

Web: www.aeeeng.org

ISSN 2006-8395

ECONOMIC GLOBALIZATION AND MANUFACTURING OUTPUT IN NIGERIA

*Stephen M. Chukwuka¹, Amaka Gertrude Metu², Ebele S. Nwokoye²,

& Chinwe M. Madueke²

¹Department of Economics, Denise Osadebay University, Anwai, Delta State, Nigeria

²Department of Economics, Nnamdi Azikiwe University, Awka Anambra State, Nigeria

*Corresponding Email: <u>cmesenterprises@gmail.com</u>

Abstract

The United Nations, in 2015 had emphasized through its Sustainable Development Goals (SDG), that adequate manufacturing output will reduce poverty, hunger and promote economic growth. However, Nigeria's manufacturing output has failed to meet this target, with evidences of hunger, poverty and poor economic growth. This study examined the impact of economic globalization and the extent to which it contributed to variance on Nigeria's manufacturing output. This study utilized manufacturing sector output and economic globalization index data from KOF globalization index. The auto regressive distributed lag was used for estimation of variables in this study. The findings of the study revealed that economic globalization index had long run relationship with manufacturing output. Economic globalization had positive and insignificant coefficient value in the short-run but turned negative and insignificant in the long-run. In addition to these results, the variance decomposition test revealed that globalization accounted for less than 20% variations in manufacturing output for the first five periods. The study concludes that economic globalization was not strong enough to drive manufacturing output in Nigeria and recommends that Nigeria should introduce import substitution strategy to enable her improve the contribution of globalization to her manufacturing output.

Keywords: Manufacturing output; economic globalization; Nigeria.

JEL Classification Codes: L6, F01, F6

1. Introduction

Manufacturing is viewed as the production of merchandise for sale or use through the application of tools, machine, labour, chemical and biological formulation. It involves both handicraft of human activities and high tech by transforming of unfinished goods to finished goods. Manufacturing sector output is measured primarily as an index of product revenues, adjusted for price changes. During the measurement of manufacturing sector output, adjustments were made to ensure that output that is sold to another business within the same measuring unit is excluded to prevent error in measurement (Adenikinju & Adeola 2013). Manufacturing has generally been described and accepted as a catalyst for economic growth and development all over the world.

Manufacturing indicators include production volume, production downtime, production costs, overall operations effectiveness (OOE), overall equipment effectiveness (OEE), total effective equipment performance (TEEP), track overall effectiveness, capacity utilization, defect density, rate of return, ontime delivery, right first time, asset turnover, unit costs, return on assets, maintenance costs and revenue per employee (Adeniran, Adetiloye, Fakintoye, Ibidapo, & Osabohien, 2018).

The Goal 1, Goal 2 and Goal 8 of Sustainable Development Goal (SDG) is to foster a global partnership that will promote manufacturing sector production to carter for hunger and eradicate poverty through economic growth and development. This SGG is one of the implementation plans developed to advance manufacturing and production plan. It will help developing economies like Nigeria to reduce her dependence on foreign good, reduce cost of locally made goods and create employment through the expansion of the manufacturing sector products. But this has not been the case in Nigeria. Nigeria, a country blessed with abundant natural and human resources, has failed to meet the 2020 goal of her Industrial Revolution Plan which is to increase the contribution of the manufacturing sector to GDP from the present 4% to more than 10%. Nigeria has also failed to boost the annual revenue

Economic Globalization and Manufacturing Output in Nigeria

earnings of the Nigerian manufacturers by up to N5 trillion per annum as documented in the Industrial Revolution Plan.

Since Nigeria is a signatory to the SDG yet our country is still among the countries lagging behind to meet these set goals, it calls for serious scrutiny and proper economic investigations regarding the drive for manufacturing production. Despite the incredible opportunities globalization has brought to the other signatory nations like China and Singapore, it is not same situation in Nigeria. This justifies the essence of this study especially now that the wave of globalization has continuously intensified its impacts in all the spheres of the global economies of the world. Furthermore, manufacturing is the driver of economic improvement dimension as detailed in Goal 8 of the Sustainable Development Goals. Nigeria have failed to trigger the N5billion growth target in the manufacturing sector, projected to be achieved in 2020. Nigeria is one of the 193 member countries that adopted the Sustainable Development Goals (SDGs) which aims to improve better life through economic prosperity. Surprisingly, Nigeria is still struggling with an average score of 47.1% which ranks her no. 43rd out of the 52 ranked countries on the attainment of the SDGs. The slow contribution to Nigeria's manufacturing output through sector globalization has not helped to improve

Nigeria's economic growth, this is another bothering issue which this study seeks to proffer solution and policy options to. incidently, the Nigeria manufacturing sector output has been meagre over the last fifty years. The manufacturing sub sector policies has focused on import substitution (IS) ignoring the manufacturing sector in most cases. The government has failed to rekindle the sector back to its old days before the civil war, when Nigeria was one of the highest producers and exporters of red oil, cocoa and many other products. This has led to the decline in the manufacturing output in Nigeria.

Globalization has significant impact on all economies of the world, with manifold effects especially on their manufacturing of goods and services. employment of labour, investment in both physical and human capital. This results in the diffusion of technology, ensuring efficiency, productivity and competitiveness from one nation to other through economic, political and social globalization (UNIDO, 2015). According to Ajibade, Ajayi, and Allo (2016) globalization encompasses trans-border capital, labour, news, images, management, and data flows. described the main They engine of globalization as the transnational corporations (TNCs), inter-governmental organizations (IGOs), non-governmental organizations (NGOs), alternative and government

Economic Globalization and Manufacturing Output in Nigeria

organizations (AGOs). On the other hand, Akinlo (2019) assert that globalization results to uneven distribution of benefits and losses on economic growth of emerging economies and that the Nigeria's situation is not quite different.

Despite the various policy interventions which includes; import substituting industrialization the structural adjustment programme (SAP), the trade and financial liberalization policy, the national economic empowerment and development strategy (NEEDS), Nigeria is yet to achieve optimality in the manufacturing sector irrespective of the impact of economic globalization. According to the Manufacturers Association of Nigeria (MAN), irrespective of the aforementioned policy interventions, the operating environment for the manufacturers in Nigeria is still ranked to be very poor and annihilating (McKenzie & David 2017). Manufacturers Association of Nigeria (MAN) noted that factors responsible for the poor performance of the sector include high interest rates, multiple taxation, overbearing bureaucracy, policy somersaults, social unrests and the likes (Masson, 2013). This has made the Nigerian manufacturing sector unable to raise its contribution to her gross domestic products (GDP) from 4% to 10% which was the country's target in 2020 (IMF, 2020). Most manufacturing companies in Nigeria has packed-up while several others are relocating

to other countries in search of better operating environment (Desai, Raj & Homi 2017). Importantly, with the current manufacturing inconsistency, Nigeria will be unable to achieve the UN Goal 1, 2 and 8 of the Sustainable Development Goals (SDG) which set a target for all nations to eradicate poverty, hunger, food security and promote economy growth and development of her citizens from 2015 to 2030 (World Bank, 2019).

Canning, David, Sangeeta Raja, and Abdo (2015) noted that Nigeria's inadequate manufacturing sector output has led to increased poverty level, hunger, worsened food security and had left Nigerians with poor economic growth and development. Canning, et al., (2015) emphasized that the impact of globalization which is supposed to bring about adequate openness to help boost Nigeria manufacturing sector output and increase manufacturing sector production has failed to yield up to expectation. The world economic forum (2018) makes it clear that the likes of China, Singapore and Vietnam and many other countries were able to boost their local manufacturing through the adoption of globalization, yet Nigeria after the adoption of globalization for decades now is still manufacturing struggling with output inconsistency. The foregoing is a major concern and necessitated the conduct of this research to ascertain how Nigeria's manufacturing sector output is impacted by economic globalization.

Economic Globalization and Manufacturing Output in Nigeria

2. Review of Related Literature Theoretical Framework

The underpinning theory for this study is the Paul Romer New Growth Theory, Keynesian Growth Theory and The Heckscher - Ohlin Theory. These theories selection is based on the efficacy of both globalisation and manufacturing sector production which tends to achieve higher macroeconomic outcomes. In view of its theoretical and empirical relevance to manufacturing sector output and overall performance of the economy, these theories were unanimously adopted in this study. In line with Heckscher-Ohlin theory approach, Bhorat, Haroon, Ravi, Christopher and François (2017) proposed a two-nation growth theory with endogenous technological progress. As shown in their theory, globalization leads to export promotion and helps to promote technological development and broadens economic knowledge as well. This justifies the objective of the study which looked at the link and role of manufacturing development economic sector to performance.

Furthermore, the new growth theory supports globalization as one of the factors that can cause increases in demand and thus will surely bring about increases in manufacturing sector performance, all other things being equal (Sheridan, 2014). It is important to note that though this approach is highly sophisticated and robust it has been widely

instrumental to the developed economies of the world this is in conformity with Say's law (Jarreau & Poncet 2012). Indeed, most people believe that the major constraints of modern economic growth lie on the Agricultural sector volume instead of the manufacturing sector productivity capacity. In other words, some economic experts tend to believe that only increases in factor inputs (such as raw materials) and improvements in economic efficiency can stimulate economic growth (Ilegbinosa, Uzomba & Somiari 2012).

The concept of globalization and manufacturing sector output has robust theoretical underpinnings that can be traced to economic align with growth and development. Prior to Adam Smith and David Ricardo's theses on international trade, the "mercantilist" philosophy promoted manufacturing as the foundation of national wealth. Whereas international trade is also known as globalisation this is according to the neo-classical model of growth which was later countered by the radical theorists on the inviolability of globalization for ensuring the growth of nations. The radical theorists and proponents of development the early economics were of the view that growth can be internalized with a more committed investment in human capital development, emphasizing that this will increase the availability of labour force and invariably increase the manufacturing output.

Economic Globalization and Manufacturing Output in Nigeria

However, recent developments in the world economy have shown that it is futile for countries to isolate themselves in a rapidly integrating world, while ignoring their home manufacturing industries that have capacity to turn around their economies. Consequently, in order to understand the influence of globalization on the Nigeria economy, we specify a model which captures globalization impact on economic growth; this model will be able to predict the directional causality of globalisation impact in manufacturing sector performance as well. Research have shown that globalization constitute the platforms for economic development and manufacturing sector performance (Iyoha & Okim, 2017). Iyoha and Okim (2017) revealed that the naira exchange rate devaluation or depreciation will encourage globalisation which is an injection into the economy and is expected to have positive impact on manufacturing sector performance and economic growth. Trade openness/Degree of openness captures the flow of trade in and out of a country. Positive or larger trade openness improves economic growth. Total savings and net foreign capital flow (NFCF) is also a determinant of economic growth (Dreher & Axel, 2016). David and Jeff (2015) stated that economies through globalization grow and more investment in manufacturing sector and foreign direct earnings, positing that foreign direct investment and the later facilitate economic growth according to the traditional

Chukwuka, Metu, Nwokoye & Madueke (2024): The Nigerian Journal of Energy & Environmental Economics (NJEE), Volume 15 (2) Keynesian Growth Theory and The Heckscher – Ohlin Theory.

Conceptual Framework

Nigeria is a signatory to the Sustainable Development Goals (SDGs), but our nation is still among those that are falling short of achieving these targets. This calls for careful examination and appropriate economic research regarding our push for

Economic Globalization and Manufacturing Output in Nigeria

manufacturing production, which is a crucial factor in the eradication of hunger, poverty, and subpar economic growth as well as development. Henceforth, there is need for the increased decentralization of manufacturing sector production activities in the face of globalization as this will enable enterprises to become more productive and competitive globally.

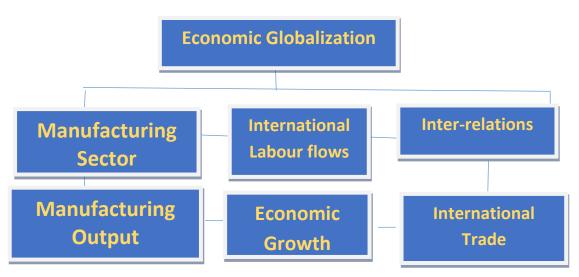


Fig 2.1: Conceptual framework of economic globalization and manufacturing output

Source: Researchers, Conceptualisation, (2024)

This section conceptualizes globalization and manufacturing sector and explains in detail why these two variables can be combined in the first place in academic research. However, these two variables are interconnected with each other because they both have key access to economic prosperity of every nation worldwide. The concept of globalization simply means the speedup of movements and exchanges (of human beings, goods, and services, capital, technologies or cultural practices) all over the planet. One of the effects of globalization is that it promotes and increases interactions between different regions and populations around the globe. In a similar conceptual context manufacturing strategy is usually divided into content and process. The content of manufacturing strategy is described in terms of competitive factors which globalization brings into play in this concept. The manufacturing strategy process describes strategy formulation and implementation, in either way the manufacturing sector cannot do without

globalization to effectively perform, this is because globalization gives access to new technologies development, access to global market in the manufacturing sector (Desai, Raj & Homi 2017).

This conceptual framework also shows the increasing decentralization of manufacturing sector resulting from the need for enterprises to become more flexible, productive and competitive in the face of globalization implies that governments must devolve more power and responsibility to managers and workers at industry and enterprise level to enable them fully utilize the benefits of globalization. It will also place much greater demands on the people involved in individual enterprises, and reinforce the manufacturing sector with effective workers' and employers' which have the capacity to respond to the demand of consumers. Furthermore, the aim of this study is to capture its dynamics in the Nigeria manufacturing context before and after the adoption of globalization. The choice of this globalization offers a unique reply to the challenges of manufacturing sectors in developed economies (Desai, et al., 2017).

Furthermore, the manufacturing sector of Nigeria and globalization has been conceptualized as the process of opening up of economies to the outside world to facilitate trade, reduction in physical and other barriers to increase mobility of goods and factors of production as well as labour force. In other

Economic Globalization and Manufacturing Output in Nigeria

words, it is a process of integration of economies through economic, social and political processes. Thus, in order to have a comparison of relative position of openness of any country, Dreher (2016) introduced the globalisation index since 2002 and it is computed by considering the three dimensions of it viz economic, social and political.

Globalization is conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance and produces complex relations of mutual interdependence. The KOF Index of Globalization measures the three main dimensions of globalization: Economic, Social and Political and the overall globalisation index indicate the degree of openness of a country to the other countries in the world. The economic dimension captures the (a) actual flows of trade, foreign direct investment, portfolio management, income payment to foreign nationals and foreign capital employed (all expressed as percentage of GDP) and (b) restrictions on trade, foreign capital through physical and economic barriers, tariff rates, taxes and an index of capital control.

Empirical Literature Review

Numerous studies exist in relation to globalization, manufacturing sector performance and economic growth in Nigeria. However, the summary of the theoretical literature was conducted using various

methodologies that are generally acceptable in social science research. Some studies like Jarreau & Poncet 2012; Jolliffe, 2014; Kaur, (2011), examined the relationship and correlation between globalization and industrialization in the context of economic growth both in West Africa, developing economies and emerging economies in the World. These studies in general concluded that there is strong evidence to show that globalization positively improves both manufacturing sector performance and economic growth based on the fact that manufacturing sector output and economic growth were found to be highly correlated. The principal weakness of this group of studies is that they used a high degree of correlation between the two variables as evidence supporting their various conclusions. But high degree of correlation between the variables is not a sufficient condition to validate the globalization and economic growth hypothesis, because in econometrics and statistics, correlation does not necessarily imply causality that will impact or trigger increase in output.

Estimating manufacturing sector output growth regression equations based on the neoglobalisation growth techniques of production function analysis, including exports/export growth and human development index as an explanatory variable, (AfDB, OECD & UNDP 2017; and Economic Commission for

Economic Globalization and Manufacturing Output in Nigeria

Africa trade report, 2016). These studies examined whether or not globalization is driving force for increase in manufacturing products and economic growth using auto regressive distributed lag model in 6 countries. Their results revealed that there is a significant improvement in the coefficient of with determination the inclusion of globalization variable in the regression equation as evidence for the manufacturing sector output growth and expansion in manufacturing. This group of studies has been severely criticized based mainly on a methodological issue by World Bank (2020a). The studies in general made a priori assumption that export of globalization causes manufacturing sector output growth and they did not consider the direction of causal relationship between the variables under study investigation.

There is a coordinated set of studies which has relatively laid emphasis on causal direction between manufacturing sector, globalization economic growth. and These studies including Newfarmer et al., (2018); Jonathan, Kehinde, Oladopo, Adedolapo (2015)investigated whether or not individual countries showed evidence for manufacturing sector output and economic growth in-line with the level of manufacturing sector investment using Granger causality test analysis. The major weakness of these studies is that the Granger causality tests are only

valid if, among other things, the original time series are not co-integrated. The tests are invalid and misleading when the original time series are integrated of order one and are cointegrated. However, studies such as Arip, Yee and Abdul, (2010); Abdul and Arip, United Nations (2011);Economic Commission for Africa (UNECA, 2018); Atkin, (2015) emphasized the need to check for stationarity and cointegration properties of the series before using Granger causality test. Yinka, Opusunju, Ahmed (2020) analysed the relationship between manufacturing sector investment and economic growth within the framework of a general manufacturing technology. The study employed the Engel-Granger two-step procedure of cointegration as well as the error correction modelling technique in the analysis. The study concludes that the manufacturing sector investment for Nigeria manufactured products is insufficient. However, the study did not address the issue of causality and the direction of causality for the variables. It is pertinent to note that the issue of causality and its direction is of utmost importance in research of such magnitude in order to ascertain the impact of globalization manufacturing in promoting sector production.

Atkin and Donaldson (2015) used the traditional Granger causality test to examine whether the implication of international trade and globalization is valid for Nigeria

Economic Globalization and Manufacturing Output in Nigeria

economic growth promotion. The results of the study indicated that a bidirectional relationship exists in Nigeria. Thus, the study concluded that globalization and international trade drives economic growth in Nigeria. Though the study examined the stationarity properties of the variables used, it did not consider the issue of cointegration. The issue of cointegration is very important in determining whether or not to apply the traditional Granger causality test in the analysis of causality. OECD and WTO in (2015) collaborated and carried out a study on globalisation and economic growth in West Africa using the traditional Granger causality test and Johansen cointegration tests. The result of their study revealed a bidirectional causality and long-run relationship between globalisation and economic growth in West Africa. However, given that the variables in question (globalization and economic growth) are integrated of order one and are cointegrated, the use of the traditional Granger causality test is not appropriate. Granger causality test should have been done in the framework of error correction model. Thus, this study intends to correct these methodological defects identified in the studies empirically reviewed and incorporate the appropriate method of analysis by introducing the unit root test, panel auto distributed lag model, regressive error correction model, granger causality test,

Chukwuka, Metu, Nwokoye & Madueke (2024): The Nigerian Journal of Energy & Environmental Economics (NJEE), Volume 15 (2) cointegration test and CUSUM and CUSUMSQ stability test in the analysis.

In spite of the weaknesses associated with the techniques adopted by previous studies, it is crystal clear that generations of studies with various techniques, are still very relevant for they provide useful insights on the research topic under study. Indeed, the techniques serve as simple and handy analytical methods of testing the validity of globalization and manufacturing sector performance and in predicting economic growth in Nigeria. It is necessary to point out here that this study will close the gaps identified in previous research works.

 $MO_{t-i} = \alpha_0 + \sum_{i=1}^{p} B_{i1}OPEN_{t-i} + \sum_{i=1}^{p} B_{i2}FDI_{t-i} + \sum_{i=1}^{p} B_{i3}EXR_{t-i} + \sum_{i=1}^{p} B_{i4}INFR_{t-i} + \varepsilon_t$

and modified the above model used in their study to enable us accommodate other variables which we introduced to their model. Hence, the stated model for this study is specified below:

$$MSO = f (ECOG, EMP, GDP, CPS, EXR)$$
(3.1)

Stating the relationship mathematically, the model is specified as:

$$MSO = \beta_1 ECOG + \beta_2 EMP + \beta_3 GDP + \beta_4$$

CPS + \beta_5 EXR (3.2)

Where; β_0 is the constant intercept which shows the level of MSO, when the explanatory variables ECOG, EMP, GDP, Economic Globalization and Manufacturing Output in Nigeria

3. Research Method

The study employed advanced econometric technique called autoregressive distributed lag (ARDL) model and also used modern analytical and evaluation technique to estimate the relationship between economic globalization and manufacturing sector output in Nigeria for 32 years. The data were sourced from world development indicators WDI and unit root test was used to certify the order of stationarity of the variables.

Model Specification

In line with stated objectives of this study which is to evaluate the impact of globalization on the manufacturing output of Nigeria economy, this study adapted the work of Jonathan, Kehinde, Oladopo, Adedolapo, (2015) whose model is specified as

and EXR are zero. Manufacturing sector output is the dependent variable in this study, and dependent on ECOG, EMP, GDP, CPS and EXR. This means that ECOG, GDP, and EXR are the independent variables and therefore determine the behaviour of the MSO.

Stating the relationship in an econometric model, it becomes;

$$MSO = \beta_0 + \beta_1 ECOG + \beta_2 EMP + \beta_3 GDP + \beta_4 CPS + \beta_5 EXR + ui$$
(3.3)

From the infusion of β_0 and ui above, it becomes an econometric model. Ui is the

stochastic error term or disturbance variable while β_0 remains the constant as stated earlier. The Ui takes care of other variable that influence the dependent variables but not stated in the model. It therefore has the following assumptions guiding its behaviour, this assumption includes; assumption of zero *Economic Globalization and Manufacturing Output in Nigeria*

mean, assumption of correct aggregation, assumption of randomness, assumption of homoscedasticity and assumption on normality (Koutsoyiannis, 2003).

4. Results Presentation and Discussions

Table 4.1: Unit Root Test Results									
Variable	t-Statistics	ADF 5%	ADF 1%	1(0)	1(1)	Prob.	Decision		
MSO	-7.124431	-3.574244	-4.309824		**	0.0000	1(1)		
EMP	-9.544211	-3.633033	-4.416345	*		0.0000	1(0)		
GDP	-5.191501	-3.595026	-4.356068		**	0.0015	1(1)		
CPS	-3.647920	-3.574244	-4.309824	*		0.0429	1(0)		
EXR	-4.074398	-3.574244	-4.309824		**	0.0171	1(1)		
ECOG	-4.394123	-3.580622	-4.323979	*		0.0085	1(0)		

 Table 4.1: Unit Root Test Results

Source: Authors' computation using e-view12

The unit root test results above indicate that economic globalization index is significant at 5% significant level. This is because the manufacturing sector output (MSO) has a probability value of 0.0000 which is less than 0.05, augmented Dickey-Fuller test statistic value of -7.124431 which is greater than the test of critical value of -3.574244 at 5% level of significance. Economic globalization index (ECOG) has a probability value of 0.0085, t-statistics of -4.394123 which is greater than the augmented Dickey Fuller test statistics value of -3.580622 at 5% significant level.

Table 4.2: AKDL Results									
Variable	Coefficient	Std. Error	t-Statistic	Prob					
MSO	-0.493227	0.155229	-3.177410	0.0112					
EMP	-0.196358	0.500888	-0.111535	0.0658					
GDP	1.194184	0.400436	2.982210	0.0154					
CPS	0.417376	0.460857	0.319786	0.7564					
EXR	0.213601	0.055284	3.863685	0.0038					
ECOG	0.066675	0.156418	0.426265	0.0374					

Table 4.2: ARDL Results

Source: Authors' computation using e-view12

Our results revealed that economic globalization increases the cost of manufacturing in Nigeria. This is against the general trend and impact of globalization apriori expectation which is to positively impact manufacturing output in Nigeria and reduce production cost overtime. This implies that manufacturing companies cannot manufacture at lower cost thereby the prices of locally manufactured goods will skyrocket. Furthermore, in the first period, economic globalization index has a coefficient value of

0.06%, which drastically decreased to 0.001% and -0.416% respectively. This shows an obvious downward trend of its contribution to the Nigeria manufacturing output in the long run. The result also indicates that economic globalization index has a negative and insignificant relationship to manufacturing output in Nigeria because a 0.06% change in manufacturing production will lead to -0.416% decrease in manufacturing output. This result reveals that despite the openness of the Nigeria economy through the adoption of globalization, due to poor economic policies Nigeria failed to harness the gains of globalization. This confines Nigeria as a nation struggling to grow her manufacturing output in the presence of abundant natural resources. The economic globalization components are in tandem with the economic globalization index results. The components are statistically significant but negatively impact the growth of Nigeria manufacturing sector output.

Test of hypothesis

The study's Wald test hypothesis results revealed that the probability value (PV) is 0.4 which is greater than 0.05 at 5% significant level. Recalling the decision rule, we therefore accept the null hypothesis and reject the alternate hypothesis based on the fact that the probability value (PV) is 0.4. Economic Globalization and Manufacturing Output in Nigeria

Discussion of Findings

The study found out that the manufacturing output in Nigeria has a negative coefficient value of -0.493227 which depicts danger for the Nigeria economic growth going forward. In the long-run there is no hope for this situation to change, which implies that without salient economic policies put in place, policies especially channeled towards revamping the Nigeria's manufacturing sector, it might continue to experience low manufacturing output, low economic contribution to gross domestic product growth and low development of the nation's manufacturing industries. This will inhibit manufacturing output to meet the consumption demand of Nigerians and will keep encouraging high importation which is what is currently experienced in the Nigeria of today. Whereas, globalization is supposed to help bring about improved production, technical know-how of manufacturing sector workers, and help Nigeria become more productive (using local raw materials) to meet the nations increasing population demand. But the reverse is the case, globalization has done more harm than good to Nigeria's manufacturing output due to bad policies of government and instituted institutions that has failed to live up to the expectation to exploit the benefit of globalization to bring in more sophisticated manufacturing equipment's into the country to help save the country from total collapse in terms of low production.

Furthermore. economic globalization revealed that it increases the cost of manufacturing in Nigeria. This is against the general trend and impact of globalization apriori expectation which is to positively impact manufacturing output in Nigeria. This implies that manufacturing companies cannot manufacture at lower cost thereby the prices of locally manufacture goods will skyrocket. Hence a 0.06% impact on the manufacturing output of Nigeria which drastically decreased to 0.001% and -0.416% respectively shows an obvious downward trend of its contribution to the Nigeria manufacturing output in both in the short and the long run. This also indicates that economic globalization index has a negative and insignificant relationship to manufacturing output in Nigeria.

Policy Implications of Findings

The findings of our study indicate that the economic diversification agenda requires an emergency declaration in the Nigeria manufacturing sector; this is because this sector is plagued by numerous lapses among limitations. The other governments' regulatory agencies should primarily set up a smooth-running policy to instil sanity and to fast track the development of the manufacturing by removing sector encumbrances manufacturing to sector growth which is currently evident in this sector as seen in this study's results. This should be done because when the

Economic Globalization and Manufacturing Output in Nigeria

manufacturers record growth in their respective businesses the government also makes money in terms of revenues from taxes among others.

5. Conclusion

This study investigated the impact of economic globalization and manufacturing output of Nigeria using autoregressive distributed lag (ARDL) estimation technique. The study found that Nigeria as a nation have not done enough to exploit the innovation of economic globalization. The results revealed that economic globalization negatively impacted Nigeria's manufacturing output which has limited the revamping of the manufacturing The Nigeria sector. conclusion of this study is validated by the fact that local manufacturers in Nigeria are struggling to manufacture due to daunting challenges which includes lack of government support, access to credit and ineffective policies. Based on the findings, it is recommended that economic globalization which has a technological synergy should be channeled towards developing and improving Nigeria's manufacturing sector to make the sector more productive.

References

Adenikinju, A. (2013). Manufacturing failures in Nigeria: A survey-based comparative analysis of the costs and adjustment responses. *Industrial Policy*, 7(5), 31-46.

- Adeniran, A., Adetiloye, A., Fakintoye, O., Ibidapo, D., & Osabohien, R. (2018).
 Macroeconomic determinants of manufacturing sector output in Nigeria: Exchange rate and employment dimension. *International Journal of Development Research*, 8(6), 21310-21316.
- Adebayo, N., (2020). FG developing policies to support manufacturing: *The Cable News Paper Publication*. Retrieved from: https://www.thecable.ng/niyiadebayo-fg-developing-policies-tosupport-manufacturing on 2nd of July, 2021.
- African Development Bank (2017). AfDB African Economic Outlook. Journal of Entrepreneurship and Industrialization ISBN 978-92-64-27426-6.
- Ajibade, J. E., Ajayi, M. P., & Allo, T. (2016). Risk and investment decision making in the technological age: A dialysis of cyber fraud complication in Nigeria industrial production. *International Journal of Cyber Criminology*, 10(1), 62-78.
- Akinlo, A. E., (2019). Manufacturing sector output and economic growth: Evidence from 11 Sub-Sahara African countries. *Energy Economics*, 30(5), 2391-2400.
- Atkin, D., & Donaldson D., (2015). Who's getting globalized? The size and implications of intra-national trade costs. NBER Working Paper No. 21439. Cambridge: National Bureau of Economic Research, 59
- Arip, M. A., Yee, L. S. & Karim, A. (2010). Export diversification and economic growth in Malaysia. Munich Personal Repec Archive (MPRA) Paper No. 20588. <u>https://mpra.ub.unimuenchen.de/20588/1/MPRA</u>
- Bhorat, H. I., & Kanbur, R. & Rooney, C., François, S. (2017). Sub-Saharan Africa's manufacturing sector: Building complexity. *African*

Economic Globalization and Manufacturing Output in Nigeria

Development Bank Working Paper No256.Availablehttps://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/WPSNo256ManufacturingEmployment-ComplexityAnalysisZc.pdf

- Canning, D., Raja, S. & Yazbeck, A. S. (2015). *Africa's Demographic Transition: Dividend or disaster?* Africa Development Forum Washington, DC: World Bank.
- Central Bank of Nigeria Statistical Bulletin (CBN), (2017).
- Schatsky, D. & Schwarz, J. (2015). Machines as talent: collaboration, not competition. <u>https://www2.deloitte.com/us/en/insig</u> <u>hts/focus/human-capital-</u> <u>trends/2015/cognitive-technology-in-</u> <u>hr-human-capital-trends-2015.html</u>
- Desai, R. M., & Homi, K. (2017). Is a growing middle-class good for the poor? Social policy in a time of globalization. Global Economy and Development Working Paper 105, Brookings Institution, Washington, DC. <u>https://www.brookings.edu/wpcontent/uploads/2017/07/gd_2017071</u> <u>3 working-paper-105.pdf</u>
- Dreher, A. (2016). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics Tailor and Francis Journal, 38,* 10, 1091-1110.
- Gygli, S., Haelg. F., Portrafk, N., et al., (2019). The KOF globalisation index – revisited, *Review of International Organizations*, 14(3), 543-574 <u>https://link.springer.com/article/1</u> 0.1007/s11558-019-09344-2#citeas
- Ilegbinosa, A. I., Uzomba, P. & Somiari, R. (2012). The impact of macroeconomic variables on non-oil exports performance in Nigeria from 1986-
- **85** *The Nigerian Journal of Energy & Environmental Economics (NJEE), Volume 15 Issue No. 2, 2024; (a) Published by Department of Economics, NAU, Awka.*

2010. Journal of Economics and Sustainable Development, 3(5), 27-40.

- IMF, (2012). Globalization: Threat or Opportunity? Issues Briefs. Washington: International Monetary Fund.
- Iyoha, M., & Okim, A. (2017). The impact of trade on economic growth in ECOWAS member countries: Evidence from panel data. CBN Journal of Applied Statistics, 8(1), 23 (49).
- Jarreau, J. & Poncet, S. (2012). Export sophistication and economic growth: evidence from China. *Journal of Development Economics*, 97, 281–292.
- Jolliffe, D. (2014). Measuring Africa human capital development: The sensitivity of estimated manufacturing sector output. *Journal of Economic and Social Measurement*, 27, pp.1-23.
- Jonathan, D. D., Kehinde, J. A., Oladopo, B., & Adedolapo, R. O., (2015). Globalization and the Nigerian manufacturing sector. *Journal of Law*, *Policy and Globalisation, 41*, ISSN 2224 - 3240.
- Khor, M. (2010). *Globalization and the South: Some critical issues*. Ibadan: Spectrum Books
- Koutsoyiannis, A. (2003). *Theory of econometrics*. Harper and Row. New York: Charles Scribner's Sons
- Newfarmer, R. S., John, P. & Finn, T. (2018). Industries without smokestacks: Industrialization in Africa reconsidered. Oxford University Press. <u>https://www.wider.unu.edu/publicatio</u> <u>n/industries-without-smokestacks-2</u>
- Masson, P. (2013). Globalisation: facts and figures. *IMF Policy Discussion Paper No.* 4, Washington: International Monetary Fund.

Economic Globalization and Manufacturing Output in Nigeria

https://www.imf.org/external/pubs/ft/p dp/2001/pdp04.pdf

- McKenzie, D. J. (2017). How effective are active labour market policies in developing countries? A critical review of recent evidence. *World Bank Research Observer, 3*(2), 127-154. <u>https://academic.oup.com/wbro/article</u> /32/2/127/4064175
- OECD (2012). Social institutions and gender index: Understanding the drivers of gender inequality. Paris: OECD Publishing.
- Sheridan, B. J. (2014). Manufacturing exports and growth: When is a developing country ready for transition from primary exports to manufacturing exports? *Journal of Macroeconomics*, *Elsevier, 42*, 1–13.
- United Nations Industrial Development Organization, (2015). Industrial. Development Report 2016.
- United Nations Economic Commission for Africa (2017). *African governance report*. Addis Ababa: UNECA.
- Ojeleye, Y. C., Ahmed, A. I. & Opunsunju, M. I. (2020). Globalization and performance of manufacturing sector in Nigeria. *Journal of Accounting and Manufacturing*, *3*,(1), Retrieved from <u>https://www.researchgate.net/publication</u> /342872791_GLOBALIZATION_AND_PERF ORMANCE_OF_MANUFACTURING_SECTO <u>R_IN_NIGERIA</u>
- World Bank. (2019). Global Economic Prospects, October. Washington, DC: World Bank.
- World Bank. 2020a. Global Economic Prospects, June. Washington, DC: World Bank.

⁸⁶ The Nigerian Journal of Energy & Environmental Economics (NJEE), Volume 15 Issue No. 2, 2024; (a) Published by Department of Economics, NAU, Awka.