GLOBALISATION AND THE MANUFACTURI NG SECTOR IN NIGERIA

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Abstract
The study examined the relationship between globalization and the manufacturing sector performance in Nigeria covering the period 1985 to 2015. The study used descriptive statistics and ARDL approach. The study found that data for some variables were stationary at level while others became integrated at first difference. Findings from the study showed long-run positive relationship between globalization and manufacturing output in Nigeria. However, the short-run influence of the globalization processes on the manufacturing performance was negative. The study also found that even if manufacturing output drift away from equilibrium in the short-run, it has the ability to adjust to long-run equilibrium at 66.47% each year. The study therefore recommended that the Nigerian government should embark on regulated and favourable trade policies to avoid back slash effect and encourage foreign and domestic investors in the manufacturing sector by providing favourable environment that would help in conducting business activities without unnecessary risks.

Keywords: Globalisation, Manufacturing Output, Trade Openness.

1.0 Introduction

The concept of globalisation, its processes and the implications for the developing world has received considerable attention from scholars and bodies in contemporary times. But, the term “globalisation” does not have a definite definition. It can be said that globalisation is a broad set of processes concerning multiple networks of economic, political and cultural interchange propelled by Information and Communication Technology (ICT). According to Ebong, Udoh and Obafemi (2014), the biggest dilemmas developing countries face is whether they should open their economies up to the globalisation processes or adopt a cautious approach to avoid risks.
This paper is more concerned with economic globalisation as it is the aspect that affects manufacturing most. Economic globalisation involves the

increasing economic integration and interdependence of national, regional and local economies across the world through an intensification of cross-border movements of goods, services, technologies and capital. This implies the globalisation of production, finance, markets, technology, organizational regimes, institutions, corporations, and labour. This has been expanding since the emergence of trans-national trade and has affected all countries of the world.

The manufacturing sector plays a catalytic role in the modern economy and has many dynamic benefits crucial for economic transformation and it is the basis for determining a nation's economic efficiency (Amakom, 2012). It is the most dynamic component of the industrial sector. Kayode (1987) believes that the industrial sector and in particular manufacturing sector is the heart of any economy as it is often seen as a *sine-qua-non* for breaking the vicious cycle of poverty and for achieving dynamic and self-reliant economies. Furthermore, it creates investment capital at a faster rate than any other sector of the economy while promoting wider and more effective linkages among different sectors. Manufacturing involves the process of transforming raw materials into finished or intermediate goods. According to Ebong, Udoh and Obafemi (2014), industrial development policies, perspective plans and medium-term economic plans acknowledged the importance of the manufacturing sector in the economy. Danladi, Akomolafe, Babalola and Oladipupo (2015) also argued that a vibrant manufacturing sector is a sure means of boosting economic growth and raising the standard of living.

Historically, manufacturing activities in Nigeria declined in 1980s as most companies were affected by the global economic collapse. This scenario further led to the closure of some industries as unfavourable conditions lingered which kept the sector's output at low level and contributed to substantial discontent and conflict. However, the output from the sector exhibited an increasing trend since 1990's. Prior to this period, the sector itself was characterized by increasing cost of production emanating from high tariff, increased cost of energy input, reliance on poor and inadequate public sector infrastructure and rising cost of imports. Generally, the manufacturing sector in Nigeria could be said to have a vast potential for growth due to abundant labor force coupled with the agrarian nature of the economy.

With the growing level of globalization and trade liberalization, coupled with the several trade strategies and the Nigerian signatory to many international and regional trade agreements such as IMF, WTO, and ECOWAS, it is expected to bring the required technology and the much needed investment

capital. But despite implementation of trade liberalization measures taken, reduction in external debt and debt services, some macroeconomic indicators show poor performance of the economy characterized by infrastructure inadequacy, widespread corruption, inefficiency in the public sector, low degree of savings, low capital formation and capacity underutilization (Ajudua & Okonkwo, 2014). It is, therefore, important to investigate how the process of globalisation has affected the manufacturing sector in Nigeria. The aim of this study, therefore, is to find out the relationship (if any) between globalisation and the manufacturing sector performance in Nigeria.

2.1 Literature Review

2.2 Conceptual Clarification

The concept of globalisation is not a new phenomenon, Aluko (2004) and Hopkins (2004) affirmed that its antecedents date back to the great movements of trade and empire across Asia and the Indian Ocean from the 15th century onwards. Economic theory predicts that countries that adhere to a more open stance towards globalisation enjoy higher growth rates than those that close their economies to trade (Frankel & Warner 1999; Hill, 2004). This brings to light the fact that globalisation brings about increased financial and capital inflow and paves way for better and superior technology to be made available to domestic firms. This presupposes a better productive capacity for domestic manufacturing industries and makes them more efficient. More so, according to Bayo (2002), globalisation is a process that affects firms, industries, economies and nations. Generally, developed economies are the main actors of globalisation since it is about the expansion of markets for goods and services. Underdeveloped countries, like Nigeria, which are not well equipped to produce goods and services that can withstand competition with others, are not likely to be interested in market expansion. While availability of goods and services produced by firms motivates the need for wider markets, availability of markets in turn, provides impetus for further production of goods and services. Inspiration from economic growth and development analysis implies that effective use of resources, which is the critical stimulant for the process of economic growth and development, is hinged on industrial production.

The praxis of globalisation has caught up with virtually all countries of the world today, which are faced with the realities of increased integration of world trade and capital flows facilitated by the rapid growth of information technology and the opening up of hitherto closed economies. The trend of

increased integration of national economies with the rest of the world is gradually evolving into a coherent global economy that is hinged on free markets, investment flows, trade and information. The process of globalisation has opened great opportunities for the exploitation of economies of scale and scope, making for rapid growth and conferring comparative advantage on those with access to it.

Thus scholars have argued that globalisation offers both opportunities and challenges, especially for developing countries like Nigeria (Aluko, 2004; Clark, 2000, Bhagwati, 2004; Adams 2004; Adenikinju, 2006). This notwithstanding, there exists a variation in the experiences of developing countries. Whereas regions such as Asia got quickly integrated into the global economy with a resultant enhanced economic growth, it has been otherwise in the African region (Akinmulegun, 2011). Nonetheless, Akinmulegun (2011) agrees that globalisation has led to an unprecedented increase in international trade in manufactured goods for more than 100 times since 1955. Salimono (1999) observes that globalisation offers Nigeria the opportunities to create wealth through the export-led growth, to expand international trade in goods and services and to gain access to new ideas, technologies and institutional designs. Besides, competition among firms to get a good share of the large world market has led to; specialisation and efficiency; better quality products at reduced prices; economies of scale in production; technological and managerial improvements.

Adaptation to a growing market, widened by international trade, according to Ibrahim (2005) stimulates industrial production and provides additional impetus to the attainment of economic growth. The dimension of international trade has given rise to the contemporary challenges posed by globalisation. For instance, International capital flows have flourished through the process of globalisation and underdeveloped countries have received a fair share of these flows. However, the flows of international capital to underdeveloped economies have not stimulated the process of economic growth and development because such flows are mainly in the form of official development finance, export credits, international bank loans, and bond issues with short-term maturity, which serves the purpose of facilitating the import dependent behaviour of the underdeveloped economies, rather than trigger a process of domestic production that could evolve into industrialization process. The foreign direct investment component of the flows is directed to

the service sectors of the economy that have limited or even no linkage with the manufacturing sectors of the economy of the underdeveloped countries.

Nigeria's economy is characterized by lack of infrastructure and motivation for the production of goods and services. This has constituted into a serious setback to industrial production in the country, which has manifested into difficulties in meeting the basic needs of the domestic economy for goods and services. Due to lack of industrial production, the Nigerian economy cannot reap the benefits of learning-by-doing and other positive externalities such as knowledge spillovers, Research and Development (R&D) and technological leapfrogging. The unutilised resources of the underdeveloped economies, like Nigeria, find their ways to the developed economies for use as raw materials for industrial production. The globalisation process sustains this trend using the overbearing rules of international institutions that are largely controlled by the industrialised countries.

2.3 Performance of the Nigerian Manufacturing Sector

Due to the complexities involved in constructing productivity index, there is little or no data on productivity levels in the Nigerian manufacturing sector. However, several studies have been conducted on the performance of the manufacturing sector in Nigeria. Alao (2010) evaluated the productivity of the Nigerian manufacturing sector using the error correction model (ECM) and found that interest rate spread and exchange rates have negative impact on the growth of the manufacturing sector in Nigeria. He also found out that the rising index of manufacturing is a reflection of high inflation rate and cannot be necessarily interpreted as real growth. Alao (2010) further revealed that liberalization of the Nigerian economy had promoted manufacturing growth between 1979 and 2008.

Ad hoc studies conducted during 1989 indicated that, on the average, there was a little rise in productivity Akinlo (1996). For instance, the study by Felix and Emmanuel (2015) indicates abysmal performance of the manufacturing sector. In agreement with this assertion, the Manufactures' Association of Nigeria (MAN) confirmed that the general trend in productivity in the sector was negative in 1989 and that the situation has worsened since then.

Developments in the Nigerian manufacturing sector show that from a modest 4.8% at independence in 1960, manufacturing contribution to GDP increased to 7.12% in 1970 and to 7.4% in 1975 this growth rate declined thereafter to 5.4% in 1980 but picked to a record height of 10.7% in 1985. From this peak,

the contribution of the manufacturing sector to GDP has continued to decline. It was 6.2% in 2000 but slumped to a low 3.4% in 2001 before sluggishly picking up reaching 4.23% in 2013 (CBN, 2013). This is, in fact, less than what it was in 1960. As can be seen from the historical developments of the manufacturing sector in Nigeria, the sector's share in the GDP remains minuscule compared to the strong manufacturing sectors in the emerging economies, where structural changes have already occurred and millions have been lifted out of poverty and the manufacturing sector contributes a higher percentage of GDP. For instance, in Brazil its contribution to GDP is 20%, in China 34%, in Malaysia 30%, in Thailand 35% and it is 28% in Indonesia (Ogbu, 2012). Akinlo (1996) also affirmed that, in terms of its contribution to GDP, the Nigerian industrial sector as a whole was relatively insignificant even starting from independence. According to analysts, though Nigeria is blessed with abundant material and human resources, the country still occupies the back stage in world market in terms of manufacturing products. Despite the various national development programmes in the past, the Nigerian economy still remains mono-cultural. Growth in the manufacturing sector is also in a downward trend and industrial capacity utilization is below 37%. This could be partly explained by globalisation which has opened Nigeria to influx of cheaper imported manufactured goods.

2.4 **Empirical Review**

Agu, Anichebe and Maduagwu (2016) highlighted the impact of globalisation on Nigeria manufacturing sector. The study used population size of 640 out of which a sample size of 246 was drawn using Taro Yamane Formula but only 230 questionnaires were retrieved. The instrument used for data collection was primarily questionnaire and interview. The study found that trade liberalization has significant negative impact on the consumption of Nigeria made products and that globalisation is a sword of double edge that promotes and demote economic activities of any developing nation. The study recommended that government should reposition its policies in order to monitor the activities of these agents of globalisation as it affects the Nigerian manufacturing sector.

Danladi, Akomolafe, Babalola and Oladipupo (2015) examined the impact of globalisation on the manufacturing sector of Nigeria using annual time series data covering the period of 1980 to 2013. The study used Vector Auto-Regression (VAR) model. The study findings showed a positive relationship between globalisation and the manufacturing sector of Nigeria and

recommended that the Nigerian government should ensure continuous openness of its economy in a beneficial way and as well put up measures to stem up the confidence of investors in the activities of the manufacturing output while, the rate of inflation and exchange should be steady in a manner that would encourage people to involve in the activities of the manufacturing sector.

Ojo and Ololade (2014) assessed the contribution of manufacturing sector to economic growth in Nigeria in the era of globalization. The study used Ordinary Least Square (OLS) econometric technique on time series data covering the period 1980 to 2009. The study found that though Nigeria manufacturing sector benefited from globalization process, the level of the development in the sector was found to be highly negligible that is, globalization exerts little impact on economic growth via manufacturing sector of the economy. The study recommended that efforts should be geared toward strengthening the macroeconomic, socio-infrastructural and institutional environment of the nation, thus bringing a good linkage between domestic and external institutions with the ultimate aim of properly harnessing funds so mobilized towards productive manufacturing sector of the economy.

Ebong, Udoh and Obafemi (2014) examined the nature of the influence globalisation that might have exerted on the industrial development of Nigeria from 1960 to 2010. Based on the Engle-Granger two-step and Johansen Cointegration tests, the vector auto regressions technique was used within an error correction framework. The study showed that globalisation had significant impacts on industrial development in Nigeria. The study therefore suggested that increasing the level of trade with the rest of the world would create opportunities to export local raw materials and import necessary inputs into the industrial process while, financial liberalization adversely impacted on industrial development and that policies were required to reverse the tide of capital flight from the country and direct resources towards developing the country's industrial sector.

Tamuno and Edoumiekumo (2012) examined the impact of globalisation on the Nigerian industrial sector, using annual time series data covering the period 1970 to 2008. This study adopted co-integration test and error correction mechanism. The result showed the existence of long run relationship among the variables in the model. The result of the error correction model for short run dynamics showed that external debt, gross

capital formation, nominal exchange rate and degree of openness have negative impact on the Nigerian industrial sector; while foreign direct investment has positive impact on industrial output in Nigeria. The study therefore concludes that the Nigerian industrial sector has a weak base which makes it difficult to compete favourably with her foreign counterparts.

Oparanama, Hamilton and Zep-Opibi (2009) examined globalisation challenges on the manufacturing industry in Nigeria using descriptive statistics and non-parametric statistic (chi-square test). The study employed a sample of two firms in Port Harcourt through the use of the questionnaire and oral interviews. The study found that the problem of poor technology is the greatest challenge of Nigerian firms and that Nigerian managers are not nonchalant in responding issues of globalisation and have responded adequately to global competition and Nigerian firms have also been able to increase sales volumes. The study recommended that Nigerian firms still need to improve in their response pattern to globalisation in order to rescue the economy from perpetual infancy; and that Nigeria should take another look at her membership in the World Trade Organization (WTO) selectively engaging more in those trades that will not jeopardize her national interest.

Aluko, Akinola and Fatokun (2004) examined the impact of globalisation on the Nigerian manufacturing sector with focus on selected textile firms from Lagos, Asaba and Kano using both qualitative and quantitative techniques. The data were analyzed using parametric and non-parametric statistics and the study found that globalisation had strong adverse effects on capacity utilization in the manufacturing sector. The study concluded that Nigeria needs to have a second thought on globalisation and her membership of the WTO agreement if she does not intend to do away with the manufacturing sector of the economy.

3.1 **Methodology**

3.2 **Methods of Analysis**

In an attempt to find the appropriate impact that globalisation exerts on the Nigerian manufacturing sector, the study adopts the regression model. The study utilized time series data spanning from 1985 to 2015. This choice of period is predicated on the premise that it coincides with the period of Structural Adjustment Programme (SAP) which encouraged manufacturing. The study used both descriptive and econometric techniques. The econometric techniques are as follow;

Augmented Dickey Fuller Test (ADF) was used to ascertain the stationary properties of the time series. The ADF formula was specified as:

$$\Delta P_{it} = \alpha_1 + \alpha_{2t} + \alpha P_{it-1} + \sum_{t=1}^{m} \Delta P_{it-1} + \varepsilon_{it} \quad \text{-(1)}$$

Due to the small sample, the study also used Ng and Perron (2001) which constructed four test statistics that are based upon the GLS detrended data y_t^d. The formula is stated as:

$$K = \sum_{t=2}(y_t^d)^2/T \quad \text{- - - - - (2)}$$

The modified statistics may then be written as:

$$MZ_\alpha^d = (T^{-1}(y_T^d)^2 - f_0)/(2k)$$

$$MZ_t = MZ_\alpha \times MSB$$

$$MSB^d = \left(\frac{k}{f_0}\right)^{1/2} \quad \text{- - - - - (3)}$$

$$MP_T^d = \begin{cases} (\bar{c}^2 k - \bar{c}T^{-1}(y_T^d)^2)/f_0 & if\ x_t = \{1\} \\ (\bar{c}^2 k + (1-\bar{c})T^{-1}(y^d)^2)/f_0 & if\ x_t = \{1,t\} \end{cases}$$

Where

$$\bar{c} = \begin{cases} -7 & if\ x_t = \{1\} \\ -13.5 & if\ x_t = \{1,t\} \end{cases} \quad \text{- - - (4)}$$

Auto-Regressive Distributed Lag (ARDL) Model was used given the stationarity of the variables that were incorporated in the model to test for long-run relationship among the variables and therefore determine long-run coefficients. The speed of adjustment was also conducted in Ordinary Least Squares framework

3.3 **Model Specification**

The study employs regression model based on modifications from Ojo and Ololade (2014) model of open economies. The openness equation can be

expressed in a functional relation as follows:

$$MOT \square\square F\ (OPEN\ ,\ CAB) \quad - \quad - \quad - \quad (5)$$

Where,
MOT =Manufacturing Out put
, OPEN =Trade Openness,
CAB = Current Account Balance
Nowmore variables that influence manufacturing output are introduced into the model as follows:

$$MOT \square\square F\ (OPEN\ ,\ CAB,\ GEX\ ,\ CBSM\ ,\ FDI\ ,\ EXR,\ INF\ ) \quad (6)$$

where:

MOT = Manufact uring Out put

$OPEN$ = Trade Openness

CAB = Current Account Balance

GEX = Government Expenditure

$CBCM$ = Commercial Bank Credit to Manufacturing Sector

FDI = Foreign Direct Investment

EXR = Exchange Rate

INF = Inflat ion

Equation (6) is now converted to a probabilistic mathematical form as follows: (7)

$MOT = \beta_0 + \beta_1 OPEN + \beta_2 CAB + \beta_3 GEX + \beta_4 CBSM + \beta_5 FDI + \beta_6 EXR + \beta_7 INF + \varepsilon$

where,

β_0 = is the intercept

β_1, β_2, β_3, β_4, β_5, β_6, and β_7 = regression coefficients to be estimated, ε is the stochastic disturbance term. The other variables are as explained above.

3.4 **Sources and Methods of Data Collection**

The data on manufacturing output were retrieved from the Central Bank of Nigeria's (CBN) Statistical Bulletin; also data on current account balance, government expenditure, Commercial Bank Credit to Manufacturing Sector, and Inflation were all retrieved from the CBN Statistical Bulletin, data on foreign direct investment, Exchange Rate and trade openness were obtained from the World Bank's World Development Indicators.

4.1 **Results and Discussions**

4.2 **Descriptive Statistics**

The results of descriptive statistics show that manufacturing output, trade openness, current account balance, government expenditure, commercial bank credit to the manufacturing sector, foreign direct investment, exchange rate and inflation rate averaged ₦1,851.52 billion, 53.93, ₦3,700.6 billion, ₦1,603.51 billion, ₦406.02 billion, ₦365.28 billion, 80.53 and 20.02% from 1985 to 2015. The result of skewness of the data for the variables incorporated in the model showed that manufacturing output, current account balance, commercial bank credit to manufacturing sector, and inflation rate had leptokurtic shapes. This implies that, the data for those variables are concentrated around the mean. However, data for trade openness, government expenditure, foreign direct investment and exchange rate had platykurtic shapes implying that, the data for the variables are widely spread around the

mean. None of the variables had mesokurtic shape because their values were

either greater or less than the excess kurtosis of 3 (that is, the data that has normal distribution). Data for some of the variables (manufacturing output, current account balance, commercial bank credit to the manufacturing sector and inflation rate) were not normally distributed. However, when natural logarithm was taken on the data, for the purpose of unification, the data for all the variables became normally distributed since their respective Jarque-Bera statistic were insignificant at 5% critical level.

4.3 Results of Unit Root Test

The results of ADF and Ng-Perron unit root test are presented in Table 1.

Table 1: Results of Unit Root Test

Variables	ADF Test			Ng-Perron Test				
	ADF-Statistic	Prob.	Remark	MZa	MZt	MSB 0.233	MPT 3.1700	Remark
lnMoT	-1.368656 (-	0.5840	Not Statio	1.56897	2.47730	1.57893	181.927	Not Statio
D(lnMoT)	-3.542732	0.01	I(1)	-9.94594	-2.18715	0.21990	2.627178	I(1)
lnOPEN	-2.981698 (-	0.0482	I(0)	-5.37967	-1.63996	0.30484	4.554488	Not Statio
D(lnOPE				-	-2.43978	0.196	2.1759	I(1)
lnCAB	-3.142098	0.03	I(0)	-	-2.30629	0.196	2.5291	I(0)
lnGEX	-2.446462 (-	0.1383	Not Statio	0.92077	1.19817	1.30127	110.870	Not Statio
D(lnGEX)	-7.473407	0.00	I(1)	-	-2.50575	0.197	1.9814	I(1)
lnCBCM	-1.667601 (-	0.4369	Not Statio	1.33286	1.99903	1.49981	157.616	Not Statio
D(lnCBCM)	-4.375887	0.00	I(1)	-	-2.60866	0.191	1.8001	I(1)
lnFDI	-2.106004 (-	0.2438	Not Statio	-0.09977	-0.07037	0.70538	30.4818	Not Statio
D(lnFDI)	-8.619516	0.00	I(1)	-	-2.49072	0.200	1.9762	I(1)
lnEXR	-3.383192 (-	0.0197	I(0)	0.45297	0.41056	0.90637	52.0698	Not Statio
D(lnEXR)				-	-2.52564	0.196	1.9363	I(1)
lnINF	- (-2.963972	0.0791	Not Statiry	-8.94183	-2.10928	0.23589	2.7596`	Not Statiry
D(lnINF)	-4.896757	0.00	I(1)	-14.3842	-2.67876	0.18623	1.71475	I(1)

Source: Computed from E-Views 9.5 output, * indicates the asymptotic critical values

Note: The probability values for the ADF test statistics are computed using Mackinnon (1996) one-sided p-values while the asymptotic critical values are computed using Ng-Perron (2001, Table 1).

The study found mixed order of integration as some variables were stationary at level while others became stationary after the first difference at 5% critical level. This called for the application of ARDL model for the analysis of the impact of globalization on manufacturing output in Nigeria.

4.4 ARDL Optimal Lag Selection

To select the optimal lag order for the series, Akaike Information Criterion (AIC), Schwarz criterion (SC) and Hannan-Quinn Criterion (HQ) were used. The results are compiled and presented in Table 2.

Table 2: ARDL Optimal Lag Selection

Lag	Log	AIC	SC	HQ
1	51.90257	-2.660171	-2.099692	-2.480869
2	55.99869	-2.896562	-2.236388	-2.689735
3	74.41480	-3.672486*	-2.578175*	-3.337944*
4	96.46743	-2.235563	-1.346522	-1.245325

Source: computed from E-Views 9.5 output.

The graphical presentation of the above optimal lag selection is depicted in Figure 1.

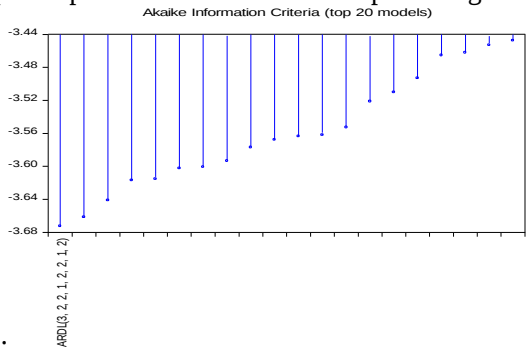

Figure 1: ARDL optimal lag Selection Results.

The results in Table 2 and Figure 1 show that the lag length of 3, was selected for the optimal estimates of the model because, it has the least Akaike

Information Criterion (AIC), Schwarz Criterion (SC) and Hannan-Quinn Criterion (HQ) as compared to other models.

4.5 **The Impact of Globalization on Manufacturing Output in Nigeria**

In order to determine whether there is long-run relationship among the variables in the model, ARDL Bounds test was conducted and the results are presented in Table 3.

Table 3: ARDL Bounds Test Results

Test Statistic	**Value**	**K**
F Statistic	7.585137	7
	Critical Value Bounds	
Significance	**IO Bound**	**I1 Bound**
10%	1.92	2.89
5%	2.17	3.21
2.5%	2.43	3.51
1%	2.73	3.9

Source: Authors' Computation from E-views 9.5 Output

Result in Table 3 indicates that there is long-run relationship among variables incorporated in the model. This is because; the F-statistic Value of 7.585137 is greater than the Pesaran Upper Bound critical value of 3.21 at 5% level of significance. Given that there is long-run relationship among the variables, the ARDL long-run coefficients were estimated and the results are presented in Table 4.

Table 4: Long-run coefficients

Variable	Coefficients	Std. Error	t-statistic	Prob.
InOPEN	0.177593	0.458290	0.387513	0.7143
InCAB	0.007557	0.018017	0.419470	0.6923
InGEX	-0.890466	0.749396	-1.188245	0.2881
InCBCM	1.802161	0.629231	2.864068	0.0352*
InFDI	-0.190608	0.129574	-1.471037	0.2012
InEXR	0.122783	0.075563	1.624902	0.1651
InINF	-0.236147	0.122977	-1.920245	0.1129
C	2.940869	0.534307	5.504079	0.0027*

Source: Authors' Computation from E-View 9.5 output

Results in Table 4 show the long-run estimated coefficients in explaining the relationship between globalization processes and manufacturing performance in Nigeria. The study found positive impact of trade openness and current account balance of manufacturing output in Nigeria. These are theoretically plausible but not statistically significant at 5% level of significance. This implies that changes in manufacturing output in Nigeria in the log-run are accounted by other significant determinants such as commercial bank credit to the manufacturing sector among others.

The study findings also showed a negative influence of government expenditure and foreign direct investment on manufacturing output in Nigeria which disobeyed their apriori expectations and were not statically significant at 5% critical level. However, holding all the variables constant, the manufacturing output significantly improves by 53% implying that other factors also influence the performance of manufacturing sector in Nigeria in the long-run. The results of the residual tests and stability of the long-run model are compiled and presented in Table 5.

Table 5: Residual and Stability Analysis Results

Test (Jaque-Bera)	**F Statistic**	**Probability**
Breusch-Godfrey serial correlation LM Test	6.511428 (0.606687)	0.0810* 0.8364* 0.738346
Breusch-Pagan-Godfrey Heteroscedasticity Test		*
Jaque-Bera Normality Test		

Source: Authors' Computation from E-views 9.5 Output * shows acceptance of the null hypothesis

Since there is long-run relationship among the variables, examining the speed of adjustment towards long-run equilibrium becomes imperative in the case of initial distortions in the system. This is because; Error Correction Term (ECT) corrects or eliminates the discrepancy that occurs in the short-run. The results showed the ECT(-1) value of 0.6647 which means that even when manufacturing output drift away from equilibrium in the short-run, it has the ability to adjust to long-run equilibrium at 66.47% each year.

The results also show that trade openness and current account balance disobeyed their apriori theoretical expectations in the short-run hence, were

not theoretically plausible but statistically significant. This signifies that, globalization processes in Nigeria has negative influence on manufacturing performance in the short run. Other coefficients excluding exchange rate were positive and insignificant at 5% critical level except commercial bank credit to the manufacturing sector in Nigeria. The coefficient of multiple determinations (R^2) showed that the model has good fit as the independent variables jointly explained about 89.39% of the movement in the dependent variable with the R^2 – adjusted of 80.16%. The residual tests and stability test were conducted. The results the short-run model showed the absence of serial correlation and heteroscedasticity using Breusch-Godfrey serial correlation LM test and Breusch-pagan-Godfrey heteroscedastcity test respectively. The stability of the estimates was also examined and the results revealed that the short-run model and its parameter estimates are stable through the application of the CUSUM test at 5% level of significance.

5.0 Conclusion/Recommendations

The paper concludes that due to the globalization processes, the manufacturing sector was influenced negatively by openness and current account balance in the short-run. However, the effect changed favourably in the long-run. Hence, the level of manufacturing sector performance was found to be highly negligible. The study therefore recommends the following:

i. The Nigerian government should embark on regulated trade policies so that the negative effect would be curtailed. This could be done by advancing effective and favourable trade policies since the Nigerian manufacturing sector has weak base and less competitive which makes it difficult to compete favourably with her foreign counterparts

ii. The Nigerian government should provide foreign and domestic investors with favourable environment that would help in conducting business activities without unnecessary risks. This would help in boosting investment in the manufacturing sector that would increase output, hence, enhancing the country's competitiveness at the international market thereby avoiding back slash effect.

iii. Nigerian government should also increase its interactions with other economically viable countries through effective trade policies as earlier recommended thereby gaining much comparative benefits while investors should be encouraged to investment in the sector by providing loans at low interest rates and allowing the sector to enjoy less import duties on

machines. These would ginger prospective investors towards investment in the sector.

iv. The study also recommends the promotion of capital good and import substitution strategies which permit development that would create employment since it is the main plank of poverty removal.

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