ASR Journal
International Academic Social Resources Journal
Open Access Refereed E-Journal & Indexed & Puplishing
Year 2021, Vol:6, Issue:25, pp:743-750 E-ISSN: 2636-7637

Arrival Date : 07.04.2021
Published Date : 07.06.2021
DOI Number: 10.31569/ASRJOURNAL.247
RESEARCH ARTICLE

MANUFACTURED GOODS EXPORT AND GROSS DOMESTIC PRODUCT (GDP) IN NIGERIA

Michael Isaac, OPUSUNJU, Ph.D.
Department of Business Administration Nile University of Nigeria

Murat, AKYUZ Ph.D.
Department of Business Administration, Nile University of Nigeria

Samuel Atta, AKU, Ph.D.
Department of Business Administration, Nasarawa State University, Keffi

Cite As Opusunju, M.I; Akyuz, M. & Aku, S.A. (2021). "Manufactured Goods Export And Gross Domestic Product (Gdp) In Nigeria", International Academic Social Resources Journal, (e-ISSN: 2636-7637), Vol:6, Issue:25; pp:743-750

ABSTRACT

The study examined the impact of manufactured export on gross domestic product in Nigeria. The study selected 50 years period from 1970 to 2019. The study used ex-post facto research design. The population of this study is one the sector of the economy and sample size is one sector of non-oil export. The study used descriptive statistics, correlation analysis, unit root test and regression analysis with t-test and f-test. Data collected from Central Bank of Nigeria statistical bulletin were analysed using e-view version 9.00. The study found that there is positive and significant impact of manufacturing export on economic growth in Nigeria. The study recommended that Government of Nigeria should concentrate on manufacturing export since it lead to economic growth in terms of GDP.

Keywords: manufactured export and gross domestic product

1. INTRODUCTION

The exports of manufactured goods are globally recognised as one of the main determinants of economic growth. The debate on whether exports lead to economic growth is still ongoing. A large number of studies have been done for different countries with focus on either total exports or manufactured exports and economic growth and they include among others Torayeh (2011), Kahyarara (2013), Sinoha-Lopete (2006), Jordaan and Eita (2009), Yaghmaian (1994) and Abu-Bader (2001). Different results have been obtained and some results showed evidence of long run relationship between exports and economic growth while on the other hand evidence of no long run relationship was obtained. The differences in the obtained results are associated with the econometric technique applied, country sets and duration of the study as well as the selection of variables used.

Manufactured export is part of non-oil export sectors of the Nigeria economy which is faced with a lot of problems such as mismanagement, inconsistent and poor government policies, lack of basic infrastructure, obsolete varieties and land tenure system which made the sector accounts for over 26.8% of GDP in recent years. For example, the export of non-oil commodities contributes only 4% of total exports in Nigeria (Okoh, 2004).

From the empirical studies, most of the studies have looked at various resource endowment, especially oil and metals, just a few have focused on manufactured export. However, this study looked at manufactured export and gross domestic product in Nigeria.

The main objective of the study is to examine the impact of manufactured goods export on Gross Domestic Product (GDP) in Nigeria. Also, the scope of this study is restricted to the impact of manufactured goods export on Gross Domestic Product (GDP). The periods selected are 1970 to 2019. The period is chosen because the situation became worrisome thus with the era of democracy and over dependent on oil export. There were attempts to recapture the loss of glory of agriculture by General Olusegun Obasanjo's and Goodluck Jonathan during this period.

To carry out this research effectively, it deem fit to formulate the null hypothesis:

Ho_1 There is no significant impact of manufactured export on Gross Domestic Product (GDP) in Nigeria

1.1. Concept Of Gross Domestic Product

Penny, Pritzker, Ken and Brian (2015) note that Gross Domestic Product is the total value of goods and services produced within the borders of a country, regardless of who owns the assets or the nationality of the labour used in producing that output. Gross Domestic Product reflects production in a given time period, regardless of whether that production is used for consumption, for investment in new fixed assets or

inventories, or for replacing depreciated fixed assets. Pritzker, Arnold and Moyer (2015) identified Gross Domestic Product (GDP)as the economic indicator which measures the value of the goods and services produced in an economy in a given time period.

1.2. Concept Of Manufacturing Export

This is another part of non-oil export. In the country, the contribution of this category of export product is not encouraged in years fast. According to Ikpeazu (2000) the problem of manufactured sector are numerous and these had cost the country to have its own fair share in the export of manufactured goods due to the quality and not meeting international standard. In the observation made by MAN (Manufactured Association of Nigeria) in their 2002 general meeting, the government can help to revamp the sector by increasing the capacity utilization via infrastructure development programme and financial assistance to the sector.

Manufacturing Export is another important mechanism through which firms in developing countries can absorb world technology via international trade channels. Through exposure to foreign markets, technologies, and products, developing-country firms may specialise in products with high learning potential. This view is supported both by case studies and empirical evidence, showing that export-based firms experience higher productivity growth than firms that supply domestic markets (Arnold & Hussinger2004).

1.3. Aluminium Product

Aluminium is soft, lightweight, fire-proof and heat-resistant, easy to work into new shapes and able to conduct electricity. It reflects light and heat very effectively and it doesn't rust. It reacts easily with other chemical elements, especially oxygen and readily forms an outer layer of aluminium oxide if you leave it in the air. Aluminium really comes into its own when you combine it with other metals to make aluminium alloys (an alloy is a metal mixed together with other elements to make a new material with improved properties, it might be stronger or it might melt at a higher temperature). A few of the metals commonly used to make aluminium alloys include boron, copper, lithium, magnesium, manganese, silicon, tin and zinc (Ahmed, 2013).

1.4. Rubber sheets

Rubber sheets have been used for many years to protect mattresses from bed wetting, other moisture and dust. Now days, there are several fantastic alternatives that are more comfortable and durable such as- Vinyl cover, a cover that can simply be wiped clean, vinyl seems to have replaced rubber as a lightweight, inexpensive, effective mattress protection. A heavy duty 6G vinyl is worth a few more dollars because it is thicker, less apt to tear and will last longer. The disadvantage of using a rubber or vinyl cover is that it doesn't allow the body heat to dissipate so some users report that they sweat more in the night-time unless another absorbent mattress pad is used on top (Ahmed, 2013).

1.5. Nitrogenous Fertilizer

Nitrogenous fertilizers as per the management practices are invariably applied at early growth stages of the crop and the N concentration in soil at this stage reaches to 100 mM and subsequently declines to as low as 10 mM during flag leaf blade emergence (Ahmad et al., 1999). One of the approaches to enhance NUE was to identify the genotypes which use N naturally in a more efficient manner, i.e., HNR genotypes. The nitrogenous fertilizer industry includes the production of synthetic ammonia, nitric acid, ammonium nitrate, and urea. Synthetic ammonia and nitric acid are used primarily as intermediates in the production of ammonium nitrate and urea fertilizers (Ahmad et al., 1999).

1.6. Cargo Ships and Fire Boats

Nigeria currently has about 10 shipyards, with a combined capacity of 66,050T, although only six of them are operational. They include Starz Marine and Engineering Limited, Nigerdcok, West Atlantic Shipyard, Naval Dockyard, West African drydocks, Shipside Drydocks and Niger Benue Transport Company (Wisdom, 2017). A *fireboat* is a specialized watercraft with pumps and nozzles designed for fighting shoreline and shipboard fires (Wikipedia, 2019). Nigeria Exports to United States of Ships, boats, and other floating structures was US$791.4 Thousand during 2018, according to the United Nations COMTRADE database on international trade (2017). Also, Nigeria Exports to United States of Ships, boats, and other floating structures.

1.7. Empirical Studies

Oludotun, Akanni and Abiodun (2006) examined the impact of manufactured exports and its components on economic growth in Nigeria, taking cognisance of the country's institutional framework. Few of the components of manufactured exports were found to exert positive influence on growth both in the long and short runs.

Teboho, Mmamontsho and Joel (2016) examine the empirical relationship between manufactured exports and economic growth in SADC. This study applied the recent panel econometric methods to determine the long run equilibrium between manufactured exports and economic growth. The results of this study indicate that there is an existence of long run equilibrium between manufactured export and economic growth during 1980 to 2012. The results show that there is a positive impact of manufactured exports on economic growth in SADC. Furthermore, the study applied causality analysis and it was found that causality is running from economic growth to manufactured exports.

Letlhogonolo and Hinaunye(2016) used the bound testing ARDL approacb cointegration to determine the short run and long run relationship between manufactured exports and economic growth in Swaziland for the period 1990 to 2008. The results reveal that a long run relationship exists among the variables. The error correction term was also found to be statisticaUy significant and has the correct sign. The implication is that there is a fairly high speed of adjustment after a shock. The results are favourably comparable to those inthe literature. The policy implication of a positive relationship between manufactured exports and economic growth in Swaziland is that an expansion of manufactured exports will lead to an increase in economic growth.

Torayeh (2011) carried out a study on manufactured exports and economic growth in Egypt. Cointegration analysis and error correction model ECM were used to determine the short run and long run relationship between manufactured exports and economic growth. The study covered the period 1980 to 2008. The results obtained showed a bi-directional long run relationship between exports of manufactured good as a whole and economic growth. The study concluded that there is a long run circular causality between manufactured exports and economic growth in Egypt.

Uzochukwu (2019) studied how Low growth of manufacturing exports has been identified as a major factor for poor economic performance in many Sub-Saharan African economies. Exports improvement in the manufacturing sector especially through the learning process is a necessary condition for growth and real development of less developed and developing economies in Sub-Saharan Africa (SSA). The study sought to establish empirical support in the SSA context for the “learning by exporting hypothesis” by employing Cobb-Douglas type of production functions and firm-level survey data from asample of ten African countries (Nigeria, Ghana, Kenya, Tanzania, Ethiopia, South Africa, Cameroon, Botswana, Mauritius, and Zimbabwe). Furthermore, employing Ordinary Least Squares (OLS), Clerides, Lach and Tybout (CLT) and Non-parametric Maximum Likelihood (NPML) estimation techniques, the study found support for the learning by exporting hypothesis in Sub-Saharan Africa.

1.8. Keynesian Growth Theory

According to the traditional Keynesian theory, an increase in exports is one of the factors that can cause increases in demand and thus will surely bring about increases in outputs, all other things being equal (Lin & Li, 2007). It is important to note that though this approach is highly sophisticated and robust, it has not been widely used. This is partly because of the remnant of Say’s law in people’s mind (McCombie & Thirlwall, 1994). Indeed most people believe that the major constraints of modern economic growth lie on the supply side instead of on the demand side. In other words, they believe that only increases in factor inputs and improvements in economic efficiency can stimulate economic growth (Lin &Li, 2007). However, proponents of the demand- oriented analysis disagree with the above view and argue persuasively that it is growth in exports that is the major stimulant of aggregate economic activity and economic growth. Thirlwall (1987), McCombie (1985), McCombie and Thirlwall (1994 and 1997) and others later developed the argument of the proponents of the demand-oriented analysis into a powerful theoretical framework that analyses the relationship between exports and economic growth. Put briefly, the theoretical framework has the following characteristics: (a) contrary to popular belief, the Keynesian theory/model can be used to analyze long-term phenomena such as economic growth; (b) exports are an autonomous component of demand; (c) the role that exports play in an open economy model is as important as investment in a closed economy model; and (d) the role of the balance of payments as a constraint on economic growth is important.

2. METHODOLOGY

The study adopted ex-post facto research design and use secondary data from the Central Bank of Nigeria statistical bulletin**.** According to Export Promotion Council of Nigeria (EPCN) cited in CBN (2005), the population of this sector is all manufactured export and the sample size is the manufactured export. The Descriptive Statistics (Pre Diagnostics Test), correlation analysis, unit root test were used in analyzing data. Also, the Augmented Dickey-Fuller (ADF) is employed to test univariate time series for the presence of unit roots or non-stationarity. The multiple regression model is specified.

Soil Mineral Export and Gross Domestic Product

2.1. Manufacturing Export and Gross Domestic Product

$$bGDP_{it} = \alpha_0 + \alpha_1 bAPEP_{it} + \alpha_2 bRSEP_{it} + \alpha_3 bNFEP_{it} + \alpha_4 bCSFBEP_{it} + \varepsilon_{it} \ldots .1$$

Where GDP is gross domestic product, APEP is Aluminum product export, RS is rubber sheets export, NFEP is nitrogenous export and CSFBEP is cargo ships/Fire boats; i stands for the entire three sectors, t denotes time (i.e., years) while εit is the composite error term. a_1, a_2, a_2 and a_4 are the efficient. The models can be estimated using descriptive, unit root test and multiple regressions. With this assumption, the models can be estimated using the ordinary least squares (OLS) method.

3. DATA ANALYSIS

Table 1 Descriptive Statistics

	APEP	RS	NFEP	CSFBEP	GDP
Mean	1.15E+09	1.39E+08	54100554	67285495	5.24E+12
Median	2.58E+08	48810656	7328786.	6777931.	2.77E+11
Maximum	6.87E+09	6.53E+08	6.28E+08	6.28E+08	4.12E+13
Minimum	517271.0	628291.0	526262.0	252720.0	6.99E+08
Std. Dev.	2.08E+09	1.70E+08	1.22E+08	1.47E+08	1.02E+13
Skewness	1.775351	1.276763	3.702083	2.781932	2.300551
Kurtosis	4.432818	3.546460	15.95919	9.439330	7.308800
Jarque-Bera	30.54261	14.20650	464.0881	150.8782	82.78312
Probability	0.000000	0.000822	0.000000	0.000000	0.000000
Sum	5.74E+10	6.95E+09	2.71E+09	3.36E+09	2.62E+14
Sum Sq. Dev.	2.13E+20	1.42E+18	7.28E+17	1.05E+18	5.14E+27
Observations	50	50	50	50	50

The table showed that Aluminum export in Nigeria has a mean value (average) of 1.15 over the period of review. The table revealed that median value of 2.58 which showed that the absence of outliers in the values. The variable has a standard deviation of 2.08 which suggested that the value of the observation was spread across its mean value of 1.15. The skewness statistics of the variable was 1.77, suggesting that it was positive, while the kurtosis statistics of 4.43 suggested that the observation was leptokurtic in distribution. The Jaque-Bera statistics 30.54 with a probability value of 0.00 suggested that the APEP was not normally distributed at 5% level of significance and it was log to correct it to normal.

The table showed that Rubber sheets export in Nigeria has a mean value (average) of 1.39 over the period of review. The table revealed that median value of 48810656 which showed that the absence of outliers in the values. The variable has a standard deviation of 1.70 which suggested that the value of the observation was spread across its mean value of 1.39. The skewness statistics of the variable was 1.27, suggesting that it was positive, while the kurtosis statistics of 3.54 suggested that the observation was leptokurtic in distribution. The Jaque-Bera statistics 14.20 with a probability value of 0.00 suggested that the RS was not normally distributed at 5% level of significance and it was log to correct it to normal.

The table showed that nitrogenous export in Nigeria has a mean value (average) of 54100554 over the period of review. The table revealed that median value of 7328786 which showed that the absence of outliers in the values. The variable has a standard deviation of 1.22 which suggested that the value of the observation was spread across its mean value of 54100554. The skewness statistics of the variable was 3.70, suggesting that it was positive, while the kurtosis statistics of 15.95 suggested that the observation was leptokurtic in distribution. The Jaque-Bera statistics 464.08 with a probability value of 0.00 suggested that the NFEP was not normally distributed at 5% level of significance and it was log to correct it to normal.

The table showed that nitrogenous export in Nigeria has a mean value (average) of 67285495 over the period of review. The table revealed that median value of 6777931 which showed that the absence of outliers

in the values. The variable has a standard deviation of 1.47 which suggested that the value of the observation was spread across its mean value of 67285495. The skewness statistics of the variable was 2.78, suggesting that it was positive, while the kurtosis statistics of 9.45 suggested that the observation was leptokurtic in distribution. The Jaque-Bera statistics 150.87 with a probability value of 0.00 suggested that the NFEP was not normally distributed at 5% level of significance and it was log to correct it to normal.

The table showed that gross domestic product in Nigeria has a mean value (average) of 5.24 over the period of review. The table revealed that median value of 2.77 which showed that the absence of outliers in the values. The variable has a standard deviation of 1.02 which suggested that the value of the observation was spread across its mean value of 5.24. The skewness statistics of the variable was 2.30, suggesting that it was positive, while the kurtosis statistics of 7.30 suggested that the observation was leptokurtic in distribution. The Jaque-Bera statistics 82.78 with a probability value of 0.00 suggested that the GDP was not normally distributed at 5% level of significance and it was log to correct it to normal.

Table 2: Correlation Matrix

	LGDP	LAPEP	LRS	LNFEP	LCSFBEP
LGDP	1.000000	-0.142005	0.128309	0.299352	-0.476921
LAPEP	-0.142005	1.000000	0.025059	0.138701	0.176695
LRS	0.128309	0.025059	1.000000	0.242325	0.137658
LNFEP	0.299352	0.138701	0.242325	1.000000	-0.045077
LCSFBEP	-0.476921	0.176695	0.137658	-0.045077	1.000000

Source: Researcher's computation using, E-views 9.0, 2020

Table 2 revealed that gross domestic product in Nigeria (GDP), has weak negative correlation (0.14) with aluminum export (APEP). Gross domestic product in Nigeria (GDP) has a weak positive correlation (0.12) with rubber sheets export (RS) in Nigeria. Also, gross domestic product in Nigeria (GDP) has weak positive correlation (0.29) with nitrogenous export (NFEP) in Nigeria and gross domestic product in Nigeria (GDP) has weak negative correlation (0.47) with cargo ships/fire boats export (CSFBEP) in Nigeria. These correlation showed that the indicants were appropriately selected. Thus, there was absent of multicollinearity or there was no problem of multicollinearity.

Table 3 Unit Root Test on the Variables

Variables	**Level of stationarity**	**ADF-statistic**	**Significant values 1%, 5%, 10%**	**Order of Integration**	**Prob.(5%)**
LGDP	constant (exogenous): Trend	7.61	-3.57, -2.92, -2.60	1(1)	0.0000*
LAPEP	Constant	3.71	-4.16, -3.50, -3.18	1(0)	0.03**
LRS	Constant	3.78	-3.57, -2.92, -2.59	1(0)	0.0003*
LNFEP	Constant	3.23	-3.57, -2.92, -2.59	1(0)	0.02**
LCSFBEP	Constant	3.62	-3.57, -2.92, -2.59	1(1)	0.008*

Source: Author's Computation using E-view 9.00
Probability values are indicated by *1%, **5% and ***10%

Table 3 showed that LGDP and LCSFBEP were not stationary at level and second difference but stationary at first difference due to the fact that the values of its ADF test statistics at first differences were greater than their corresponding critical values at 5% level of significance. Thus, LGDP, and LCSFBEP were stationary at first difference. It is also recorded that LAPEP, LRS and LNFEP were not stationary at first difference and second difference but stationary at level due to the fact that the values of its ADF test statistics at first differences were greater than their corresponding critical values at 5% level of significance. Thus, LAPEP, LRS and LNFEP were stationary at level. Also, the variables were integrated of order one 1(1) and 1(0) in each model which signify that regression analysis such as t-test and f-test were appropriately and adequately needed in this study.

Table 4: Regression Analysis
Dependent Variable: LGDP
Method: Least Squares
Date: 05/20/20 Time: 09:49
Sample: 1970 2019
Included observations: 50

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.39964	5.385161	5.273685	0.0000
LAPEP	-0.109729	0.138845	-0.790300	0.4335
LRS	0.226468	0.218548	1.036239	0.3056
LNFEP	0.424401	0.208193	2.038493	0.0474

LCSFBEP	-0.657742	0.177573	-3.704071	0.0006

R-squared	0.531034	Mean dependent var	26.64029
Adjusted R-squared	0.471570	S.D. dependent var	2.860735
S.E. of regression	2.441583	Akaike info criterion	4.717810
Sum squared resid	268.2598	Schwarz criterion	4.909012
Log likelihood	-112.9452	Hannan-Quinn criter.	4.790621
F-statistic	5.566992	Durbin-Watson stat	1.071425
Prob(F-statistic)	0.000996		

Source: E-view 9.00 output, 2020
Decision rule: 5%

The regression result shows that the model is fit for the study since the f-statistics is significant at 5% level of significant. The result also shows that aluminum export (LAPEP) has negative and insignificant impact on economic growth in terms of gross domestic product in Nigeria. The finding also indicates that rubber sheets export(LRS) has positive and insignificant impact on economic growth in terms of gross domestic product in Nigeria. It also showed that nitrogenous export (LNFEP) has positive and significant impact on economic growth in terms of gross domestic product in Nigeria and cargo ships/fire boats export (LCSFBEP) has negative and significant impact on economic growth in terms of gross domestic product in Nigeria.

These negative impacts are significant and insignificant since the P-value is less than 5% and more than 5%. Thus, we can conclude that aluminum export (LAPEP) has negative and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Rubber sheets export(LRS) has positive and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Nitrogenous export (LNFEP) has positive and significant impact on economic growth in terms of gross domestic product in Nigeria and cargo ships/fire boats export (LCSFBEP) has negative and significant impact on economic growth in terms of gross domestic product in Nigeria.

The R^2 = 0.53 indicates that only 53% of variation on manufacturing export can be used to explain by economic growth in Nigeria but 47% can explained by other factors not noted in the regression model which is refer to as error term. The study concluded that there is positive and significant impact of manufacturing export on economic growth in Nigeria.

4. DISCUSSION OF FINDINGS

The results of the analysis indicate that found that there is positive and significant impact of manufacturing export on economic growth in Nigeria. Aluminum export (LAPEP) has negative and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Rubber sheets export(LRS) has positive and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Nitrogenous export (LNFEP) has positive and significant impact on economic growth in terms of gross domestic product in Nigeria and cargo ships/fire boats export (LCSFBEP) has negative and significant impact on economic growth in terms of gross domestic product in Nigeria. The study is in line with the findings of Ajie et al (2019) who found positive and significant impact of the variables. The study is also in tandem with traditional Keynesian theory which states that an increase in exports is one of the factors that can cause increases in demand and thus will surely bring about increases in outputs, all other things being equal (Lin & Li, 2007).

5. CONCLUSION AND RECOMMENDATIONS

The study concluded that there is positive and significant impact of manufacturing export on economic growth in Nigeria. Aluminum export (LAPEP) has negative and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Rubber sheets export(LRS) has positive and insignificant impact on economic growth in terms of gross domestic product in Nigeria. Nitrogenous export (LNFEP) has positive and significant impact on economic growth in terms of gross domestic product in Nigeria and cargo ships/fire boats export (LCSFBEP) has negative and significant impact on economic growth in terms of gross domestic product in Nigeria. The study is in line with the findings of Ajie et al (2019) who found positive and significant impact of the variables.

The study recommended that Government of Nigeria should concentrate on manufacturing export since it lead to economic growth in terms of GDP. They should encourage aluminum export even if it has negative and insignificant impact on the GDP in Nigeria. They should export more of rubber sheets since it has

negative impact even though there is insignificant impact. They should also concentrated on the nitrogenous export and cargo ships/fire boats export.

REFERENCES

Ajie, C. O., Okoh, S. A. & Ojiya, E. A.(2019). The Impact Of Solid Minerals Resources On Economic Growth In Nigeria: An Ols And Causality Approach. International Journal of Humanities, Art and Social Studies, 4(1)

Letlhogonolo, M M. & Hinaunye, E. J. (2016). Manufactured Exports and Economic Growth in Swaziland: Autoregressive Distributed Lag (ARDL) Bound Testing Approach. International Academic Conferences Proceedings New York, USA

Torayeh, M.N., (2011). "Manufactured exports and economic growth in Egypt: Cointegration and causality analysis". Applied Econometrics and International Development. 11 (1), 111-135.

Kahyarara, G. (2013).Tanzania Manufacturing Exports and Growth:A Cointegration Approach, *International Journal of Economics and ManagementSciences*, 2(12):41-51.

Sinoha-Lopote, R. (2004). Export Led Growth in Southern Africa, Unpublished Mater of Science Thesis Lousiana: B.S Louisiania State University.

Jordaan A. C.& Eita J. H. (2009). Testing the Export-Led Growth Hypothesis for Botswana: A Causality Analysis, Botswana Journal of Economics,6(10):2-14.

Yaghmaian, B. (1994)."An Empirical Investigation of Exports, Development,and Growth in Developing Countries: Challenging the Neoclassical Theory ofExport-Led Growth, World Development, vol. 22.

Abu-Bader, S. (2001). "Financial development and economic growth: The Egyptian experience," Journal of Policy Modeling, Elsevier, vol. 30(5), pages 887-898.

Okoh, R. N. (2004) Global Integration and the Growth of Nigeria's Non-oil Exports. A paper presented at the Centre for the Study of African Economies, African Conference 2004, on Growth, Poverty Reduction and Human Development in Africa, 21st to 22nd March 2004, Oxford, UK. Pp. 1-30

Penny, S., Pritzker, P.O/. Ken, I. L. & Brian, L. (2015). 'An evaluation of the trade relationships between South Africa and China: An empirical review 1995–2014', South African Journal of Economic and Management Sciences 21(1)

Pritzker, O.P. Arnold, I. U. & Moyer, M. K.(2015). Effect of Kenya's Bilateral Relations with China on Economic Growth of Kenya (2000-2015). Journal of Economics and Finance, 9(5) 13-21

Ikpeazu, C. (2000). "Tackling the Problems of Manufacturing Sector of the Nigeria Economy/Article of the Nigerian Industry Policy.

Arnold, J., and K. Hussinger (2004). Export Behavior and Firm Productivity in German Manufacturing: A Firm-Level Analysis. Bocconi University and Centre for European Economic Research mimeo.

Ahmed, A.T.A, Mandal, S, Chowdhury, D.A, Tareq, A.R.M., & Rahman, M.M. (1999). Bioaccumulation of some heavy metals in Ayre Fish (Sperata Aor Hamilton, 1822), sediment and water of Dhaleshwari River in dry season. Bangladesh J. Zool. 40(1):147-153.

Ahmed, I. O. (2013). Aluminium production in Nigeria. International Journal of Business, 2(3) 33-41

Wisdom, (2017). Types of manufacturing goods. International journal of industrial goods, 2(3) 21-33

Wikipedia, (2019). Manufacturing goods in Nigeria. online source

United Nations COMTRADE database on international trade (2017). Data source information

Teboho, R,, Mmamontsho, O. & Joel. I. (2016). Effect of empirical relationship between manufactured exports and economic growth in SADC. International Journal of Business Management and Business, 3(3)22-34

Uzochukwu, I. (2019). Effect of Low growth of manufacturing exports in Sub-Saharan African economies. International Journal of Economic and Finance, 2(3) 22-34

Lin, J.Y. & Ren. R. (2007). East Asian Miracle Debate Revisited" (in Chinese). Jingji Yanjiu (Economic Research Journal) 42(8): 4 – 12.

McCombie, J.S.L. and Thirlwall, A.P. (1994) Economic Growth and the Balance of Payments Constraint, Basingstoke, Macmillan

Thirlwall, A.P. (1987). Keynes and Economic Development. London : Macmillan

McCombie, J.S.L. & Thirlwall, A.P. (1997) 'The Dynamic Harrod Trade Multiplier and the Demand-Oriented Approach to Economic Growth : An Evaluation', International Review of Applied Economics, 2(3)76-81

McCombie, J.S.L.(1989) 'Thirlwall's Law and Balance of Payments Constrained Growth – A Comment on the Debate', Applied Economics, May

McCombie, J.S.L. (1985) ' Economic Growth, the Harrod Trade Multiplier and the Hicks Supoer-Multiplier', Applied Economics, February