

The Relationship between Trade Openness and Economic Growth in Nigeria from 2000 to 2020

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ABSTRACT

The study aimed to explore the relationship between trade openness and economic growth in Nigeria from 2000 to 2020, utilizing an ex-post facto research design. Secondary data was collected from the Central Bank of Nigeria Statistical Bulletin for the year 2022, and data analysis was conducted using SmartPLS 12.1 software, which is suitable for time series regression analysis. The findings of the study reveal that there is no significant relationship between export and both gross domestic product (GDP) and per capita income in Nigeria during the specified time frame. Similarly, the study indicates that there is no significant impact between foreign direct investment (FDI) and both GDP and per capita income in Nigeria. However, it was demonstrated that import significantly affects both the gross domestic product (GDP) and per capita income (PCI) in the country. This suggests that the influx of imports plays a more substantial role in influencing Nigeria's economic growth during the review period. Based on the above findings, the study establishes that trade openness has a significant impact on the economic growth of the Nigerian economy, with the exception of export and foreign direct investment (FDI). It emphasizes the need for the Nigerian government to address security challenges posed by Boko Haram insurgency, Bandits, and Fulani Herdsmen activities. By ensuring a secure and stable environment, the country can attract both foreign and domestic investors, fostering economic development. The study also recognizes the vast potential in the agricultural sector and advocates for revitalizing agriculture in Nigeria. By prioritizing agricultural development, the country can create more job opportunities, enhance food security, and increase its export capabilities, contributing to overall economic growth and stability.

Keywords: Foreign direct investment, Export, Import, gross domestic product, per capital income

INTRODUCTION

Globalization provides nations with the avenue to develop trade openness, economic policies, and initiatives that facilitate the utilization of goods and services originating from other regions. Trade openness pertains to government strategies and programs tailored to enable countries to harness the offerings of foreign entities. The discourse on trade openness and its role in fostering economic growth has been ongoing for a considerable period. This dialogue traces its origins to historical figures like Adam Smith, John Stuart Mill, and David Ricardo, who held a Mercantilist perspective, as well as protectionists such as Raul Prebisch and Hans Singer. The Mercantilists asserted that trade openness prompts economies to engage in unrestricted trade, concentrating their efforts on the production of goods and services wherein they possess a comparative advantage. This approach champions the notion that trade openness stimulates the transfer of technology and knowledge. By intensifying domestic competition, it fuels the accumulation of knowledge

for technological modernization, thus catalyzing economic growth (Kerebana & Krama, 2021).

Challenging the Mercantilist perspective, protectionists offer a contrasting viewpoint that questions the premise of trade openness as being detrimental to economic growth. They argue that trade openness can lead to detrimental competition, favoring advanced economies while potentially relegating developing nations to becoming mere dumping grounds. This, in turn, could lead to economic decline if embraced by developing economies. Protectionism, on the other hand, presents an alternative stance, aiming to safeguard domestic industries through measures like tariffs and non-tariff trade barriers (Mwaba, 2020). The theories from both sides have exerted influence over policies in various countries and have played a role at different stages of economic growth and development (Ayibor, 2022). Protectionism advocates for governmental policies that restrict international trade in order to support domestic industries. These policies are often implemented with the objective of enhancing economic activity within a domestic context, while also addressing issues of safety or quality.

Trade openness refers to the elimination of restrictions like tariffs, quotas, subsidies, and non-tariff barriers to facilitate cross-border transactions. It also involves integrating economies into global markets, increasing the volume and variety of international exchanges in goods, services, and capital (Musa, 2020). Economic growth, as defined by Jhingan (2010), denotes a sustained rise in a nation's national income. Dwivedi (2009) further elaborated that economic growth involves a quantitative increase in per capita income, accompanied by expanded labor force, consumption, capital, and trade volume (Dwivedi, 2009). In essence, economic growth entails the augmentation of per capita income (PCI) and/or gross domestic product (GDP) through a country's total production of goods and services.

In the contemporary world, nearly every nation engages in trade with others, driven by bilateral and multilateral trade agreements to fulfill diverse needs and desires. Trade openness can yield significant gains that enhance economic growth. It serves as a means to control the inflation of imported goods and services, mitigating potential price hikes due to monopolies (Umar, Hawwa, Nazeef & Yahaya, 2021). This approach allows countries to specialize in specific products and services, optimizing production costs while maintaining competitive pricing. Despite its advantages and economic benefits, trade openness is not without drawbacks. As a result, a comprehensive exploration of the relationship between trade openness and economic growth in Nigeria from 2000 to 2020 is crucial.

Statement of the Problem

Nigeria had copiously integrated into the global economic arrangement as a member and signatory to many multilateral trade agreements (e.g. OPEC & ECOWAS) and bilateral trade agreements with different countries. This strategy is to form economic synergy by confiscating trade barriers, trim down tariffs and embark on outward oriented trade policies which escort economic growth. Nigeria is blessed with immense natural resources that could enable the country become a major player in the international market and consequently achieves per capita income and gross domestic product. Crude oil in Nigeria constitutes the most substantial fraction of export however the country's export performance has been lackluster. Unlike other oil producing countries, Nigeria is unable to broaden her economic horizons such that crude oil persists to account higher than every other exported products and services. The dominance of crude oil export figure has made Nigeria highly dependent in the world oil market and prevented it from taking other economic advantage. Attempts to foster export from agricultural through export subsidies and several nonfinancial incentive measures have had very limited success since all the programs have been destabilized by fraud and corruption. Therefore, this study examines the relationship between trade openness and economic growth in Nigeria between 2000 and 2020.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Foreign Direct Investment

There is a paradigm from the argument baseline that foreign direct investment (FDI) is also a strategy to boost the economic growth in the domains. Foreign Direct Investment (FDI) refers to the investment made by individuals, organizations, or entities from one country (the home country) into businesses, assets, or projects located in another country (the host country). FDI involves acquiring a significant ownership stake, usually 10% or more, in a foreign company or establishing a direct presence, such as subsidiaries, joint ventures, or branches, in the host country (Kerebana & Krama 2021). FDI is characterized by a long-term interest and a certain degree of influence or control over the operations of the foreign entity. It differs from portfolio investment, which involves the purchase of securities like stocks and bonds without active involvement in the management of the invested entity (Kerebana & Krama, 2021).

The primary objectives of FDI include gaining access to new markets, resources, technologies, expertise, and potentially benefiting from cost efficiencies. FDI can have a substantial impact on both the host and home countries' economies. For the host country, FDI can bring in capital, create jobs, enhance technology transfer, and stimulate economic growth. For the home country, FDI provides opportunities for diversification and expansion, as well as potential benefits from the earnings and profits generated by the foreign investments. A number of scholars believe that FDI has no positive contribution to the economic growth of the host nation state (Kerebana & Krama, 2021; Umar, Hawwa, Nazeef & Yahaya 2021). Adeel, Taj and Bilal (2016) submitted that the contributions of FDI towards economic growth depend on many factors and it varies over time and from one host country to another. The key players of trade openness argued that positive or negative occurrence of FDI depends on the trade policy regime instituted by host economy. Hence, the effect of FDI is significantly positive in economies that pursue export promotion strategy and insignificant in countries that characterized by import substitution plan (Adeel, Taj & Bilal 2016). In that there has been no consensus viewpoint about FDI and economic growth. Therefore, we hypothesized that:

$H_{0:1}$ Foreign direct investment has no significant effect on gross domestic product in Nigeria.

$H_{0:2}$ Foreign direct investment has no significant effect on per capital income in Nigeria.

Export

The term “exports” refers to the goods and services produced in one country and sold to buyers in another country. According to Kerebana and Itode (2021), exports encompass goods or services produced in a home country and offered to foreign nations. International trade encompasses both exports and imports. Instead of confining themselves within their national borders, countries extend their reach to global markets in search of enhanced revenue and transactional prospects. The export of goods and services presents significant opportunities to modern economies, granting individuals and businesses access to broader markets for their products (Kerebana & Itode, 2021). The relationship between exports and economic growth is a central focus for numerous researchers. Bhagwati and Srinivasan (1979), as well as Muhammad, Muzaffar, Hafiz, and Hassan (2012), argue that exports facilitate economic growth by capitalizing on economies of scale and fostering competitive productivity. However, achieving sustainable economies of scale through export-driven growth necessitates substantial financial investments in research and development. This investment is crucial to introduce innovative products into the market, ensuring long-term benefits and competitive advantages.

Approaching empirical viewpoints, Akram, Khan, Atif, and Shafique (2011) aligned with the Canadian economy, asserting a positive correlation between exports and economic growth. Pradhan (2010) presented the Indian perspective, highlighting the enduring stability between exports, financial development, and

economic growth. Investigating the impact of exports and imports on Syria's economic growth, Mohsen (2015) demonstrated both to have a significant positive influence on the country's gross domestic product. Turning to Riau Islands, Indonesia, Kartikasari (2017) delved into the effects of exports, imports, and investment on economic growth. Results indicated an insignificant negative impact of exports on economic growth. Akter and Bulbul (2017) extended this investigation to eight developing countries, including Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan, and Turkey, between 2001 and 2015. The findings unveiled that Bangladesh, Nigeria, Iran, and Pakistan supported the null hypotheses, while Turkey witnessed growth due to imports and Egypt, Indonesia, and Malaysia due to exports; ultimately, Malaysia exhibited an insignificant impact. As a logical outcome, we consequently formulate the hypothesis that:

$H_{0:3}$ *Export has no significant effect on gross domestic product in Nigeria.*

$H_{0:4}$ *Export has no significant effect on per capital income in Nigeria.*

Import

The term "imports" pertains to the acquisition of goods and services into a jurisdiction, particularly crossing national borders from external origins. In the receiving country, imports effectively translate to exports from the sending country. Import and export activities constitute the pivotal financial transactions of international trade. Imports play a significant role in enhancing the caliber of domestic technologies by fostering competition, compelling local enterprises to refine their production methods. Furthermore, the introduction of imports contributes to a greater diversity of goods and services accessible within the economy. This dynamic fosters heightened economic efficiency for both producers and consumers, as their choices regarding consumption and production are driven by the principles of cost reduction and satisfaction maximization (Ucan, Akyildiz, & Maimaitimansuer, 2016).

Kartikasari (2017) delved into the influence of exports, imports, and investments on the economic growth of Indonesia's Riau Islands. The research demonstrated a noteworthy impact of imports on economic growth, a conclusion drawn from the probability value. Analyzing India's context spanning from 2005 to 2017, Guntukula (2018) explored the relationship between exports, imports, and economic growth. The study revealed bidirectional causality between import and economic growth. Turning to Palestine, Fannoun and Hassouneh (2019) assessed the effect of exports and imports on economic growth from 2000 to 2018. The research spectrum also encompasses the dimension of capital importation. Notably, Arawoma (2014), Ogbonna (2015), and Azebi and Dein (2020) collectively confirmed a significant connection between capital import and economic growth. Conversely, Olusanya (2013), Azeez, Dada, and Aluko (2014), and Okeke (2018) posited that capital import's effect on economic growth is negligible. These studies present divergent outcomes regarding the impact of capital importation on Nigeria's economic growth. This variability renders an empirical resolution elusive between the two variables. Consequently, the collective body of research in this domain remains inconclusive. The disparate findings stemming from empirical studies prevent researchers from arriving at a definitive conclusion on this topic. In light of this, the present study postulates that:

$H_{0:5}$ *Import has no significant effect on gross domestic product in Nigeria.*

$H_{0:6}$ *Import has no significant effect on per capital income in Nigeria.*

Economic Growth

Economic growth denotes a steady procedure in which production capacity of the country increase over time to bring about progressive rise in the levels of national output and income. There are basically three components of economic growth (GDP) which are; gross domestic products, per capital income and growth

in population through ultimate growth in the labor force and technological progress (Elias, Agu & Eze, 2018). GDP offers the monetary value of final goods and services that are bought by the final consumer from the production in a country in a given period of time. GDP counts all of the output generated within the borders of a country (Bantu, 2017). Thus it composed of goods and services produced for sale in the market and nonmarket production, such as defense or education services provided by the government. Another alternative of this concept is that of gross national product (GNP) which add up all the output of the residents of a country. Therefore, if a Ghanaian-owned a company in Nigeria, the output from this factory would not be included in Nigeria GNP but in Ghana GNP. Meanwhile per capita income of a given country, state or Nation determines the amount of money earned by every person in that area. It measures the average income of a person in a geographical location. This helps economist to assess the standard of livelihood and the quality of life of people in given state or region. Whereas, a larger labor force according to Elias, Agu and Eze, (2018) indicate more productive workers, and a large population increases the potential size of domestic markets through technological progress that improve new ways of accomplishing traditional tasks.

2.2 Theoretical Review

The theoretical perspective of international trade and human capital investment is naturally rooted from the theories of trade openness and human capital. Towards this end, the research word is anchored on Adams Smith theory of absolute advantage. The theory of absolute advantage was propounded by Adams Smith in 1776. Smith (1776) disagreed with the Mercantilist that it was impossible for all Counties to become wealthy simultaneously because the export of one nation is another nation's import and thus stated that instead all nations would expand simultaneously if they practiced free trade and specialized in accordance with their absolute advantage. Smith in addition affirmed that the wealth of nations depends upon the goods and services available to their citizens, rather than their gold reserves. While there are possible gains from trade with absolute advantage, the gains may not be mutually beneficial. Comparative advantage focuses on the range of possible mutually beneficial exchanges. The theory avows that countries have to specialize in the production of goods and services that provide them with absolute advantage in its production. Adam Smith utilizes absolute advantage to submit to a country with production cost that is less expensive than another. Adams Smith argued that the remaining cost could be used in free trade that provides benefit to both countries; and of course international trade depends on the basis of this theory.

2.4 Empirical Studies

There are numerous studies that examined the relationship between trade openness and economic growth. Here are few of with conflicting results: For instance, Kerebana and Itode (2021) examined the impact of trade openness and human capital investment on economic growth in Nigeria from 1981 to 2020. Economic growth was proxies by nominal gross domestic product. Human capital investment was decomposed into government capital expenditure on education, government recurrent expenditure on education, government capital expenditure on health and government recurrent expenditure on health while trade openness was measured by trade openness index. The study used descriptive statistics test, Augmented Dickey-Fuller unit root test as well as Johansen co-integration test and Error Correction Mechanism (ECM) technique for the analysis. The result exposed that capital component of government expenditure on health and education were negatively related to national output during the period of investigation. But, the recurrent component of government: health and education as well as trade openness were positively related to economic growth for the period. The study recommended that Government should increase funding in education and health sectors to meet the benchmark recommended by UNESCO and WHO. However, the study did not reflect the nature of effect from it result as debated in the literature review.

Umar, Hawwa, Nazeef and Yahaya (2021) investigated the impact of trade openness on economic development in Nigeria. The variables used were gross domestic product (GDP) as the dependent variable,

real exchange rate, degree of trade openness (import and export as independent variables) within the period of 1980 to 2020. The study used Augmented Dickey-Fuller (ADP) and Philips Perron (PP) unit root test. The co-integration test of Autoregressive Distributed Lags (ARDL) bound test also utilized during estimation process. The result illustrated that there was positive and significant long-run impact of export and exchange rate on economic growth, while negative impact of import on economic growth in Nigeria. The study recommended that the government should focus on the other sectors in Nigeria, such as the agricultural and manufacturing sectors other than the petroleum alone. The study also offered that government ought to promote import liberalization by reducing import tariffs to prevent or discourage smuggling activities. However, the researchers did not state the source of data used for data analysis.

Musa(2020)investigated the effect of trade openness and exchange rate volatility on economic growth in Nigeria. To achieve the objective, the generalized autoregressive conditional heteroskedasticity (GARCH) and autoregressive distributed lag (ARDL) model were employed for the analysis. The study used annual time series data sourced from CBN Statistical Bulletin and National Bureau of Statistics for the period under investigation. The variables employed for the study include GDP growth rate used as proxy for economic growth which served as the dependent variable while trade openness, real exchange rate, foreign direct investment and inflation rate were used as the independent variables. Results showed that trade openness had negative and significant relationship with Nigeria's economic growth both in the short-run and long-run. The study recommended that the Central Bank of Nigeria should stabilize the exchange rate of naira by controlling the high demand for foreign currency. The study was explicit in contextual framework though the span of years to which the study was covered was not stated.

Sunday and Ahmed (2019) investigated the dynamic impact of trade openness on the economic growth in Nigerian economy between 1980 and 2016. Secondary data were sourced, from the 2016 Central Bank of Nigeria Statistical Bulletin. Cointegration test, unit root test and error correction model was used for analysis. The result revealed that trade openness has negatively impacted on the economic growth in both the short run and long run. It was recommended that since the imports of the country are more than its export; the government needs to have the present efforts to sustain the diversification of the economy to achieve economic growth led by exports. Collaborative effort of government with private sectors could encourage the export substitute in the nation to discourage importation and promote export of primary commodities especially the ones that have absolute advantages to the nation. The study did not give recommendation to policy makers on how the country should sustain the policy of Treasury Single Account so as that the loopholes will be blocked in the private and public sectors of the nation, and also to make sure there is equity in the utilization of the revenue generated internally for the masses to benefit.

Oyefabi and Tukur (2019) examined the extent to which trade openness has impacted the growth of the Nigerian economy covering the period from 1981 to 2018. Real Gross Domestic Product (RGDP) was used as a proxy for economic growth. Other variables of interest incorporated into the model as independent variables including trade openness exchange rate and inflation. The data for the study were sourced from the Central Bank of Nigeria statistical database. The Augmented Dickey-Fuller test (ADF) was employed to ascertain the stationary of the variables, and the result revealed that trade openness has a positive and significant impact on economic growth. It was also revealed that inflation has a significant negative impact on economic growth while exchange rate has a positive but not significant impact on economic growth of Nigeria within the period under study. It was thus recommended that the government should embark on a comprehensive trade liberalization policies and programs in order to ensure the acceleration and sustenance of the Nigerian economy. The study did not ascertain how trade liberalization is of benefits to the developed economies than that of the underdeveloped countries.

Egbulonu and Adaku (2018) examined the relationship between trade openness and Economic growth in Nigeria. The study covered the period 1990 – 2015, using ARDL approach to cointegration. The ARDL

result confirmed the existence of a long-run relationship between Economic Growth, Trade Openness, Foreign Direct Investment and Gross Capital Formation. It was establish that trade openness and gross capital formation had positive and negative impacts respectively on growth rate of GDP in the short run. The study thus concluded that, trade openness should be regulated by government; from our result an increase in trade openness caused a decrease in our GDP. FDI should be encouraged as it was seen to have significantly improved economic growth in Nigeria. There was no prove from the literature how the study as contributed on the existing studies and did not reveal how the study contributes to the existing literature.

METHODOLOGY

The study’s primary aim was to explore the correlation between trade openness and economic growth in Nigeria spanning the years 2000 to 2020. To accomplish this goal, the research employed an ex-post facto research design, suitable for studying variables that can’t be manipulated due to their prior occurrences (Emanaku, 2012).The study’s sample framework consisted of import, export, and foreign direct investment, serving as proxies for trade openness. Gross Domestic Product (GDP) and per capita income were considered as the dependent variables. The research encompassed the entire global population, with the sample conveniently drawn from the Nigerian economy. A random sampling technique was used, enabling the researcher to estimate the probability of selecting specific elements from the population to form the sample.

To gather data, secondary data from the Central Bank of Nigeria Statistical Bulletin for the year 2022 was utilized. Data analysis was conducted using the SmartPLS 12.1 software. The utilization of SmartPLS-3 for time series regression analysis was justified due to its robustness, technical proficiency, and efficiency, even with a limited number of cases (Brooks, 2012). Although the data was initially coded in SPSS, it was later converted to CSV format for compatibility before being imported into SmartPLS.

The three independent variables, namely export (EXP), import (IMP), and foreign direct investment (FDI), were initially subjected to regression against the dependent variable gross domestic product (GDP) in the first equation. This process was then replicated for the second dependent variable, per capita income (PCI).The analysis procedure encompassed the specification of the dependent and independent variables, aiming to establish the relationship between trade openness and economic growth in Nigeria during the specified timeframe.

$$GDP = \beta_0 + \beta_1EXP + \beta_2IMP + \beta_3FDI + \mu \dots\dots\dots(i)$$

$$PCI = \beta_0 + \beta_1EXP + \beta_2IMP + \beta_3FDI + \mu \dots\dots\dots(ii)$$

Data Presentation and Discussion of Findings

Table 3.1: Descriptive Statistic Result

	N	Minimum	Maximum	Mean		Std. Deviation	Skewness
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
GDP	21	3.85	5.19	4.6489	.09107	.41733	-.556
FDI	20	7.17	9.21	8.6313	.11550	.51654	-1.160
IMP	21	6.89	7.95	7.5944	.06365	.29170	-.888
EXP	21	7.31	8.17	7.7245	.05565	.25502	.001

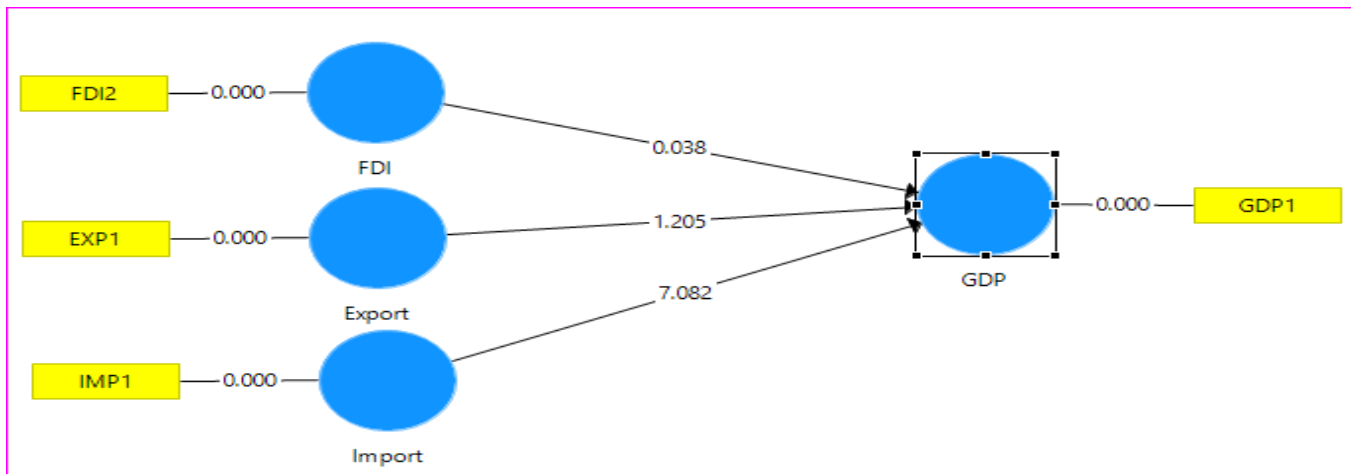
PCI	21	2.75	3.51	3.2233	.05087	.23312	-.987
Valid N (listwise)	20						

Source: SPSS Output, (2023)

As shown from the table 3.1 the Minimum value for Gross Domestic Product (GDP) was 3.85, Foreign Direct Investment (FDI) was 7.17, Import (IMP) was 6.89, Export (EXP) was 7.31 and Per Capital Income (PCI) was 2.75. Meanwhile, their Maximum values were 3.85, 9.21, 7.95, 8.17 and 3.51 respectively. The mean of each variable reflected that Gross Domestic Product (GDP) was 4.6489, Foreign Direct Investment (FDI) was 8.6313, Import (IMP) was 7.5944, Export (EXP) was 7.7245 and Per Capital Income (PCI) was 3.2233. The table also reflected their standard deviation for the variables were as follow 0.41733, 0.51654, 0.29170, 0.25502 and 0.23312 respectively. The Skewness of Gross Domestic Product (GDP) was -0.556, Foreign Direct Investment (FDI) was -1.160, Import (IMP) was -0.888, Export (EXP) was 0.001 and Per Capital Income (PCI) was -0.987.

The data presented were also used for test of hypotheses through a structural equation modeling. In testing the hypotheses, the researcher first regressed all the studied independent dimensions of trade openness (Foreign Direct Investment (FDI), Import (IMP) and Export EXP) with Economic Growth (EG) dimension as Gross Domestic Product (GDP). Thereafter, the study also regressed the same independent dimensions of trade openness with Economic Growth (EG) dimension per capital income as showed in table 3.2, 4.3 and Figure 3.1 and 3.2 respectively. The measurement of this tool is regarded as significant if the ($p < 0.05$) path estimates; while t-tests = 1.96 value of the factor loading construct is to be rejected.

Figure 3.1 Independent Variables on Gross Domestic Product



Source: Smart PLS3 Output, (2023)

From the figure 3.1 there are three lines connecting the constructs (round objects) representing: Foreign Direct Investment (FDI), Import (IMP) and Export EXP) with Economic Growth (EG) dimension as Gross Domestic Product (GDP). In-between those lines, there are numbers, these numbers are called T Statistic values which if ≥ 1.97 is accept a given construct or hypothesis. In the study, only Import (IMP) construct met the threshold and has T Statistic value of 7.082. The Hypothesis which stated that there is no significant effect between imports and gross domestic product in Nigeria was rejected and the alternative hypothesis which stated that there is significant effect between imports and gross domestic product in Nigeria was accepted (see Figure 3.1 and summary in Table 3.2).

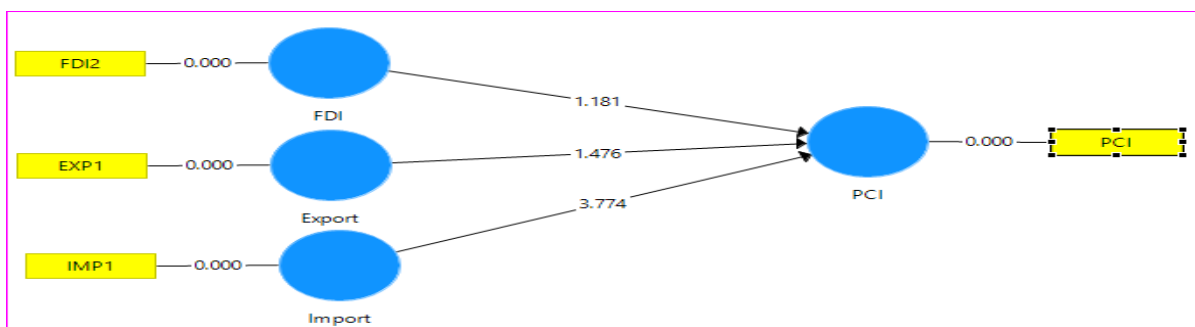
Table 3.2 T Test Independent Variables on Gross Domestic Product

	Original Sampl...	Sample Mean (...	Standard Devia...	T Statistics (O...	P Values
Export -> GDP	-0.329	-0.406	0.273	1.205	0.229
FDI -> GDP	0.006	0.019	0.169	0.038	0.970
Import -> GDP	1.125	1.164	0.159	7.082	0.000

Source: SmartPLS3 Output, (2023)

From table 3.2, Export was match against gross domestic product the T Statistic yields a result of (t =1.205) and P Value is (p = 0.229) given us values below minimum threshold of above 1.97 from the T Statistic and higher than 0.05 from the P Value. The result also revealed that foreign direct investment and gross domestic product T Statistic produces was (t = 0.038) and P Value was (p =0.970) and (t = 7.082) and P Value was (p =0.000) when import and gross domestic product were examined, Hence, hypotheses $H_{0.1}$ was rejected while $H_{0.2}$ and $H_{0.3}$ were accepted as having insignificant influence on output in Nigeria (see Table 3.2 and Figure 3.1).

Figure 3.2 Independent Variables on Per Capital Income



Source: SmartPLS3 Output, (2023)

From the figure 3.2 above, there are three lines connecting the constructs (round objects) representing: Foreign Direct Investment (FDI), Import (IMP) and Export EXP) with Economic Growth (EG) dimension as Per Capital Income (PCI). In-between those lines, there are numbers, these numbers are called T Statistic values which if ≥ 1.97 is accept a given construct or hypothesis. In this study, only Import (IMP)constructmet the threshold and has T Statistic value of 3.774. The Hypothesis which stated that there is no significant effect between imports and Per Capital Income (PCI)in Nigeria was rejected and the alternative hypothesis which stated that there is significant effect between imports and Per Capital Income (PCI) in Nigeria was accepted(see Figure 3.2 and summary in Table 3.3).

Table 3.3 T Test Independent Variables on Per Capital Income

	Original Sampl...	Sample Mean (...	Standard Devia...	T Statistics (O...	P Values
Export -> PCI	0.299	0.226	0.202	1.476	0.141
FDI -> PCI	0.205	0.259	0.174	1.181	0.238
Import -> PCI	0.503	0.519	0.133	3.774	0.000

Source: SmartPLS3 Output, (2023)

Based on the analysis presented in Table 3.3, the study investigated the relationship between Export and Per Capita Income (PCI). The T Statistic value was found to be 1.476, with a corresponding P Value of 0.141. These values fell below the minimum threshold of 1.97 for the T Statistic and above 0.05 for the P Value, indicating that the relationship between Export and Per Capita Income is not statistically significant. Similarly, the study analyzed the impact of foreign direct investment (FDI) and Per Capita Income (PCI), yielding T Statistic values of 1.181 and 3.774, with corresponding P Values of 0.238 and 0.000, respectively. Consequently, hypotheses H0.4 was rejected, while H0.5 and H0.6 were accepted, suggesting that FDI has an insignificant influence on output in Nigeria. The study investigated trade openness and output growth in Nigeria over a time series from 2000 to 2020. The findings revealed that import significantly affects both the gross domestic product (GDP) and Per Capita Income (PCI) in the country. This finding contrasts with the study conducted by Ucan, Akyildiz, and Maimaitimansuer in 2016, which explored trade liberalization and economic growth in Nigeria from 1982 to 2012. In their study, Ucan et al. found that import does not have a significant impact on GDP. The current study suggests that for the government to foster liberalization and ease the import procedures of capital goods and services, it must remove quantitative restrictions on listed commodities that may pose a threat to the interests of domestic producers (Umar, Hawwa, Nazeef & Yahaya, 2021). In conclusion, the study's analysis indicates that Export and FDI have insignificant influences on Per Capita Income and output in Nigeria. However, it highlights the significant impact of import on both GDP and Per Capita Income, contrary to the findings of a previous study. Therefore, the government may need to reconsider its approach to import policies and regulations to foster economic growth and development.

The findings of the present study indicate that there is no significant relationship between export and both gross domestic product (GDP) and per capita income in Nigeria within the specified time frame. This aligns with the conclusions drawn by Kartikasari (2017), who also investigated the impact of capital account openness and found that developing countries experienced more challenges when opening their economies. Several researchers have attempted to address the issue of causality between trade variables, particularly exports, and economic growth. However, their findings were inconsistent with the results of the present study. For instance, Echekeba (2015) conducted a study using time series data to achieve this objective, but the outcomes did not align with the present study's conclusions. Similarly, Azebi and Dein (2020) examined causality tests between export and growth for thirty-seven developing independent states and found consistent evidence supporting export-led growth in only four instances. In summary, the current study's results demonstrate that there is no significant effect between export and GDP or per capita income in Nigeria during the specified time frame. This finding is consistent with Kartikasari's (2017) research, which emphasized the challenges faced by developing countries when opening their economies. Despite efforts by other researchers to explore the causality between exports and economic growth, their conclusions differed from the outcomes of the present study.

The findings of the current study indicate that there is no significant impact between foreign direct investment (FDI) and both gross domestic product (GDP) and per capita income in Nigeria. This aligns with the results of the study conducted by Egbulonu and Adaku (2018), who also explored the effects of trade openness and financial investment on Nigeria's economic growth over the period from 1960 to 2011. They found that there is a statistically insignificant and long-term relationship between FDI and Nigeria's economic growth. However, the results of the current study differ from the findings of Guntukula (2018), who established a significant impact of trade openness on economic growth in Nigeria. Additionally, Olusanya (2013) identified a unidirectional relationship between openness and growth, suggesting that an increasing level of openness could be beneficial, depending on Nigeria's level of economic development. In summary, the current study's results indicate that there is no significant effect between FDI and both GDP and per capita income in Nigeria. These findings are consistent with the research conducted by Egbulonu and Adaku (2018). However, it contrasts with the results of Guntukula (2018), who found a significant impact of trade openness on economic growth in Nigeria. The relationship between openness and growth, as identified by Olusanya (2013), implies that the benefits of increasing openness depend on the country's

economic development level.

CONCLUSION

The presented data indicates a multifaceted relationship between trade openness and economic growth in Nigeria. While the impacts of exports and foreign direct investment (FDI) on growth are modest, imports emerge as a substantial driver for both GDP and PCI (Per Capita Income) growth. The study reveals that trade openness, represented by exports and FDI, exerts insignificant effects on both GDP and per capita income growth. However, imports hold a more prominent influence compared to exports and FDI.

In light of these findings, the researchers advocate for the Nigerian Government to persist in diversifying the economy, aiming for enhanced success in export endeavors. The emphasis should be on prioritizing sectors like agriculture and manufacturing to generate export surpluses, moving beyond exclusive focus on domestic consumption. By strategically elevating the agricultural and manufacturing sectors, Nigeria can foster the creation of internationally demanded goods and services, thereby unlocking its potential as an exporter. This approach not only stimulates economic growth but also amplifies foreign exchange earnings.

The study underscores the overall positive impact of trade openness on Nigeria's economic growth, except in the cases of exports and FDI. To fully harness the advantages of trade openness, the Nigerian Government is urged to intensify efforts in diversification, while fostering the production of export-oriented goods and services, particularly within agriculture and manufacturing. This shift is poised to elevate export volumes, thereby contributing significantly to the nation's economic development and bolstering overall stability.

Given this scenario, the study proposes a strategic solution: the government should introduce policies that incentivize the importation of machinery and equipment, designed to amplify domestic production capabilities. Simultaneously, there should be constraints on the importation of goods and services that can be manufactured within the country. By implementing such measures, the government can effectively address the observed weak connection between trade openness and economic growth, as highlighted in the present findings. This strategic approach is poised to bolster domestic production and industrialization, reducing the over-reliance on crude oil exports and boosting the creation of value-added goods and services. The provided data suggests that the relationship between trade openness and economic growth in Nigeria is complex. While exports and FDI might have limited impacts on growth, imports appear to play a significant role.

RECOMMENDATIONS

Based on the aforementioned findings, the study emphasizes the importance of providing the Nigerian government with a set of recommendations.

Reconsidering Export Strategy: Given the absence of a notable correlation between exports and the growth of both GDP and PCI (Per Capita Income), it would be prudent for Nigeria to reconsider its emphasis on exports as the primary driver of economic growth. Although exports still hold significance for revenue generation and economic diversification, it's evident that relying solely on export-oriented growth might not lead to substantial advancements in overall economic performance. In pursuit of sustained economic progress, Nigeria could strategically pivot towards diversification, aiming to expand its growth avenues beyond just exports and imports. By cultivating a multifaceted economy encompassing strong domestic production, a resilient services sector, and innovation-propelled industries, Nigeria can lay the groundwork for a more resilient and robust growth trajectory. This approach recognizes that a balanced economic portfolio, embracing various sectors and sources of growth, can contribute to a steadier

foundation for development. As such, focusing on a comprehensive strategy that goes beyond export-driven growth is likely to enhance Nigeria's prospects for long-term economic stability and prosperity.

Promoting Foreign Direct Investment (FDI) Inflows: Despite the relatively modest positive correlation between FDI and the growth of both GDP and PCI (Per Capita Income), it is prudent to explore policies aimed at enticing and streamlining foreign direct investment. FDI possesses the potential to introduce capital, technology, and expertise, offering substantial contributions to long-term economic expansion. Acknowledging the limited but discernible link between FDI and growth indicators, initiatives aimed at attracting and facilitating FDI could facilitate the infusion of resources and knowledge that can yield enduring benefits for the nation's economic development.

Optimizing Import Strategies: Given the robust association observed between imports and the growth of both GDP and PCI (Per Capita Income), it becomes evident that implementing policies to effectively manage and optimize imports can wield a significant influence on economic expansion. This could entail adopting approaches that bolster local production capacities, nurture indigenous industries, and ensure that imported goods synergize harmoniously with domestic economic pursuits. Hence, it is imperative to recognize that these findings are derived from a restricted set of variables and data. To achieve a more comprehensive comprehension of the intricate interplay between trade openness and economic growth in Nigeria, it is advised to conduct more exhaustive analyses. This expanded exploration might encompass a wider array of variables, sophisticated econometric models, and a careful examination of external factors, collectively offering a clearer insight into the dynamics at play.

REFERENCES

1. Adeel, A. D., Taj, M., & Bilal, M. (2016). Is there a relationship between foreign direct investment, human capital, trade openness and economic growth of Pakistani economy?. *Science International Journal (Lahore)*, 28(1), 715-719.
2. Akram, M., Khan, A. J., Atif, M., & Shafique, F. (2011). Exports and economic growth: empirical evidence from Canada. *Interdisciplinary Journal of Contemporary Research in Business*, 3(2), 849-858.
3. Akter, M. & Bulbul, M. N. (2017). Comparative analysis between export-led growth and import-led growth: A study on Developing Eight. *International Journal of Economics, Finance and Management Sciences*, 5(4), 204-212. doi: 10.11648/j.ijefm.20170504.11
4. Arawoma, S.I. (2014). The Determinants of Foreign Direct Investment in Africa: A survey of the evidence, in Ajayi, S.I. (ed.) *Foreign direct investment in Sub-Saharan Africa: Origins, Targets, Impact and Potential*, African Economic Research Consortium: Nairobi
5. Azebi, M., & Dein, B. (2020). Foreign direct investment, economic freedom and growth: New Evidence from Latin America. *European Journal of Political Economy*, 19(3), 529-545.
6. Azeez, K. M., Dada, S.O. & Aluko, O. O. (2014). Impact of foreign direct investment on Nigeria economic growth. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 9-19.
7. Bantu, J. W. (2017). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115-135.
8. Bhagwati, J. N. & Srinivasan, T. (1979). *Trade policy and development*, International Economic Policy: Theory and Evidence. John Hopkins University Press, Baltimore, MD.
9. Dwivedi, D.N. (2009). *Macroeconomics: Theory and policy*. New Delhi: Tata McGraw-Hill
10. Egbulonu, K. G. & Adaku, E. J. (2018). trade openness and Nigeria's economic growth (1990- 2015). *International Journal of Development and Economic Sustainability*, 6(3), 1-11.
11. Elias, I. A., Agu, R. E. & Eze, L. O. (2018). Impact of International Trade on the Economic Growth of Nigeria. *European Journal of Business and Management*, 10(18), 22-30.
12. Fannoun, Z. & Hassouneh, I. (2019). The causal relationship between exports, imports and economic

- growth in Palestine. *Journal of Reviews on Global Economics*, 8(1), 258-268.
13. Guntukula R. (2018). Exports, imports and economic growth in India: evidence from cointegration and causality analysis. *Theoretical and Applied Economics*, 25(2), 221-230.
 14. Jhingan, M.L. (2010). *Macroeconomics theory*. Delhi: Vrinda Publication Limited.
 15. Kartikasari, D. (2017). The effect of export, import and investment to economic growth of Riau Islands Indonesia. *International Journal of Economics and Financial Issues*, 7(4), 663-667.
 16. Kerebana, T. K. & Krama, I. J. (2021). Trade openness, human capital investment and economic growth in Nigeria. *International Journal of Development and Economic Sustainability*, 9(3), 57-71.
 17. Mohsen, A.S. (2015). Effects of exports and imports on the economic growth of Syria. *Euro-Asian Journal of Economics and Finance*, 3(4), 253-261.
 18. Muhammad, U., Muzaffar, A., Hafiz, W. K., & Hassan, K. (2012). Impact of Exports on Economic Growth: A Case of Luxemburg. *Information Management and Business Review*, 4(1), 1-7.
 19. Musa, N. (2020). Impact of trade openness and exchange rate volatility on economic growth in Nigeria. *Interdisciplinary Journal of African and Asian Studies (IJAAS)*, 6(2), 185-195.
 20. Ogbonna, S. (2015). Capital inflows and the real exchange rate: A comparative study of Asia and Latin America. *Journal of Humanities*, 1(3), 45-60.
 21. Okeke, D. (2018). *Bautista conference: Foreign direct investment: Mexico, United States, Canada NAFTA, and Presentation Transcript*. *European Journal of Research and Management Science*, 4(5), 23-50.
 22. Olusanya, J.O. (2013). Foreign direct investment and economic growth in Nigeria: A seemingly unrelated model. *Africa Review of Money, Finance and Banking*, 1(1)5-25.
 23. Oyefabi, I. S. & Tukur, M. U. (2019). Trade openness and economic growth in the developing countries: Evidence from Nigeria. *International Journal of Academic Research IN economics and management sciences*, 8(3), 31-42.
 24. Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations*. In *The Glasgow edition of the works and correspondence of Adam Smith, Vol. 2*, eds. R. H. Campbell, and A. S. Skinner. Oxford: Oxford University Press.
 25. Sunday, E., & Ahmed, B. M. (2019). Dynamic impact of trade openness on the economic growth in Nigeria. *International Journal of Engineering and Advanced Technology (IJEAT)*, 8(5C), 609-616.
 26. Ucan O., Akyildiz A., & Maimaitimansuer M. (2016). The Relationship between export and economic growth in Turkey. *European Scientific Journal*, 5(2), 61-70.
 27. Umar, B., Hawwa, A. A., Nazeef, B. H. & Yahaya Y.M. (2021). Impact of trade openness on economic development in Nigeria. *International Journal of Intellectual Discourse (IJID)*, 4(2), 303-312.