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Does Commodity Price Boom Stunt Manufacturing Sector Growth? Evidence from Nigeria

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Abstract:
The literature on Dutch Disease and resource curse is built on the hypothesis that commodity dependent economies do find it difficult to expand their manufacturing sector during commodity price boom. This study examines this hypothesis using data for Nigeria, African biggest oil exporter. The study employed both ARDL approach and dynamic short-run Error Correction Model estimates to find the relationship between growth in manufacturing sector and a group of independent variables, which include, value of oil exports, growth rate of GDP, exchange rate, inflation and non-oil exports using annual data from 1981 to 2018. The results show that value of oil export has a positive but insignificant relationship with manufacturing sector growth, while the coefficient of growth rate of GDP is negative and insignificant, indicating that oil boom may have spurned state-led industrialisation in Nigeria, but this may not have led to sustained economic growth. Also, exchange rate and non-oil exports returned negative but insignificant coefficients in both estimates indicating that exports of non-oil raw materials and high cost of foreign inputs depress domestic manufacturing. These results indicate that policies that will promote private-sector led industrialisation should be encouraged to sustain the manufacturing sector and drive sustainable economic growth.

Keywords: *Commodity boom, manufacturing sector, economic growth, Nigeria*

1. Introduction

Nigeria depends on oil and gas exports for 95 per cent of its foreign exchange earnings and 70 per cent of government revenue. Yet, the sector accounts for only 8 percent of its GDP (CBN, 2018). Also, the economic growth trajectory of Nigeria has shown that rapid expansion in output tracks oil price boom. For example, per capita income increased by 2.7 per cent annually between 2003 and 2011 when oil price was very high, while it contracted at an annual rate of 2 percent from 1980 to 2000 when oil price was low (AfDB, 2016). In the same vein, following the decline in oil price since 2015, per capita income in Nigeria has contracted annually at 2 percent from 2015 to 2018 (AfDB, 2018). The country also experienced its first recession in almost three decades during the first and second quarters of 2016. This trend confirms that the expansion of output per person in Nigeria is driven essentially by oil price boom.

This commodity boom-driven economic growth reveals some structural weaknesses in the Nigerian economy. Firstly, it shows that while the economy is diverse, with output spread over many sectors, government revenue and foreign earnings are not because both are driven by commodity exports. For example, according to figures from the Central Bank of Nigeria, agriculture, services and wholesales and retails account for 22%, 19% and 18% of GDP respectively. In the same vein manufacturing and oil and gas accounts for 7% and 8% respectively reflecting how diverse production base is in the country (CBN, 2018). However, oil and gas sector which contributes only 8 percent of GDP accounts for 95 percent of foreign earnings and 70 per cent of government revenue (CBN, 2018). Secondly, the manufacturing sector which accounts for 7 percent of GDP contributes only 1 percent of foreign earnings. Yet, the manufacturing sector has been identified as a major driver of inclusive growth and rapid economic development in other parts of the world especially Asia in recent times (Rodrik, 2006). Thirdly, the evidence that commodity driven economic growth is not sustainable can be illustrated by the fluctuating pattern of output expansion in Nigeria and the small share of manufacturing in GDP.

It was against this dismal share of manufacturing in GDP that Nigeria did make some concerted efforts in the past at expanding its manufacturing sector by pursuing a state-led industrialisation during its oil boom era of 1970s and 1980s (Collier and Hoffler, 2005). This import substitution strategy, which was led by Nigerian civil service elites, during the oil boom era, was unsuccessful like others in most African countries that used the same model. Specifically, the massive

capital investment made by government to drive industrialisation during this period was wasted and this dismal attempt at industrialisation has been used to illustrate how oil wealth could stunt economic growth prospects on the long run. In a seminal work, Sala-i-Martins and Subramanian (2003) discussed how Nigeria invested heavily on industrialisation during this period in an attempt to build heavy industries in steel, automobile and oil and gas processing. These attempts resulted into massive investment that failed to generate enough returns to pay for their costs, while others were not completed. The study attributed this failure to institutional weakness because the Nigerian state was not strong enough to develop the discipline and competency to sustain these production firms. This institutional explanation for the concept of Dutch Disease has expanded the literature on how commodity price boom stunts manufacturing sector. It has also provided a popular variant of the Dutch Disease and its effects on commodity dependent economies in Africa.

Nigeria dependence on oil and gas wealth does encourage rent-seeking and corruption just as it contributes to slow growth in higher-productivity manufacturing sector. For example, growth in Nigeria manufacturing sector has stagnated for more than a decade now including the period of high economic growth (CBN, 2018). This is an indication that there is the possibility that massive exports of natural resources can lead to re-allocation of inputs from traditional value-added sector like manufacturing to extractive sector because of the high foreign earnings from commodity exports to the domestic economy. This tendency and the fact that high commodity earnings could lead to currency appreciation and make manufacturing outputs uncompetitive in the global market have formed the basis of discussion on how commodity dependence stunts manufacturing output.

The dependence of the Nigerian economy on commodity exports can also be explored by analysing how macroeconomic variables track oil price. For example, the period of oil price boom of 2003-2014 was also a period of strong macroeconomic performance, with low inflation, stable exchange rate, high economic growth rate and current account surplus (CBN, 2018). The drop in oil price starting from the second half of 2014 reduced Nigerian export earnings from oil and gas, led to disappearance of current account surplus and triggered the depreciation of the local currency by more than 25 percent within a year (AfDB, 2016). Other macroeconomic indicators were also affected by the sharp decline in oil price and revenue during this period. For example, Nigeria foreign reserve dropped by more than 20 percent within a year, while the economic growth rate contracted in the first two quarters of 2016 leading to the first recession in the country in almost 30 years (AfDB, 2018). Not surprisingly, Nigeria currency, the naira, exchange rate moves closely with the price of oil with a correlation index reflecting how oil earnings help in stabilizing the local currency (AfBD, 2018)

This paper empirically investigates the effect of oil price boom on the expansion of manufacturing sector in Nigeria and through this process test a simple hypothesis of whether oil price boom stunts the growth of the manufacturing sector in Nigeria. This study is motivated by many reasons. Firstly, African economies need to diversify away from dependence on commodity exports to manufacturing exports to reduce unemployment, increase income per capita and generate pro-poor or inclusive growth. Nigeria, which is the biggest economy in the region, can provide empirical evidence of why this has been difficult to achieve. Secondly, an analysis of the performance of African economy shows that there is a wide disparity in economic performance across sub-regions. East Africa seems to be doing well while Central Africa and West Africa are growing very sluggishly (AfDB, 2018). The poor performance of these two sub-regions is driven by Congo in Central Africa and Nigeria in West Africa. It is therefore important to understand how the inherent circumstances of Nigerian economy explains it poor performance. Thirdly, Asia has been able to lift a substantial percent of its citizens out of poverty in the last few decades because its two most populous countries, China and India, expand their manufacturing sector. In same vein Africa will achieve the same result if Nigeria can grow it manufacturing sector considering its share of Africa population.

The reminder of this paper is structure as follows: Section two reviews some theoretical and empirical literature. Section three presents the model and data source. Section four discusses the empirical results, while section five concludes and makes recommendations.

2. A Review of Theoretical and Empirical Literature

The idea that natural resources abundance can stunt economic growth gained prominence following the emergence of the Dutch Disease phenomenon in the 1970s. The concept of Dutch Disease was used to describe the decline of the manufacturing sector in Holland after the discovery of natural gas in the country. The first set of the model for Dutch Disease was developed in the 1980s and it explained how currency appreciation caused by large earnings from natural resources can lead to decline in manufacturing exports (Corden and Neary, 1982: Corden, 1984). The Dutch Disease occurs because Dutch manufacturing was no longer competitive because of high cost of production. This means that high income from natural resources export increases both domestic income and the demand for goods and in the process generate inflation and appreciation of real exchange rate (Papyrokis and Gerlogy, 2004: Frankel, 2010: Gylfason, 2001).

The Dutch Disease can be transmitted through two basic channels. The first is the spending effect where commodity boom leads to increase in the relative price of non-resource commodities and therefore reduces their competitiveness in the global market (Frankel, 2010). The second, which is called the pull effect occurs when increase in the price of domestic inputs like labour and materials increase because the natural resource sector is paying higher prices for them. This will increase production cost for all sectors and thereafter makes manufacturing goods uncompetitive in the global market (Humpherys, Sachs and Stiglitz 2007). The literature has also been extended from Dutch Disease to resource curse hypothesis. The term resource curse was first used in the 1990s to describe how countries rich in natural resources have lower economic growth rate than resource poor countries (Auty, 1993). The resource curse hypothesis shows that the volatile nature of mineral revenue makes these countries vulnerable to macroeconomic shocks. The study also

describes how foreign owned mining companies tend to create an enclave industry within the local economy and how they repatriate most of their earnings abroad with little left in the domestic economy (Auty, 1993).

The popularity of the resource curse hypothesis led to series of studies based on cross sectional data in the last few decades (Sachs and Warners, 1995: 1997; 1999: Gylfason, 2001; 2006 and Stiglitz, 2005). Sachs and Warner (1995) used a large data to show quantitatively that resource dependence is detrimental to economic growth in a large number of resource-rich countries. Gylfason (2001:2006) showed how resource rich economies tend to grow slowly through poor investment in human capital, infrastructure and low capital formation. In specific term, Nile and Rastad (2007) showed that income per person declined by 29 percent in oil exporting countries between 1975 and 2000, while it increased by 34 percent on the average globally during the same period. Apart from the Dutch Disease channel resource dependence can also stunts economic growth in oil-rich countries through the volatile nature of natural resources price in the global market. This happens when market instability increases uncertainty, causes fluctuations in resource-based revenue and makes economic planning very difficult (Davis and Tilton, 2005: Frankel, 2010). There are tendencies for resource revenue to decline during bust period and exchange rate to deteriorate very rapidly. In addition, there are cases where resource rich economies borrow heavily during commodity boom because of over-valued local currency but find it difficult to service such debt when low commodity price drives the cost of debt very high (Humphreys, Sachs and Stiglitz, 2007).

Some studies (Iimi, 2006; Gylfason, 2001Ismail, 2010) have also argued that natural resource revenue tend to encourage mismanagement due to the nature of the tax derivable from these resources. For instance, access to resource rent may make government less accountable and creates the incentive for poor fiscal discipline. In some cases, resource rent may allow the state to get involved in industrialisation even when the conventional wisdom suggests that the best strategy is to encourage private sector-led industrialisation (Sala-i-Martins and Subramanian, 2003). Additionally, natural resource dependency may also reduce the incentive for people to accumulate human capital because of high level of resource- based wages. This is a reflection of how resource rents discourage skill development among the citizens of commodity dependent countries. This tendency also supports the empirical evidence that public expenditures on education as a fraction of national income has inverse relationship with natural capital (Gylfason, 2001).

Resource rent also encourages rent seeking activities (Gylfason, 2001; Hodler, 2006; Deacon and Rode, 2012). The basic argument here is that people tend to seek political position to obtain resource rents and this tends to crowd out productive activities in the economy. This phenomenon has been called political Dutch Disease and it describes a situation where resource rents increase the power of the elites and they thereafter use this power to redistribute resource rents to themselves and their cronies (Lam and Wantchekon, 2003). The implication of this behaviour to development is grave because resources are allocated to rent-seeking activities instead of using such resources for sustainable development. It has also been shown that resource windfall encourages conflicts,drives political instability and leads to misallocation of resource (Collier, 2007; Sala-i-Martins and Subramanian, 2003; Davis and Tilton, 2005; Collier and Hoeffler, 2005; 2009).

Some studies (Hodler, 2006; Frankel, 2012; Iimi, 2007) have shown how resource rents reduce the quality of institutions and encourage corruption. For example, Arezki and Brucker, (2011)showed that increase in oil rent tend to increase the political risk in a country as measured by Political Risk Index, especially when the state is the dominant actor in the oil industry. Also, Arezki and Glyfason, (2011) showed that natural resource rents induce corruption in a non-democratic state. Finally, for Nigerian studies, Sala-i-Martins and Subramanian, (2003) showed that natural resource rents stunt economic growth by weakening social, political and economic institutions. Their study which used Nigeria as a case study showed that resource rents produce weak institutions and this tends to reduce economic growth. In specific term, the study described how Nigeria wasted enormous resource rents on state driven industrialisation that did not produce any return to investment and attribute this failure to poor institutions.

3. The Model and the Data

The model used for this study is an adapted version of the one specified by Cheney (1960), which describes a relationship between manufacturing output as a dependent variable and income asan independent variable. However, income in the model was broadly defined to capture a wide range of variables to reflect the diverse determinants of national income.

Cheney (1960) stated a linear logarithmic regression equation as follows

Log V = ao +ao Log Y + a1 Log N ……(1)

Where V is manufacturing value-added, N represents other variables that complement national income. The coefficients represent both the elasticity of income and the elasticity of other variables.

This study therefore modified equation (1) and incorporates other variables to reflect variables of interest for this study and this gives equation (2) as follows

MSG = f(EXCH, GDPgr, INF, OEX, NOEX)

Where MSG – manufacturing sector growth rate, EXCH - exchange rate, GDPgr - GDP growth rate, Inflation, OEX -oil export and NOEX –non oil export. The dataset covers annual data from 1981 to 2018 sourced from World Development Indicators. Here manufacturing is measured by growth in the sub-sector annually over the period covered by the study. This is consistent with extant literature (UNIDO, 2015). The explanatory variable of interest is the value of oil export which reflects the size of commodity boom in Nigeria as an oil exporting country. This is also supported by literature as value oil exports have been used as a proxy for commodity boom (Sachs and Warner, 1995:1999). Other variables exchange rate, non-oil export, grow rate of GDP, and inflation rate are added to reflective how macroeconomic variables may influence the impact of oil exports on manufacturing sector in Nigeria. This is because macro-economic conditions have been identified as a very important driver of manufacturing sector performance in the literature (European Commission, 2009).

Some of the macroeconomic variables that drive manufacturing sector growth are aggregate income, exchange rate, rate of inflation, interest rate, taxes, government expenditures (European Commission, 2009). Also, openness and terms of trade have also been identified as important determinants of manufacturing sector performance and this is proxy in this study by non-oil export.

The most important independent variable of interest for this study is oil export and this is supported in the literature by the evidence that natural resources endowments, oil, mining, natural gas, and forest do work against the development of manufacturing sector holding other variables constant (see Haraguichi and Rezouya, 2012; 2011; UNIDO, 2015;2012). The negative effect of natural resources endowments on manufacturing sector can work through different channels, one of which is currency appreciation which can drive up the cost of manufacturing (UNIDO, 2015). This study concentrates on oil exports as a form of resource endowments and a measure of commodity price boom in Nigeria.

4. Results and Discussions

4.1. Results

4.1.1. Unit Root Test Result

The result of the ADF unit root test is presented in the table 1, the result showed that all variables are stationary at level I(0) except for exchange rate (EXCH) which is found to be stationary at first difference. Manufacturing sector growth (MSG), growth in GDP (GDPgr), Inflation (INF), oil export (OEX) and non-oil export (NOEX) are all stationary at levels 1(0).

Variable	ADF Test Statistics	Critical Value @ 1% Sig. Level	Prob.	Order of Integration
MSG	-4.3368	-3.6210	0.0015	I(0)
EXCH	-4.2168	-3.6267	0.0021	I(1)
GDPgr	-4.1062	-3.6210	0.0028	I(0)
INF	-4.2350	-3.9625	0.019	I(0)
OEX	-6.4293	-3.6210	0.000	I(0)
NOEX	-6.8698	-3.6210	0.002	I(0)

Table 1: Unit Root Test
Source: Authors' computation (2020)

Given the unit root result whose variables are integrated of mixed order of 1(0) and 1(1). The method of autoregressive-distributed lag and bound co-integration test is employed to achieve the objective of this study**.**

4.1.2. ARDL Bound Cointegration Test Result

The computed F-statistic of 4.5571 is greater than the upper bound at 5% significant level and also greater than the lower bound at 5% significant value, the lower bound is represented as I0 and the upper bound is represented as I1. Hence, we reject the null hypothesis that there is no co-integration that is there is a long run relationship among variables.

Critical Value Bounds Computed-F-statistics 4.57115				
Significance	I0 Bound	I1 Bound		
10%	2.26	3.35		
5%	2.62	3.79		
2.5%	2.96	4.18		
1%	3.41	4.68		

Table 2: Critical Value Bounds
Source: Authors' computation (2020)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OEX	0.010261	0.042587	0.240939	0.8115
NOEX	0.063343	0.04439	1.425378	0.1659
EXCH	-0.026891	0.0033977	-0.791443	0.4358
GDPgr	-1.341779	0.801713	1.673640	0.1062
INF	-0.759547	0.275888	-2.753299	0.0106
C	19.620515	9.833536	1.995266	0.0566

Table 3: Estimated Long-Run Coefficients Using the ARDL Approach
Source: Authors' Computation (2020)

Table 3 presents the results of the estimated long-run coefficients for the ARDL approach. The results show that the coefficients of oil export and non-oil export are positive but are statistically insignificant indicating that a direct relationship exist between oil export and manufacturing sector growth, while exchange rate, GDP growth rate and

inflation exhibit a negative relationship with manufacturing sector growth, however only inflation was found to be statistically significant. A unit increase in inflation will decrease manufacturing sector growth by 0.7595 units. The positive sign of oil export may indicate that increase in oil may have spurned expansion in manufacturing sector in Nigeria because it has been established that industrialisation in Nigeria was mostly state driven and that it was neither sustainable nor enhanced economic growth (Bates, 2007; Subramanian and Sala-i-Martins, 2003). This point is reinforced by the fact that the growth rate of GDP exhibits a negative relationship with expansion in manufacturing indicating that economic growth in Nigeria is not driven by value-added manufacturing. This result is consistent with the findings of previous studies (Sachs and Warner, 1995: 1997). The result shows R- squared of 0.825102, which indicate 82% variation in MSG is explained by the independent variables, OEX, NOEX, GDPG, INF and EXCH.

4.1.3. Short-Run Estimates

Once the long-run co-integrating model has been estimated, the next step is to model the short-run dynamic relationship among the variables within the ARDL framework. Table 4 presents the results of the estimated error-correction model of manufacturing sector growth and its determinants using the ARDL technique.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(OEX)	0.004990	0.020971	0.237474	0.8142
D(NOEX)	0.030743	0.0.018280	1.681755	0.1046
D(EXCH)	-0.013051	0.015087	-0.8655080	0.3949
D(GDPgr)	-1.538935	0.343936	-4.474476	0.0001
D(INF)	-0.529590	0.097907	-5409131	0.0000
$D(INF)_{(-1)}$	0.278134	0.091877	3.027249	0.0055
$ECM_{(-1)}$	-0.485343	0.134827	-3.599741	0.0013

Table 4: Estimated Short-Run Error Correction Model using the ARDL Approach
Source: Authors' computation (2020)

The results of the short run error correction model are almost identical with those of the initial results. The grow rate of GDP, inflation and the lag of inflation have significant negative impact on manufacturing sector growth in the short run. These findings are consistent with some results in the literature which show the commodity boom driven economic growth can be detrimental to grow in manufacturing sector (Corde, 1984: Corden and Neary, 1982), while high rate of inflation is also bad for expansion in manufacturing sector. An important result from the short-run dynamic estimates is the positive and insignificant relationship between manufacturing sector growth and oil export, which is identical to the results for the long-run ARDL estimates. This result confirms that although oil price boom may drive manufacturing activities in Nigeria, this is not statistically significant.

The short run estimate of exchange rate also supports the long run estimate as it indicates a negative but insignificant effect of exchange rate on manufacturing sector growth. Also, as in the long run inflation rate to manufacturing sector growth is negative and significant, same result persists in the short run estimates. The coefficient specifically implies a positive change in inflation rate will induce a 0.52956-unit reduction in manufacturing sector growth.

Furthermore, Gross Domestic Product growth rate (GDPgr) maintains negative relationship but significant relationship with manufacturing sector growth (MSG) in the short run unlike the long run. Inflation rate lag by period 1 (INF_{-1}) shows a positive and significant relationship with manufacturing sector growth.

The Error Correction Model, ECM (-1) term showed the adjustment or feedback mechanism which shows the rate at which disequilibrium in manufacturing sector growth (MSG) is being corrected in the long run. The ECM term here is negative and significant and therefore confirms that there is long-run relationship in the model. It showed that disequilibrium in MSG is corrected by 0.485343 i.e. almost 48 percent annually.

4.2. Diagnostic Test

4.2.1. Heteroscedasticity Test

The null hypothesis is that there is homoscedasticity in the variance of error term while the alternative hypothesis states that there is heteroscedasticity in the variance of error term. The F-statistic probability value of 0.0125 is less than the 5% level of significance, from the F-statistics (3.5325) and it respective probability value (0.0125).

F-statistic	3.532470	Prob. F(5,30)	0.0125
Obs*R-squared	13.34061	Prob. Chi-Square(5)	0.0204
Scaled explained SS	16.19047	Prob. Chi-Square(5)	0.0063

Table 5: Heteroskedasticity Test: Breusch-Pagan-Godfrey
Source: Authors' Computation (2020)

We therefore reject the null hypothesis of homoscedasticity and thus accept the alternative hypothesis of heteroscedasticity in the variance of error model.

4.2.1.1. Autocorrelation Test

The table showed the autocorrelation result for the study. The null hypothesis is that there is no autocorrelation in the error term against the alternative hypothesis of presence of autocorrelation in error term.

F-statistic	**3.682479**	**Prob. F(2,1)**	**0.3458**
Obs*R-squared	28.17452	Prob. Chi-Square(2)	0.0000

Table 6: Breusch-Godfrey Serial Correlation LM Test
Source: Authors' computation (2020)

The F-statistics in the result has a probability value 0.3458 which is greater 5% significance level based on the value of F-statistics (3.68247) and its respective probability value (0.3458), it can be concluded that there is no autocorrelation in error term and therefore we cannot reject the null hypothesis.

4.2.1.2. Stability Test

The null hypothesis is that the regression model fit the data well versus alternative hypothesis of invalid regression model. The F-statistics in the result has a probability value of 0.3898 (38%) which is greater than 5% level of significant.

Equation: UNTITLED **Specification: MSG OEX NOEX EXCH GDPG INF** **Omitted Variables: Squares of fitted values**				
	Value	df	Probability	
t-statistic	0.872658	30	0.3898	
F-statistic	0.761532	(1, 30)	0.3898	
Likelihood ratio	0.902432	1	0.3421	
F-test summary:				
	Sum of Sq.	df	Mean Squares	
Test SSR	66.80548	1	66.80548	
Restricted SSR	2698.560	31	87.05034	
Unrestricted SSR	2631.755	30	87.72517	
LR test summary:				
	Value	df		
Restricted LogL	-128.7870	31		
Unrestricted LogL	-128.3358	30		

Table 7: Ramsey Reset Test
Source: Authors' Computation (2020)

Hence the null hypothesis that the regression model fit the data is well accepted, hence the parameter estimate in this model are stable overtime.

Also, the results of the various diagnostic tests show that the estimated model passed the various confirmation tests. In table 5, we reject the null hypothesis of homoscedasticity, while we accept the alternative hypothesis of heteroscedasticity. We also conclude from table 6, that there is no autocorrelation in the error term, while table 7, shows that the regression model fit the data very well when compared to another alternative. The three diagnostic tests confirm that our model is appropriate and well estimated.

4.3. Discussions of Findings

The results of both the log-run coefficient of the ARDL model and the short-run dynamic estimates using the Error Correction Model (ECM) are identical for almost all the variables, especially for our variables of interest. For the results of both estimates, oil exports have positive but insignificant relationship with manufacturing sector growth, which indicates that oil boom may have driven manufacturing sector growth but this relationship is not very reliable. The implication of this is that any expansion in industrialisation that is driven by oil boom in Nigeria may not be that important and this assertion is confirmed by the results of the relationship between manufacturing sector growth and growth in GDP which return negative coefficients in both estimates with only the dynamic short-run ECM estimates been statistically significant. Also, the results for non-oil exports show a negative and insignificant relationship with manufacturing sector growth for both estimates and this might be because of the relatively small size of non-oil exports in Nigeria as its accounts for an average of 4 percent of total exports (CBN, 2018). For our results on oil exports, there are consistencies with previous studies that have established that when commodity boom drive expansion in manufacturing sector the growth in the sector may not be that very important (Subramanian and Sala-i-Martins, 2003).

In addition, our results for other variables like exchange rate and inflation for both estimates are almost identical with the exception been a slightly different in the coefficient of lag value of inflation, which was positive and significant in the dynamic ECM estimates. For exchange rates, both estimates show that it has negative and insignificant relationship with manufacturing sector growth which implies that currency depreciation enhances manufacturing sector expansion in

Nigeria but not very significantly. Some important deductions can be made from these findings. Firstly, oil price boom in Nigeria may seem to drive manufacturing sector growth but this is mainly superficial as the relationship between the two variables is not significant. Secondly, economic growth does not drive manufacturing sector expansion in Nigeria and this may be because economic growth in Nigeria has been mainly driven by oil price boom. Thirdly, exchange rate depreciation seems to be good for manufacturing sector growth since it drives the price imports up and encourages consumptions of locally produced goods. Fourthly, non-oil exports have a negative relationship with manufacturing sector in Nigeria and this may be because a substantial fraction of manufacturing output in Nigeria is consumed locally and also because expansion in local manufacturing may depress non-oil exports which are mostly primary products that are also used in local manufacturing. Finally, inflation seems to drive local manufacturing because it may expand the margins for local manufacturers.

5. Conclusion and Recommendations

For most commodity exporting countries in sub-Saharan African countries, expanding their manufacturing sector has always been a challenge and this has implications for their long-term growth and their prospect for economic diversification. This study contributes to the literature on the relationship between commodity price boom and manufacturing sector growth in sub-Saharan Africa using data for Nigeria. The study established a positive and insignificant relationship between manufacturing sector growth and commodity price boom in Nigeria for the period under review. This result shows that although oil price boom, proxy by value of oil exports, seems to drive manufacturing sector growth in Nigeria, the growth may be superficial because the relationship is not significant. This is also supported by the existing literature which has established that commodity boom driven industrialisation, especially when it is state-led is not sustainable and does not drive long-term economic growth.

The inability of commodity boom driven industrialisation to drive economic growth was confirmed by the negative relationship between GDP growth rate and manufacturing sector growth in our results, while both high inflation and depreciating exchange rate encourage expansion in manufacturing sector growth a result that is consistent with that of extant literature. In addition, the value of non-oil export is found to stunt manufacturing sectorgrowth and this suggests that export of non-oil primary products in Nigeria may deprive manufacturing sector growth. This study therefore recommends that policy makers should focus on expanding the manufacturing sector by developing industrialisation strategy that will be private sector and not public sector led.

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