Time series analysis of the determinants of non-oil manufacturing exports within business environment in Nigeria

Eyam, Nkang Enighe[1]; Ayodele Solomon Olusiyi[2]; Ayodele Oluwafemi[3]; Adie, Joseph Adie[4]
[1]Department of Economics, University of Calabar, Nigeria, nkangenigheeyam@gmail.com
[2]Department of Economics, Taraba State University, Nigeria, ayoolusiyi@gmail.com
[3]Department of Economics, University of Calabar, Nigeria, femfit190@gmail.com
[4]Department of Economics, University of Calabar, Nigeria, Adiej19@gmail.com

Corresponding Author: [1]nkangenigheeyam@gmail.com

Abstract
Manufacturing export in Nigeria today has become the most dynamic sector with the highest level of production globally and based on the significant performance, the study aimed at ascertaining whether specific business environmental factors are major drivers of manufacturing export performance in Nigeria. The model was anchored on Export-led growth theory. Panel data analytical framework using survey sampling technique and a crosssectional time series technique was employed to investigate 20 manufacturing firms listed in the Nigerian stock exchange of 2018 between 2007 to 2018. The panel result shows that the estimated equation is statistically significant and has a good fit. It was also revealed that economic and regulatory quality, government efficiency, trade relations, agriculture, conglomerate and service industries are major drivers of manufacturing export performance. The study concludes that Government should make strong and proactive economic and regulatory policies to provide monitoring and evaluation programs to check the activities of non-oil exporting firms to make sure those available financial resources are used to generate aggregate net worth, increase sales, and enhance profitability. Further and extensive research should be carried out disaggregating ownership into public, private and foreign sectors to determine the one with higher export propensity, effective performance and aggregate output.

Keywords; Manufacturing, Performance, Output, Export, Firms,

Introduction

Africa currently accounts for about two percent of global trade and less than one percent of global GDP and its share of world non-oil exports are almost zero (Aggrey & Richard 2010). Considering non-oil exports, Nigeria as one of the growing African countries began as an agricultural economy. The agro-based product of the early Nigeria comprises of timber, rubber, beans, groundnuts, cocoa, hides & skin and kernel. According to Rano, and Tsauni, (2006), these products accounted for more than 50 percent of GDP and were the major source of Nigeria's public revenue and export earnings. The disclosure of crud in 1956 followed by its exploration in large amount in 1958, gradually therefore the oil sector became the main and almost the dominant source of export earnings. According to World Bank 2002, Crude oil increased Federal government revenue which accounted for about 78 percent in 1970 and over 95 percent of export earnings. The oil boom in 1973 therefore, the economy's foreign exchange income grew extremely good, signifying a high of growth such that income to the government was greater than expenditure. The decline in the prices of crude oil in the late 1970 led to a series of macroeconomic issues like, price instability, balance of payments deficit, budget deficits, negative growth and high rate of unemployment. The above problems were as a result of over dependence on crude oil such that the country has to borrow externally in order to sustain enormous government deficit expenditure.

In regards to the huge crisis, the country introduced the structural adjustment program (SAP) in 1986. This was aimed at diversify and liberalizing the economy. With the introduction of SAP, a lot of policies as well as export promotion strategies were formulated on non-oil export to include incentives on export and research and development (R&D). In spite of these efforts to improving and diversifying export, the consequences were not commensurable. This was as a

result of the low share of non-oil export to total export earnings when compared to the primary goods in general or the oil sector in particular. It is Evident that the share of non-oil export as a proportion of aggregate export remains below one percent till the year 2000. This was far less than the sub-Saharan African countries average of 6.2 per cent, and much less than the average of 70 percent achievable by East Asian countries. The trend remained the same for Nigeria over the decades in addition to fluctuations in volume both of which adversely affected economic growth.

In 2009, during the civilian rule, 820 non-oil exporting firms were closed down and rendered thousands of youths unemployed as declared by the manufacturing association of Nigeria (MAN) during the past nine years (from 2000 & 2008). This was necessitated by unstable electricity, tough operating environment and high cost of diesel, high interest rate, smuggling, high levies, high exchange rates, high taxation and petroleum to power firms' generators. It therefore means that, there are no growth driving input available for non-oil exporting firms in the economy over the years, which in turn leads to a decline in growth potentials (Africa Vanguard, 2009). More so, the provision of key infrastructural facilities like energy, transportation, telecommunication and trade relations cannot be feasible if manufacturing sub-sector is to survive domestically especially in our unusual condition where the improvement of energy production had gone through 30 years of rejection (Sangosanya, 2011). With this analyses, it is ideal to reverse the decayed business environment factors in order achieve the expected dynamics of growth and development in the economy. To this end, it is important to extensively carry out a research survey to establish those environmental factors that determine the level of non-oil export in Nigeria. It is also important to note that for manufacturing sector to achieve maximum performance, business environment is of outmost important. This is because both the value of environment and economic activities takes place in the business environment. The goal of any economic environment is the ability to take into account the cost and benefits of both environment and economic activities. Business environment is important factor to determine the performance of manufacturing sub-sector because it has the ability to provide productive resources, accept waste and provide aesthetic pleasures to homes.

The time frame for this study is limited to 2007-2012. The sample period chosen was as a result of availability of firms' level data quoted in the NSE of 2012 annual report. According to NSE (2012), some firms are delisted every year as new ones are registered while others do not return for exports. The period has the best and consistent return of exports data.

Literature review and theoretical issues

The newly industrialized economies (NIEs) is evident that exports of manufactured goods, semi-manufactured and non- traditional products are behind the progress of economies like Singapore, Taiwan, South Korea, Turkey, Thailand, Hong Kong, and Brazil. In 2005 according to Todaro and Smith, 2009, despite the important recognition in attaining economic growth of manufactured goods, some countries in Africa including Nigeria to a large extent still depends on the export goods at their primary stage of 98 percent of the aggregate export income. This threat accompanied with her total dependence on the manufactured capital and consumer goods importation to satisfy her increasing consumption desire of raw materials and the growing populace couple with machineries for its domestic companies leads to balance of payment deficit in the economy, since the purchases on imports is growing when related to the export earnings for goods and services. A nation's income is also a determinant of net export (export less import); income (GDP) is adversely being affected by the position of import.

The different ways employed to better the export of manufactured goods employed by the government are; export expansion grant, establishment of export processing zones and minimum local raw materials utilization in order to avoid the marginalization of Nigeria in the ongoing globalization process. The non-oil sector should be developed with the view to improve productivity for both export and local consumption. Another group of independent variables that explained the position of exports those bordered around future benefits of exporting. Future benefits from exports will be increased thereby increasing the tradable prices relative to non-tradable goods if trade is liberalized. Increase in the volume of exports and export share is caused by the depreciation of real exchange rate. Moreover, hence the destination of a larger proportion of African economies export within Africa, what matters to the prices of export is to move local currency relative to other African country's currencies instead of changes in other factors of the real exchange rate that determine a firms future gains from exporting like; firms size, technical efficiency, geographical location, electricity supply, and interest rate (Graner & Isaksson, 2002).

The empirical literature on firm's level of manufacturing export behaviour of developing economies is scarce. Roberts and Tybout (1997) among a few others carried out studies in South Africa, Ghana, Colombia, Mauritius, Mexico, and morocco. These studies focus mostly on few variables, for example, the effect of firm size, export performance of R&D expenditure and the effect of firm size. World Bank (2004) studied Nigeria, Tanzania and Uganda using cross sectional data and the results shows that larger firms are more typically to export more of their output than the smaller firms. Foreign-owned firms were also revealed to export more than domestically-owned firms. It was also revealed that firms that produce wood, construction material, furniture and metals tend to export less than other firms.

The stylized facts that emerged from the former studies reviewed revealed that exchange rate, firm size, and technology are the major determinants of a firm's propensity to export. The evidence on the association of efficiency, firm's age, foreign ownership, propensity to export and infrastructure is mixed. Average wage, skill intensity, R&D and Capital intensity were shown to be positively associated with propensity to export in some studies. These findings provide a framework to compare and contrast Nigeria's results that would emerge from the study. Related studies in Nigeria used descriptive analysis while others used aggregate study to determine export performance and dynamics of economic growth. It is against this backdrop that the research was carried out using firms' level study and panel analytical modeling to determine why manufacturing firms enter into export market and the propensity to export to different destinations in order to test for both the long and short run effect, economically robust and value added on the economy. Again, firm's level study was chosen and paneled in that the method has the ability to control for issues of both endogeneity and heterogeneity. The method also revealed its ability to control individual-specific effects.

Export-led growth theory: Several models on export-based study have been formulated to determine how a country's economic growth can increase export through the present macro-dynamic view. According to Adam Smith, John Stuart Mill and David Ricardo, the classical trade theorists maintain that foreign trade influences a favorable result on trading economies. The theory emphasized that the presence of idle resources of labour and land result to the use of outrageous input to produce an excess of export goods resulting to a productive capacity surplus that would alternatively be utilized. Trade encourages efficient global distribution of resources. Ricardo's comparative advantage theory states that specialization is as a result of production through trade

optimization (Edame & Eyam, 2013). According to John Stuart Mill (1848) in his Principles of Political Economy, establish the basic benefits of trade in addition to the dynamic benefits from trade to include the one that widens the market extent, improve productivity and stimulate innovations, technological transfer in entrepreneurship, skills, wants and taste, instill new and educative ideas, capital accumulation and increase savings. Consequently, trade gives developing countries the advantage of reducing domestic insufficiency to outgrown the diseconomies of the nature and the size of its local market.

TABLE 1: Composition of Nigeria's exports in tons between 1980 – 2000 (%)

YEAR	OIL	NON-OIL GOODS	MANUFACTURING GOODS	OTHERS	TOTAL
1981	97.00	2.94	0.22	2.72	100
1982	97.10	2.90	0.16	2.74	100
1983	94.40	5.60	0.11	5.49	100
1984	95.15	4.85	0.14	4.71	100
1985	96.72	3.28	0.06	3.22	100
1986	93.13	6.87	0.03	6.84	100
1987	95.37	4.63	0.29	4.34	100
1988	91.16	8.84	0.51	8.33	100
1989	94.67	5.83	0.65	4.68	100
1990	97.03	2.97	0.46	2.51	100
1991	94.53	5.47	0.77	4.70	100
1992	96.90	3.10	0.30	2.80	100
1993	97.72	2.28	0.30	1.98	100
1994	97.72	2.28	0.25	2.03	100
1995	97.72	2.28	0.25	2.03	100
1996	98.20	1.78	0.30	1.48	100
1997	97.70	2.30	0.20	2.10	100
1998	95.50	4.50	0.20	4.30	100
1999	98.40	1.60	0.30	1.30	100
2000	98.70	1.30	0.25	1.05	100

Source: FBS, 2012.

Table 2 provides average summary of the growth performance of non-oil manufacturing industries in Nigeria. The non-oil sector performance in terms of growth in real GDP, growth in value added, export and import growth, capacity utilization are as summarized below. Despite government's support of the manufacturing industry over the years, the sector still remains weak, and is heavily import-dependent. The share of non-oil manufacturing export in gross domestic product (output) remained low while some firms did not even make returns and hence hinder the value added of the sector. The sector therefore remains a net user of foreign exchange, contributing less than one percent of foreign exchange earnings and utilizing up to 64 percent of foreign exchange earned in the economy over the same period (Oluwatayo & Olasupo, 2005).

TABLE 2: Exports of non-oil manufacturing firms and growth rate, selected years (2008 – 2012) in tons

	Companies	Years				
		2008	2009	2010	2011	2012
1	FTN cocoa processors plc	456883	496588	303796	39331	-
2	Okomu oil palm Plc	2883293	2680688	3240364	6852499	-
3	Guinness Nigeria Plc	40820836	42777547	48790408	46641358	
4	Nigerian breweries Plc	79876783	78764457	83656201	109341661	127953812
5	Pz Cussons Nigeria Plc (Pz industries)	12001052	15004286	15586271	16609547	13765161
6	UACN Plc	14672100	14757900	16454000	21800500	20585000
7	Unilever Nigeria Plc (lever brothers)	8976482	10485158	10836472	12923727	15382384
8	Cadbury Nigeria Plc	6166538	6899405	8794580	11757563	12092405
9	Flour mills of Nigeria Plc	21634583	21259659	46259203	38214727	37857189
10	Glaxo Smithkline (beecham) consumer Nigeria Plc	-	-	-	5774961	7057287
11	VITAFOAM (Nig.) Plc	1738046	1607689	1689356	1987739	2412961
12	BETA (DELTA) Glass Co. Plc	4203702	5082645	5183101	5584764	6114381
13	Academy press Plc	487472	488692	-	-	-
14	United Nigeria textiles Plc	2904386	1686537	-	-	-
15	LAFARGE NAPO Plc (West African Port-Land Cement)	17359233	14351986	-	-	-
16	7-up bottling company	14451885	16956067	-	-	-
17	Cement co. of Northern (Nig). Plc	3349310	4390072	3574847	5423352	-
18	Dangote cement Plc	-	-	-	143885342	187649779
19	SCOA (Nig.) Plc	-	-	-	617117	912903
20	Nestle Nigeria Plc. (food specialties Nig. Ltd)	-	-	-	36106893	93921319

Source; Nigeria Stock Exchange, 2012

Methodology

Firm specific characteristics and business environment factors are integrated into the export-led growth theory and optimum firm size theory in the production at the firm's level. Time series data were used to analyze firm's level study using panel regression technique to determine the level of manufacturing export by 24 firms listed in the NSE. The study is sampled from 24 non-oil exporting firms listed on the NSE during the period under study. These firms cover major sectors such as agriculture, conglomerate, consumer goods, health care, industrial goods and services. The sample period is ten year ranging between 2007 and 2012, hence, the study is a cross-sectional time series analysis as it enabled the researcher to study the behaviors of these firms across each other over a long time period. Data of firms listed on the NSE are relied upon because these firms are mandated to make their information public and this is a solution to the problem of paucity of data in a country like Nigeria. Table 4.4 in the appendix gives a description of the firms included in this study. Deriving the model theoretically, the empirical models anchored on the export-led growth and optimum firm size theories. The estimation model given below in functional form

$$X_{ij} = \beta + \emptyset T_{ij} + \gamma F_{ij} + \theta E_{ij} + \varepsilon \text{-------} 1$$

Where;

Xij = export propensity (Total sales to share of exports) of *i firm* in sector *j;*
Fij = set of specific firm characteristics;
Eij = vector of business environment variables; and
Tij = vector of factor intensity variables.

Also, β is a constant term while $\emptyset$, γ and θ are parameter estimates, and ε is the error term. The above equation is further specified in an explicit form as shown below:

$$\begin{aligned}&\exp ort\_prpensityi = \alpha_0 + \alpha_1 N\_own_i + \alpha_2 F\_own_i + \alpha_3 Ln\_Age_i + \alpha_4 Ln\_Age^2 + \\ &\alpha_5 Ln\_Size_i + \alpha_6 Ln\_size^2{}_i + \alpha_7 Gov\_eff_i + \alpha_8 \operatorname{Re} g\_Quality_i + \alpha_9 Control\_corr_i + \\ &\alpha_{10} Lncap\_Lap_i + \alpha_{11} Agriculture\_dummy_i + \alpha_{12} Conglomerate\_dummy_i + \\ &\alpha_{13} services\_dummy_i + \alpha_{14} Technical\_efficiency_i + \varepsilon_i \text{ ----------} 2\end{aligned}$$

The analysis is conducted within a framework of panel data estimation. The method of estimation is preferred not because it enables a cross-sectional time series analysis which usually makes provision for broader set of data points, but also because of its ability to control for endogeneity and heterogeneity issues. Hence panel data estimation allows for the control of individual-specific effects usually unobservable which may be related with other explained variables included in the specification of the relationship between dependent and explanatory variables (Hausman & Taylor, 1981). This condition is also applicable regardless of the infinite large sample of observations taken during the estimation process, because the OLS estimation will not be a consistent estimator of the true underlying values (Gujarati & Porter, 2009). Hence, endogeneity issue is as a result of the explanatory variables being correlated with the disturbance term ε_{it} Nakamura and Nakamura (1981). The study adopts the traditional Least Squares Dummy

Variable Fixed Effect to research on the determinants of non-oil export propensity of firms listed on the Nigerian Stock Exchange.

Composition of Nigerian manufacturing sector

The National Bureau of Statistics categorize based on the number of workers, the scale of operations of Nigeria's non-oil sector to include:

Micro-scale small/medium scale large scale

5-9 workers 10-99 workers 100 workers and above

Source; Computed by Author from National Bureau of Statistics, 2014

The sectoral classification of firms quoted in Nigerian stock exchange of 2012 is seen below;

TABLE 3: Sectoral classification of firms listed in the Nigerian stock exchange (NSE)

S/N	Identifier	Names of surveyed company	Sector
	ME 03	FTN cocoa processors plc	Agriculture
2	ME 08	Okomu oil palm Plc	Agriculture
3	ME 09	Airline services and logistics Plc	Service
4	ME 72	Guinness Nigeria Plc	Consumer goods
5	ME 81	Dangote cement Plc	Consumer goods
6	ME 85	Nigeria wire and cable Plc	Consumer goods
7	ME 112	Pz Cussons Nigeria Plc (Pz industries)	Consumer goods
8	ME 115	UACN Plc	Conglomerates
9	ME 116	Unilever Nigeria Plc (lever brothers)	Consumer goods
10	ME 127	7-up bottling company	Consumer goods
11	ME 130	Cadbury Nigeria Plc	Consumer goods
12	ME 131	Dangote flour mills Plc	Consumer goods
13	ME 134	Flour mills of Nigeria Plc	Consumer goods
14	ME 137	Multi-trex integrated food Plc	Consumer goods
15	ME 139	Nestle Nigeria Plc. (food specialties Nig. Ltd)	Consumer goods
16	ME 160	Glaxo Smithkline (beecham) consumer Nigeria Plc	Health care
17	ME 163	Morison industries Plc	Health care
18	ME165	Pharma-Deko Plc	Health care
19	ME 184	Vitafoam (Nig) Plc	Consumer goods
20	ME 277	Avon crowncaps & containers	Industrial goods
21	ME 278	BETA (DELTA) Glass Co. Plc	Consumer goods
22	ME 295	Academy press Plc	Service
23	ME 298	University press Plc	Service
24	ME 324	United Nigeria textiles Plc	Consumer goods

Source: Computed by Author from Nigerian stock exchange 2014.

OWNERSHIP

Empirical evidence suggests that ownership structure influences productivity in Nigeria's industrial sector. The Nigerian non-oil establishments are owned by either the foreign, public or private sectors as follows;

Manufacturing ownership in percentage

Public Private Foreign

43.37 20.45 36.18

Source; Computed by Author from Nigerian Stock Exchange, 2012

4.0 Research Findings

Descriptive Statistics of Variables

Variables	Minimum	Maximum	Mean	Median	Std. Deviation
Export_prop	0.0001	0.969	0.100	0.016	0.203
Nig_public (%)	5.130	90.000	43.100	43.000	18.799
Foreigners (%)	10.000	82.000	50.877	54.000	18.264
age_of_firm	1	89	48	48	20
age_offirm_2	1	7921	2665	2304	1993
Firmsize	70	4977	1693	1150	1411
Firmsize_2	4900	24770529	4833669	1321623	6416256
Gove_Eff	-1.272	-0.954	-1.132	-1.183	0.106
Reg_Quality	-0.870	-0.582	-0.726	-0.717	0.081
Control_Corruption	-1.189	-0.813	-1.021	-1.002	0.117
capital_lab_ratio	56.679	1738514.800	48580.321	14633.507	198292.965
Technical_inefficiency	14.432	20.091	17.724	17.966	1.350

Source: Field survey, 2014

The table above shows the descriptive analysis of all the companies pooled together. From the table, the export propensity lies between 0.0001 and 0.969, a 0.100 mean with a 0.203 standard deviation. Nigerian ownerships have a minimum value of 5.13 per cent with a maximum of 90 percent, an 43.1 average value with 18.799 standard deviation. Foreign ownership ranges from minimum of 10 percent and a maximum of 82 percent with 50.877 average values and 18.264 standard deviation. In addition, age of firm one ranging from 1year to 89 years. The average age of the firm two is about 48 years with a standard deviation of 20.122. Firm Size (proxied by number of workers) ranges from 70 to 4977 with the mean value of 1692.807 and a standard deviation of 1410.920. Government effectiveness ranges from -1.272 to -0.954, an average value of -1.132 with a standard deviation of 0.106, while the regulatory quality ranges from -0.870 to –0.582 with the mean value of -0.726 and a standard deviation of 0.081. Again, the control of corruption ranges from -1.189 to -0.813, a mean of -1.021 with a standard deviation of 0.177. Technical inefficiency ranges from 14.432 to 20.091, an average value of 17.724 with a standard deviation of 1.35.

Summarily, the correlation result serves dual significant purposes. The first is to determine if there are dual relationships among each pair of the explained and explanatory variables. The latter is to ensure that the relationships between the independent variables are not increasing to the extent of posing multi-collinearity problems. Exploring the correlation among the explanatory variables, it is evident that there is no multi-collinearity problem because there is no strong correlation among the explanatory variables.

Nigerian own firms are significantly related to their export propensity with a correlation coefficient of 0.057. However, the correlation coefficient is statistically insignificant. Foreign own firms are negatively correlated with export propensity and Nigerian ownership with correlation coefficients of -0.004 and -0.760 respectively. The negative relationship with Nigerian ownership is statistically significant at five percent level.

The value of the dependent variable is usually predicted from that of the independent variable, it was also evident that value of export prosperity was predicted from that of the independent variables.

Regression Result

Variables	Model
	0.005**
Nigerian Public Ownership	(2.52)
Foreign Ownership	(2.03)
	0.02
LN (Capital Labour Ratio)	(1.02)
	0.511***
LN (Age)	(5.32)
	-0.141***
LN (Age^2)	(7.70)
	0.331
LN (Firm Size)	(1.35)
	-0.017
LN (Firm Size^2)	(0.95)
	0.883***
Agriculture Dummy	(4.06)
	0.819***
Conglomerate Dummy	(4.43)
	0.419**
Services Dummy	(2.10)
	0.614***
Consumer Goods Dummy	(3.73)
	-0.001
Government Effectiveness	(0.00)
	-0.067
Regulatory Quality	(0.19)
	0.029
Control of Corruption	(0.12)
Technical Inefficiency	-
	-2.065**
Constant	(2.07)
Number of Obs	62
	10.33
F-statistics	(0.000)
Adj. R-square	0.6817

Note: *, **, *** indicate significance at the 10%, 5% and 1% levels of significance respectively.

Source; Field survey, 2014

The regression result of manufacturing firms in Nigeria determined the impact of factor intensity and firm specific characteristics on export propensity of non-oil exports. We estimated the empirical equation by including and excluding some variables as shown in the Table. Equation one excluded technical inefficiency of firms. The excluded technical inefficiency do not significantly change the significance and coefficient of our variables. The F-statistics value of 10.33 ($P<0.05$) show that the independent variable is jointly statistically significant in explaining variations in firm's propensity to export. In addition, the regression result shows that the model have a good fit. The R-square value of 0.755 shows that, the repressor accounts for 75.5 per cent variation in export propensity of non-oil exporting firms in Nigeria. The estimates of the specifications is not significantly different, thus the model is accepted since it included most of firm specific characteristics and factor intensity variable. Again, ownership (Nigerian and Foreign), age, Agriculture, Conglomerate, Services and Consumer Goods industry dummy are found to increase export propensities. Specifically, age and age square are significant determinants of firm's export propensity. Age is positively related to export propensity, while age square is negatively correlated to export tendencies. Going by the result, the null hypothesis that the tendency of older firms to export is higher than younger firms as predicted by productivity learning model is rejected and the alternative hypothesis that younger firms have higher exporting propensity to export is accepted. Precisely, export propensity will increase by 51.1 per cent given a unit increase in firm's age, while it will fall by 14.1 per cent given a 100 percent increase in age square. Ownership is a significant driver of firm's export propensity. The result shows that both

local and foreign ownership are significantly related to export propensity. Export propensity will increase by 0.5 per cent given a 100 percent growth in Nigerian ownership, while export propensity tends to fall by 0.4 per cent given a 100 percent growth in foreign ownership.

The result shows that industrial specific effect (industrial dummies) are statistically significant, thus we conclude that industrial specific characteristics of firms are major drivers of their export propensity. More precisely, export propensity is more likely to increase for firms that belong to the agriculture, conglomerate, services and consumer goods industry compared to firms in health care industry. Specifically, firms in agricultural industry are likely to have a greater export tendency compared to firms, followed by firms in conglomerate, consumer goods and services. Capital to labour ratio is significantly correlated to export tendency, however, the positive relationship is not statistically significant. This implies that capital labour proportion is not a positive determinant of export propensity. Firm size is not statistically significant, thus it is not a major factor influencing export propensity. Though not statistically significant, firm size is positively related to export propensity, while firm size squared is negatively related to export propensity.

Conclusion

The purpose of the study is to establish the factors that determines of manufacturing exports by Nigerian manufacturing firms. The study was focused on descriptive and econometric analysis. Our aim was on factor intensities and firm characteristics. The result from the descriptive analysis therefore concludes that exporting firms tends to operate on a larger scale than non-exporting firms. Firms with Nigerian ownership revealed to have higher percentage of exporting firms. In addition, most exporting firms also had top managers who had training beyond secondary education and the majority of non-oil exporting firms were from agro-based, conglomerate, industrial goods and consumers' good sectors. The econometric results also revealed that capital labour ratio, firm size, Nigerian ownership, being an agro-based, conglomerate and industrial goods firms are the major determinants of export propensity. The major drivers of propensity to export to (other destination) African countries were firm size, capital-labour ratio, ownership and skill intensity and being industrial firm. As an agro-based firm, firm size and industrial specific factors were the only significant variables determining propensity to export to western European countries. More so, the determinants of the decision to export or not, firm size, Nigerian ownership, capital-labour ratio, being an agro-based, conglomerate, services and consumer goods firms are the variables that are consistently shown to be statically significant.

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