Mellander, E., Vredin, A. and Warne, A., (1992). Stochastic trends and economic fluctuations in a small open economy. *Journal of Applied Econometrics*. 7.

Milberg, W. (2002). "Say's Law in the Open Economy: Keynes' Rejection of the Theory of Comparative Advantage," in *Beyond Keynes*, S. Dow and J. Hillard (eds.), Aldershot, U.K.: Edward Elgar.

Moschos, D. (1989), "exports expansion, growth and the level of economic development: An empirical analysis", *Journal of Development Economics,* 30 (1*).*

Muscatelli, V.A. (1994), Stevenson, A.A., and Montagna, C., Intra-NIE Competition in Exports of Manufactures," *Journal of International Economics,* 37.

Mwega, F.M. (1993): Import Demand Elasticity and Stability During Trade Liberalization: A case Study of Kenya. *Journal of African Economies, 2.*

Nyong, M. O. (2005), *International Economics: Theory, Policy and Applications.* Wusen Press Limited-Calabar-Nigeria.

Obadan. M.I. (2012) *Foreign Exchange Market And The Balance Of Payments: Elements, Policies And Nigerian Experience*. Benin City: Goldman Press Limited

Ohlin, B. (1933). *Interregional and International Trade*, Cambridge, Mass.: Harvard University Press.

Olayide, O. (1968): "Import Demand Model: An Econometric Analysis of Nigeria" *The Nigeria Journal of Economic and social studies Vol. 10, NO.3, pp. 303- 319.*

Olopoenia, R.A. (1991): "Fiscal response to oil wealth and balance of payments performance in Nigeria, 1970-89". Draft Final Report Presented at the Economic Research Workshop African Economic Research Consortium. Nairobi.

Osterwald-Lenun, M., (1992). "A note with Quantiles of the asymptotic distribution of the ML cointegration rank test statistics". *Oxford Bulletin of Economics and Statistics*. 54.

Oyejide, T.A. (1975): *Tariff Policy and Industrialization in Nigeria.* Ibadan: University Press.

Ozo-Eson, PJ. (1984): "Determinants of Imports Demand in Nigeria: A Monetary Approach" *The Nigerian Journal of Economic and social studies,* 26(1).

Palley, T.I. (1990), "Applied Fix-Price Macro Models: A Reconsideration," *Atlantic Economic Journal,* XVIII,.

Palley, T.I. (2002). "Domestic Demand-Led Growth: A New Paradigm for Development," in Jacobs, Weaver and Baker (eds.), *New Rules for Global Finance*,
Washington, DC. Also published as "A New Development Paradigm: Domestic Demand-Led Growth," *Foreign Policy in Focus*, September. online: http://www.fpif.org/

Patterson, K (1990) *An Introduction to Applied Econometrics: a time series approach*. Palgrave publishers, United Kingdom.

Prasch, R.E. (1996). "Reassessing the Theory of Comparative Advantage," *Review of Political Economy*, 8 (1).

Prebisch, R. (1950), *The Economic Development of Latin America and its Principle Problem*, Santiago: UNECLA.

Ram, R. (1985), Exports and economic growth: Some additional evidence", *Economic Development and Cultural Change*, 33(2).

Ram, R. (1987), Exports and economic growth in developing countries: Evidence from Time-Series and cross sectional data", *Economic Development and Cultural Change,* 36(1).

Rana, P. B. (1985), "Export and Economic Growth in the Asian Region", *ADB Economic Staff Paper*, 25.

Sachs, J. (1997), "Power Unto Itself," Financial Times, December 11.

Sachs, J., and Warner, A. (1995), "Economic Reform and the Process of Global Integration," *Brookings Papers on Economic Activity* .

Samuelson, P.A. (1948). "International Trade and Equalisation of Factor Prices," *Economic Journal*, 58.

Sargan, J.D., (1964). 'Wages and Prices in the UK: A Stud in Econometric Methodology', in P. Hart, G. Mills and J. Whittaker (eds,), *Econometric Analysis for National Planning*, London: Butterworth.

Seddighi, H.R., Lawler, K.A. and Katos. A.V.. (2000). *Econometrics*: a *Practical Approach*. London: Rutledge.

Serleti, A. (1992), "Export growth and Canadian Economic Development", J*ournal of Development Economics*, 38..

Serven, A. K. (1968), "The relation of exports and economic growth: Comment", Kyklos, 21(3).

Shan, J. and Sun, F. (1998), "On the Exports-Led Growth Hypothesis: Econometric Evidence for China", *Applied Economics*, 30(8).

Singh, A., (1999) "Asian Capitalism and the Financial Crisis," in J. Michie and J. Grieve-Smith, eds., Global Instability: The Political Economy of World Economic Governance, London: Rutledge.

Stock, J. H. (1987), "Asymptotic Properties of Least Squares Estimators of Co- integration Vectors", *Econometrica*, 55.

Syron, R. F. and Walsh, B.M. (1968), "The relation of exports and growth: A note", Kyklos, 21 (3).

Tang, N. & M. Nair (2002): Cointegration Analysis of Malaysian Import Demand Function: Reassessment from the Bounds Test. *Applied Economic Letters,* 9, (5).

Thomas, R. L., (1997). *Modern econometrics: an introduction.* London: Addison—Wesley.

Thursby, J. and M. Thursby (1984): "How reliable are simple, single equation specifications of import demand". *Review of Economics and Statistics*, 66

Todaro, P. and Smith, S. C. (2003), *Economic Development*, Eight Edition, Addison, Wesley, Singapore.

Tyler, W. G. (1981), "Growth and exports expansion in developing countries: Some empirical evidence", *Journal of Development Economics,* 9(1).

Urzua, C. M., (1997). "Omnibus tests for mu1tiariate normality based on a class of maximum entropy distributions". *Advances in Econometrics*. 12.

Watkins, M. H. (1963), "A Staple Theory of Economic Growth", Canadian *Journal of Economics and Political Science, XXIX.*

White, H., (1980). "A heteroskedasticity-consistent covariance matrix and a direct test for heteroskedasticity". *Econometrica*. 48.

World Bank (1993), *The Asian Miracle: Economic Growth and Public Policy, Oxford:* Oxford University Press.