FACTORS AFFECTING SMEs’ INTERNATIONALIZATION PROCESS IN THE SOUTHWEST NIGERIA

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Accepted date: 16-12-2018
Published date: 11-03-2019


Abstract: This paper examined factors affecting SMEs’ internationalization process in Southwest Nigeria. Its conceptual framework specifically aimed at analyzing the influence of SME owners’/managers’ characteristics and their firms’ attributes on the companies’ capacity to export the non-oil products. The quantitative data collected through a cross-sectional, multi-stage and purposive sample survey of 279 SME firms in Lagos state were analyzed with binary logistic regression and descriptive statistical methods. The study revealed that SMEs’ capacity to export in the Southwest Nigeria is more likely to be influenced by factors including: SME owners’/managers’ age group, level of education and previous exporting experience, along with firms’ attributes including business registration status, source of raw materials, access to bank loans, government incentive supports and collaboration with foreign partners. Consequently, the two null hypotheses tested in the study were rejected. The study thus, recommends for increased entrepreneurial awareness and improved capacity building for the SMEs in Southwest Nigeria to enhance their foreign exchange generation capability.

Keywords: SMEs’ Internationalization Process, SMEs’ Capacity to Export, Owners'/Managers' Characteristics, Firms’ Attributes

Introduction
The emergence and increasing interests in SMEs getting more involved in international business has led to many scholarly works on internationalization process. Mohanty & Nandi (2010) cited in Gustafson & Zasada (2011) attributed this new development to the accelerated globalization process and reduction in trade barriers accompanied by rapid technological revolution in
information, tele-communication and transportation sectors. The result of these processes they stressed, has been the sporadic birth of new group of ambitious entrepreneurs and competitors who are eager to exploit the opportunities and trade incentives occasioned by trade liberalization, deregulation of foreign exchange regimes and foreign direct investments. In addition, increasing international trading activities which was formally regarded as an exclusive precinct and operations that could only be undertaken by large corporations and the multinational enterprises, are today becoming the area that is now filled up by SMEs (Zain & Ng, 2006). These firms are today, known to be scrambling frantically, competing profitably and contributing to economic empowerment of nations all over the world, thanks to considerable reduction in trade barriers and advancement in ICT (Abdullah & Zain, 2011). Consequently, all the formerly protected national market environment where most SMEs were formerly recognized as local champions, are now fast-becoming more opened and penetrable to foreign competition that is continuously being stimulated by changing customer needs and preferences. All of these factors, have contributed to making the study of SMEs’ internationalization process, a matter of greater necessity now than ever before in most emerging economies. There are however, obvious gaps in past studies on Nigerian SMEs’ internationalization process particularly, with respect to the impacts of SME owners’/managers’ characteristics and their firms’ peculiar attributes on SMEs’ capacity to export the non-oil products in the Southwest Nigeria. This study in its objectives is thus, set:
1) To examine the influence of firm owners’/managers’ characteristics on SMEs’ internationalization process in the Southwest Nigeria;
2) To determine the effects of firm-specific attributes of SMEs on internationalization process in the Southwest Nigeria;

The questions that are central to the study’s investigation therefore, include:
1) What are the impacts of owners’/managers’ characteristics on SMEs’ internationalization process in the Southwest Nigeria?
2) What are the effects of firms’ attributes on SMEs’ internationalization process in the Southwest Nigeria?

Expectedly, the result of this study will serve as useful inputs in SMEs’ capacity building, as well as in managerial and institutional decision making on SMEs’ internationalization campaign in the southwest Nigeria.

Literature Review

Relevance of the SMEs in Internationalization Process
A lot of scholarly works have been carried out on the essence and relevance of the Small and Medium-scale Enterprises (SMEs). This underscores the importance and significance of the sector in the growth and economic development of nations around the world. To this extent, SMEs have been described in many quarters as the engine of growth particularly, considering the positive impacts of the sub-sector on the economy through the creation of potential entrepreneurs, employment, income and foreign exchange generation. According to Kadiri (2012) therefore, achieving a desirable level of economic growth and development in Nigeria, can be made possible through intensification of economic diversification policy, with a vibrant SME sector in the non-oil sector. However, this cannot be achieved without resolving the complex issues on SMEs’ capacity building, productivity in domestic economy, global competitiveness and profitable positioning in international market. This is because, as Osotimehin, Jegede, Akinlabi, & Olajide
(2012) observed, the poor performance of the SME sector in Nigeria, despite the growing interests and government policy supports to stimulate the real growth in the sector, is quite worrisome. The SME sector in the Southwest region and Nigeria as a whole, is faced with various challenges that undermine its expected performance in the economy. The sector has underperformed in its contributions to the GDP and the manufactured exports, despite the fact that it accounts for more than 96% of all the existing businesses (Gbandi and Amissah, 2014, p. 327). To this end therefore, many studies have been conducted and various recommendations advanced regionally and internationally on how to grow and sustain a formidable SME sector that will form entrepreneurial seed beds that will produce spontaneous job creation and stamp out poverty in Nigeria through its contribution to the GDP and foreign exchange from the non-oil exports. These seem to be the arguments of research analysts (Babajide, 2011; Ehinomen & Adeleke, 2012; Osotimehin et al., 2012; Onodugo, et al., 2013; Gbandi & Amissah, 2014; Nwankwo, 2015; Abosed, Hassan, & Oko-Oza, 2017) in their view of SMEs in Nigeria, contributing to the national output by mass producing, packaging and exporting processed agricultural and solid mineral products, through increasing internationalization process. The heterogeneity of products and services from the SME sector, can transform the economy into fully industrialized and globally competitive entity that will help in contributing significantly to the needed increase in the sector’s local added values. A viable and flourishing SME sector is thus, seen as one of the secrets of economic growth and development of the Southwest Nigeria, as this has been proven in most of the fast-growing economies of the Asian-Pacific regions.

**Theories Relevant to SMEs’ Internationalization Process**

Internationalization theories according to Morgan & Katsikeas (1997) are series of postulates which “endeavour to explain how and why firms engage in overseas activities and in particular, how the dynamic nature of such behaviour can be conceptualized” (p. 71). While some of the existing internationalization theories are traditional and postulate mainly, on the mode of entry of firms into the foreign markets, others emphasize on effects of resource capabilities on competitive advantages and performance indices of the exporting firms in the foreign markets.

Prominent among the traditional theories that have addressed SMEs’ mode of entry into the foreign markets are:

a) **The Uppsala stage-by stage incremental theory:** - This theory was propounded by Johanson &Wiedersheim-Paul (1975) and advanced by Johanson & Vhalne (1977). It explains firm’s internationalization process as involving stage by stage events of learning about, and committing resources to the foreign market, until it finally leads to a full-blown international business engagement. By this model, the source of power of a firm in its internationalization road map in the long run, is in the firm’s increased knowledge about the foreign market situations that makes it to increase commitment of its resources to the process in order to reduce the usual barriers against free flow of business information in the form of language, industrial, political and cultural differences, etc. between different trading countries.

b) **The Network theory of Johansson & Mattson (1988):** - which proposes the possibility of many firms been linked together in one or more foreign market networks by common source of supply, customer base, production process, sources of information, acquired knowledge, and other market criteria for mutual benefits. The theory highlights the possibility of such market factors to stimulate firms into working together in forming a relationship that ensures pooling their resources and expertise together for prosecuting joint operations in the international market for mutual benefits.
c) The ‘Born Global’ or ‘Internationalization New Venture’ theory of Rennie (1993): - which was developed to explain the exemplary and rapid nature of internationalization process of some SMEs companies that get internationalized right from their inception without going through the theoretical outlines of the traditional Uppsala and network approaches (Oviat, McDougall, & Patricia, 1994).

The relevance of the above traditional theories especially, with regards to factors determining export performance of internationalized companies has been subjected to criticisms in modern times. To this extent, some researchers (e.g. Axinn & MatthysSENS, 2002; Lavra, 2015) have faulted the traditional theories due to their incompetence in explaining the complex nature of the modern-day trade connections and associations in the foreign market. Most importantly, the traditional theories as noted have paid no attention to SMEs’ decision making regarding long term strategic planning on what determines the capability of internationalized SME ventures in export market (Ruzzier, Antoncic, & Konecnik, 2007). Nassar & Faloye (2015) state that the global competitive scope of SMEs in most developing countries, is undermined by lack of innovation and creativity of the firm owners/managers, as well as the usual weakness of their firms’ attributes. Ruzzier, et al (2007) posit that the impacts of the value-creating attributes of firm owners'/managers’ competence and firms’ resource capabilities, determine the performance indices of a business entity. Similarly, Shamsuddoha, Ali, & Ndubisi (2014) also, submitted that inadequacy or lack of effective entrepreneurial/managerial resources and capabilities is largely responsible for the challenges that hinder the performance of most exporting SMEs in developing countries, including those in Southwest Nigeria. The crux of the matter in modern times is therefore, on SMEs’ ability to own and leverage individual and inimitably unique capabilities and resources that empowers the firms in responding to the ever-changing global market situations. Therefore, in keeping with the emerging opinions and increasing interests in the significant factors that determine SMEs’ export performance, long-term profitability and hence, their competitive positioning in the global market, this paper anchors mainly on:

a) The resource-based view (RBV) of Barney (1991), which emphasises the importance of unhindered access of firms to innovative reasoning and creative ideas of its owners, managers and employees, as prerequisites for accomplishing the different network of relationships and organizational routines, which together with owned resources, ensure sustainable competitive advantage and market positioning particularly, in the ever-changing SMEs’ international market.

b) The dynamic capabilities theory (DCT) of Teece & Pisano (1994), which in advancing and blending the Resource-Based View (RBV) on firms’ valuable resources, presupposes firm’s ability to speedily configure, mobilize and deploy the needed resources in responding to changing global market situations.

Review of Recent Literature and The Study Hypothesis

Ajayi (2016) investigated SMEs’ internationalization process as the key to success in export performance of the Nigerian agricultural sector. The researcher sought to establish an empirical evidence to show how firms’ export performance is influenced by entrepreneurial orientation, networking capability and government incentive support policy, using primary data collected from 245 respondents. The researcher found a positive and significant relationship between exporting capability of the SMEs in Nigerian agricultural sector and entrepreneurial orientation, networking capability and government incentive support policy. The study also, found evidence to support the
existence of mediation role of government policies, procedures and regulations which can reduce the impact of entrepreneurial orientation and networking capabilities on Nigerian agricultural SMEs’ export performance, if neglected. This study is one of the very few attempts made in recent time at identifying factors determining the internationalization of the Small and Medium-scale Enterprises (SMEs) in Nigeria.

Monteiro, Soares, & Rua (2017) in a study examined the dependence of firm’s export performance on entrepreneurial orientation, organizational resources, financial resources and dynamic capabilities, using primary survey data collected from 265 managers of exporting companies in Portugal. Anchoring on the resource-based view (RBV) and dynamic capabilities approach (DCA), the researchers observed critically, the mediating role of the intangible resources and dynamic capabilities in the relationship between entrepreneurial orientation and firms’ export performance. The study revealed that entrepreneurial orientation through innovation, creativity, proactiveness, and risk-taking, augments and improves firms’ export market information, customer awareness and knowledge about competitors, but not firms’ financial resources. The study result showed that firms’ dynamic ability in maintaining consistency between the needed strategies for dealing with the challenges in the firm’s business environment affects export performance; while organizational resources and dynamic capabilities significantly mediate in the relationship between entrepreneurial competence and export performance.

Mpunga (2016) explored the factors affecting export performance for Small and Medium Enterprises (SMEs) in Tanzania, using descriptive statistics and correlation method on survey data collected from 160 SME-firm owners. The focus of the researcher was on the impacts of competencies of the exporting firms, the export market-related factors and the enabling environment within the domestic economy on SMEs’ export performance. The study findings suggest that exporting SMEs in Tanzania are significantly constrained by lack of needed competencies. The study also, revealed that characteristics of export destinations of the SMEs significantly influence their export performance; while the impact of the domestic business laws and regulation significantly impacted on SMEs exporting capability in Tanzania.

Malecka (2017) in a recent study examined the effects of trade benefits, stability, and government incentive supports on the foreign trade performance of some selected SMEs in the EU countries and Poland, using data from the yearly reports and publications of the financial market institutions in some of the EU countries, as well as the researcher’s field survey data collected from 238 sampled respondents from among the Polish entrepreneurs. The study found that the Polish entrepreneurs engaging in international trade are motivated by: profitability of foreign business operations; prospect of long-term future business collaborations with foreign investors; as well as market expansion for made-in-Poland goods in the international markets.

The review as shown above has therefore revealed that recent researches on the topic of SMEs’ internationalization process are varied in their approaches and methodologies, the indicators examined and their results. Besides, related works on internationalization process of the SMEs in Nigeria are not only few but have not adequately reflected the impacts of the characteristics of owners/managers and their firms’ attributes on the non-oil exporting capability of the SMEs in the Southwest Nigeria. These gaps as noted are thus, the main focus which the present study seeks to bridge with the intent of testing and verifying the following null hypotheses:
• **H1**: SMEs’ capacity to export is not statistically and significantly dependent on firm owners’/managers’ characteristics in the Southwest Nigeria
• **H2**: SMEs’ capacity to export is not statistically and significantly dependent on firms’ attributes in the Southwest Nigeria

The Conceptual Framework
The conceptual framework as shown in figure 1, captures the hypotheses formulated for the study as it portrays the dependence of SME’s capacity to export (i.e. the dependent variable) on owners’ characteristics and firms’ attributes (the independent variables). The paths showing the existing relationships in the framework, correspond to the two null hypotheses tested in the study.

![Conceptual Framework Diagram](Image)

**Independent Variables**
- **SME Owners’ Characteristics**
  - (Age; Marital status; Education; Previous Exporting Experience; Professional Inclination)
- **SMEs’ Firms’ Attributes**
  - (Age of Business; Business Activities; Source of Initial Capital; Source of Raw Materials; Business Registration; Government Incentive Support; Collaboration with Foreign Partners)

**Dependent Variable**
- **H1**: SMEs’ Internationalization Process (Firms’ Capacity to Export)
- **H2**: SMEs’ Internationalization Process (Firms’ Capacity to Export)

![Figure 1: Conceptual Framework of Smes’ Internationalization Process and The Related Variables](Image)

Source: Author’s own

Also, as indicated in the study framework, the selected dimensions of the independent variable, SMEs’ owners’ characteristics include: respondent’s age, marital status, educational level, previous exporting experience, and professional inclination; while the independent variable, firms’ characteristic consists of age of business, business activities, source of initial capital, source of raw materials, business registration, government incentive support, and collaboration with foreign partners.

Methodology

**Sampling Frame and Respondents’ Selection Procedure**
The unit of analysis for this study is SME which is defined as a firm employing between 10 – 250 employees, following CBN (2005) classification criteria. A cross-sectional survey design was employed to collect quantitative data from a sample of 300 SME owners/managers who were selected by convenience through a multi-stage, stratified and purposive sampling procedure from 6 randomly selected out of the 57 existing Local Government Areas (LGA) in Lagos state. This convenience sampling approach ensures respondents’ availability and accessibility (Abrams, 2010). The choice of Lagos as the study location is due to its reputation for being the state with
the fastest growth in population and SMEs’ business community as evidenced by over 11,663 SMEs operating in the state according to SMEDAN & NBS (2013) data. Lagos is also, a border city having proximity to the neighbouring west African countries of Togo, Benin, Liberia, Ghana, and it is believed to have considerable export potentials among the Nigerian Small and Medium-scale business community.

**The Data Collection Instrument**

The primary data collection method and the approach of statistical quantification chosen for the study are due to the intent of the researcher to gather sufficient and adequate empirical data, enough to answer the research questions and validate the research hypotheses. Thus, a total of twenty (20) copies of the preliminary study instrument was pre-tested in a pilot study organised. The result of the feedback from the mini study was used for revising the questionnaire before being used in the final survey exercise. SMEs’ Internationalization process, which is the dependent variable, was exemplified in the study as firms’ capacity to export the non-oil products. This was measured in the questionnaire through a structured statement which asked the study respondents to either agree or disagree with the statement: “Small and Medium-scale Enterprises (SMEs) are the hub for economic diversification and foreign exchange earnings from export in the southwest Nigeria”. In addition, the independent variables in the study were SME owners’/managers characteristics which were made to include: respondent’s age, educational level, professional inclination and previous occupation; as well as the firms’ attributes: age of business, business activities, source of initial capital, source of raw materials, business registration, government incentive support and collaboration with foreign partners. These independent construct variables were measured in the study questionnaire as dichotomous independent variables in order to match with the requirement of the Binary Logistic Regression Model (BLRM). The study instrument which was technically designed and framed in line with the study objectives and the research questions (Malhotra, 2015; Sánchez, 2012; etc.), were physically administered to the owners/managers of the sampled firms in an organised field survey exercise. The validity and operational capacity of the instrument in its content domain was adjudged qualitatively through subjective opinions of some senior specialists in the field of SME business management.

**Data Processing and Analysis**

The processing and analysis of the data collected was made with the aid of SPSS program. The study used the Binary Logistic Regression Model which is binomial in its capacity to express a relationship between a dichotomous dependent variable and any type of independent variables. This model was thus, employed to regress the maximum likelihood of SMEs’ capacity to export non-oil products in the Southwest Nigeria on a set of SME owners’/managers’ attributes, as well as their firms’ characteristic variables. These variables according to Kadiri (2012), are widely acknowledged as appropriate for modelling the determinants of SMEs’ performance. The Logit regression was thus, used to develop the predictive model for the study. This model according to Kadiri (2012), is capable of yielding actionable results that can easily be interpreted and incorporated in the analysis and decision making regarding SMEs’ performance indicators. The Logit model is also, one of the most popular binary response model used in empirical analysis for predicting the natural log of the odds of having the occurrence of the outcome of a dichotomous resultant variable (Y), the probable occurrence of which according to Landau & Everitt (2004) is denoted by p(Y=1); and none occurrence of which is symbolized as: 1- p(Y=0). The Logit regression model thus, assumes that there is an indication of some events which can either occur or not. So, it tries to specify these events as binary variables. This implies that what the logistic
regression model does is to evaluate the changes in the dependent variable (Y) after its transformation into the ‘log odds’ as shown in equation (3.1); and not in the actual value of the dependent variable itself as does the Ordinary Least Square (OLS) Regression.

\[
\text{Logit (p)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \ldots + B_n X_n + U_t
\]

where:

- \( p \) = the predicted likelihood of SMEs’ capacity to export; while \((1 - p)\) is the opposite. This implies that \( p \) is the predicted probability of SMEs contributing to the non-oil exports;
- \( \beta_0 = \) constant term of the equation. \( \beta_0 < 0 \) is the apriori expectation;
- \( \beta_i = \beta_1, \beta_2, \beta_3, \ldots, \beta_n \) = coefficients of logistic regression, with \( \beta_i > 0 \) or \(< 0 \), but \( \beta_i \neq 0 \);
- \( n = \) number of variables included in the equation;
- \( X_i = \) Vector of the predictor variables, with, \( i = 1, 2, 3 \ldots, n \);
- \( U_t = \) Error term.

Basically however, what the binary logistic regression model is all about in this study is the estimation and significance of the coefficients \( (\beta_i) \) that go into the logistic regression model and their interpretation. This means that the model estimates the values and significance of the covariates of the factors that are included in the logistic regression equation model, in order to ascertain their individual influence on the resultant indicator in the subsequent analysis. Furthermore, the overall significance of the of the Binary Logistic Regression Model as was used in the analysis is assessed with the Nagelkerke \( (R^2) \) statistic which reveals the amount of the variation in the dependent variable that is explained by the set of the factors that are included in the model equations.

Finally, the two \( (2) \) null hypotheses \( (H1 \ and \ H2) \) that were formulated and tested in the study were validated on the basis of the computed \( p-values \) associated with the Chi-Square \( (X^2) \) result of the omnibus test of the model coefficients, such that:

- when the \( p-value < 0.001 \), the conclusion is that the set of the independent variables included in the equation model has statistically and significantly impacted on the dependent variable. Hence, the null hypothesis is rejected and the alternative hypothesis accepted instead.
- when the \( p-value > 0.001 \), we conclude that the set of the independent variables included in the equation model has not statistically and significantly impacted on the dependent variable. Hence, we do not reject the null hypothesis.

**Data Analysis and Discussion**

The main objective of this paper was to examine the influence of SME owners’/managers’ characteristics, and attributes of their companies on the firms’ internationalization process in the Southwest Nigeria. For this aim, SMEs’ capacity to contribute to export earnings was used as a proxy for internationalization process to examine the influence of the owners’ and managers’ characteristics on the SMEs’ propensity to export on one hand; and the impacts of the attributes of the companies themselves as productive exporting agents, on the other hand. This critical issue was undertaken in the study with the aid of Binary Logistic Regression Models, 1 and 2.

**Impacts of Respondents’ Characteristics on SMEs’ Capacity to Exports**

Based on the influence of the factors included in Table 1, the SPSS result of the Binary Logistic Regression Model (1) as shown in equation (3.2) is the changes in the ‘log odds’ of the dependent
variable, SMEs’ capacity to export (as occurring, Y=1 or not, Y=0), after its transformation into the Logit notation (i.e. the natural log of the odds). Equation (3.2) is thus expressed as:

\[
\text{Logit} (p) = -1.615 + 1.175X_1 + 1.341X_2 + 0.876X_3 + 0.062X_4 - 0.218X_5 + 1.436X_6 + 0.743X_7 + 0.189X_8 \\
\]

\…………………………………………………………………………………………………….. (3.2)

Table 1: Binary Logistic Regression Model (1) for the Impacts of Respondents’ Characteristics on SMEs’ Capacity to generate Non-Oil Exports

<table>
<thead>
<tr>
<th>Variables</th>
<th>β</th>
<th>S.E.</th>
<th>Sig.</th>
<th>Exp. (β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1.615*</td>
<td>0.761</td>
<td>0.034</td>
<td>0.199</td>
</tr>
<tr>
<td>Age of Respondents:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>20-35 years (X_1)</td>
<td>1.175*</td>
<td>0.583</td>
<td>0.044</td>
<td>3.237</td>
</tr>
<tr>
<td>36-45 years (X_2)</td>
<td>1.341*</td>
<td>0.574</td>
<td>0.019</td>
<td>3.824</td>
</tr>
<tr>
<td>46 + years (X_3)</td>
<td>0.876</td>
<td>0.593</td>
<td>0.139</td>
<td>2.402</td>
</tr>
<tr>
<td>Gender (X_4)</td>
<td>0.062</td>
<td>0.151</td>
<td>0.679</td>
<td>1.064</td>
</tr>
<tr>
<td>Marital Status (X_5)</td>
<td>-0.218</td>
<td>0.335</td>
<td>0.516</td>
<td>0.804</td>
</tr>
<tr>
<td>Educational Attainment (X_6)</td>
<td>1.436*</td>
<td>0.673</td>
<td>0.033</td>
<td>4.203</td>
</tr>
<tr>
<td>Previous Exporting Experience (X_7)</td>
<td>0.743*</td>
<td>0.338</td>
<td>0.028</td>
<td>0.476</td>
</tr>
<tr>
<td>Professional Inclination (X_8)</td>
<td>0.189</td>
<td>0.302</td>
<td>0.532</td>
<td>1.208</td>
</tr>
</tbody>
</table>

Summary Result for Logistic Regression Model (1)

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Overall Percentage of correctly predicted values</td>
<td>90.6</td>
</tr>
<tr>
<td>-2 Log likelihoods</td>
<td>254.625</td>
</tr>
<tr>
<td>Cox &amp; Snell R²</td>
<td>0.833</td>
</tr>
<tr>
<td>Nagelkerke R²</td>
<td>0.861</td>
</tr>
</tbody>
</table>

Source: SPSS output based on Researcher’s Field Survey Data, 2016; Dependent Variable, SMEs’ Capacity to generate Non-Oil Exports; * = p is significant at 5% level.

It is however, important to note that it is not changes in the original or actual data of the dependent variable as collected from the survey exercise that was estimated, as does by Ordinary Least Square (OLS) method. Rather, it is the changes in its ‘natural log of the odds’. The dimensions of SME Owners'/managers’ characteristics (X_i) as used in the model are:

X_1 = Respondents’ age (20 - 35 years) – a categorical variable;
X_2 = Respondents’ age (36 - 45 years) – a categorical variable;
X_3 = Respondents’ age (46 - 65 years) – a categorical variable;
X₄ = Gender (1 for male and 0 for female);
X₅ = Marital Status (1 for married; 0 for unmarried);
X₆ = Educational Attainment (1 for post-secondary; 0 for up to secondary level);
X₇ = Previous Exporting Experience (1 for having previous experience; 0 if otherwise).
X₈ = Professional Inclination (1 for business relating to owner’s profession; 0 if otherwise).

Consequently, Table 1 reveals that the estimate of the intercept of model (1), \( \beta_0 = -1.615, p < 0.05 \) is significantly negative (i.e. \( \beta_0 < 0 \)). This is the theoretical or apriori expectation and implies a situation when none of the identified determinants is influencing the SMEs’ capacity to export. The possible implication of this is that at this period, if an SME firm attempts to engage in any form of exporting activities, it is less likely to contribute positively to the non-oil export generation. Furthermore, in logit notation, the beta coefficients for the young entrepreneurs and managers in the age groups of 20 – 35 years (X₁) and 36 – 45 years (X₂) which are \( \beta_1 = 1.175, p < 0.05 \); and \( \beta_2 = 1.341, p < 0.05 \) respectively, are both positive and statistically significant; while the beta coefficient of X₃ for respondents in the upper age group of 46 years +, which is \( \beta_3 = 0.876, p > 0.05 \), is though positive but statistically insignificant. The implication of these results is that the youthful and more adventurous generation of entrepreneurs in their ‘20 – 35’ and ‘36 – 45’ years age groups are likely to be more resilient, export oriented and contributing to SMEs’ internationalization process in the Southwest than those in the older age groups, all things being equal. This study result has further confirmed the potency of Nigerian citizens between the ages of 20 and 45. It also, acknowledges the rationale in the ongoing N-Power youth empowerment scheme of the Federal government of Nigeria, which is a platform that targets the 18 – 35 Nigerian youth for entrepreneurial skill acquisition and development. This age group of ‘20 – 45’ year old Nigerians as captured in the study thus, houses the viable group of young entrepreneur-managers that are significant human capital resources in the country. According to the resource-based view (RBV) of Barney (1991) therefore, supporting these employers of labour with appropriate modern entrepreneurial skill development programme, export orientation and financial supports, will create the needed driving force for a nation on the path of economic growth and social development like Nigeria. In addition, based on the dynamic capabilities theory (DCT) of Teece & Pisano (1994), harnessing this group of young Nigerian entrepreneurs will surely, provide an opportunity for raising the productivity level of the exporting SMEs in domestic production, economic diversification and increasing volume of the non-oil exports, while enhancing their capability to create more jobs and reduce the level of youth unemployment in the country. This will boost income and foreign exchange generation through the non-oil product exports, and as stated by Akeem (2011), reduce poverty level and its attendant social costs of youth unemployment.

Table 1 also shows that the covariate of the independent construct, gender (X₄) estimated as \( \beta_4 = 0.062, p > 0.05 \) is positive but statistically insignificant; while that of marital status (X₅) is negative and insignificant as \( \beta_5 = -0.218, p > 0.05 \). These two constructs are therefore, less likely to positively influence the exporting capacity of the SMEs in the Southwest Nigeria. The results on gender issue and marital status seem to show that these variables are not deterrent factors to entrepreneurial activities in Nigeria even though, there is no generally acceptable composite of characteristics for would-be successful entrepreneurs in the foreign markets. It also, appears to suggest that, while intuitive energy, willingness to take risks, ability to organize, technical competence, administrative strength, good sense of judgment, leadership skills, patience and pre-ownership experience, are vital to successful entrepreneurship in SME businesses, there is no definitive list of personal characteristics which requires, that an individual should either be a male,
a female, married or single, in order to succeed in small business ownership, and to the extent of impacting on the likelihood of SMEs’ success in exporting business. As for respondents’ education (X_6) and exporting experience (X_7), the beta coefficients are both positive and significant as \( \beta_6 = 1.436, p < 0.05; \) and \( \beta_7 = 0.743, p < 0.05 \) respectively. The implication is that entrepreneurs with good education and exporting experience are more likely to influence their firms’ capacity to export than those without the relevant knowledge, training and experience. These results also show that possession of good education, as well as previous experience in exporting businesses are essential tools for opportunity recognition and market awareness in foreign business. This also appears more likely, as success in export business according to researchers (e.g. Johansson & Vahlne, 1977; Johansson and Mattson, 1988; Mtigwe, 2006), is to a large extent, a function of the learning process in the foreign market and acquired experiences that lead to well-informed strategy in decision making on resource commitments by the SMEs’ operators in their foreign market activities.

The Nagelkerke R^2 statistic as presented in Table 1 reveals the significance of analysis of the Binary Logistic Regression Model (1) which shows that 86.1% of total variations in SMEs’ capacity to contribute to export earnings in the Southwest Nigeria is explained by the dimensions of firm owners’/managers’ characteristics as were included in the model. Interestingly, all the variables in Model (1) exhibited beta coefficient signs that are conforming to the theoretical expectation in the study.

**Impacts of Firms’ Attributes on SMEs’ Capacity to Generate Non-Oil Exports**

The impact analysis of firms’ attributes on SMEs’ capacity to generate non-oil exports was also captured in the study with the aid of Binary Logistic Regression Model (2). The SPSS result of this analysis after the transformation of the dependent variable into ‘natural log of the odds’ of its probable occurrence (Y=1) or not (Y=0), is as shown in Table 2. This is also, expressed in Logit equation (3.3) as:

\[
\text{Logit} \ (p) = -2.218 + 0.126X_1 + 0.161X_2 + 1.930X_3 + 0.771X_4 + 0.078X_5 + 0.558X_6 + 2.521X_7 \\
\]

The binary connotation of firms’ attributes (Xi) as used in equation (3.3) above are as follow:

- X_1 = Age of the Business (1 for firms older than 5 years; 0 for less than 5 years);
- X_2 = Bus Activities (1 for agriculture, agro-allied, manufacturing, solid minerals & mining related industries; 0 for wholesales & retail trading, crafts, artisans & service industry);
- X_3 = Source of Initial Capital (1 for firms with access to Bank Loans/Borrowings; 0 for those without);
- X_4 = Source of Raw Materials (1 for firms sourcing for raw materials locally; 0 for those importing raw materials);
- X_5 = Business Registration (1 for registered firms; 0 for unregistered companies);
- X_6 = Government Support (1 for firms with government supports; 0 for those without supports);
- X_7 = Collaboration with Foreign Partners (1 for firms having foreign partners; 0 for firms without).
Table 2: Binary Logistic Regression Model (2) for the Impacts of Firms’ attributes on SMEs’ Capacity to generate Non-Oil Exports

<table>
<thead>
<tr>
<th>Variables</th>
<th>β</th>
<th>S.E.</th>
<th>Sig.</th>
<th>Exp. (β)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-2.218</td>
<td>0.499</td>
<td>0.000</td>
<td>0.109</td>
</tr>
<tr>
<td>Age of Business (X&lt;sub&gt;1&lt;/sub&gt;)</td>
<td>-0.126</td>
<td>0.342</td>
<td>0.713</td>
<td>0.882</td>
</tr>
<tr>
<td>Bus Activities (X&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>0.161</td>
<td>0.323</td>
<td>0.619</td>
<td>1.174</td>
</tr>
<tr>
<td>Source of Initial Capital (X&lt;sub&gt;3&lt;/sub&gt;)</td>
<td>1.930</td>
<td>0.297</td>
<td>0.000</td>
<td>6.888</td>
</tr>
<tr>
<td>Source of Raw Materials (X&lt;sub&gt;4&lt;/sub&gt;)</td>
<td>0.771</td>
<td>0.342</td>
<td>0.024</td>
<td>2.162</td>
</tr>
<tr>
<td>Business Registration (X&lt;sub&gt;5&lt;/sub&gt;)</td>
<td>0.805</td>
<td>0.377</td>
<td>0.033</td>
<td>0.988</td>
</tr>
<tr>
<td>Government Technical Aid Support (X&lt;sub&gt;6&lt;/sub&gt;)</td>
<td>0.558</td>
<td>0.281</td>
<td>0.047</td>
<td>0.572</td>
</tr>
<tr>
<td>Collaboration with Foreign Partners (X&lt;sub&gt;7&lt;/sub&gt;)</td>
<td>2.521</td>
<td>0.617</td>
<td>0.000</td>
<td>12.445</td>
</tr>
</tbody>
</table>

Summary Result for Logistic Regression Model (2)

- Overall Percentage of correctly predicted values
  - 92.5
- -2 Log likelihoods
  - 319.580
- Cox & Snell R²
  - 0.854
- Nagelkerke R²
  - 0.883

Source: SPSS output based on Researcher’s Field Survey Data, 2016; Dependent Variable, SMEs’ Capacity to generate Non-Oil Exports; * = p is significant at 5% level.

The intercept of the Binary Logistic Regression model (2) is β₀ = -2.218 and maintains the negative (-) sign (i.e. β₀ < 0) as shown in Table 2. This is theoretically expected. The result implies negative contribution of SMEs to exports especially, when none of the firms’ characteristic variables is functioning. The estimates of logistic regression coefficients of the age of business (X<sub>1</sub>) and the type of business activities (X<sub>2</sub>) given as: β₁ = -0.126, p > 0.05 and β₂ = 0.161, p > 0.05 respectively in Table 2, are both statistically insignificant to stimulate positive export performance of the SMEs. In particular, the result of age of business, not being a significant factor that influences the likelihood of SMEs’ getting involved in exporting businesses, seems to support the presupposition of the Born Global theory of Rennie (1993) that has come to challenge the continued relevance of the conventional Uppsala and the Network internationalization theories of firms, given the observed trend in some SMEs that get internationalized, right from their inception. However, the covariate of the Source of Initial Capital (X<sub>3</sub>), β₃ = 1.930, p < 0.05, which by default value in the study implies SMEs that source for their initial capital requirements through loans and borrowings from the formal banking sector, is more likely to contribute significantly to export earnings than those SMEs which source for their initial capital mainly from personal savings, gifts
and inheritance from friends and family members. This result corroborates the previous researches (e.g. Ezeudu, 2014; Gulani & Usman, 2013; World Trade Organization, 2016; Abosede et al., 2017) that have found source of finance as one of the major determinants of effective performance of Nigerian SMEs both in the domestic and export markets. Therefore, this result appears to show that augmenting the exporting SMEs in the Southwest Nigeria by providing them with easy access to credit facilities; adequate start-up capital, soft terms of loan acquisition & repayment, and functional export finance mechanisms, will increase their non-oil export capability. The estimate of Source of raw materials (X4) also, exhibited positive and statistically significant covariate, \( \beta_4 = 0.771, p < 0.05 \) in model (2) and provides an indication of a more likely chance that those SMEs which source for their raw materials locally, have greater propensity to profitably generate more exports than those firms which largely import their raw material needs from other countries. This as usual, is due to the high production and foreign exchange costs that accompany importation of raw materials. This is particularly true, when we consider the vagaries of the exchange rate of foreign currencies especially, the strong US dollar against the weak Nigerian Naira. In addition, the result of business registration (X5) with significant covariate, \( \beta_5 = 0.805, p < 0.05 \) is also, an indication that those SMEs that are registered in the Southwest Nigeria, are more likely to contribute to export earnings in the non-oil sector than the unregistered firms. Thus, firm’s legal status as suggested by Folorunsho (2013), is one of the necessary preconditions for firm’s business expansion programs into the foreign market, as this permits businesses with legal status, having easy access to finance and other institutional benefits from the formal sector. It also, conforms to the findings of Teoh & Chong (2008) as cited in Mohammad, et al (2010), that lack of positive registration status can prevent SME firms, access to various opportunities in the international market.

Furthermore, the positive and statistically significant coefficient of government financial/technical supports (X6), shown in Table 2 as: \( \beta_6 = 0.558, p < 0.05 \), reveals that SMEs that have access to government incentive supports in the Southwest are likely to be more export capable than those without such supports. This is because, the usual effect of government incentive and institutional support policy on the SMEs, is to enhance the sustainability of capacity building and development of entrepreneurial and managerial competence of the firms. This, as argued by Czinkota (1994) implies that government/institutional factor is an external change agent which enhances SME firms in creating the entrepreneurial foundation, as well as organizational capabilities needed for successful performance in export market. And finally, the estimate of SMEs’ collaboration with foreign partners (X7) yields a positive and significant covariate, \( \beta_7 = 2.521, p < 0.05 \) with implication that the exporting SMEs that maintain beneficial collaborations with foreign business partners either in technical, marketing or financing areas in the Southwest Nigeria, are more likely to contribute to export generation and foreign exchange earnings than those firms that lack such foreign collaborations. This result also, supports the earlier finding of Faloye (2015) and the view of Awuah & Amal (2011) which have maintained that SMEs’ collaboration with foreign partners is a necessary precondition to enhance the performance and market competitiveness of the SMEs in most developing economies. According to Ehinomen & Adeleke (2012), SMEs’ collaboration with foreign partners is not merely for the geographical extension of the economic activities across a national boundary, but it is also and more importantly, for inflow of foreign direct investment (FDI) and functional integration of SMEs into the committee of the global economies with the current process of globalization that produces new global-functional unity and competitiveness.
The value of Nagelkerke $R^2$ statistic in Table 2, shows the significance of the analysis of Binary Logistic Regression Model (2) which has revealed that 88.3% of the total variations in the capacity of the SMEs for export earnings in the Southwest Nigeria is explained by the set of independent variables (i.e. firms’ attributes) included in the Binary Logistic Regression Model (2). This, in effect therefore, means that the rest influence is attributable to other factors which further research may discover.

**Result of Hypotheses Testing**

The two hypotheses formulated for the study were validated, using the SPSS results of the omnibus chi-square test on the respective model coefficients as shown in Table 3 and 4.

**Hypothesis Test (H1)**

$H_0$: SMEs’ capacity to export is not statistically and significantly dependent on firm owners'/managers’ entrepreneurial characteristics in the Southwest Nigeria.

**Table 3: Omnibus Chi-square Tests of Coefficients of BLRM (1)**

<table>
<thead>
<tr>
<th></th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
<td>35.857</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Block</td>
<td>35.857</td>
<td>8</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>35.857</td>
<td>8</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: SPSS Output based on Researcher’s Field Survey Data, 2016

With SPSS transformation, the p-value associated with the result of the chi-square ($X^2$) test of the model coefficients in the omnibus test Table 3 shows that the set of independent variables included in Binary Logistic Regression Model (1), has statistically and significantly impacted on the dependent variable, SMEs’ capacity to export the non-oil products in the Southwest Nigeria. In summary, this is given as:

$$X^2(Df = 8, N=279) = 35.857, p < 0.001 \text{ (since, } p = 0.000).$$

Therefore, since the p-value < 0.001, we conclude that the set of the independent dimensions of entrepreneurial characteristics in the Binary Logistic Regression Model (1) has positively and significantly impacted on the SMEs’ internationalization process. Consequently, the null hypothesis (H1) of no statistical and significant dependence of SMEs’ capacity to export on entrepreneurs’ characteristics, is rejected. This by implication, means that the Binary Logistic Regression Model (1) is statistically significant and its result can be conveniently used for making inferences regarding the non-oil export capacity of the SMEs in the south west, Nigeria.

**Hypothesis Test (H2)**

$H_0$: SMEs’ capacity to export is not statistically and significantly dependent on firms’ attributes in the Southwest Nigeria

The Hypothesis (H2) was also tested to verify the influence of the firms’ attributes as included in the Binary Logistic Regression Model (2) on the dependent variable, SMEs’ capacity to export in the Southwest Nigeria. The omnibus test of the model coefficients shown in Table 4 has also,
revealed the result of the chi-square test for this model, with a p-value computed with SPSS transformation as being less than 0.001 threshold:

\[ X^2(7, N=279) = 46.784, \text{ p-value} < 0.001 \text{ (since the p value} = 0.000). \]

### Table 4: Omnibus Chi-square Tests of Coefficients of BLRM (2)

<table>
<thead>
<tr>
<th></th>
<th>Chi-square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step</td>
<td>46.784</td>
<td>7</td>
<td>.000</td>
</tr>
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<td>Block</td>
<td>46.784</td>
<td>7</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>46.784</td>
<td>7</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: SPSS Output based on Researcher’s Field Survey Data, 2016

In view of the above finding therefore, whereby p-value is significantly lower than 0.001 threshold, we infer that model (2) has performed well. Hence, the null hypothesis of no significant dependence of SMEs’ capacity to export non-oil product on SME firms’ attributes in the Southwest Nigeria is thus, rejected and the alternative hypothesis, accepted instead. The conclusion is therefore, that the set of firms’ attributes included in the BLRM (2), has impacted statistically and significantly on SMEs’ capability to export in the Southwest Nigeria.

### Conclusion and Recommendation

The main aim of this study is to investigate and identify the impacts of the characteristics of SME owners/managers, and attributes of their companies on SMEs’ internationalization process in the Southwest Nigeria. Therefore, given the study conceptual framework and result of effective sample survey of 279 SME owners/managers in Lagos state, analysis of the influence of characteristic variables of SMEs’ owners/managers, as well as their firms’ attributes on the capacity of SMEs to contribute to the non-oil export earnings in the Southwest Nigeria was made by estimating binary logistic regression models. Consequently, the followings findings and conclusions have been made from the study:

**SME Owners'/Managers’ Characteristics Versus Firms’ Capacity to Export – Hypothesis (H1)**

The SME firms, owned or managed by the young, vibrant and more result-oriented entrepreneurs in their ‘20-35’ years age groups with logistic beta coefficients, \( \beta_1 = 1.175, p < 0.05 \) and ‘36-45’ years with \( \beta_2 = 1.341, p < 0.05 \) respectively, have exhibited more likelihood to influence the SMEs’ internationalization process in the Southwest Nigeria than those in the older age groups. In addition, entrepreneurs and managers with post-secondary education, \( \beta_6 = 1.436, p < 0.05 \); and previous experience, \( \beta_7 = 0.743, p < 0.05 \) in their chosen export ventures are more likely to positively and significantly influence the SME capacity to export the non-oil products for increased foreign exchange earnings than those entrepreneurs without education and exporting experience. According to the value of Nagelkerke \( R^2 \) statistic, a total of 86.1% of variation in SMEs’ capacity to export the non-oil products from the Southwest Nigeria was explained by SMEs’ owners'/managers’ characteristic variables included in the analysis (see Table 1). The omnibus test of the model coefficient showing the chi-square test result for hypothesis (H1) also revealed a p-value of less than 0.001. Consequently, the null hypothesis test (H1) of no dependence of SMEs’...
capacity to export on firms’ owners’/managers’ characteristics is rejected in favour of the alternative hypothesis (see Table 3). Hence, it was concluded that entrepreneurial characteristics of the SME owners/managers have positive and significant influence on SMEs’ internationalization process in the southwest Nigeria. These findings agree with the view of Barney (1991); Teece & Pisano (1994); Ajayi (2016); Monteiro, et al (2017); and Mpunga (2016) on the need for strong SMEs’ capacity building, resource mobilization and leveraging to ensure effective performance while responding to changing market conditions and preserving the firm’s competitive advantages in the foreign markets. The findings also, corroborate the ideas of Johansson & Vahlne, 1977; Johansson and Mattson, 1988 in their recognition for the impact of learning process and background export experience of entrepreneurs and managers on foreign market operations of the SMEs.

**Firms’ Attributes Versus Smes’ Capacity to Export – Hypothesis (H2)**

The firm’s attributes have positively and significantly impacted on SMEs’ capacity to export through: source of initial business capital, β3 = 1.930, p < 0.05 for SMEs with access to loans from the formal banking sector; SMEs with local source of raw materials with logistic covariate, β4 = 0.771, p < 0.05; registered SMEs with covariate, β5 = 0.805, p < 0.05; firms getting government aids with β6 = 0.558, p < 0.05; and SMEs collaborating with foreign partners in technical and marketing areas with β7 = 2.521, p < 0.05. The Nagelkerke R² result revealed that 88.3% of total variations in the capacity of the SMEs to contribute to export earnings was explained in the relationship by the firms’ attributes (see Table 2) and the omnibus test of model coefficients showing the chi-square test for hypothesis (H2) with p-value less than 0.001 threshold (see Table 4). The null hypothesis (H2) of no influence of firms’ attributes on SMEs’ capacity to export in the Southwest was thus, rejected. It was therefore, concluded that firms’ attributes have positive and significant impact on the SMEs’ internationalization process in the Southwest Nigeria. This conclusion corroborates the findings in previous studies (Dotun, 2015; Awuah & Amal, 2011; Ehinomen & Adeleke, 2012; Sánchez, 2012; Folorunsho, 2013; Ezeudu, 2014; Muktar, 2009; Gulani & Usman, 2013; World Trade Organization, 2016; Abosede et al., 2017) that have confirmed the positive roles of firm attributes in augmenting the firm’s performance measures both in the domestic and international marketplace.

The study thus made the following recommendations based on the result of the hypotheses tested and study findings:

- That government should establish a functional and well-focused National Entrepreneurial Institute (NEI) to train, develop and promote entrepreneurship, while encouraging creativity in young entrepreneurs and offering consultancy services to businesses especially, the non-oil producing SMEs in the Southwest. This is sure to improve their entrepreneurial characteristics, competence and exporting experiences.
- That government should ease the SMEs’ business registration process; access to soft loans from the formal banking sector; and increase incentive supports for SMEs by facilitating non-oil export promotion through the nations’ Export Processing Zones (EPZs) and export finance support policy for the exporting SMEs in the Southwest Nigeria.
- That government should also, create an enabling economic environment that will aid the local production of exportable value-added made-in Nigeria products, raise the capacity utilization, and enhancement of the non-oil export potentials of the Small and Medium-scale Enterprises in the Southwest and Nigeria as a whole.
• That SME owners and stakeholders must also, be proactive and intensify their efforts at improving the SME managers’ experience, education and awareness, innovation and creativity, managerial skills, opportunity discovery, prowess in strategic planning, market penetration and networking, etc. These will improve their competencies and competitiveness of their enterprises in terms of domestic and export performance.

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