

Creating Value for Nigeria Manufacturing Sectors for Global Competition: An Issue for Economic Growth

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ABSTRACT

Nigeria has remained backwards in global competition, this has resulted to increase in poor quality of export, poor foreign direct investment, poor local patronage of the manufacturing goods and domestic investment among others. The objective of the study was to examine Nigeria manufacturing sector output on economic growth. The study used secondary data source from the publication of CBN Statistical Bulletin for the period of 2000-2018. The study used E-views 12 for granger causality test and regression analysis. The granger causality revealed that few linkages between economic series has been established in line with economic theory and postulations. The results of the regression analysis shows that foreign direct investment total import, total export, exchange rate are positively related to GDP while capacity utilization of manufacturing and trade openness index are negatively related to GDP. The study concluded and recommended that government should advance manufacturing sub-sectors and harmonics impartation of certain goods so as to reap the benefits of globalization. Tariff and duties on certain equipment should be reduced especially those that concerns manufacturing sectors.

KEYWORD: Economic growth, Regression, Granger causality, Globalization, Creating value.

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I. INTRODUCTION

In a competitive environment that is changing very fast, value creation is also needed as a fundamental logic for strategic thinking. As business continues to go global, it must manage and analyze a new method of doing things; structure, behavior, language and culture so as to be successful. In the businesses world today, a picture of interdependence and global interrelationships is glaring. Manufacturing sector has been accepted and described as economic development and growth catalyst worldwide. It provide the means to produce goods or services, earn handsome rewards for economic agents and facilitate better jobs (Olurunfeme, Obamuyi, Adekunjo and Ogunleye, 2013). While porter (1990) pointed out that there are two criteria to understand international business and globalization in terms of competitiveness; that is, looking back and looking forward. Organization can use past performance as a benchmark or it can prepare for it future competition by scanning the environment. In factor productivity context, manufacturing sector have a role to play in value creation, it export and import a bigger share of inputs, use appropriate technology and create value which may be exported.

Statement of the Problem

Nigeria, since independence in 1960 has remained backwards in global competition resulting from her inability to update her technology, manpower development, diversify her economic base. Nigeria today imports finished products of what she produces, the raw-materials such as fuel, thereby increasing import prices as against poor export prices. Ojo (2003) noted that this has also resulted to increase in poor quality of export; poor foreign direct investment as a result of poor local market patronage of the manufacturing goods and domestic investment among others.

Objective of the Study

To examine Nigeria manufacturing sector output on economic growth.

II. LITERATURE REVIEW

Conceptual Framework

Value Creation and Globalization

Vargo, Maglo and Akaka (2008) assert that organization create value for customer by so many variables configuration which provide the foundation for customers satisfaction. In the words of Gronroos (2009) it is a process by which a user of a product or services is better off than before after using the product or services. Stabell and Ejeldstad (1998) noted that the model of value change, is the assessment of services provided and the product produced. The model placed emphasis on solving customers problem. The process of mobilizing activities and resources to solve customers problem is creating value. Globalization bring in a wide scope, enhancement and deepening impact of increasing network and interregional flows of network interaction globally. Goldberg and Pavcnik (2006) assert that value creation lead to successful operation of business globally. It is the bane and spine of competition internationally and locally. Nations have chosen a big share of the market globally among which are Japan, China, USA along with other developed countries as a result of their ability of annexing value to their products or services

Manufacturing Sector and Economic Growth

Ogbu (2012) observed that there is underutilization of resources in Nigeria is what is leading to extreme poverty, because the potentials of the manufacturing sector were not utilized. This sector is expected to boost employment and lead to economic development. It was noted that years back, the sector contribution to Gross Domestic Product was just 20% compare to countries like Malaysia which was 28%, china which was 30% and brazil which was 35% . This typically reflected that Nigeria economic structure is an under-develop country trait, because 50% and above of its GDP is contributed by just one sector in the economy (Chete, Adeoti, Adeyinka and Ogundele, 2014). They also pointed out that in the past the sector capacity utilization has been very low and sluggish compare to the statistics in 1990 which was 40% and in 2008 was at 53.84%. In 2009 it was 54.50%, in 2015 it rose to 56.50%. These statistical analysis indicated that though capacity utilization of manufacturing sector increases over time the sector's development is still vanishingly small compared to other economy of the world. Yet theoretically, the activities of manufacturing sector capacity utilization is an important indicator for improve gross domestic product of a country.

Competitiveness and Globalization

Stoner, Freeman and Gilbert (1999) sees competitiveness as the new way of globalization. They noted that it takes careful deliberation and time to establish a position in the global market; companies move through different stages for globalization with closer contact and proximity to customers in other nations. Levitt (1983) observed that the decision on which home market intend to go outside the country usually focus on demand by firms abroad, ability to meet up with the demand, or produce quality word-class product. The political, currency, local culture, accounting conventions, tariff rate, corruption and competition. Goldberg and Pavcnik (2006) noted that "interestingly, entry of many developing economies into the global market coincides with dynamics in various indices of inequality in these economies.

Global Business Practice

Bawa (2019) assert that globalization means increasing cooperation of different economies in the world by reducing barriers that has to do with international trade, this include tariffs, quotas, import and export fees. International business means goings beyond the domestic market of a nation to sell goods and services in other countries (Ijewere, 2009). Engaging in international business enables nations of the world to achieve a higher degree of specialization by allowing it to make full use of its peculiar advantages such as cheap labor, favorable climate, mass-production techniques, scare mineral deposits, high educational level and technology among others. In the views of Stoner et al (1999), in making investment decisions, managers must assess three factors. The first is the economies of different nations. The second factor is the political risk, which refers to political changes. The third factor is the appropriateness of technology to different cultures. For instance, production technologies that work well in Japan might not work well in Nigeria. To avoid problems resulting from unfamiliarity with local or international laws affecting businesses, Stoner et al (1999) is of the view that firms should rely on expertise provided by government agencies and private consultants.

Stoner et al (1999) gave some major potential benefits that multinational enterprises and host countries due to international businesses will gain to include: transfer of capital, technology and entrepreneurship. In the same vein international business offers some advantages as opined by Ijewere (2009) such as having goods whose foreign prices may be lower than the domestic prices on similar goods; it makes available in the home front goods that arc not available in the country, foreign markets as a result of international business stimulate increase in sales volume thus enabling the firm to enjoy economies of large scale production and lower unit

costs; generation of foreign exchange for the firm which may be used to buy worn-out parts of machines, new machines and raw materials

Theoretical Framework

Eclectic Paradigm

This study is based on the eclectic paradigm theory. The theory is attributed to Dunning (1979) with the primary principle of relative importance on taking competitive advantage, location advantage (with regard to labour, presence of cheaper raw material resources among others) and internationalization advantage (with regard to main activities of an organization) into a single approach. This theory is of the view that external sources need to be considered and used jointly in order to attract external influx of capital into a country.

Research Methodology

Data for the study were gathered from CBN publication for the period of 2000-2018. The paper used Econometric views (E-views 12) for Regression Analysis and Granger Causality Test.

III. DATA ANALYSIS AND PRESENTATION OF RESULTS

Data Presentation

| Year | Foreign Direct Investment (Inflow) (₦' Million) | Total Import (₦' Billion) | Total Export (₦' Billion) | Gross Domestic Product at Current Basic Prices - Annual (₦' Billion) | Average Exchange Rate | Capacity Utilization of Manufacturing | Trade Openness Index |
|------|---|---------------------------|---------------------------|--|-----------------------|---------------------------------------|----------------------|
| 2000 | 16453.60 | 985.02 | 1945.72 | 6897.48 | 102.11 | 36.10 | 0.425 |
| 2001 | 4937.00 | 1358.18 | 1867.95 | 8134.14 | 111.94 | 42.70 | 0.397 |
| 2002 | 8988.50 | 1512.70 | 1744.18 | 11332.25 | 120.97 | 44.30 | 0.287 |
| 2003 | 13531.20 | 2080.24 | 3087.89 | 13301.56 | 129.36 | 41.10 | 0.389 |
| 2004 | 20064.40 | 1987.05 | 4602.78 | 17321.30 | 133.50 | 55.70 | 0.380 |
| 2005 | 26083.70 | 2800.86 | 7246.53 | 22269.98 | 132.15 | 54.80 | 0.451 |
| 2006 | 41734.00 | 3108.52 | 7324.68 | 28662.47 | 128.65 | 53.30 | 0.364 |
| 2007 | 54252.20 | 3911.95 | 8309.76 | 32995.38 | 125.83 | 53.38 | 0.370 |
| 2008 | 37977.70 | 5593.18 | 10387.69 | 39157.88 | 118.60 | 53.84 | 0.408 |
| 2009 | 56297.30 | 5480.66 | 8606.32 | 44285.56 | 148.90 | 54.50 | 0.318 |
| 2010 | 65130.40 | 8163.97 | 12011.48 | 54612.26 | 150.30 | 53.00 | 0.369 |
| 2011 | 72428.40 | 10995.86 | 15236.67 | 62980.40 | 153.90 | 57.00 | 0.417 |
| 2012 | 80822.50 | 9766.56 | 15139.33 | 71713.94 | 157.50 | 57.50 | 0.347 |
| 2013 | 90526.80 | 9439.42 | 15262.01 | 80092.56 | 157.30 | 57.75 | 0.308 |
| 2014 | 93411.30 | 10538.78 | 12960.49 | 89043.62 | 158.60 | 58.20 | 0.264 |
| 2015 | 94218.40 | 11076.07 | 8845.16 | 94144.96 | 192.40 | 56.50 | 0.212 |
| 2016 | 96255.30 | 9480.37 | 8835.61 | 101489.49 | 253.50 | 53.60 | 0.180 |
| 2017 | 98292.20 | 10804.85 | 13988.14 | 113711.63 | 305.80 | 55.96 | 0.218 |
| 2018 | 99065.90 | 13445.11 | 19280.04 | 127762.55 | 306.10 | 54.60 | 0.256 |

Source: CBN Statistical Bulletin Vol 28, 2019

Granger Causality Test

Pairwise Granger Causality Tests

Date: 07/10/20 Time: 09:59

Sample: 2000 2018

Lags: 2

| Null Hypothesis: | Obs | F-Statistics | Probability |
|-----------------------------------|-----|--------------|-------------|
| EXH does not Granger Cause CAP | 17 | 0.61327 | 0.55771 |
| CAP does not Granger Cause EXH | | 1.05823 | 0.37734 |
| EXPORT does not Granger Cause CAP | 17 | 1.3556 | 0.29456 |
| CAP does not Granger Cause EXPORT | | 0.39859 | 0.67983 |
| FDI does not Granger Cause CAP | 17 | 0.15618 | 0.85711 |
| CAP does not Granger Cause FDI | | 2.42666 | 0.13031 |
| GDP does not Granger Cause GDP | 17 | 0.23249 | 0.79605 |
| CAP does not Granger Cause GDP | | 0.01726 | 0.98291 |
| IMPORT does not Granger Cause CAP | 17 | 0.22799 | 0.79950 |
| CAP does not Granger Cause IMPORT | | 0.16817 | 0.84717 |
| TOI does not Granger Cause CAP | 17 | 1.04292 | 0.04547 |
| CAP does not Granger Cause TOI | | 0.55130 | 0.59012 |

| | | | |
|--------------------------------------|----|---------|---------|
| EXPORT does not Granger Cause EXH | 17 | 3.12181 | 0.08099 |
| EXH does not Granger Cause EXPORT | | 10.7043 | 0.00215 |
| FDI does not Granger Cause EXH | 17 | 12.2964 | 0.00124 |
| EXH does not Granger Cause FDI | | 0.13645 | 0.87378 |
| GDP does not Granger Cause EXH | 17 | 6.69265 | 0.01116 |
| EXH does not Granger Cause GDP | | 5.01938 | 0.02606 |
| IMPORT does not Granger Cause EXH | 17 | 2.51461 | 0.12244 |
| EXH does not Granger Cause IMPORT | | 1.65386 | 0.23207 |
| TOI does not Granger Cause EXH | 17 | 4.15727 | 0.04249 |
| EXH does not Granger Cause TOI | | 0.14020 | 0.87059 |
| FDI does not Granger Cause EXPORT | 17 | 11.1098 | 0.00186 |
| EXPORT does not Granger Cause FDI | | 1.71373 | 0.22147 |
| GDP does not Granger Cause EXPORT | 17 | 3.11041 | 0.08160 |
| EXPORT does not Granger Cause GDP | | 2.04897 | 0.17158 |
| IMPORT does not Granger Cause EXPORT | 17 | 3.69005 | 0.05636 |
| EXPORT does not Granger Cause IMPORT | | 1.06605 | 0.37484 |
| TOI does not Granger Cause EXPORT | 17 | 4.29281 | 0.03924 |
| EXPORT does not Granger Cause TOI | | 3.37839 | 0.06857 |
| GDP does not Granger Cause FDI | 17 | 1.32852 | 0.30117 |
| FDI does not Granger Cause GDP | | 1.21731 | 0.33011 |
| IMPORT does not Granger Cause FDI | 17 | 1.65080 | 0.23263 |
| FDI does not Granger Cause IMPORT | | 4.24263 | 0.04041 |
| TOI does not Granger Cause FDI | 17 | 0.97320 | 0.40580 |
| FDI does not Granger Cause TOI | | 9.20589 | 0.00377 |
| IMPORT does not Granger Cause GDP | 17 | 0.40496 | 0.67578 |
| GDP does not Granger Cause IMPORT | | 6.99025 | 0.00971 |
| TOI does not Granger Cause GDP | 17 | 0.34807 | 0.71295 |
| GDP does not Granger Cause TOI | | 8.58100 | 0.00485 |
| TOI does not Granger Cause IMPORT | 17 | 0.70383 | 0.51401 |
| IMPORT does not Granger Cause TOI | | 1.97560 | 0.18127 |

The goal of this paper was to examine the interrelationships among certain economic indicators in Nigeria by using the concept of Granger causality tests. No causality exists between Exchange Rate and capacity Utilization of Manufacturing. No causality exists between Total Export and Capacity Utilization of Manufacturing. No causality exists between Foreign Direct Investment and Capacity Utilization of Manufacturing, No casualty exists between Gross Domestic Product and Capacity Utilization of Manufacturing, No causality exists between Total Import and Capacity Utilization of Manufacturing. Uni-directional causality exists between Exchange rate and Foreign Direct Investment. Bi-directional causality exists between Gross Domestic Product and Exchange Rate, Uni-directional causality exists between Trade Openness Index and Exchange rate, Unidirectional causality exist between Foreign Direct Investment and Exchange rate, Uni-directional causality exists between Trade Openness Index and Total Export, Uni-directional causality exists between Foreign Direct Investment and Total Import, Uni-directional causality exists between Trade Openness Index and Foreign Direct Investment, Uni-directional causality exists between Gross Domestic Product and Total Import and Uni-directional causality exists between Trade Openness Index and Gross Domestic Product.

Hence this proves that the above cause and effect relationship is both unidirectional and bidirectional. As expected, in line with the Granger causality results above, few linkages between the economic series has been established in line with economic theory and postulations.

Regression Analysis

Dependent Variable: GDP

Method: Least Squares

Date: 07/10/20 Time: 09:58

Sample: 2000 2018

Included observations: 19

| Variable | Coefficient | Std. Error | t-Statistics | Prob. |
|----------|-------------|------------|--------------|--------|
| C | 8074.706 | 20561.35 | 0.392713 | 0.7014 |
| FDI | 0.321474 | 0.126904 | 2.533215 | 0.0263 |
| IMPORT | 3.099331 | 1.035066 | 2.994332 | 0.0112 |
| EXPORT | 0.587602 | 0.729754 | 0.805206 | 0.4364 |
| EXH | 175.5836 | 33.28064 | 5.275849 | 0.0002 |
| CAP | -98.52962 | 270.0945 | -0.364797 | 0.7216 |
| TOI | -63741.20 | 32483.24 | +1.962280 | 0.0733 |

| | | | |
|--------------------|-----------|-----------------------|----------|
| R-square | 0.991875 | Mean dependent var | 53679.44 |
| Adjusted R-square | 0.987812 | S.D. dependent var | 38531.50 |
| S.E. of regression | 4253.796 | Akaike info criterion | 19.82632 |
| Sum squared resid | 2.17E+08 | Schwarz criterion | 20.17427 |
| Log likelihood | -181.3501 | F-statistic | 244.1500 |
| Durbin-Watson stat | 1.721762 | Prob(F-statistic) | 0.000000 |

The result of the regression equation is presented below:

$$GDP = b_0 + b_1FDI + b_2IMP + b_3EXP + b_4EXH + b_5CAP + b_6TOI + e_i$$

$$GDP = 8074.71 + 0.322FDI + 3.099IMP + 0.588EXP + 175.58EXH - 98.53CAP - 63741.2TOI$$

$$(0.3927) (2.5332) (2.9943) (0.8052) (5.2758) (-0.3648) (-1.9623)$$

*The parenthesized figures below the coefficients are the t-values.

R-Square: 0.991875

Adjusted R-square: 0.987812

Standard Error: 4253.796

F-Statistics: 244.1500

Durbin Watson: 1.721762

Foreign Direct Investment is found to be positive at a t-ratio of 2.5332 and it has a positive and significant impact on Gross Domestic Product, having the value of its coefficient as 0.322. The sign indicate that coefficient of Foreign Direct Investment is positively related to Gross Domestic Product.

Total Import is found to be positive at t-ratio of 2.9943 and it has a positive and significant impact on Gross Domestic Product, having the value of its coefficient as 3.099331. The sign indicate that coefficient of Total Import is positively related to Gross Domestic Product.

Total Export is found to be positive at a t-ratio of 0.805206 and it has a positive and significant impact on Gross Domestic Product, having the value of its coefficient as 0.587602. The sign indicate that coefficient of Total Export is positively related to Gross Domestic Product.

Exchange rate is found to be positive at a t-ratio of 5.275849 and it has a positive and significant impact on Gross Domestic Product, having the value of its coefficient as 175.5836. The sign indicate that coefficient of Exchange rate is positively related to Gross Domestic Product.

Capacity Utilization of Manufacturing is found to be negative at a t-ratio of -0.364797 and it has a negative impact on Gross Domestic Product, having the value of its coefficient as -98.52962. The sign indicate that Capacity Utilization of Manufacturing is negatively related to Gross Domestic Product.

Trade Openness Index is found to be negative at a t-ratio of -1.962280 and it has a negative impact on Gross Domestic Product, having the value of its coefficient as -63741.20. The sign indicate that Trade Openness Index is negatively related to Gross Domestic Product.

Coefficient Determination (R^2)

The R-Square is 0.991875, which suggests a strong positive relationship between the dependent variable that is: Gross Domestic Product and the independent variables: Foreign Direct Investment, Total Import, Total Export, Average Exchange Rate, Capacity Utilization of Manufacturing and Trade Openness Index. The adjusted R^2 of 0.987812 suggests that 99% of the total change in Gross Domestic Product can be attributed to the independent variables.

F-Test

If $F^* > F$, we reject the null hypothesis and if otherwise, we accept the null hypothesis. Given the results on the ANOVA table, the observed $F^* = 244.1500$

At 5% level of significant, our theoretical F, given our level our level of significance and degree of freedom is $F_{0.05} = 244.1500$ comparing these value

$F^* > F_{0.05}$

i.e. $244.1500 > 3.23$

The conclusion from such result is that we reject our null hypothesis that all b_i are zero and accept our alternative hypothesis that all b_i different from zero.

IV. DISCUSSION OF FINDINGS

The coefficient of foreign direct investment being positive is that only appropriate investment in technology which is inform of innovation that can create value and drive growth. Although our granger causality reveals that no causality exists between foreign direct investment and capacity utilization of manufacturing. This may be as a result of some institutional arrangement in Nigeria which may not be in line with the international best practices. However our import coefficient has a positive relationship with the growth of the GDP this implies that certain inputs necessary to create value for Nigeria manufacturing sector output need to be imported. The granger causality reveals that no causality exists between import and capacity utilization of manufacturing.

The regression results indicated that export is found to be positive while the granger causality reveals that no causality exists between export and capacity utilization of manufacturing this shows that export act as an important element of growth in economics of the world. The magnitude of the export depends on the production techniques available and resources available together with the demand characteristics of the goods to be exported in order to drive growth. Exchange rate has a positive relationship with Gross Domestic Product but no causality exist between exchange rate and capacity utilization of manufacturing that can drive growth. The regression results reveals that capacity utilization of manufacturing is found to be negative and has a negative impact on Gross Domestic Product. The granger causality result also reveals that no causality exists between Gross Domestic Product and capacity utilization of manufacturing. This may be as a result of value not been added or created which will have a positive influence on Gross Domestic Product. Trade openness index is found to be negative and has a negative impact on Gross Domestic Product this could be attributed to the recent ban on importation of certain goods into the country.

V. CONCLUSION

It is impossible to separate trade from globalization. The issue of value creation in the global market has been critically examined in this study, using the parameters which can expose and measure Nigeria manufacturing sector's ability to create value. The results shows that the manufacturing sectors do not perform well with regard to creating value and exporting manufacturing products in the global market .

VI. RECOMMENDATIONS

Because of the benefits of globalization government should advance manufacturing sub-sectors and harmonize importation of certain goods so as to reap the benefits of globalization. Steps should be taken to reduce tariff and duties of certain equipment especially those that concerns manufacturing sectors so as to enable them create value for their products. Exchange rate of naira should be effectively managed so as to improve the value of naira for economic growth.

REFERENCE

- [1]. Bawa, I. (2019). Global Business Practice and Industrialization: An Issue for Structural Change through Free Zone Scheme in Nigeria. In Anam, B. and Antai, A.S. (editors) *Managemnt and Development: Addressing Global Best Practice in Nigeria*. Chapter 8, 119-120pp. Published by Advanced Publishers, Nigeria. www.internationalpolicybrief-ISBN978-051-974-2
- [2]. CBN (2019). Central Bank of Nigeria Statistical Bulletin, Vol. 28.
- [3]. Chete, L.N.; Adeoti, J.O.; Adeyinka, F.M. & Ogundele, O. (2014). Industrial development and growth in Nigeria: lessons an challenges.
- [4]. Dunning, J.H. (1979). The eclectic paradigm of international production: a restatement and some possible extension, *Journal of International Business Studies*; 19(1), 1-31.
- [5]. Goldberg, P.K. & Pavcnik, N. (2006). Distributional effect of globalization in developing countries. National Science Foundation.
- [6]. Gronroos, C. (2009). Towards service logic: the unique contribution of value creation. Working paper, Hanken School of Economics, Department of Marketing <http://dhanken.shh.fi/dspace/bitsream> accessed on 03 July, 2020.
- [7]. Ijewere A.A. (2009). International Business in Agbonifoh B.A. Introduction to Business: A functional view, Benin City windex publishing company limited.
- [8]. Levitt, T. (1983). The globalization of markets, Harvard Business Review, May-June p.94.
- [9]. Ogbu, O. (2012). "Toward inclusive growth in Nigeria".
- [10]. Ojo, M.O. (2003). Globalization and economic development, international experience in globalization and Africa's economic development. Selected papers for 2003 annual conference of Nigeria economic society.
- [11]. Olurunfeme, O.S.; Obamuyi, T.M.; Adekunjo, F.O. & Ogunleye, E. (2013). Manufacturing performance in Nigeria: implication for sustainable development, *Asian Economic and Financial Review*, Vol. 3(9) pp.1195.
- [12]. Porter, M. (1990). *The Comparative Advantage of Nations*, New York: Free Press .xii.
- [13]. Stabell, C.B. & Ejeldstad, O.D. (1998). Configuring value for competitive advantage: on chains shops, and networks, *strategic management journal*, 19(5), 413-347.
- [14]. Stoner, J.A.F; Freeman, R.F. & Gilbert, D.R. (1999). *Management*, 6th ed., England Cliffs, New Jersey Prentice-Hall, Inc.
- [15]. Vargo, S.L., Mmaglo, P.P. & Akaka, M.A. (2008). On value and value co-creation; A service systems and service logic perspective. *European management journal*, 26(3) 145-152.