## Trade Liberalization and Nigeria Economic Growth: The Post Structural Adjustment Programme

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#### Abstract

This study examined the effect of trade liberalization on Nigeria economic growth. The objective of the study was to study the effect of trade liberalization on Nigeria economic growth. Time series data was sourced from Central Bank of Nigeria Statistical Bulletin from 1990-2023. Real gross domestic product was modeled as the function of trade openness, exchange rate and balance of The study employed multiple regression models to estimate the effect of trade payment. liberalization on Nigeria economic growth. The null Hypotheses ( $H_0$ ) were tested at 0.05 level of significance, Ordinary Least Square (OLS), Augmented Dickey Fuller Test, Johansen Cointegration test, normalized co-integrating equations, parsimonious vector error correction model and pair-wise causality tests were used to conduct the investigations and analysis. The study found that 69% variations in the dependent variable could be trace to variation in the model; this is again justified by the f statistics and the probability value, the study also found that the variables can adjust at the speed of 34.5 percent annually while the parameters of the variables shows that trade openness and balance of payment have positive and significant effect while exchange rate have positive but no significant effect Nigeria economic growth. From the findings, the study conclude that trade liberalization have positive effect on Nigeria economic growth. The study recommends that government should formulate policies that will enhance both domestic and foreign trade to foster global integration and competition since it has been established that there is a relationship between degree of openness and volume of trade and economic growth. Policymakers of the government should balance its strategies of trade liberalization as a result of the inability of the economy to absorb the adverse shocks from foreign trade, appropriate fiscal and monetary policies should be deployed by the government for the protection of the economy against foreign influences and the diversification of the structure of export is necessary to ensure that manufactured products are exported more to achieve economic growth.

Keywords: Trade Liberalization, Nigeria Economic Growth, Post Structural Adjustment Programme

## **INTRODCUTION**

The nexus between trade liberalization and economic growth has been a subject of extensive debate among academics, policymakers, researchers in the arena of international trade and international development partners particularly in developing countries since the early 1990s. The new theories of economic growth advanced that through openness to trade, economic growth can be realized by boosting the degree of spillover (Aboubacar, et al., 2014). Trade liberalization through regional, bilateral or multilateral trade agreements creates a competitive environment, permits the diffusion of knowledge and transfer of technology, enhances the competitiveness of export, increases access to the international market, expands the domestic market, creates marketing networks, provides managerial and technical skills, enhances the transformation of technology, results in industrialization, leads to job creation, improves productivity, enhances economic growth, provokes the expansion of the export sector and stimulates the reduction of sectors competing for import. Traditional theories of trade postulated that trade liberalization reallocates resources in line with comparative advantage, lowers waste, and reduces the price of goods imported in an economic regime that is more transparent, with reduced lobbying activities, and there is more diversification of exports besides rapid expansion. Furthermore, there is a consensus among most economists that countries with open economies progress better than those with closed economies in the long-run. However, they opined that the short-run effects of trade liberalization can be detrimental to the poor.

The effect of trade liberalization on economic growth remains a point of departure among economist in the 21 century. Economic theory traditionally considers trade liberalization to be the reduction or complete removal of existing trade restrictions and economists typically endorse it as allowing for efficiency. While removal of trade barriers is the most direct to free trade, many countries have chosen more gradual and flexible approaches. David Ricardo's theory of competitive advantage is central to the efficiency hoped to derivable from global trade openness. One of the enduring legacies of the new growth theory is its emphasis on the role of trade and foreign direct investment as the major drivers of economic growth. The neo-liberals have argued that liberalizing trade has the potentials to promote competition locally and globally. This argument is premised on the fact that in an attempt to enter the foreign market or compete with foreign firms, domestic exporting firms have to eliminate inefficiency and produce high quality goods at low cost. They can only do this by acquiring new and modern technology that will make them competitive at the international market.

Openness of trade by nations and countries brings about sustained growth and prosperity. By liberalizing trade and concentrating on areas of comparative advantage or by focusing on what they do best, countries benefit economically. Liberalized trade enables resources to be channelled to where the return is highest and diversifies risk (OECD, 2016). It leads to cost effectiveness for importers and exporters, lower production costs and ultimately lowers consumers cost. Trade

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liberalization can be a threat to developing nations and economies due to inability to effectively compete with more established economies which can lead to the crumble of new industries in a particular nation. Domestic industries complain of unfair competition and dumping from world markets.

Nigeria have been involved in immense economic reforms for the past few decades in order to remove or substantially reduce market distortions created mainly by government intervention in the productive sector since independence. Their ability to succeed will depend on the political will to allow private firms to play their role as the engine of growth in their economies but only when the proper attention and encouragement has been given to the private sector to ensure growth, sustainability and the ability to export. Reform programmes come in sharp contrast of existing economic policies that were pursued after independence. The institutions necessary to aid the success of trade liberalization and ultimately growth/development are unavailable or are deficient. Having a vast population, Nigeria has not utilized it in achieving this goal of development but however it has brought about disequilibrium such as widening the gap between the rich and the poor. Since there are no functional and corrupt-free institutions in the country, corruption does not seem but has vehemently proven to have eaten deep into the bone marrows of the economy. However there exist many different types of institutions. The issue is about what specific types of institutions are important for the country to benefit from openness. There are many studies on the effect of trade liberalization on economic growth, findings of the scholars has been controversial. Some of the authors found positive effect of trade liberalization variables and economic growth (Aboubacar et al., 2014; Adhikary, 2011; Adjei & Nketiah, 2019; Adu-Gyamfi, et al., 2020).While other found negative effect of trade liberalization on economic growth (Bekele, 2017; Bushra, et al., 2014; Dabel, 2016), from the above, this study examined the impact of trade liberalization on Nigeria economic growth in the post structural adjustment programme.

## LITERATURE REVIEW

#### **Trade Liberalization**

Liberalization can simply be said to mean a shift from direct policy and regulatory controls to market driven behavior to set prices and allocate resources. Trade liberalization involves removing barrier to trade between different countries and encouraging free trade. According to DeRosa (2012) trade Liberalization was referred to as the increasing integration of international market for goods, trade able services and financial assets. In the real sense it also referred as the increasing integration of markets for major inputs to production (not only mobile physical capital) but also labour in its various forms: basic labour, skilled labour and other professional services. Trade liberalization is thus a multidimensional concept and may be viewed as the forging of multiplicity of linkages and interconnectedness between States and the societies which make up the modern World called the global village. It is also a process by which occurrences, decision and activities in one part of the World come to have significant consequence on individual and communities in quite distant part of the globe.

Trade liberalization involves:

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- i. Reducing tariffs
- ii. Reducing / eliminating quotas
- iii. Reducing non-tariff barriers

Non-tariff barriers are factors that make trade difficult and expensive. For example having specific regulations on imported goods can give an unfair advantage to domestic producers. Harmonizing environmental and safety legislation makes it easier for international trade.

#### **Advantages of Trade Liberalization**

According to Ogujiuba, Oji and Adenuga (2014) the following are the advantages of trade liberalization:

Trade liberalization allows countries to specialize in producing the goods and services where they have a comparative advantage (produce at lowest opportunity cost). This enables a net gain in economic welfare.

**Lower prices:** The removal of tariff barriers can lead to lower prices for consumers. For example removing food tariffs in the West would help reduce the global price of agricultural commodities. This would translate to benefit for countries who are importers of food.

**Increased competition:** Trade liberalization means firms will face greater competition from abroad. This should act as a spur to increase efficiency and cut costs or it may act as an incentive for an economy to shift resources into new industries where they can maintain a competitive advantage. For example, Trade Liberalization has been a factor in encouraging the United Kingdom (UK) to concentrate less on manufacturing and more on the service sector.

**Economies of scale:** Trade liberalization enables greater specialization. Economies concentrate on producing particular goods. This can enable big efficiency savings from economies of scale.

Problems of Trade Liberalization According to Romer (2013), some of the problems of trade liberalization include:

Trade liberalization often leads to a shift in the balance of an economy. Some industries grow, some decline. Therefore there may often be structural unemployment from certain industries winding up. Trade liberalization can often be painful in the short run as some industries and workers suffer from the decline in uncompetitive firms. Trade liberalization could lead to greater exploitation of the environment e.g. greater production of raw materials and trading toxic waste to countries with lower environmental laws. Trade liberalization may be damaging for developing economies that cannot compete against free trade. The infant industry argument suggests that trade protection is justified to help developing economies diversify and develop new industries. Most economies had a period of trade protectionism. It is unfair to insist that developing economies cannot use some tariff protectionism. Given this assumption some argue that trade liberalization often benefits developed countries more than developing countries.

## **Degree of Openness**

Historical Experience According to Krueger, (2015) Nigeria is regarded to have the largest economy in Sub-Saharan Africa excluding South Africa. In the last four decades there has been little or no progress realized in alleviating poverty despite the massive effort made and many programmes established for that purpose. Indeed as in many other sub-Saharan Africa countries, the number and proportion of the poor have been increasing in Nigeria. In particular the 1998 United Nations human development report declares that 48% of Nigeria's population lives below the poverty line. According to the report (UNDP, 2012),the bitter reality of the Nigerian situation is not just that the poverty level is getting worse by the day but more than four in ten Nigerians live in conditions of extreme poverty of less than N320 per capita/month which barely provides for a quarter of the nutritional requirements of healthy living. This is approximately US 8.2 Dollar per month or US 27 cents per day.

According to Sachs and Warner (2015), Nigeria economy is not merely volatile; it is one of the most volatile economies in the world. There is evidence that this volatility is adversely affecting the real growth rate of Nigeria's Gross Domestic Product (GDP) by inhibiting investment and reducing the productivity of investment (public and private). Economic theory and empirical evidence suggest that sustained high future growth and poverty reduction are unlikely without a significant reduction in volatility. Oil price fluctuations drive only part of Nigeria's volatility policy, choices have also contributed to the problem. Yet policy choices are available that can help accelerate growth and thus help reduce the percentage of people living in poverty despite the severity of Nigeria's problems.

According to Saibu (2014) the analysis of the growth of exports and imports gives an indication as to the extent of the openness of an economy. However trade flow analysis provides the basis of robust empirical investigation of the openness of an economy. Empirically openness can be measured by the share of trade (import plus export) in total output measured by the Gross Domestic Product (GDP). This is a broad concept of openness; in the narrow context the ratio of imports or exports to GDP can represent the degree of openness of an economy. Chakraverty and Singh (2014) argued that openness is a multidimensional concept. Apart from trade a country can be open or not so open with respect to financial and capital market in relation to technology, science, culture and education, inward and outward migration. Moreover a country can choose to be open in some direction like trade but not so open in others such as foreign Direct Investment (FDI). Their analysis suggests that there is no unique optimum for or degree of openness which holds true for all countries at all time. Therefore in the real sense no country is open or closed.

There are several measures of trade openness as listed by Rodriquez and Rodrik (2014):

- i. Trade Dependency Ratio: The growth rate of exports over the specified period.
- ii. Growth Rate of Export: The growth rate of exports over the specified period.
- iii. Tariff Averages: A simple or trade weighted average of tariff level
- iv. Collected Tariff Ratio: The ratio of tariff revenues to import

- v. Coverage of Quantitative Restrictions: The percentage of good covered by quantitative restrictions.
- vi. Black Market Premium: The black market premium for foreign exchange, a proxy for the overall degree of external sector distortions.
- vii. Trade Bias Index: The extent to which policy increase the ratio of importable goods price relative to exportable goods prices compared to the same ratio in world market
- viii. Sarch and warner Index: A composite index that uses several trade–related indicator; tariffs, quota coverage, black market premier, social organization and the existence of export market boards.
- ix. Learner's Openness Index: an index that estimate the difference between the actual trade flows and those that was expected from a theoretical trade model. For a long time economists have tried to provide comparative measure of openness. This has proved to be controversial and elusive. This is illustrated by the fact that while according to Greenway, Wynn, Wright (2012) South Korea has an open and outward oriented economy. For others like wade (2014) it is an example of a semi closed economy with a high degree of government intervention.

Export According to Saibu (2014), the term export means shipping goods and services out of the jurisdiction of a country. The seller of such goods and services is referred to as an "exporter" and is based in the country of export whereas the overseas based buyer is referred to as an "importer". International trade, "exports" refers to selling goods and services produced in the home country to other markets. Export of commercial quantities of goods normally requires involvement of the customs authorities in both the country of export and the country of import. The advent of small trades over the internet such as through Amazon and E Bay have largely by passed the involvement of Customs in many countries because of the low individual values of these trades (Jeffrey 2015). Nonetheless these small exports are still subject to legal restrictions applied by the country of export. An export's counterpart is an import. Daniels, Radebaugh and Sullivan (2013), the theory of international trade and commercial policy is one of the oldest branches of economic thought. Exporting is a major component of international trade. The macroeconomic risks and benefits of exporting are regularly discussed and disputed by economists and others. Two views concerning international trade present different perspectives. The first recognizes the benefits of international trade. The second concerns itself with the possibility that certain domestic industries (or labourers, culture) could be harmed by foreign competition. Methods of export include a product, good or information being mailed, handdelivered, shipped by air, shipped by vessel, uploaded to an internet site or downloaded from an internet site. Exports also include the distribution of information 30 that can be sent in the form of an email, an email attachment, a fax or shared during a telephone conversation.

## **Advantages of Exporting**

According to Mike (2015) ownership advantages are the firm's specific assets, international experience and the ability to develop either low cost or differentiated products within the contacts of its value chain. The locational advantages of a particular market are a combination of market potential and investment risk. Internationalization advantages are the benefits of retaining a core

competence within the company and threading it though the value chain rather than obtain to license, outsource or sell it. In relation to the Eclectic paradigm, companies that have low levels of ownership advantages either do not enter foreign markets. If the company and its products are equipped with ownership advantage and internalization advantage they enter through low risk modes such as exporting (Mwaba, 2013). Exporting requires significantly lower level of investment than other modes of international expansion such as FDI. As you might expect, the lower risk of export typically results in a lower rate of return on sales than possible through other modes of international business. In other words the usual return on export sales may not be tremendous but neither is the risk. Exporting allows managers to exercise operation control but does not provide them the option to exercise as much marketing control. An exporter usually resides far from the end consumer and often enlists various intermediaries to manage marketing activities. After two straight months of contraction, exports from India rose to a whopping 11.64% at \$25.83 billion in July 2013 against \$23.14 billion in the same month of the previous year (Obioma 2012).

## **Disadvantages of Exporting**

For Small-and-Medium Enterprises with less than 250 employees, selling goods and services to foreign markets seems to be more difficult than serving the domestic market. The lack of knowledge for trade regulations, cultural differences, different languages and foreign exchange situations as well as the strain of resources and staff interact like a block for exporting. Indeed, there are some SME's which are exporting, but nearly two-third of them sells only to one foreign market (Daniels, Radebaugh and Sullivan, 2014). According to Daniels et al (2014) the following assumption shows the main disadvantages of exporting:

- i. Financial management effort: To minimize the risk of exchange rate fluctuation and transactions processes of export activity, the financial management needs more capacity to curb the major effort.
- ii. Customer demand: International customers demand more services from their vendor like installation and startup of equipment, maintenance or more delivery services.
- iii. Communication technologies improvement: The improvement of communication technologies in recent years has enabled the customer to interact with more suppliers while receiving more information and cheaper communications cost at the same time like 20 years ago. This leads to more transparency. The vendor is in duty to follow the real-time demand and to submit all transaction details.
- iv. Management mistakes: The management might tap in some of the organizational pitfalls like poor selection of oversea agents, distributors or chaotic global organization.

#### Import

An import is a good brought into a jurisdiction especially across a national border from an external source. The party bringing in the goods is called an importer (Osllivan, 2013). An import in the receiving country is an export from the sending country. Importation and exportation are the defining financial transactions of international trade. According to (Mwaba, 2013), in international

trade the importation and exportation of goods are limited by import quotas and mandates from the customs authority. The importing and exporting jurisdictions may impose a tariff (tax) on the goods. In addition, the importation and exportation of goods are subject to trade agreements between the importing and exporting jurisdictions. According to Lequiller (2013) imports further consist of transactions in goods and services to a resident of a jurisdiction (such as a nation) from non-residents. The exact definition of imports in national account includes and excludes specific borderline cases. A general delimitation of imports in national accounts according to Lequiller (2013) is given below:

An import of a good occurs when there is a change of ownership from a nonresident to a resident; this does not necessarily imply that the good in question physically crosses the frontier. However in specific cases national accounts impute changes of ownership even though in legal terms no change of ownership takes place (e.g. cross border financial leasing, cross border deliveries between affiliates of the same enterprise, goods crossing the border for significant processing to order or repair). Also smuggled goods must be included in the import measurement. Import of services consists of all services rendered by non-residents to residents. In national accounts any direct purchases by residents outside the economic territory of a country are recorded as imports of services; therefore all expenditure by tourists in the economic territory of another country are considered part of the imports of services. Also international flows of illegal services must be included. Edwards, S. (2012) opined that basic trade statistics often differ in terms of definition and coverage from the requirements in the national accounts:

- i. Data on international trade in goods are mostly obtained through declarations to custom services. If a country applies the general trade system, all goods entering the country are recorded as imports. If the special trade system (e.g. extra-EU trade statistics) is applied goods which are received into customs warehouses are not recorded in external trade statistics unless they subsequently go into free circulation of the importing country.
- ii. A special case is the intra-EU trade statistics. Since goods move freely between the member states of the EU without customs controls, statistics on trade in goods between the member states must be obtained through surveys. To reduce the statistical burden on the respondents small scale traders are excluded from the reporting obligation.
- iii. Statistical recording of trade in services is based on declarations by banks to their central banks or by surveys of the main operators. In a globalized economy where services can be rendered via electronic means (e.g. internet) the related international flows of services are difficult to identify.
- iv. Basic statistics on international trade normally do not record smuggled goods or international flows of illegal services. A small fraction of the smuggled goods and illegal services may nevertheless be included in official trade statistics through dummy shipments or dummy declarations that serve to conceal the illegal nature of the activities.

## **Balance of Trade**

Balance of trade represents a difference in value for import and export for a country. A country has demand for an import when domestic quantity demanded exceeds domestic quantity supplied or when the price of goods or services on the world market is less than the price on the domestic market. Lequiller (2013) the balance of trade, usually denoted by (NX) is the difference between the value of the goods and services a country exports and the value of the goods the country imports i.e. NX = X-1.

According to Carmen and Kenneth (2014) a trade deficit occurs when imports are large relative to exports. Imports are impacted principally by a country's income and its productive resources. For example the US imports oil from Canada even though the US has oil and Canada uses oil. However consumers in the US are willing to pay more for the marginal barrel of oil than Canadian consumers are, because there is more oil demands in the US than there is oil produced.

## **Balance of Payment**

The balance of payment also known as balance of international payments and abbreviated as (BOP) of a country is the record of all economic transactions between the residents of the country and the rest of the world in a particular period over a quarter of a year or over a year period (Harberzar, 2016). These transactions are 41 made by individuals, firms and government bodies. Thus the balance of payment includes all external visible and non-visible transactions of a country. According to Cheol and Bruce (2013), it is an important issue to be studied especially in international financial management field for a few reasons. First the balance of payment provides detailed information concerning the demand and supply of a country's currency. For example if the United States imports more than it exports then this means that the supply of dollars is likely to exceed the demand in the foreign exchanging market ceteris paribus. One can thus infer that the U.S. dollar would be under pressure to depreciate against other currencies.

On the other hand, if the United States exports more than it imports, then the dollar would be likely to appreciate. Secondly a country's balance of payment data may signal its potential as a business partner for the rest of the world. If a country is grappling with a major balance of payment difficulty it may not be able to expand imports from the outside world. Instead the country may be tempted to impose measures to restrict imports and discourage capital outflows in order to improve the Balance of Payment situation. Country experiencing a significant Balance of Payment surplus would be more likely to expand imports offering marketing opportunities for foreign enterprises and less likely to impose foreign exchange restrictions. Thirdly Balance of Payments data can be used to evaluate the performance of the country in international economic competition supposing a country is experiencing trade deficits year after year. This trade data may then signal that the country's domestic industries lack international competitiveness. To interpret Balance of Payments data properly it is necessary to understand how the Balance of Payment account is constructed (Cheol, and Bruce, 2013). These transactions include payment for the country's exports and

imports of goods, services, financial capital and financial transfers. It is prepared in a single currency typically the domestic currency for the country concerned.

## **Concept of Economic Growth**

Economic growth refers to the increase in the amount of the goods and services produced by an economy over time. It is conventionally measured as the percent rate of increase in real gross domestic product, or real Gross Domestic Product. Growth is usually calculated in real terms, inflation adjusted terms, in order to net out the effect of inflation on the price of the goods and services produced. In economics, economic growth or economic growth theory" typically refers to growth of potential output production at full employment, which is caused by growth in aggregate demand or observed output Arthur Lewis (1963) in his concept of economic growth incorporates the human element and sees the goal of economic growth as the growth of the output per head of population. Sichel and Eckstein (1974) defined economic growth as an increase in the ability of the economy to produce commodities service.

Todaro (1977) defined economic growth as the increase overtime of an economy's capacity to produce those goods and services needed to improve the wellbeing of the citizens in increasing numbers and diversity. It is the steady process by which the productive capacity of the economy is increased overtime to bring about rising levels of national income. Baumol and Blinder (1988) sees economic growth as occurring when an economy is able to produce more goods and services for each consumer, while Roger Miller (1991) defined economic growth as the expansion of the economy to produce more goods, jobs and wealth. Henderson and Poole (1991) defined economic growth as the increase in output and other measures of material progress at a certain period. It is also said to be either growth in national output as measured by GDP or GNP (which measures economic power), or growth in the national average standard of living as measured by the GNP per capita (which measures the well-being of citizens.

## **Theoretical Review**

## Absolute Advantage

Absolute Advantage Trade Theory In 1776, Adam Smith questioned the leading mercantile theory of the time in The Wealth of Nations. Adam Smith, an Inquiry into the Nature and Causes of the Wealth of Nations (Strahan and Cadell, 1776). Other versions have been edited by scholars and economists. Smith offered a new trade theory called absolute advantage which focused on the ability of a country to produce a good more efficiently than another nation. Smith reasoned that trade between countries shouldn't be regulated or restricted by government policy or intervention. He stated that trade should flow naturally according to market forces .

## **Theory of Comparative Advantage**

David Ricardo in 1817 propounded this theory wherein a country benefits from international trade even if it is less efficient than other nations in the production of two commodities. The country

maybe at an absolute disadvantage with respect of both the commodities but the absolute disadvantage is lower in one commodity than another. Therefore, the country should specialize in the production and export of the commodity in which the absolute disadvantage is less than that of another commodity. In other words, the country has got a comparative advantage in terms of more production efficiency. This implies that countries also gain from trade by employing their resources for the production of goods in which they are relatively more efficient. David Ricardo developed this theory to explain why countries engage in international trade. For this to happen, he assumed that there are only two countries, two commodities, free movement of factors of production, no import barriers, the prevailing cost of technology is constant (Mankiw, 2004). The model suggested that specialization by each country in the production of a commodity in the area of their comparative advantage leads to the attainment of gains from trade (Salvatore, 2007). From the perspective of the comparative advantage model, effective use of the resources of an economy is generated through trade by allowing the imports of goods and services that would have been produced at a higher cost at home. The developing countries would serve as the best illustration for this based on the high cost of import capital and intermediate goods necessary for economic growth when fashioned locally. This model emphasized on trade as the artery for the attainment of static efficiency in production and international competitiveness that result in economic growth.

#### **Factor Endowment Theory**

Eli Hechscher (1919) and Bertil Ohlin (1933), two Swedish Economists developed this theory also known as Hechscher-Ohlin trade theory. This theory is a means of studying the general equilibrium characteristics of open economies. It explains the reasons for differences in relative commodity prices and competitive advantage between two nations. According to this theory, a nation will export the commodity whose production requires intensive use of the Nations relatively abundant and cheap factors and import the commodity whose production requires intensive use of the Nations scarce and expensive factors. Thus, a country with an abundance of cheap labour would export labour - intensive products and import capital – intensive goods and vice-versa. It suggests that the patterns of trade are determined by factor endowment rather than productivity. This implies that developing countries are labour abundant and therefore they should concentrate in the production of primary products and should import capital intensive products i.e. manufactured goods from the developed countries. The model also assures two countries, two commodities and factor inputs, and labour and capital which are assumed also to be homogenous (Pugel & Lindert, 2000; Ngerebo-a, Nwosi, & Lucky, 2016).

## Heckscher-Ohlin (H-O) theory

The Heckscher-Ohlin (H-O) theory was established through the platform of David Ricardo's theory of comparative advantage (Thindwa & Seshamani, 2014). It supports the idea that countries can participate in international trade by exporting commodities based on their comparative advantage. Furthermore, it sees comparative advantage from the perspective of factor abundance and intensity in a particular country. Therefore, a nation has a comparative advantage if a particular resource is in abundance in that nation and if that resource has a high ratio in production (factor intensity) comparative to others. Salvatore (2007) argued that any resource that shows these

features, the country that utilizes it for the production of a commodity has a comparative advantage. When countries specialize in production and trade, a high standard of living is generated for the countries concerned. Nigeria is a labour-abundant country with rich deposits of natural resources such as crude oil and several solid minerals. Concerning this, formal and informal employments have been created in the trade and investment sector of the economy. Income is expected to result in the multiplier process.

The theories of Smith and Ricardo didn't help countries determine which products would give a country an advantage. Both theories assumed that free and open markets would lead countries and producers to determine which goods they could produce more efficiently. In the early 1900s, two Swedish economists Eli Heckscher and Bertil Ohlin (2013) focused their attention on how a country could gain comparative advantage by producing products that utilized factors that were in abundance in the country. Their theory is based on a country's production factors: land, labor, and capital which provide the funds for investment in plants and equipment. They determined that the cost of any factor or resource was a function of supply and demand. Factors that were in great supply relative to demand would be cheaper; factors in great demand relative to supply would be more expensive. Their theory also called the factor proportions theory stated that countries would produce and export goods that required resources or factors that were in great supply and therefore cheaper production factors. In contrast countries would import goods that required resources that were in short supply but higher in demand (Yarbrough and Yarbrough, 2014).

## Harrod – Domar Growth Model

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

#### The Solow Model of Economic Growth

This is the beginning of the second part of this paper, where François Quesnay's, Adam Smith's, Robert Malthus' and David Ricardo's theories will be summarized prior to the introduction of the Solow model and the development of each author models. The Solow model on economic growth will be introduced. This model has been selected as theoretical foundation to have a common framework to compare the four different authors. In this part, the model will be adapted to represent the perspectives of the four authors on capital accumulation and economic growth. The Solow growth model is designed to show how growth in the capital stock, growth in the labor force and advances in technology interact in an economy, and how they affect the nation's total output. In order to build the model, the first step will be to determine the supply and demand for goods and their relation to the accumulation of capital. However, before starting with the development of the model and its adjustments to represent each author theories, the key assumptions of each author will be summarize below.

## **Empirical Review**

Duru et al., (2020) used the Autoregressive Distributed Lag Bounds technique to cointegration. The results showed that trade liberalization do not support economic growth in Nigeria. Hence, the genuineness of the extensive trade liberalization campaign in developing countries through the bright idea of international organizations in the late 1980s and early 1990s was not validated. Furthermore, the results showed the presence of unidirectional causality from real Gross Domestic Product to trade liberalization in Nigeria. The study, therefore, recommends that policymakers of the government should balance its strategies of trade liberalization as a result of the inability of the economy to absorb the adverse shocks from foreign trade, appropriate fiscal and monetary policies should be deployed by the government for the protection of the economy against foreign influences and the diversification of the structure of export is necessary to ensure that manufactured products are exported more. Also, the Central Bank of Nigeria and policymakers of the government should also provide incentives to investors and a conducive environment for investment. Moreover, the government should initiate policies of growth for the promotion of trade.

Echekoba, Okonkwo and Adigwe (2015) examined trade liberalization and economic growth; The Nigerian experience: analyzed data for the period of 1971-2012 using Gross domestic product, imports, exports, exchange rate, Foreign direct investment and inflation rate, with the help of ordinary least Square (OLS) regression techniques to determine the effect of international trading activities on economic growth . The result of the regression showed that imports, exports and Foreign Direct Investment (FDI) have significant relationship with GDP, while exchange rate and inflation do not have significant relationship with GDP. Thus the study concluded that trade liberalization is good for the Nigeria economy but should be applied carefully as it also has some negative effects.

Ude and Agodi (2015) examined does trade openness make sense? Investigation of Nigeria Trade Policy using Real gross domestic product, exchange rate, interest rate and trade openness, it further empirically examined whether trade openness make sense using Nigeria trade Policy as a yardstick using secondary data from the period under investigation ranged from when Nigeria adopted unrestricted trade policies, that is 1984-2013. The study employed Auto-regressive conditional Heteroscedasticity (ARCH), Generalized Auto-regression Conditional Heteroscedasticity (GARCH) and Pairwise-Granger causality methodology. Results shows that trade openness have a significant impact on economic growth. The control variables (Interest rate and exchange rate) have significant positive effect on economic growth in Nigeria. The Pairwise Granger causality test shows that there is a unidirectional causality between economic growth and trade openness at lag one only.

Kingu (2014) investigated the impact of trade liberalization and export performance in Tanzanian cashew nuts, employing a time series data from 1970 - 2010 using both econometrics and non-parametric techniques for the estimation which are: co-integration technique, error correction modelling approach and trend analysis. To estimate this impact the study used the cashew units

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export earnings (X cashew nuts) as the dependent variable while the independent variables are world price (WP) and real exchange rates (RER) as measures of competitiveness. The empirical results suggest that world price and real exchange rate are significant determinants of cashew nuts exports earnings in Tanzania, however real exchange as a measure of export competitiveness is found to be insignificant both in the short and long-run. This implies that the Tanzania government should not rely on real exchange rates in promoting cashew nuts export performance. World price has a big influence is a cashew nuts export earnings than domestic prices. While the trend analysis revealed that cashew nut exports has a positive trend. The study concluded that trade liberalization improved cashew nuts export earnings tremendously.

Manwa (2015) investigated the impact of trade liberalization on economic growth on five (5) Southern African customs Union (SACU) countries using annual observation. Over the period of 1980-2011, the variables used are GDP as the dependent variable while independent variables are capital stock (k), labour (L), Human capital (HC) and Trade liberalization (LIB). The Auto Regressive distributive lag (ARDL) bounds test was used as the primary estimation method. Vector Error Correction model (VECM) was used. The findings showed that the coefficients of labour and Human Capital were negative which suggests that majority of the countries growth arises from mining and capital intensive manufacturing with limited employment opportunities. Short term results under the ARDL bound test showed that none of the trade liberalization variables had any impact on economic growth. Apartheid did influence economic growth. Trade policy cannot be used as a short term stimulant of economic growth but should be viewed and used as a long term strategic tool. The study demonstrated that trade liberalization occurring through incidence and outcomes based measures has had an impact on eco growth in a small country such as Southern African.

Mathew (2013) investigated the impact of trade liberalization and institutions on economic growth in thirty (3) selected sub-Saharan African developing countries. The scope of the study covered the period of 1985-2012. The study focused on economic, political and cultural institutions. Selection of countries was based on world banks (2007) classification of countries into moderately outward oriented (MOO), moderately inward oriented (MIO) and strongly inward oriented (SIO) countries. Variables used were independent variables: Gross fixed capital formation (G kap), labour (Lab), Institutional variables (INST), and Trade liberalization (TLIB) while the dependent variable is growth rate of gross domestic product (GRGDP). The statistical measure used is the pooled ordinary least square, while the estimation methods are least square Dummy variables (LSDV) and the generalized methods of moment's technique (GMM). The findings/results shows that the impact of trade liberalization, economic and political institutions on growth were more visible in central Africa while cultural institutions impacted more on growth in East and Southern Africa. International trade seems to be affected more by strong political and cultural institution than strong economic institutions. The study therefore concludes that trade liberalization and institutions have significant impacts on economic growth, in order for the countries under study to harness maximum gains from international trade, there has to be the presence of strong institutions.

Onuorah (2018) examined trade liberalization and economic growth in Nigeria. Secondary data were sourced from CBN statistical bulletin and World Bank Development indicators over a period of 28 years, 1990-2017. The study proxied Trade Liberalization by Degree of Openness (DOP), Exchange Rate (EXR), Balance of Payment (BOP), Inflation rate (INF), Foreign Direct Investment (FDI), Balance of Trade (BOT) and Net Exports (NEXP) as the independent variables, while Gross Domestic Product (GDP) was proxied for Economic Growth in Nigeria as the dependent variable. The study applied E-view 7.0 version and used Ordinary Least Square (OLS) for the estimation of the result. The results/findings revealed that the independent variables: DOP, INF, FDI, BOT and NEXP have positive significant impact on GDP while EXR and BOP shows a negative impact. The coefficient of R-squared which is 0.9896 shows that all the independent variables have 99% positive impact on GDP while the coefficient of Adjusted Rsquared, 0.9858 suggests that 98% of all independent variables could be explained by the changes in GDP. The study concluded that trade is an engine for growth and economic integration and therefore contributes heavily to the economic growth of a nation. Thus, it was recommended that government should formulate policies that will enhance both domestic and foreign trade to foster global integration and competition since it has been established that there is a relationship between degree of openness and volume of trade, competitiveness and integration.

Ijirshar (2019) assessed the impact of trade openness on economic growth among ECOWAS countries using secondary data from 1975 to 2017. The study uses non-stationary heterogeneous dynamic panel models by applying Pooled Mean Group (PMG) and Mean Group (MG) estimators since the time dimension was more than cross-sections. Applying the Hausman test, the Pooled Mean Group (PMG) estimator was favored. The study found that trade openness positively affects growth in ECOWAS countries in the long run but mixed effects in the short run. Nketiah et al. (2019) examined the relationship between foreign direct investment, openness to trade, and economic growth in Ghana in the period after liberalization from 1975 to 2017. The Augmented Dickey-Fuller (ADF) test for unit root, regression analysis, descriptive analysis, and Pearson correlation was applied to investigate the relationships. The study exhibited that trade openness is the main factor affecting Ghana's economic growth (annual %).Adjei et al., (2019) examined the determinants of real exchange rate and its overall performance on Ghanaians economy from 1998 to 2016. The study revealed that trade openness and GDP are the main factors affecting the exchange rate in Ghana.

Malefane and Odhiambo (2018) used the autoregressive distributed lag (ARDL) -bound test approach to investigate the dynamic effects of open trade on economic growth. According to the long-run empirical results obtained, it was found out that trade openness has a positive and significant impact on economic growth when the ratio of total trade to GDP is used as a proxy only, but not when the three other three proxies are employed. However, in the short run, when the first three proxies of openness are used, the study found trade openness to impact economic growth positively, but not so when the trade openness index is employed.

Iyoha and Okim (2017) used four estimators; pooled OLS, fixed effects model, random-effects model, and dynamic panel regression model. Although a dynamic panel data estimator was

preferred to solve the problem of endogeneity, they found that exchange rate, investment, and exports were significant determinants of per capita. Real income growth has been and that exports have been consistently positively linked to growth, which means that trade has a significant positive impact on economic growth in ECOWAS member countries. This research, however, fell short in terms of the scope covered for the analysis and the conditions for deciding between the Pooled Mean Group (PMG) estimator and Mean Group (MG) estimator through the use of the Hausman test. The test would have decided whether the differences in estimated coefficients are systematic or not. Adu-Gyamfi et al (2020) determined the effects of trade openness and inflation on economic growth for nine West-African countries from 1998 to 2017. The study used pooled ordinary least squares (OLS), fixed effect (FE), and random effect (RE) tests with panel data to arrive at the results. The study found that openness in trade had a significant negative impact on economic growth (GDP) using the pooled OLS and a negligible impact using the fixed and random affects tests.

Wiredu et al (2020) empirically examined the relationship between openness to trade and foreign direct investment (FDI) to economic growth for a committee from four West African countries (Côte d'Ivoire, Ghana, Nigeria, and Senegal) between 1998 and 2017. The static panel regression techniques were employed to assess the causal link of our regressors, namely, FDI, trade openness, investment, and inflation, to economic growth measured by Gross Domestic Product (GDP). The evidence from the statistical analysis suggests that aggregated trade openness does have a positive and significant impact on economic growth in Côte d'Ivoire, Ghana, Nigeria, and Senegal. Manni and Afzal (2012) assessed the impact of trade liberalization on Bangladesh economy between 1980 and 2010. Using the OLS technique their results indicated that GDP growth increased consequent to liberalization. Liberalizing trade however does not seem to affect inflation. Nwosaet al (2012) examined the relative contribution of trade liberalization trade tax revenue in Nigeria between 1970 and 2009. Their findings revealed that trade liberalization, public debt, gross domestic product and labour force impacted positively on trade tax revenue while exchange rate had a negative effect. They concluded that there is the need for appropriate macroeconomic policy to enhance trade liberalization in Nigeria.

Daniel, Denilson and Adelar, (2013) examined the relationship between trade openness and economic growth for the period 1952-2003. The analysis involves three variables: the annual growth rate of GDP per capita, the openness index (exports plus imports divided by GDP) and the investment share of the GDP. The data was obtained from the Penn World table version 6.2. They applied the Granger non-causality test using a panel data approach based on SUR (seemingly unrelated regression) systems. The relationship between trade openness and growth is a highly debated topic in the growth and development literature yet this issue is far from being resolved. There is a long history of research both theoretical and empirical that provides at least an answer to the question: does openness to trade result in the growth of output (say, GDP)? But currently there is no consensus either empirically or theoretically on the nature of the relationship between trade openness and output growth. In fact this is because the mechanisms behind it are not well understood.

Razin and Rose (2014) studied the impact of trade and financial openness on the volatility of output, consumption and investment for a sample of 138 countries over the period 1950-1988. They found that there is no significant empirical link between openness and macroeconomic volatility. Klein and Olivei (2012) showed that capital account liberalization had a positive impact on growth in the case of developed countries. However these two authors did not identify any positive link between capital account liberalization and economic growth in the case of nonindustrialized countries. Baillu (2012) found that capital account liberalization boosts economic growth. The argument that the growth impacts of capital account liberalization depend on the level of economic development is defended by Edwards (2012). He shows that the level of financial liberalization is positively linked to strong GDP per capital growth. Harrison (2012) asserted that openness to trade provides access to imported inputs which embody new technology, increase the size of the market faced by the domestic producers. This would invariably raise the return to innovation and facilitate a country's specialization in research intensive production. In line with potential dynamic gains of trade openness, most early empirical studies have examined a set of trade openness measures and their correlation with each other to economic growth. They found a clear positive link.

Harrison (2012) looked at a number of openness indicators that turned out to have a positive 74 'association' with economic growth and produced evidence in support of bidirectional casualty between openness (trade share) and economic growth. Recent research however has questioned the robustness of the relationship. Rodriguez and Rodrik (2014) confirmed the Harrison Hanson (2013) critique and argued that much of the work to correlate trade openness and economic growth has been plagued with subjective and collinear measures of openness that though positively related with economic growth arrive at their conclusion through problematic econometric methodologies. Lucas (2013) examined on the mechanics of economic development' states that free trade might cause a country sufficiently far from its steady state to become completely specialized in the lowtechnology goods with its short-run comparative advantage, although it has a long-run comparative advantage in high technology goods. In theory the best option for trade policy in this case is to have restricted or prohibited trade until the economy has gained short -run comparative advantage in the high-tech goods. Gundlach (2015) examined openness and economic growth in developing countries' in ascertaining if openness has a strong impact on economic growth in developing countries, examining it using aneo-classical growth model with partial capital mobility, physical capital's share in factor income determines the difference in the predicted convergence rates for open and closed economies. This study concludes that openness along with factor accumulation matters for economic growth, especially in DCs (Developing Countries). Mwaba (2013) examined trade liberalization and growth: Policy Options for African Countries in a Global Economy tried to explore the relationship between 75 trade liberalization and growth in developing countries. The study concludes that while opening an economy to trade may not provide the desired quick fix, the removal or relaxation of quantitative import/ export restrictions and lowering of tariffs would result in increased exports and growth. In an investigation carried out by the United States International Trade Commission,

USITC (2012) examined the dynamic effects of trade liberalization: An Empirical Analysis, it was found that there is a positive linkage between trade liberalization and the rate of investment, generating an indirect linkage between trade and growth. The Commission also found a statistical association between a country's degree of trade liberalization and increased female labor force participation a potential source of economic growth. They concluded finally that the linkages among trade, investment and growth are particularly strong for foreign direct investment but less strong for investment financed by domestic savings. Greenway et al (2012) examined trade liberalization and growth in developing countries,' tried to ascertain the effect of trade liberalization, it was found that liberalization does appear to impact favourably on growth of GDP per capital albeit with a lag. They conclude that liberalization never amounts to an immediate shift to free trade but are often first rather than final steps as through time. Other factors such as: reductions in transportation and communication costs, technological change and so on contribute to the openness of the economy.

Rodrik (2014) examined global governance of trade as if development really mattered' came up with a new principle which had to be considered by those engaged in theoretical and practical debate over trade policies: economic development as the objective and trade as a tool to achieving it. To him each country had the right to choose their development priorities, their own institutions and should be protected from external pressure. He is against any trade sanction; such as using diplomatic channels, (foreign aid instead) anti-dumping measures of industrialized countries against imports from developing nations. Philippe (2013) examined Unequal Effects of Liberalization: Theory and Evidence from India,' exploits the 1991 Indian liberalization to illustrate how such a reform may have unequal effects on industries and regions within a single country. Using a Schumpeterian growth model and panel data set for the sixteen main states of India over the period 1980-1997 to analyze the effects on growth and inequality of liberalization reforms aimed at increasing entry. The empirical results confirm that the 1991 liberalization in India had strong equalizing effects by fostering productivity growth and profits in 3-digit industries that were initially closer to the Indian productivity frontier and in states with more flexible labor market institutions. And finally concludes that the initial level of technology and institutional context mattered for whether and to what extent industries and states in India benefited from liberalization.

Bushra, Zainab and Muhammad (2014) examined Trade Liberalization and Economic Development: Evidence from Pakistan sought to explain the relationship between trade liberalization and economic development in Pakistan. Using simultaneous equation model and the 2SLS technique of regression analysis, they analyzed how trade liberalization has affected economic development in the country. Its effects were examined with respect to four measures of economic development: per capita GDP, income inequality, poverty and employment over the period from 1960-2003. The analysis showed that over the study period, trade liberalization did not affect all the chosen indicators of development uniformly. It affected employment positively but per capita GDP and income distribution negatively. However it did not affect poverty in any way. The study found out that trade liberalization did not affect all the indicators of development

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favorably in Pakistan. Hence the study concluded that, indeed there is a need for a cautious move towards liberalization. Keith (2014) examined Trade Liberalization and the Environment: A Study of NAFTA's Impact in El Paso, Texas And Juarez, Mexico,' sought to promote a clearer understanding of relationships between trade liberalization and environmental quality in a free trade zone along an international border between countries unevenly matched in development and infrastructure. The research indicates that trade liberalization is not necessarily environmentally harmful. The conclusion based on data suggests that NAFTA had little to no direct negative impact on the region's environmental condition, but they also do not provide evidence that NAFTA improved the environment.

Edward (2014) regressed his estimate of total factor productivity growth on a range of pre-existing indicator of openness to trade and find that most indictors are strangely positively correlated with productivity growth. Greenaway et al (2012) performed a similar analysis for GDP growth rate in developing country and find that growth is positively related with a lag to trade liberalization. Ben-David (2013) find that trade openness reduces income dispersion amongst the liberalizing countries. Frankel and Romer (2013) found that countries that trade more due to favorable geography grow more quickly after World War II, a result that was extended to the early 20th century by Irwind and Tervio (2012). Dollar and Kraay (2014) found that more trade increases the income of the poor. However, Rodriquez and Rodrik (2014) take issue with all of these Studies arguing that the measure of openness are often a poor measure of trade barrier or are highly correlated with other causes of economic performers or have no link to trade policy. Rodrik et al (2014) found that more favourable geography affect income level through the quality of institution and not through trade integration.

George (2013) examined trade liberalization and economic expansion: A sensitivity analysis tried to explore the nature of the relationship between trade liberalization and economic expansion. Granger multivariate tests were used in ascertaining why exports represent a fundamental determinant of economic performance in Ireland whereas in the case of Greece, Portugal and Spain exports do not affect economic growth and it was concluded that it was very difficult to analyze the role of trade liberalization in economic performance and to determine the factors which affect the causal links between exports and real GDP, stating that more empirical evidence from developed and developing countries is needed in order to examine the quantitative and qualitative factors which affect the direction of causality between exports and economic growth. The theoretical possibility that trade liberalization might have a negative effect on economic performance has been demonstrated in various endogenous growth studies. Arhan (2014) examined differential effects of trade liberalization on economic growth: Role of Human Capital Accumulation' tried to analyze the impact of trade liberalization on economic growth using the Schumpeterian growth model. It was discovered that in an economy in which more unskilled labour resources are abundantly available compared to its trading partners in the short-run, trade liberalization may have beneficial effects on the per capita income growth rate 80 whereas in the long-run it may decrease the equilibrium growth rate. He also adds that it is not plausible to think that trade openness across the countries would have the same effect stating rather that it depends on the specific circumstances.

## Literature Gap

The study investigated the relationship that exists between trade liberalization and Gross domestic product in Nigeria from 1987-2021. It also created insight into policy recommendation that is capable of enhancing economic growth in Nigeria. It used a more robust technique in analyzing the relationship between trade liberalization and economic growth in Nigeria. Most studies like Shafaeddin (2014) and Low (2014) focused on trade liberalization variables like degree of openness, import and export but this study took a step further to introduce additional variables like exchange rate and balance of payment.

## METHODOLOGY

This study adopted the ex-post facto research design. The justification for the use of ex-post-facto research design is the fact that the design is suitable for variables that inherently cannot be manipulated or because its manifestation has already occurred; Agbonifoh and Yomere (2013); Newbold (2012) and Anyiwe, Idahosa Ibeh (2013) and Emanakuku (2012). In this study the type of secondary data used is the time series data which has occurred and cannot be manipulated by the researcher since it is taken as given or as published by the World Bank, Central Bank of Nigeria statistical bulletin, annual reports and statement of accounts of Central Bank of Nigeria. The measurement procedure for this work adopts the E-Views 9.0 and it is justified because the E-Views 9.0 is quite robust, highly effective and technically efficient as noted by (Lyon 2013; Harris 2012; Jaramillo 2013; Chris Brooks 2012; Sargan and Alok 2012). The study used secondary data for estimation mainly from the Nigeria's monetary authority's Statistical Bulletin. This is because the data required mainly secondary data on trade liberalization as reported by Central Bank during the period 1987 - 2021. The data for the study will include relevant components of the independent and dependent variables.

#### **Model Specifications**

As stated in chapter one above, the major aim of this study is to empirically ascertain the effect of trade liberalization on Nigeria economic growth (real gross domestic product). Thus, the study is will be designed to examine nature of relationship that exists between measures of trade liberalization and real gross domestic production.

Thus, we express the model as follows;

RGDP = f (TOP, EXRV, BOP)(1)

Transforming equation 1 to testable form

$$RGDP = \alpha + \beta_1 TOP + \beta_2 EXRV + \beta_3 BOP + e_i$$
<sup>(2)</sup>

Where;

RGDP = Real gross Domestic Product

TOP = Trade Openness measured as rate of export, import to gross domestic product

EXRV= Exchange rate Volatility

BOP = Balance of payment as percentage of gross domestic product

 $\mathcal{E}_{it}$  = Stochastic or disturbance/error term.

t = Time dimension of the variables

 $\alpha_0$  = Constant or intercept.

## **Testing of Research Hypothesis**

The focus of this study is to evaluate the effect of trade liberalization on Nigerian economic growth. In other words, changes in real gross domestic product (RGDP) depend on changes in components of trade liberalization. Thus, Real Gross Domestic Product (RGDP) depends on bank intermediation.

RGDP = f(TL)

H0:  $\alpha = 0$ 

H1:  $\alpha \neq 0$ 

At 5% level of significance

Note: H0 is the null hypothesis that the parameter of trade liberalization is not significant and Ha is the alternative hypothesis that the trade liberalization parameter influences changes in Real Gross Domestic Product.

#### **Data Analysis Techniques**

It is suggested that when dealing with time series data, a number of econometric issues can influence the estimation of parameter using Ordinary Least Square (OLS). Regressing a time series variable on another time series variable using Ordinary Least Square (OLS) estimation can obtain a very high  $R^2$ , although there is no meaningful relationship between the variables. This situation reflects the problem of spurious regression between totally unrelated variables generated by a non-stationary process. Therefore, it is recommended that a stationarity (unit root) test be carried out to test for the order of integration.

Table 1: Unit Root Test								
Variable	ADF	1%	5%	10%	PROB.	Order of	Decision	Remark
						Integration		
	Unit Root at Level							
RGDP	-	-	-	-	0.0659	1(0)	Not Sig	Accept
	2.823683	3.646342	2.954021	2.615817				HO
	-	-	-	-	0.2210	1(0)	Not Sig	Accept
TOP	1.782430	3.752946	2.998064	2.638752				HO

## ANALYSIS AND DISCUSSION OF FINDINGS

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EXR	- 1.717176	- 3.646342	- 2.954021	- 2.615817	0.1166	1(0)	Not Sig	Accept H0
	-	-	-	-	0.8382	1(0)	Not Sig	Accept
BPP	0.680039	3.646342	2.954021	2.615817				H0
			Unit R	oot at Diffe	rence			
RGDP	-	-	-	-	0.0003	1(I)	Sig	Reject
	5.287597	3.737853	2.991878	2.635542				H0
	-	-	-	-	0.0005	1(I)	Sig	Reject
TOP	9.458566	3.670170	2.963972	2.621007				H0
	-	-	-	-	0.0000	1(I)	Sig	Reject
EXR	8.949490	3.661661	2.960411	2.619160				HO
	-	-	-	-	0.0000	1(I)	Sig	Reject
BPP	6.883521	3.724070	2.986225	2.632604				H0

**Source: Extract From E-View 9.0** 

Series: RGDP TOP EXR BOP

At level, the unit root test shows that the variables are not stationary at level this means the rejection of alternate hypothesis of stationarity in favour of null hypothesis of non stationarity. The non stationarity of the variables at level enable us to test for stationarity at first difference. The unit root test at first difference shows that all the variables are stationary at first difference; this implies the rejection of null hypothesis of non stationarity in favour of the alternate for stationarity. The above table also implies that the variables are co integrated in the order or 1(1). This enables us to present the regression results.

#### **Table 2: Johansen Co-Integration Test Results**

Unrestricted Cointegration	n Rank Test (Trace)			
Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None*	0.410805	55.74270	47.85613	0.0494
At most 1*	0.315591	48.81477	29.79707	0.0463
At most 2	0.170584	6.680387	15.49471	0.6151
At most 3	0.021494	0.695317	3.841466	0.4044
Unrestricted Cointegration	n Rank Test (Maximum	Eigenvalue)		
Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None*	0.410805	46.92793	27.58434	0.0262
At most 1*	0.315591	42.13438	21.13162	0.0344
At most 2	0.170584	5.985069	14.26460	0.6151
At most 3	0.021494	0.695317	3.841466	0.4044

#### Source: Extract From E-View 9.0

At trace statistics the models proved one co-integrating equation, this implies the presence of long run relationship among the variables; therefore the null hypothesis of no cointegration is rejected

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while the alternate accepted. Again the maximum Eigen validates the three statistics with one cointegrating equations in the model. The implication is that there is the presence of long run relationship among the variables.

#### Table 3: Pairwise Granger Causality Tests

Null Hypothesis:	Obs	<b>F-Statistic</b>	Prob.
TOP does not Granger Cause RGDP	32	2.27858	0.1218
RGDP does not Granger Cause TOP		0.84329	0.4413
EXR does not Granger Cause RGDP	32	4.89562	0.0153
RGDP does not Granger Cause EXR		0.41362	0.6654
BOP does not Granger Cause RGDP	32	0.29431	0.7474
RGDP does not Granger Cause BOP		1.64093	0.2125

## **Source: Extract From E-View 9.0**

From the results presented in table 4.3, the model has no causal relationship among the variables except a uni-directional causality from exchange rate while the variables have no causal relationship among the variables in the time series, therefore the study accept the null hypothesis. The no causal relationship among the variables contradicts the a-priori expectations and the objective of trade liberalization.

# Table 4 VAR Lag Order Selection C : to ::

Criteria						
Lag	LogL	LR	FPE	AIC	SC	HQ
0	-363.1195	NA	108395.7	22.94497	23.12819	23.00570
1	-311.1000	87.78294*	11528.37*	20.69375*	21.60984*	20.99741*
2	-307.5568	5.093417	26452.36	21.47230	23.12125	22.01888

HQ: Hannan-Quinn information criterion

## Source: Extract From E-View 9.0

The result of the test for VAR residual serial correlation using LM test indicates that there is no serial autocorrelation in the model. This however implies that the variables included in the VAR model are well behaved, implying that the result of the VAR model has a high predictive ability; it also shows that the result can be relied on in making forecasting. The result in the table 4 showed a probability value greater than 0.05 and so; we cannot reject the null hypothesis which states that there is no serial correlation in the model. From the above, we select lag 1 the appropriate lag length.

#### Table 5: Error Correction Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	0.128873	0.558656	0.230684	0.8197
D(RGDP(-1))	0.283046	0.367262	0.770691	0.4491
D(TOP(-1))	0.316973	0.222682	-3.423434	0.0086
D(TOP(-2))	-0.134434	0.135868	-0.989448	0.3332
D(EXR(-1))	0.255474	0.211370	1.208655	0.2396

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D(EXR(-2))	-0.116876	0.211396	-0.552874	0.5859
D(BOP(-1))	0.028872	0.126096	2.228968	0.0410
D(BOP(-2))	0.038673	0.125401	0.308394	0.7607
ECM(-1)	-0.345611	0.300933	-1.148468	0.2631
R-squared	0.690211	Mean dependent var		-0.107742
Adjusted R-squared	0.468469	S.D. dependent var		3.252741
S.E. of regression	2.966119	Akaike info criterion		5.250086
Sum squared resid	193.5530	Schwarz criterion		5.666405
Log likelihood	-72.37634	Hannan-Quinn criter.		5.385796
F-statistic	4.759756	Durbin-Watson stat		1.776230
Prob(F-statistic)	0.000166			

## Source: Extract From E-View 9.0

Over-Parameterized Result is presented in table 4.5 to check for corrections of short run in the models. From the table model 1 shows that the ECM is properly sign with negative sign. The  $R^2$  shows that 69% variations in the dependent variable could be trace to variation in the model; this is again justified by the f statistics and the probability value. From the result presented it is evidence that the variables can adjust at the speed of 34.5 percent annually while the parameters of the variables shows that trade openness and balance of payment have positive and significant effect while exchange rate have positive but no significant effect on the dependent variable.

#### **Discussion of Findings**

The estimated regression model found that trade openness has positive and significant effect on growth of Nigeria economy. The estimated coefficient proved that trade openness added 0.31 percent to Nigeria real gross domestic product for a unit increase in the variable over the periods covered in the study. The positive and significant effect of trade openness on economic growth confirms the a-priori expectations of the study and in line with international trade theories such as the comparative advantage. The findings also confirm government policy for free trade such as the deregulation of the economy in the last quarter of 1986. Empirically the positive effect of trade openness contradict the findings of Duru et al., (2020) that trade liberalization do not support economic growth in Nigeria but confirm the findings of Echekoba, Okonkwo and Adigwe (2015) that imports, exports and Foreign Direct Investment (FDI) have significant relationship with GDP, while exchange rate and inflation do not have significant relationship with GDP, Ude and Agodi (2015) that trade openness have a significant impact on economic growth. The control variables (Interest rate and exchange rate) have significant positive effect on economic growth in Nigeria, Kingu (2014) that world price and real exchange rate are significant determinants of cashew nuts exports earnings in Tanzania, however real exchange as a measure of export competitiveness is found to be insignificant both in the short and long-run. The estimated regression model found that exchange rate has positive but no significant effect on growth of Nigeria economy. The estimated coefficient proved that exchange rate added 0.25 percent to Nigeria real gross domestic product for a unit increase in the variable over the periods covered in the study. The positive and significant effect of exchange rate on economic growth confirms the a-priori expectations of the study and in line with international trade theories such as the comparative advantage. The findings also confirm

government policy for free trade such as the deregulation of the economy in the last quarter of 1986.

Empirically the positive effect of exchange rate contradict the findings of Manwa (2015) that the coefficients of labour and Human Capital were negative which suggests that majority of the countries growth arises from mining and capital intensive manufacturing with limited employment opportunities. Short term results under the ARDL bound test showed that none of the trade liberalization variables had any impact on economic growth, Mathew (2013) that the impact of trade liberalization, economic and political institutions on growth were more visible in central Africa while cultural institutions impacted more on growth in East and Southern Africa. International trade seems to be affected more by strong political and cultural institution than strong economic institutions, the findings of Onuorah (2018) that trade is an engine for growth and economic integration and therefore contributes heavily to the economic growth of a nation.

The estimated regression model found that balance of payment has positive and significant effect on growth of Nigeria economy. The estimated coefficient proved that exchange rate added 0.32 percent to Nigeria real gross domestic product for a unit increase in the variable over the periods covered in the study. The positive and significant effect of balance of payment on economic growth confirms the a-priori expectations of the study and in line with international trade theories such as the comparative advantage. The findings also confirm government policy for free trade such as the deregulation of the economy in the last quarter of 1986. Empirically the positive effect of balance of payment on economic growth confirm the findings of Khobai et al (2016) that trade openness positively impacts economic growth and has a significant 1 percent effect in Ghana, the findings of Ijirshar (2019) that trade openness positively affects growth in ECOWAS countries in the long run but mixed effects in the short run, Nketiah et al. (2019) that trade openness is the main factor affecting Ghana's economic growth (annual %).Adjei et al., (2019) examined the determinants of real exchange rate and its overall performance on Ghanaians economy from 1998 to 2016, Kim, Lin and Suen (2016) that greater international trade promotes economic growth and amplifies growth volatility in the long run and the findings of Malefane and Odhiambo (2018) that trade openness has a positive and significant impact on economic growth when the ratio of total trade to GDP is used as a proxy only, but not when the three other three proxies are employed.

## CONCLUSION AND RECOMMENDATIONS

#### Conclusion

This study examined the effect of trade liberalization on Nigeria economic growth. The objective of the study was to study the effect of trade liberalization on Nigeria economic growth. Time series data was sourced from Central Bank of Nigeria Statistical Bulletin from 1990-2023. The study found that 69% variations in the dependent variable could be trace to variation in the model; this is again justified by the f statistics and the probability value. the study also found that the variables can adjust at the speed of 34.5 percent annually while the parameters of the variables shows that trade openness and balance of payment have positive and significant effect while exchange rate have positive but no significant effect on the dependent variable. From the findings, the

probability value of 0.0086 is less than the critical value of 0.05at 5 percent level of significance, the study concludes that trade openness has no significant impact on Nigeria real gross domestic product. From the findings, the probability value of 0.2396 is greater than the critical value of 0.05at 5 percent level of significance, the study conclude that exchange rate variation has no significant impact on Nigeria real gross domestic product. From the findings, the probability value of 0.0410 is less than the critical value of 0.05at 5 percent level of significant eral gross domestic product.

#### Recommendations

- i. Government should formulate policies that will enhance both domestic and foreign trade to foster global integration and competition since it has been established that there is a relationship between degree of openness and volume of trade, competitiveness and integration.
- ii. policymakers of the government should balance its strategies of trade liberalization as a result of the inability of the economy to absorb the adverse shocks from foreign trade, appropriate fiscal and monetary policies should be deployed by the government for the protection of the economy against foreign influences and the diversification of the structure of export is necessary to ensure that manufactured products are exported more to achieve economic growth.
- iii. The Central Bank of Nigeria and policymakers of the government should prescribe sound exchange rate policies that will ensure price stability to reduce the uncertainties associated with naira exchange rate in the economy to boost economic growth.

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