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**Export Intention in Developing Countries: A Configuration Approach to** 

**Managerial Success Factors** 

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Abstract

What drives small and medium size enterprises (SMEs) to enter export markets? This study

introduces a configuration approach using a fuzzy-set qualitative comparative analysis, to

show that, contrary to previous findings, export intention does not depend on any one

managerial characteristic, but rather on the interplay of these attributes. Using a sample of

180 Algerian non-exporters, findings suggest that firms' export intention is determined by two

distinct combinations of managerial attributes, namely: [export perception\*entrepreneurial

orientation] and [export perception\*international orientation\*foreign knowledge\*Age]. In

line with the emerging resource orchestration view, such findings hold significant implications

for both theory and practice.

Key Words: Export Intention, fsQCA, Algeria, Managerial Characteristics

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#### Introduction

For small businesses, exporting can constitute a reliable source of growth, competitiveness and survival (Pattnayak and Thangavelu, 2014). Thus, stimulating firms to enter export markets through public assistance has become a priority in many countries (Kanda et al., 2013). However, promoting new exporters remains a challenging task for governments and export promotion organisations (EPOs), especially in developing countries. Here, firms are often reluctant to enter what they perceive as demanding and uncertain markets (Al-Hyari et al., 2012). Consequently, studies identifying the relevant internal resources in enhancing export initiation have emerged. Drawing on the Resource Based View (RBV), evidence suggest that firms' international market entry is conditioned by the possession of certain resources and capabilities (Yang et al., 2004; Van Beveren and Vandenbussche, 2010; Serra et al., 2012). Amongst these resources, managerial attributes have been cited as central to the international development of Small and Medium Enterprises (SMEs) (Nemkova et al., 2012; Martin and Javalgi, 2016).

However, notwithstanding the usefulness of the RBV in identifying the key assets for internationlisation, the majority of previous works have been unable to identify specific resource deployment strategies (Gruber et al., 2010; Hitt et al., 2016). Attempts to explain the mechanism whereby resources and capabilities lead to performance enhancement have been scarce as most extant works narrowly focused on the individual influence of such assets in isolation (Sjodin et al., 2016; Raddats et al., 2017). In this regard, Hughes et al (2018) emphasise the necessity of going beyond the current approach by uncovering the relevant configurations likely to increase performance. Known as resource orchestration, the combined influence of resources and capabilities is more likely to drive performance (Chadwick et al., 2015) and enhance competitiveness, as opposed to single effects (Hughes et al., 2018). With limited resources, SMEs need to create effective asset synergies to offset their constraints,

address market ambiguity (Gelhard et al., 2016a) and sustain a unique competitive advantage (Ho et al., 2016). In fact, while firms are likely to possess similar resources within a given industry, it is the uniqueness of their synergies that protect them from imitation by competitors (Kozlenkova et al., 2014). Nordqvist et al., (2014) assert that superior performance is the result of a gestalt of multiple, interrelated and mutually reinforcing organisational and structural characteristics. This supports Barney's (2014: 25) argument stating that "Resource based theory suggests that the optimal strategy for a particular firm depends on its constellation of resources and capabilities". Despite this, the relevant combinations of resources driving performance are yet to be determined, leaving the RBV approach not fully explored (Gruber et al., 2010; Ho et al., 2016; Hughes et al., 2018).

The reason behind the lack of evidence on resource orchestration appears to be of a methodological nature. Ho et al (2016) argue that the frequent use of multiple regression studies to explore the strategic role of firms' resources is the key reason for this gap. The latter relies on the net effect which could potentially lead to misleading results (Woodside et al., 2012; Ho et al., 2016; Hughes et al., 2018). For instance, while a given resource could emerge as trivial when accounting for its direct influence on performance, it can become otherwise when combined with additional assets (Ordanini and Rubera, 2008). Thus, Woodside (2013) explains that a researcher may still uncover a substantial share of variance in the outcome even when none of the predictors is significant (in terms of net effect). Moreover, Barney (2014) questions the relevance of frequentists approach when testing the RBV, and argues for case based, non-frequentist and Bayesian techniques as more appropriate. Barney suggests the former approach is ill suited as it is based on the "average" effect which could misrepresent the influence of the resources under study.

Practically, these limitations have affected the relevance of the RBV as a practical tool to maximize performance (Hughes et al., 2018). The current use of this approach lacks

guidance on how firms' resources and capabilities can increase performance (Sheehan and Foss, 2007; Sirmon, et al, 2007), providing limited practical insights to policy makers and SMEs seeking to develop international competitive advantages (Kunc and Morecroft, 2010; Merino et al., 2015). Since the latter is likely to arise from an effective combination of resources, understanding these configurations become crucial for achieving a durable positive outcome (Hughes et al., 2018).

Against these backdrops, the present study contributes to the extant literature by uncovering the managerial resource configurations likely to result in a successful international market entry. Going beyond the individual effect of managerial attributes, the study posits that SMEs' international market entry is achieved through the deployment of specific resource bundles. Thus, the study seeks to answer an important research question, which remains unanswered, namely: which combinations of managerial attributes lead to SMEs' international market entry? Providing novel insights on the potential managerial resource configurations that are likely to result in superior export performance offers increased understanding of optimum resource deployment strategies (Gruber et al., 2010; Ho et al., 2016; Hughes et al., 2018) and in the same way increase the usefulness of the RBV in explaining SMEs' export initiation. The use of a configurational approach offers great potential to advance SME literature (Nordqvist et al., 2014), and offers an insight on resource configurations that SMEs and export promotion organizations in developing countries should target to enhance their effectiveness.

To achieve its aim, the study is based on a case-based analysis using fuzzy-set qualitative comparative analysis (hereafter fsQCA), which is a set-membership analytical technique used for complex configuration analyses (Ragin 2000; Ordanini et al., 2014). The fsQCA technique posits that the influence of attributes (management characteristics) on a specific outcome (export intention) is associated with how the conditions are combined (forming recipes), rather than on the levels of the individual attributes *per se*. The study takes

place in the context of Algerian manufacturing SMEs which is neglected in the internationalisation literature. Existing studies typically focus on developed countries and their findings are often generalised across different contexts. However, their relevance for firms operating in developing nations is questionable (Boso et al., 2012). Although several studies have begun to explore this issue in the sub-Saharan African context (Robson and Freel, 2008; Boso et al., 2012; Matanda et al., 2016), evidence from North Africa remains nascent. Hence, this study adds a contextual contribution by providing evidence from a neglected region.

## The context of study: Algeria

Algeria is the largest African country in terms of landmass and the third most important economy within the MENA region (World Bank, 2017). However, being an oil-rich country, its economy remains dependent on oil and gas revenues (Global Insight, 2014). In particular, the country's exports performance are amid the least diversified globally, even when compared to similar oil-rich countries. Algerian non-oil exports are marginal and account for eight percent of the country's total exports (IMF, 2016). Consequently, the country has been urged to shift towards a more diversified economy in order to achieve sustainable growth and further employment (World Bank, 2017). Despite the Algerian Government's efforts in promoting exports, the number of exporting SMEs remains marginal. The Algerian Chamber of Commerce Database (2016) identified only 520 exporters which could be attributed to lack of relevance and inefficient targeting of assistance. Hence, empirical studies identifying the relevant resources and attributes motivating SMEs' to enter export markets are likely to increase the effectiveness of the government export assistance through a more efficient targeting (Haddoud et al., 2017). Given the importance of the decision maker in the SME context, identifying key managerial resources in the internalisation process would assist Algerian public organisations with effective and efficient targeting of their programmes.

## Conceptualising export intention

The determinants of firms' export activity have been extensively studied in the empirical literature (Pinho and Martins, 2010; Acedo and Galan, 2011; Nemkova et al., 2012; Serra et al 2012; Love et al., 2016). However, while these studies typically focused on existing exporters and elements affecting their success in foreign markets, limited research has been conducted to identify factors influencing non-exporters to enter foreign markets (Suarez-Ortega and Alamo-Vera, 2005; Cruz, 2014). Leonidou and Katsikeas (2010) highlight in their literature review that only 14% of studies focused on non-exporters. Whilst, Yang et al (1992) and Jaffe and Pasternak (1994) argue the extant literature was largely limited to exporters reflecting on prior behaviour, which is likely to affect information accuracy. Dosoglu-Guner (2011) reiterates that the question as to what influence non-exporters to initiate their export activities remains unanswered. Addressing this question would assist export promotion organisations in allocating their funding more effectively by identifying the specific needs of non-exporters and support the most appropriate export promotion programmes. In this regard, Yang et al (1992) stress that the use of profiles of current exporters to identify potential exporters have yielded mixed results. Therefore, the focus of the present study is on nonexporters' intention to export. This intention captures efforts and plans SMEs are ready to implement in order to start exporting. It is well established that pre-export activities, which often lead to actual export behaviour, are strongly linked to export intentions (Wiedersheim-Paul et al., 1978). Firms exhibiting a strong export intention are most likely to develop a successful export initiation and development strategies (Morgan and Katsikeas, 1997; Yang et al., 1992).

# Managerial determinants of export intention

# A theoretical approach

Despite its limitations, the current use of the RBV approach has been crucial in identifying the different triggers behind firms' international market entry (Sousa et al., 2008; Beleska-Spasova et al., 2012). Indeed several theories to explain market entry have been mooted (Chetty and Campbell-Hunt, 2003; da Rocha et al., 2009). This being said, a contrast is noted here where two distinct but influential approaches of internationalisation are often debated (Love et al., 2016), namely the stages approach (Johanson and Vahlne, 1977) emphasising knowledge and experience factors, and the 'born global' approach advocating opportunistic attributes (Oviatt & McDougall, 1994).

According to the stages theory (also known as the Uppsala Model) (Johanson and Valhlne, 1977), firms' internationalisation is an incremental and sequential process that proceeds through different stages. Here, managers increase their commitment to international markets based on their gradual acquisition and use of foreign market knowledge and experience, helping them to reduce uncertainty (Frynas and Mellahi, 2015). Hence, SMEs' internationalisation would be triggered when their managers' acquire the relevant foreign knowledge and experience amongst other factors. Contrastingly, many SMEs were found to adopt a more opportunistic behaviour to international market entry (Lloyd-Reason and Nughan, 2002). Not all firms adopt a gradual approach, and many "leapfrog" into internationalisation following a more strategic approach (Chetty and Cambpell-Hunt, 2003). Arguing a "born global" view, scholars explained that these firms start their internationalisation process from their inception, and do not necessarily wait until they acquire the relevant knowledge and experience (Hashai, 2011). Instead, the internationalisation of such firms is triggered by

managerial entrepreneurial attitudes in terms of risk tolerance and proactiveness (Knight and Cavusgil, 2004; Frynas and Mellahi, 2015).

In summary, although highlighting different triggers, the two approaches seem to agree upon the importance of the decision maker's characteristics in shaping SMEs' internationalisation. However, the debate on SMEs' internationalisation should evolve from a basic argumentation against or for the incremental internationalisation to a more complex approach recognising that such a process is influenced by multiple factors (Lloyd-Reason and Nughan, 2002). Supporting the resource orchestration view (Hughes et al., 2018), this study tackles this complex phenomenon by uncovering configurations of managerial traits intervening in the internationalisation process which are next considered.

## **Managerial Characteristics**

SMEs 'are not smaller versions of big business' (Shuman and Seeger, 1986: 8). These differ considerably in terms of organisational resources and management systems, which would in turn affect their internationalisation process (Lu and Beamish, 2001). For SMEs, strategic decisions related to foreign market entry are typically the direct responsibility of the owner/manager (Omri and Becuwe, 2014). Such strategic decisions are reflected in the characteristics of these owners/managers. SMEs tend to put managerial characteristics in the centre of the international decision making process (Laufs et al., 2016).

On the determinants of export intention, Reid (1981) posits that the recognition and the influence of an export stimulus are related to the management's knowledge, attitudes and motivation toward internationalisation. The manager's traits are likely to affect the firms' participation in export activities (Katsikeas and Piercy, 1993). Miesenbock (1988: 42) argues that the decision maker is "The one to decide starting, ending and increasing international activities". Several prior studies have tested the role of the decision maker's attributes in

enhancing SMEs export behaviour (Zou and Stan, 1998; Sousa et al., 2008). In general, the export literature considers the entrepreneur's capital as a valuable resource that enhances SMEs' internationalisation (Lafuente et al., 2015).

Decision makers' characteristics influencing firms' internationalisation have been classified into objective and subjective traits. While the former includes factors such as age, educational level, language proficiency, and experience abroad, the latter covers characteristics related to perceptions, attitudes, and behaviour (Suarez-Ortega and Alamo, 2005). The most studied characteristics were age, educational background, professional experience, foreign travels, language proficiency, innovativeness, risk tolerance and managerial perceptions (Stoian and Rialp, 2010). Therefore, this study includes the owner/ manager's age, foreign knowledge, international orientation (foreign experience, language proficiency), entrepreneurial orientation (innovativeness, risk-taking, proactiveness) and export perception as managerial attributes affecting firms' export intention. These are examined in greater detail, prior to exploring our configurational framing.

Manager's Age: Age could be regarded as a precursor for low export propensity yet previous findings have been mixed and inconsistent (Ibeh, 2003). While Lautanen (2000), Ibeh (2003), Suarez-Ortega and Alamo-Vera (2005), Robson and Freel (2008) and Serra et al (2012) established no relationship between managers' age and firms' likelihood to start exporting, other studies argued that firms with younger managers tend to be more internationally oriented (Moon and Lee, 1990; Caughey and Chetty, 1994). It was claimed that younger managers are more energetic, have greater interest in higher earnings, are risk takers and actively seek export opportunities (Caughey and Chetty, 1994; Serra et al., 2012). Hence, younger managers, who enjoy traits such as greater energy and enhanced risk taking attitudes, are more likely to venture into export markets. That is, the combination of youth and proactive risk taking attitude is the one likely to enhance SMEs' export initiation.

Manager's Foreign Knowledge: Lack of knowledge is recognised as a barrier preventing SMEs from entering international markets, especially in developing countries (Shih and Wickramaesekera, 2011; Al-Hyari et al., 2012). In accordance with the stages theory (Johanson and Vahlne, 1977), knowledge acquisition would reduce uncertainty and enhance firms' commitment to international markets (Casillas et al., 2015). However, findings are inconsistent. Evidence from Portugal (Pinho and Martins, 2010), the UK (Nemkova et al., 2012), Jordan (Al-hyari et al., 2012) and Turkey (Uner et al., 2013) confirms that foreign knowledge reduces international market uncertainties and enhances internationalisation (Pinho and Martins, 2010; Al-Hyari et al., 2012; Uner et al., 2013). Accurate and reliable export knowledge and skills assists the decision making process and increase managers' flexibility to deal with export problems (Morgan and Katsikeas, 1997; Nemkova et al., 2012). By contrast, evidence from China reveal that when managers have high knowledge of export activities, they tend to be more aware of risks and costs associated with exporting and hence reduce their export exposure (Ling-Yee, 2004). However, Morgan and Katsikeas (1997) explain that foreign knowledge is correlated with positive perceptions toward export markets. Wang and Olsen (2002) posit that foreign market knowledge may only enhance export behaviour when the latter is associated with a positive profitability perception of exporting. Similarly, Denicolai et al (2014) suggest that knowledge intensity increases firms' international performance only when complemented with additional assets. Hence, it is argued that managers' foreign knowledge is likely to increase SMEs' intention to export, mainly when the latter is associated with a positive perception.

Manager's International Orientation: International orientation typically refers to the manager's foreign travel experience, language expertise and international experience (Gencturk and Kotabe, 2001). In theory, managers with previous international experience are more likely to develop strategic international partners and generate sales (Reuber and Fisher,

1997). They often have high awareness and willingness to seek export opportunities (Casillas et al., 2015). In addition, language proficiency reduces psychic distance to foreign markets, avoid miscommunication and positively influence international market entry (Densil, 2011; Nemkova et al., 2012). Empirically, although Cavusgil and Naor (1987) found that the ability to speak foreign languages was amongst the weakest determinants of the export decision, several studies demonstrated that managers' international orientation or at least one of its dimensions, positively influence firms' decision to enter export markets (Palliwoda, 2013). Managers' foreign travels (Miesenbock, 1988; Ruzzier et al., 2007), successful prior international experience (Wiedersheim-Paul et al., 1978; Dichtl et al., 1990; Nemkova et al., 2012) and foreign languages abilities (Obben and Magagula, 2003; Shih and Wickramaesekera, 2011; Densil, 2011; Nemkova et al., 2012; Serra et al., 2012) were confirmed as key precursors of firms' decision to enter foreign markets. Therefore, it could be concluded that when combined, managers' in terms of foreign travels, language abilities and international experience, are likely to have a positive influence on SMEs' export intention.

Manager's Entrepreneurial Orientation: Entrepreneurial orientation includes three dimensions, namely, innovativeness, risk taking and proactiveness (Fernandez Mesa and Alegre, 2015). While innovativeness refers to the propensity to be creative and experimental, risk taking speaks of taking audacious actions and proactiveness is associated with opportunity-seeking behaviours (Martin and Javalgi, 2016). In keeping with the born global view, entrepreneurial orientation and opportunity seeking behaviour are emphasised as crucial for international market entry (Zahra and George, 2002; Pellegrino and McNaughton, 2015). SMEs enjoying high levels of entrepreneurial orientation capabilities are more effectively equipped to overcome the liabilities of foreignness (Brouthers et al., 2015). Firms with high entrepreneurial orientation are particularly efficient in exploiting international opportunities (Martin and Javalgi, 2016). Entrepreneurially oriented managers are more proactive and

innovative in developing effective export strategies to overcome barriers to entry (Brouthers et al., 2015). Empirically, several studies have confirmed the relationship between firms' with entrepreneurial orientation capabilities and export decision. Evidence from the UK (Ruzzier et al., 2007), Spain (Acedo and Galan, 2011) and Taiwan (Shih and Wickramaesekera, 2011) highlighted a link between at least one dimension of entrepreneurial orientation and firms' probability of being exporters. However, additional evidence failed to confirm such a positive role and even reported a negative influence (Frank et al., 2010). Deligianni et al (2015) found that firms' international performance could be enhanced by entrepreneurial orientation only when the latter is coupled with decision rationality. Zahra and Garvis (2000) revealed that entrepreneurial orientation contribution to firms' success depends on the managers' perceptions of the international business environment. Therefore, it could be concluded that managers' entrepreneurial orientation may only have a positive influence on SMEs' export intention, when the latter is coupled with a positive perception.

Manager's Export perceptions: Export perception here refers to export profit and growth opportunities perception. In general, favourable perceptions constitute important determinants of firms' decision to export (Naidu and Prasad, 1994; Zou and Stan, 1998; Ruzzier et al., 2007; Shih and Wickramaesekera, 2011). In contrast, negative perceptions lead to low export sales (Zou and Stan, 1998). Employing Weick's (1969) seminal work on managerial perceptions, it could be argued that perceptions of a given activity, instead of the actual objective situation, are seen as influencing attributes in the decision making process. Therefore, managers with positive perception toward profitability of export markets exhibit high commitment, allocate sufficient resources to export activities, seek new opportunities, plan market entry and develop effective export marketing strategies (Johnston and Czinkota, 1982; Sousa et al., 2008). However, some evidence did not confirm such a link. Serra et al (2012) found the perception benefits related to exporting did not significantly influence the

decision to start exporting. Thus, scholars posit that only when a favourable perception is accompanied with provocativeness (Zou and Stan, 1998; Katsikeas et al., 1997; Solberg and Durrieu, 2006), entrepreneurial orientation (Zahra and Garvis, 2000) or foreign knowledge (Wang and Olsen, 2002), that this would enhance international market entry.

## A Configuration View

Overall, while the empirical export literature appears to have been producing inconsistent and sometimes contradictory findings regarding the role of individual managerial attributes in the internalisation process, some evidence suggests that such characteristics may only have an influence when combined with at least an additional factor. For instance, explanations from Caughey and Chetty (1994) and Serra et al (2012) suggest that a younger age would only enhance internationalisation when associated with proactiveness. Similarly, Zahra and Garvis, (2000) and Deligianni et al (2015) argue the relevance of entrepreneurial orientation only when combined with a positive perception, whereas Wang and Olsen (2002) supports a similar approach in relation to foreign market knowledge. Therefore, this could constitute the key reason behind the inconsistent findings obtained thus far, and would further support the resource orchestration view put forward by Gruber et al (2010) and Hughes et al (2018). Thus this study investigates combinations of management attributes leading to export market entry. That is, the study attempts to test the proposition that: "The joint presence of at least two managerial export-related attributes (namely; age, foreign knowledge, international orientation, entrepreneurial orientation and positive perceptions) will lead to high export intention". However, since limited existing empirical evidence has pointed toward such combinations, no hypotheses are developed in this study. In fact, hypotheses are atypical to the configuration approach (Kent, 2015). Instead, identifying such combinations will be data-driven and is conducted through the fsQCA analysis.

## Sample and Data Collection

In Algeria, the total number of SMEs accounts for 169,238 firms nationally, from which 81,348 were in the manufacturing sector (MDIPI, 2015). The data was collected through a two-wave mix of online and offline surveys. Online questionnaires were administered first, followed by hard copies distributed during trade fairs. To avoid duplicates, questionnaires were identified by the name of the company these originated from. The initial sampling frame was gathered from the Algerian Chamber of Commerce database. The study targeted non-exporting SMEs with export potential<sup>1</sup>. According to APS (2015), these would only account for 1,200 firms nationally. Given such a limited number, the study included all existing manufacturing segments, including food and beverage, metal products, textile and clothing, tobacco, wood and paper products, furniture and 'other' manufacturing. In total, 180 valid responses were received.

The key informants were owner/managers or the export manager (if applicable) as they constitute the most relevant source of information (Sousa et al., 2008). The survey collected information from a single respondent per firm, as Sousa et al. (2008) revealed regarding SMEs, there is generally only one person dealing with export activities. The final sample size is considered as highly representative given the limited number of SMEs with export interest across the country. Table 1 presents the characteristics of the surveyed firms. The majority of SMEs employed less than 250 employees, has been operating for less than 25 years, were either owned by a sole proprietor or family owned, were managed by their owner(s) and operated in various manufacturing sectors with a slight prevalence of "Petroleum, chemical, plastic and rubber product" and "Food, beverage and tobacco" SMEs. It should be noted however that these characteristics reflect some disparities when compared against the characteristics of the

<sup>1</sup> The potential for export in Algeria is captured trough the firms' interest and participation to trade events organised by Algerian export promotion organisations.

overall sample. Here, the sample understudy includes a greater number of larger SMEs (250-500 employees) and a lower number of firms operating in the Metal sector.

Non-response was tested using Armstrong and Overton's extrapolation method (1977). This was conducted by comparing early and late responses. The t-test has revealed no significant differences in most of the selected items. This not only rules out potential major non-response bias and reveals no major differences between the online and offline collections methods (since early respondents are mostly online and late ones offline). To assess for common method bias, the study conducted post hoc tests, namely Harman's one-factor and Podsakoff et al's. (2003) tests. With the former, the first factor accounted for less than 50 percent of the total variances, hence showing no major sign of common method bias. As for Podsakoff et al.'s (2003) method, following Liang et al's (2007) instructions, a PLS model with a common method factor including all items of the study and estimated each item's variances that explained its principle construct and common method factor was run. The results showed that most method-based factor loadings were statistically non-significant, whereas the average variance of the items was 0.63 compared to the average method-based variances of 0.011. This confirms that common method bias is unlikely to be a significant issue in this study (Liang et al., 2007; Obadia, 2013; Lings et al., 2014)

## Table 1 Here

#### Measures

Export intention was measured using a three-item construct developed by Yang et al (1992), capturing (1) the firms' interest in exporting, (2) the firms' plans to initiate export sales and (3) the firms' plans to allocate additional resources to exporting. This construct was used as it measures the pre-export activities potential exporters would undertake. According to Yang et al (1992), firms with a high export intention would make plans to start selling abroad and

allocate necessary resources. As for managerial characteristics, "Foreign Knowledge" was adapted from Leonidou et al. (2011) capturing knowledge about foreign demand, export regulations and administration, foreign business practices and transportation and shipping practises. International orientation measured a set of items previously used in Joynt's (1982), Gensturk and Kotabe's (2001) and Obben and Magagula's (2003) studies. These captured managers' ability to speak foreign languages, previous international experience, and foreign travels. For export perception, respondents were asked about their level of perceptions regarding export sales compared with the domestic ones (Axinn et al., 1995; Calof, 1994). Finally, for entrepreneurial orientation, the study used an instrument developed by Ibeh and Young (2001). All these constructs were measured on a five-point Likert scale. Full definitions of these variables are presented in Table 2.

#### Table 2 Here

## Analysis

This study employs a configurational analysis using fsQCA. Following Cheng et al (2013), the study needs to assess the scales reliability and validity as well as endogeneity issues, prior to conducting the fsQCA analysis. This is mainly done through a Partial Least Squares Structural Equation Modelling approach using SmartPLS 3.27 (Ringle et al., 2015).

## Scales Reliability and Validity

The study examines (1) the individual reliability of all the indicators through their loadings<sup>2</sup>, (2) both composite and Cronbach's Alpha coefficients to check the constructs' reliability and (3) the Average variance Extracted (AVE) (see table 2) and the Heterotrait-

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<sup>&</sup>lt;sup>2</sup> Confirmatory Factor Analysis PLS is available upon request

Monotrait ratio of correlations criterion (HTMT) to examine the constructs' convergent and discriminant validities respectively (Hair et al., 2016).

## Table 3 Here

Table 3 shows that all the values of the composite reliability and Cronbach's alpha were higher than the 0.7 thresholds implying that the measurement model has a good reliability. Similarly, the table illustrates that all AVEs exceeded the threshold of 0.5 meaning that all constructs have a good convergent validity (Henseler et al., 2009). The table demonstrates the values of the VIFs are all below the threshold of five meaning the absence of both multicollinearity. For discriminant validity, the HTMT's threshold should be 0.90 (Henseler et al., 2015). Here, discriminant validity has been established since all results of the HTMT.90 criterion are below the critical value of 0.90. Based on the reliability, validity and collinearity tests conducted for both the first and second order variables, the measurement model presents satisfactory values.

# **Endogeneity Issues**

When causal effects are examined, endogeneity issues and unobserved heterogeneity may arise (Pappies et al., 2018). For unobserved heterogeneity, Gelhard et al (2016b) suggest the use of a combination of FIMIX-PLS and fsQCA to fully capture unobserved heterogeneity problems. While the former would detect the presence of segments within the sample, the latter would identify the configurations reflecting heterogeneity (equifinality). As such, fsQCA assumes that variables may hold different effects in different combinations and thus can address effects caused by unobserved heterogeneity (Gelhard et al., 2016b; Park et al., 2017). In this study, FIMIX-PLS suggests the presence of two heterogeneous segments (Hair et al., 2018) and these were captured by the subsequent use of fsQCA (as shown in the next section). Hence, unobserved heterogeneity is accounted for in this study.

For endogeneity, a structural model was run to capture the influence this issue on the relationships understudy. To check this, WarpPLS Kock (2017) has been used. Kock (2017) introduced a test in its latest version (version 6) that employs the instrument variable approach in order to see whether endogeneity problems are having major impact on the studied relationships. In this study, the instrument variable approach is used to assess the impact of endogeneity issues. Here, export assistance is considered as a valid instrument, since it correlates theoretically with the regressor variables but not with the dependent variable (Papies et al., 2017). Previous works showed that export assistance is directly correlated with managers' attributes (Shamsuddoha et al., 2009; Leonidou et al. 2011). The results yielded no sign of major endogeneity issues.

Reversed causality issues may also arise when causality is studied. According to Kock (2017), reversed causality may be present when Simpson's paradox instances are detected. To assess this, WarpPLS 6.0 provides several indicators, namely: the Simpson Paradox Ratio (SPR) (Pearl, 2009; Kock & Gaskins, 2016), the Statistical Suppression Ratio (SSR) (MacKinnon et al., 2000; Kock & Gaskins, 2016) and the path-correlation ratio. In this study, all these indicators met the proposed criteria. Finally, to reduce risks of omitted variables, the study tested the influence of several control variables. Papies et al (2017) argue that a large part of omitted variables problems can be solved by the inclusion of relevant control variables. Accordingly, the study controlled for (1) firm Size (Filatotchev et al., 2009; Serra et al., 2012), (2) firms' Age (Srinivasan and Archana, 2011), (3) firms' Ownership (Fernandez and Nieto, 2006) and (4) Management Type (Dosoglu-Guner, 2001). Sector was also controlled for to capture the influence of sector differences (Stoian et al., 2011; Gashi et al., 2014). These had no significant influence on the proposed relationships.

## A Configurational Approach Using fsQCA

Introduced by Ragin (2000), fsQCA is based on a Boolean algebra system identifying sufficient set of conditions for a given outcome (Ordanini et al., 2014). fsQCA is a set-theoretic approach to causality analysis including a set of conditions leading to a given outcome. Unlike the classical regression analysis, fsQCA does not identify the effect of a given independent variable on a dependent variable; instead, it identifies causal configurations leading to an outcome (Fiss et al., 2013). The technique accounts for contrarian cases that do not necessarily fall within the general trend of the data (Woodside, 2014). The application of a configurational analysis reveals patterns in the data that otherwise would have been difficult to identify in a regression analysis (Vis, 2012; Ray, 2015).

Calibration: Using the fsQCA technique, both the causal conditions (manager's characteristics) and the outcomes (export intention) are represented using fuzzy set scores (Ragin, 2009). Compared to other techniques, the "fuzziness" associated with fsQCA allows for more fine-grained assessments of the different levels of managerial traits, since the calibration involves assigning cases based on their degree of membership in sets of causal conditions and outcomes (Ragin, 2008a). This is done by transforming the conventional variables scores into fuzzy membership scores with values ranging from 0.00 to 1.00 (Ragin, 2008b). In the calibration process, the researcher needs to set three values corresponding to three qualitative anchors that constitute a fuzzy set and that would delineate three thresholds, namely: fuzzy scores of 0.95 for full membership, 0.05 for non-membership, and 0.5 for crossover (Ragin, 2009). To match fuzzy set calibration with the Likert-type five-point scales, scores of 1 (strongly disagree), 3 (neutral) and 5 (strongly agree) as representing non-membership (0), cross over point (0.5) and full membership (1) were assigned (Gast et al., 2018).

Sufficiency Analysis: The antecedents of two sets of outcomes are next presented, namely high export intention (EX INT) and low export intention (~EX INT). Truth tables containing the logically possible combinations of conditions are generated (Ragin et al., 2008a). To identify the relevant configurations, the study identifies the combinations with a minimum number of cases (frequency threshold) and the appropriate consistency score (consistency cut-off) (Woodside and Zhang, 2012). Following Cheng et al (2013), a frequency threshold of at least one case was chosen capturing 100 percent of the cases in the study which is higher than Ragin's (2008b) criterion (Ren et al., 2016). Consistency is similar to significance metrics in statistical hypothesis testing (Woodside and Zhang, 2012), it assesses the proportion of the cases under a given configuration displaying the outcome (Ragin, 2008b; Woodside and Zhang, 2012). Ragin (2008b) suggests that gaps in the upper range of consistency are useful for establishing a consistency threshold and that the threshold below 0.75 indicates substantial inconsistency. In this study, the consistency threshold is set at 0.80 for high export intention (Kent, 2015). The following table (Table 4) shows the intermediate solution for high export intention. To enhance the readability and clarity of this table, a simple representation in which black circles indicate the presence of a causal condition and white circles indicate the absence or negation of a condition.

## **Table 4 Here**

From table 4, two consistent combinations of managerial characteristics predicting export intention emerged. These are regarded as sufficient conditions leading to firms' export intention. The configurations suggest that SMEs run by owner/managers over 40 years old yet with high export knowledge, international orientation, and positive export perception are most likely to have high export intention (consistency score of 0.87). Alternatively, firms with young owner/managers characterised by high entrepreneurial orientation and positive export perception are also likely to have high export intention (consistency score of 0.86). Alongside

the consistency measure, coverage should also be examined. Coverage assesses the proportion of cases explained by a condition (unique coverage) or a combination (raw coverage) with an acceptable level of consistency (above 0.80 in this case) (Ragin, 2008b; Kent, 2015). Coverage is similar to the effect size in the regression analysis (Woodside & Zhang, 2012). Here, raw coverage for both combinations was 64 percent and 32 percent, indicating an important proportion of firms' export intention captured by each combination. Similarly, the overall solution coverage indicates the extent to which high export intentions can be determined by the set of configurations. This is akin to the R-square value reported in variable-based techniques (Woodside, 2013). The results show an overall solution coverage of 68 percent, which suggests that a significant proportion of the export intention is explained by the two combinations. Turning to the conditions leading to low export intention, the truth table has provided the following results (see table 5)<sup>3</sup>. It could be argued that two combinations could lead to low export intention. When only the age condition is present, SMEs are more likely to be nonexporters, whereas when none of the conditions is present, SMEs are also likely to not export. This highlights that the age factor can only enhance firms' export intention when associated with additional attributes such as export knowledge and experience.

## Table 5 Here

Logical Necessity Analysis: Following the sufficiency analysis presented above, a logical necessity analysis highlights the necessary individual conditions for a given outcome. These individual conditions would be necessary but not sufficient to produce the outcome (Kent, 2015). The analysis of logical necessity for a high export intention shows that export perception has the highest consistency (0.88), so is probably a necessary (yet not sufficient) condition to high export intention. These results are next discussed.

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<sup>&</sup>lt;sup>3</sup> Since the initial truth table only provided 2 relevant combinations, no intermediate analysis was run in this

#### Discussion

The findings identified two combinations of managerial attributes explaining 68 percent of high export intention likelihood. In line with the proposition developed in this study, these configurations do not only verify the application of the resource orchestration view in the context of Algerian SMEs' international market entry (Hughes et al., 2018), but also reveal *multiple* configurations likely to enhance SMEs' export initiation (equifinality). The configuration approach revealed that for Algerian SMEs to be exporters, positive export perception (by the decision maker) is a necessity. However, this condition is not sufficient, those managers have to either have a high entrepreneurial orientation (be a risk taker, innovative and proactive) *or* possess sufficient export knowledge and international orientation (foreign languages competencies, previous foreign experience, foreign travels). Lastly, the age factor seems to decreases firms' chances to go abroad unless coupled with additional attributes such as relevant knowledge and experience.

These results support previous claims regarding the importance of the combined influence of managerial attributes as opposed to single influences (Caughey and Chetty, 1994; Zahra and Garvis, 2000; Wang and Olsen, 2002; Deligianni et al., 2015). Thus while owner/managers with a positive perception towards exporting would allocate sufficient resources, seek foreign opportunities and strategically plan their export market entry (Sousa et al., 2008), the presence of a high entrepreneurial orientation will encourage increased proactive behaviour in exploiting these opportunities and predicting trends in international markets (Rauch et al., 2009; Martin and Javalgi, 2016). Those owner/managers will also be more innovative in developing export strategies (Brouthers et al., 2015) and enhancing opportunities to engage in export markets. Here, it is suggested that domestic market difficulties typically found in Algeria triggers opportunistic managerial attitudes (Azam et al., 2001; Roberts and Thoburn, 2003). Hence, hostility and lack of opportunities would act as push factors for

owner/managers to become opportunistic and seek international opportunities. These findings confirm the born global perspective, whereby firms from limited markets in their internationalisation process, increasingly rely on opportunistic behaviour more than on experiential learning (Pellegrino and McNaughton, 2015).

Alternatively, when managers with a positive perception towards exporting are equipped with sufficient export knowledge and relevant international experience (but not necessarily a high entrepreneurial orientation), they will still exhibit a high export intention. With accurate and relevant export skills and knowledge, managers are likely to encounter less uncertainty and hence be more willing to develop export entry strategies (Casillas et al., 2015). This is particularly applicable to Arab owner/managers such as the Algerian respondents who are characterised with high uncertainty avoidance (Elbeltagi et al., 2013; Ramdani et al., 2014) which is likely to affect their propensity to venture into uncertain international markets, unless this is offset by foreign market knowledge. Additionally, with high international orientation (international experience and language abilities), they are more likely to avoid miscommunication issues (Densil, 2011; Nemkova et al., 2012), and benefit from foreign partners' support (Reuber and Fisher, 1997). This is again very relevant to collectivist Algerian owner/managers who often focus on relationship-building (Elbeltagi et al., 2013; Ramdani et al., 2014), placing greater emphasis on relationship-building for business purposes (Kabasakal and Bodur, 2002). In Algeria, collaborations are common amongst successful exporters (Reguia, 2014). Therefore, these owner/managers will have a high probability to develop a high export intention despite lack of entrepreneurial orientation. This is in accordance with the Uppsala theory of firms' internationalisation, which suggests that firms' internationalisation is influenced by the decision maker's experience and knowledge towards export markets.

Finally, regarding the effect of managers' age in determining the SMEs' likelihood of entering export markets, this study found that this factor could be a double-edged sword. While

older managers are typically reluctant to enter foreign markets, due to their lack of proactiveness and opportunity seeking (Caughey and Chetty, 1994; Serra et al., 2012), when equipped with relevant attributes (positive perceptions and international orientation) they will take advantage of their experience and maturity to increase firms' chance to go abroad.

#### Limitations

The study argues the following limitations. First, the most commonly cited managerial characteristics are included, yet this list is not exhaustive. Future research should include additional factors that may also constitute important managerial attributes. Second, following previous studies and based on Sousa et al's (2008) claim that SMEs, international activities are typically managed by a single person, our data were collected using a single respondent strategy. However, this strategy can lead to issues with external validity. Despite the robust tests, undertaken here to rule out such issues, further evidence is required to validate our model. Third, the study does not rule out possible endogeneity issues including reversed causality. Although the proposed model was developed on the bases of theoretical and empirical evidence, and despite the adopted tests to rule out this issue, endogeneity problems may be present. Hence, the study calls for further longitudinal and action research studies to validate the proposed conceptualisation. Finally, in terms of representativeness, the sample used in this study does reflect some disparities in terms of size and sector when compared with the overall population. Although the non-response test indicates no major bias, such differences should be taken into account when generalising the findings. Thus, we call for further research from the North-African region to validate our conclusions. Additionally, it should be noted that, the potential for export was based on firms' interest and participation to trade events. Hence, we call future studies to develop more precise diagnostic tools to assess export potential.

# Theoretical Implications

The extant findings present important theoretical implications. From an RBV perspective, current findings enhance the usefulness of this theory when explaining SMEs' export market entry. In line with the resource orchestration view (Hughes et al., 2018), the configuration approach offers specific resource deployment strategies expected to result in international market entry. Previous works (Gruber et al., 2010; Nordqvist et al., 2014; Hughes et al., 2018) identified a significant knowledge gap in terms of identifying the specific combination of resources in addition to the number of configurations that are likely to influence firms' behavior (Gruber et al., 2010; Ho et al., 2016; Hughes et al., 2018). Hence, future research should adopt a similar perspective to study various combinations of additional resource factors (such as organisational and relational assets) affecting SMEs' behaviour.

For the SME internationalisation literature, the current study is one of the very first studies applying fsQCA to study SMEs' internationalisation. By answering Terjesen et al's (2016) call for adopting more diverse and sophisticated analytical techniques, this study provides novel and more inclusive insights into firms' pre-export activities. The study captures the complexity of the managerial antecedent configurations leading to high export intention (Skarmeas et al., 2014). Here, Coviello (2015: 23) argues that, "What remains missing is rich insight on who the entrepreneurs driving these international ventures are...in terms of their qualities and characteristics". The findings suggest that firms' export intention does not depend on single managerial attributes, but rather different combinations of relevant attributes may enhance firms' behaviour. Supporting the coexistence of two different "routes" leading to high export intention, namely global and stages approaches, the results have contributed to reconcile the mixed evidence concerning the managerial attributes and their effect on SMEs' internationalisation. In this regard, researchers should always consider the "equifinality" phenomenon that is likely to be associated with SMEs behaviour (Gast et al., 2018).

Ultimately, the study also adds a contextual contribution to the international SME literature. It is recognised that the character of entrepreneurial activity is likely to be context specific (Robson and Freel, 2008). This study contributes to the nascent internationalisation research emerging from the North African region. Algeria is playing an increasingly important role on the global economy. Similarly, other North African nations such as Egypt, Morocco and Tunisia are equally important in the international scene and hence more evidence from this area should follow.

# **Practical Implications**

The present results hold important implications for export promotion organisations (EPOs) in North-Africa and Algeria. First, based on the configuration approach adopted in this study, EPOs in this area could use these findings to increase the effectiveness and efficiency of their programmes through setting up a profiling system where SMEs' owner/managers attributes are assessed and programmes are delivered and customized accordingly with the identified needs. This will allow a more relevant and efficient targeting. In particular, the findings have confirmed the co-existence and validity of the two contrasting internationalisation views (namely born global view vs. gradual view) amongst Algerian SMEs. Hence, both perspectives should be taken into consideration by EPOs to fit all requirements. Scholars have previously acknowledged the influence of the gradual internationalisation approach on the design of the EPOs programmes which did not fit with the opportunistic and opportunity driven internationalisation of the born-global firms (Bell and McNaughton, 2000).

Specifically, the necessity analysis has demonstrated that a positive perception towards exporting is necessary for SMEs to embark on export activities, hence EPOs in developing countries can organise events and seminars where potential exporters are induced to the

potential profits that could be generated from export markets. EPOs could work in collaboration with educational institutions (including universities) to promote positive perceptions of export activities. However, the sufficiency analysis has also revealed that a positive perception is not a sufficient condition to export intention. It is essential for EPOs to follow up those motivation events with relevant training (including language support) and foreign visits. Such follow-ups should primarily be directed to the managers lacking a strong entrepreneurial orientation, since they are the ones in a higher need of such attributes. An alternative route could also be the promotion of manager's entrepreneurial minds which should be primarily achieved through educational institutions. Our study suggests that entrepreneurial owner/managers may require less support than non-entrepreneurial owner/managers. Contrastingly, EPOs should also dedicate a more intensive support to SMEs run by older owner/managers (more than 40 years old) as these have lesser chances to expand to export markets when not equipped with relevant attributes.

#### Conclusion

Overall, the large proportion of export intention explained by the managerial characteristics under study confirms previous works in the African SME context reporting managerial characteristics as key to firms' internationalisation (Ibeh, 2003; Obben and Magagula, 2003; Ibeh et al., 2012). However, the novelty of this study resides in the ability of the configuration approach to identify the specific combinations of such attributes likely to increase SMEs' international market entry (complex causality and equifinality). Thus, the study highlights that managerial factors are complementary and only the presence of, at least, two of these factors can lead to a high export intention.

## References

Acedo, F. J. & Galan, J. L.(2011). Export stimuli revisited: The influence of the characteristics of management decision makers on international behaviour. *International Small Business Journal*, 29(6), 648-670.

Algerian Chamber of Commerce, (2016). Algerian Exporters File [Online] Available at http://www.caci.dz/enus/Nos%20Services/Annuaires%20des%20entreprises%20et%20fichier s/Pages/Fichierdes-exportateurs-algeriens.aspx [Accessed 17 September 2016].

Algerie Press Service, (2016) La promotion des exportations hors hydrocarbures, une action permanente et non conjoncturelle [Online] Available at http://www.aps.dz/economie/41082-la-promotion-des-exportations-hors-hydrocarbures,-une-action-permanente-et-non-conjoncturelle [Accessed 01 November 2016].

Algerie Press Service, 2015. Entre 350 et 400 sociétés nationales exportent hors hydrocarbures. *Econews*, [Online] Available at: <a href="http://www.leconews.com/fr/depeches/entre-350-et-400-societes-nationales-exportent-hors-hydrocarbures-16-04-2015-173991\_312.php">http://www.leconews.com/fr/depeches/entre-350-et-400-societes-nationales-exportent-hors-hydrocarbures-16-04-2015-173991\_312.php</a> [Accessed 03 March 2016].

Armstrong, J. S. & Overton, T. S. (1977). Estimating Nonresponse Bias in Mail Surveys. *Journal of Marketing Research*, 14, 396-402.

Axinn, C. N., Savitt, R., Sinkula, J. M., & Thach, S. V. (1995). Export intention, beliefs, and behaviors in smaller industrial firms. *Journal of Business Research*, 32(1), 49-55.

Azam, J.-P., Calmatte, M.F., Lostalan, C. and Maurel, C. (2001), "Domestic competition and export performance of manufacturing firms in Côte d'Ivoire", Working Paper WPS/2001-01, Centre for the Study of African Economies, Oxford University, Oxford.

Barney, J. B. (2014). How marketing scholars might help address issues in resource-based theory. *Journal of the Academy of Marketing Science*, 42(1), 24-26.

Beleska-Spasova, E., Glaister, K. W., & Stride, C. (2012). Resource determinants of strategy and performance: The case of British exporters. *Journal of World business*, 47(4), 635-647.

Bell, J., & McNaugton, R. (2000). Born global firms: a challenge to public policy in support of internationalization. *Marketing in a Global Economy*, 176-185.

Boso, N., Cadogan, J. W., & Story, V. M. (2012). Entrepreneurial orientation and market orientation as drivers of product innovation success: A study of exporters from a developing economy. *International Small Business Journal*, 31(1) 57–81.

Brouthers, K. D., Nakos, G., & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice*, 39(5), 1161-1187.

Calof, J. L. (1994). The relationship between firm size and export behavior revisited. *Journal of International Business Studies*, 25(2), 367-387.

Casillas, J. C., Barbero, J. L., & Sapienza, H. J. (2015). Knowledge acquisition, learning, and the initial pace of internationalization. *International Business Review*, 24(1), 102-114.

Caughey, M., & Chetty, S. (1994). Pre-export behaviour of small manufacturing firms in New Zealand. *International Small Business Journal*, 12(3), 62-69.

Cavusgil, S. T., & Naor, J. (1987). Firm and management characteristics as discriminators of export marketing activity. *Journal of Business Research*, 15(3), 221-235.

Chadwick, C., Super, J. F., & Kwon, K. (2015). Resource orchestration in practice: CEO emphasis on SHRM, commitment-based HR systems, and firm performance. *Strategic Management Journal*, 36(3), 360-376.

Cheng, C. F., Chang, M. L., & Li, C. S. (2013). Configural paths to successful product innovation. *Journal of Business Research*, 66(12), 2561-2573.

Chetty, S., & Campbell-Hunt, C. (2003). Paths to internationalisation among small-to medium-sized firms: a global versus regional approach. *European Journal of Marketing*, *37*(5/6), 796-820.

Christensen, P. R. (1991). The small and medium sized exporters squeeze: empirical evidence and model reflections. *Entrepreneurship and Regional Development*, *3*(1), 49-65.

Coviello, N. (2015). Re-thinking research on born globals. *Journal of International Business Studies*, 46(1), 17-26.

Cruz, M. (2014). Do export promotion agencies promote new exporters? *World Bank Policy Research Working Paper No 7004*. Washington.

Da Rocha, A., Kury, B., & Monteiro, J. (2009). The diffusion of exporting in Brazilian industrial clusters. *Entrepreneurship & Regional Development*, 21(5-6), 529-552.

Deligianni, I., Dimitratos, P., Petrou, A., & Aharoni, Y. (2015). Entrepreneurial Orientation and International Performance: The Moderating Effect of Decision-Making Rationality. *Journal of Small Business Management*. 54(2), 462-480.

Denicolai, S., Zucchella, A., & Strange, R. (2014). Knowledge assets and firm international performance. *International Business Review*, 23(1), 55-62.

Densil, W. A. (2011). Modelling small locally-owned firms export behaviour: the role of language. *Academy of Entrepreneurship Journal*, 17(2), 19-35.

Dichtl, E., Koeglmayr, H.-G. & Mueller, S. (1990). International Orientation as precondition for export success. *Journal of International Business Studies*, 21(1), 23-40.

Dosoglu-Guner, B. (2001). Can organizational behavior explain the export intention of firms? The effects of organizational culture and ownership type. *International Business Review*, 10(1), 71-89.

Elbeltagi, I., Al Sharji, Y., Hardaker, G., & Elsetouhi, A. (2013). The role of the owner-manager in SMEs' adoption of information and communication technology in the United Arab Emirates. *Journal of Global Information Management (JGIM)*, 21(2), 23-50.

- Fernández, Z., & Nieto, M. J. (2006). Impact of ownership on the international involvement of SMEs. *Journal of International Business Studies*, 37(3), 340-351.
- Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, 40(6), 1005-1021.
- Fiss, P. C. (2007). A set-theoretic approach to organizational configurations. *Academy of management review*, 32(4), 1180-1198.
- Fiss, P. C., Sharapov, D., & Cronqvist, L. (2013). Opposites attract? Opportunities and challenges for integrating large-N QCA and econometric analysis. *Political Research Quarterly*, 66(1), 191-198.
- Frank, H., A. Kessler, and M. Fink (2010). "Entrepreneurial Orientation and Business Performance—A Replication Study," Schmalenbach Business Review 62, 175–198.
- Frynas, J. G., & Mellahi, K. (2015). *Global strategic management*. Oxford University Press, USA.
- Gashi, P., Hashi, I., & Pugh, G. (2014). Export behaviour of SMEs in transition countries. *Small Business Economics*, 42(2), 407-435.
- Gast, J., Filser, M., Rigtering, J. P. C., Harms, R., Kraus, S. and Chang, M.-L. (2018), Socioemotional Wealth and Innovativeness in Small- and Medium-Sized Family Enterprises: A Configuration Approach. *Journal of Small Business Management*. doi:10.1111/jsbm.12389
- Gelhard, C., & Von Delft, S. (2016a). The role of organizational capabilities in achieving superior sustainability performance. *Journal of business research*, 69(10), 4632-4642.
- Gelhard, C., Von Delft, S., & Gudergan, S. P. (2016b). Heterogeneity in dynamic capability configurations: Equifinality and strategic performance. *Journal of Business Research*, 69(11), 5272-5279.
- Genctürk, E. F. & Kotabe, M. (2001). The effect of export assistance program usage on export performance: a contingency explanation. *Journal of International Marketing*, 9(2), 51-72.
- Global Insight. (2014). EDA: Declining oil prices pose threat to Algerian economy [Online]. Available: <a href="http://globalriskinsights.com/2014/12/eda-declining-oil-prices-pose-threatalgerian-economy">http://globalriskinsights.com/2014/12/eda-declining-oil-prices-pose-threatalgerian-economy</a> [Accessed 14 March 2015].
- Gruber, M., Heinemann, F., Brettel, M., & Hungeling, S. (2010). Configurations of resources and capabilities and their performance implications: an exploratory study on technology ventures. *Strategic Management Journal*, 31(12), 1337-1356.
- Haddoud, M. Y., Jones, P., & Newbery, R. (2017). Export promotion programmes and SMEs' performance: exploring the network promotion role. *Journal of Small Business and Enterprise Development*, 24(1), 68-87.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced issues in partial least squares structural equation modeling*. SAGE Publications.

- Hair, J. F., Ringle, C. M. & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *The Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Hashai, N. (2011). Sequencing the expansion of geographic scope and foreign operations by "born global" firms. *Journal of International Business Studies*, 42(8), 995-1015.
- Henseler, J., Ringle, C. M. & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(1), 277-319.
- Hitt, M. A., Xu, K., & Carnes, C. M. (2016). Resource based theory in operations management research. *Journal of Operations Management*, 41, 77-94.
- Ho, J., Plewa, C., & Lu, V. N. (2016). Examining strategic orientation complementarity using multiple regression analysis and fuzzy set QCA. *Journal of Business Research*, 69(6), 2199-2205.
- Hughes, P., Hodgkinson, I.R., Elliott, K. and Hughes, M., (2018) Resource Orchestration and Firm Profitability: Uncovering Recipes for Success in the US Manufacturing Industry. *International Journal of Operations and Production Management*. Forthcoming.
- Hutchinson, K., Quinn, B., & Alexander, N. (2006). The role of management characteristics in the internationalisation of SMEs: Evidence from the UK retail sector. *Journal of Small Business and Enterprise Development*, 13(4), 513-534.
- Ibeh, K. I., & Young, S. (2001). Exporting as an entrepreneurial act-An empirical study of Nigerian firms. *European Journal of Marketing*, 35(5/6), 566-586.
- Ibeh, K., I. N. (2003). On the internal drivers of export performance among Nigerian firms: empirical findings and implications. *Management Decision*, 41(3), 217-225.
- Ibeh, K., Wilson, J., & Chizema, A. (2012). The internationalization of African firms 1995–2011: Review and implications. *Thunderbird International Business Review*, 54(4), 411-427.
- International Monetary Fund (2016). Economic Diversification in Oil-Exporting Arab Countries, Manama, Oman. [ONLINE] Available at: https://www.imf.org/external/np/pp/eng/2016/042916.pdf [Accessed 21 June 2017].
- Jaffe, E. D. & Pasternak, H. (1994). An attitudinal model to determine the export intention of non-exporting, small manufacturers. *International Marketing Review*, 11(3), 17-32.
- Johanson, J. & Vahlne, J.-E. (1977). The internationalization process of the firm-a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8(1), 23-32
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm—four swedish cases 1. *Journal of Management Studies*, 12(3), 305-323.
- Johnston, W. J. & Czinkota, M. R. (1982). Management motivations as determinants of industrial export behaviour. *In:* Czinkota, M. R. & Tesar, G. (eds.) *Export Management: An International Context.* Praeger Publishers: New York, USA. 131-142

Joynt, P. (1982). *An empirical study of Norwegian export behaviour*, In Czinkota, M.R. and Tesar, G.(Eds), *Export Management: An Inter-national Context*, Praeger Publishers: New York, USA. 55-69.

Kabasakal, H., & Bodur, M. (2002). Arabic cluster: a bridge between East and West. *Journal of World Business*, 37(1), 40-54.

Kanda, W., Mejiá-Dugand, S. & Hjelm, O. (2013). Governmental export promotion initiatives: awareness, participation, and perceived effectiveness among Swedish environmental technology firms. *Journal of Cleaner Production*, 98, 222-228.

Katsikeas, C. S. & Piercy, N. F. (1993). Long-term export stimuli and firm characteristics in a European LDC. *Journal of International Marketing*, 1, 23-47.

Katsikeas, C. S., Deng, S. L., & Wortzel, L. H. (1997). Perceived export success factors of small and medium-sized Canadian firms. *Journal of International Marketing*, 53-72.

Kent, R. A. (2015). Analysing Quantitative Data: Variable-based and Case-based Approaches to Non-experimental Datasets. Sage.

Knight, G. A. (2001). Entrepreneurship and strategy in the international SME. *Journal of International Management*, 7, 155-171.

Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, *35*(2), 124-141.

Kock, N. (2017). WarpPLS 6.0 User Manual. Laredo, TX: ScriptWarp Systems.

Kock, N., & Gaskins, L. (2016). Simpson's paradox, moderation and the emergence of quadratic relationships in path models: an information systems illustration. *International Journal of Applied Nonlinear Science*, 2(3), 200-234.

Kozlenkova, I. V., Samaha, S. A., & Palmatier, R. W. (2014). Resource-based theory in marketing. *Journal of the Academy of Marketing Science*, 42(1), 1-21.

Kunc, M. H., & Morecroft, J. D. (2010). Managerial decision making and firm performance under a resource-based paradigm. *Strategic Management Journal*, 31(11), 1164-1182.

Lafuente, E., Stoian, M. C., & Rialp, J. (2015). From export entry to de-internationalisation through entrepreneurial attributes. *Journal of Small Business and Enterprise Development*, 22(1), 21-37.

Laufs, K., Bembom, M., & Schwens, C. (2016). CEO characteristics and SME foreign market entry mode choice: The moderating effect of firm's geographic experience and host-country political risk. *International Marketing Review*, 33(2), 246-275.

Lautanen, T. (2000). Modelling Small Firms' Decisions to Export–Evidence from Manufacturing Firms in Finland, 1995. *Small Business Economics*, 14(2), 107-124.

Leonidou, L. C., Palihawadana, D. & Theodosiou, M. (2011). National export-promotion programs as drivers of organizational resources and capabilities: effects on strategy, competitive advantage, and performance. *Journal of International Marketing*, 19, 1-29.

Liang, H., Saraf, N., Hu, Q., & Xue, Y. (2007). Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management. *MIS quarterly*, 59-87.

Ling-Yee, L. (2004). An examination of the foreign market knowledge of exporting firms based in the People's Republic of China: Its determinants and effect on export intensity. *Industrial Marketing Management*, 33(7), 561-572.

Lloyd-Reason, L., & Mughan, T. (2002). Strategies for internationalisation within SMEs: the key role of the owner-manager. *Journal of small business and enterprise development*, 9(2), 120-129.

Love, J. H., Roper, S., & Zhou, Y. (2016). Experience, age and exporting performance in UK SMEs. *International Business Review*, 25(4), 806-819.

Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal*, 22(6-7), 565-586.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.

MacKinnon, D.P., Krull, J.L., & Lockwood, C.M. (2000). Equivalence of the mediation, confounding and suppression effect. Prevention Science, 1(4), 173-181.

Martin, S. L., & Javalgi, R. R. G. (2016). Entrepreneurial orientation, marketing capabilities and performance: the moderating role of competitive intensity on Latin American International new ventures. *Journal of Business Research*, 69(6), 2040-2051.

Matanda, M. J., Ndubisi, N. O., & Jie, F. (2016). Effects of Relational Capabilities and Power Asymmetry on Innovativeness and Flexibility of Sub-Sahara Africa Small Exporting Firms. *Journal of Small Business Management*, 54(1), 118-138.

MDIPI. (2015). *Bulletin d'information Statistique de l'entreprise* [Online]. Available: http://www.mdipi.gov.dz/IMG/pdf/Bulletin PME no27.pdf [Accessed 22/06/2017].

Merino, F., Monreal-Pérez, J., & Sánchez-Marín, G. (2015). Family SMEs' Internationalization: Disentangling the Influence of Familiness on Spanish Firms' Export Activity. *Journal of Small Business Management*, 53(4), 1164-1184.

Miesenbock, K. J. (1988). Small businesses and exporting: A literature review. *International Small Business Journal*, 6(2), 42-61.

Moon, J., & Lee, H. (1990). On the internal correlates of export stage development: an empirical investigation in the Korean electronics industry. *International Marketing Review*, 7(5).

Morgan, R. E. & Katsikeas, C. S. (1997). Export stimuli: Export intention compared with export activity. *International Business Review*, 6(5), 477-499.

Naidu, G. & Prasad, V. K. (1994). Predictors of export strategy and performance of small-and medium-sized firms. *Journal of Business Research*, 31(2), 107-115.

- Nemkova, E., Souchon, A. L., & Hughes, P. (2012). Export decision-making orientation: an exploratory study. *International Marketing Review*, 29(4), 349-378.
- Nordqvist, M., Sharma, P., & Chirico, F. (2014). Family firm heterogeneity and governance: A configuration approach. *Journal of Small Business Management*, 52(2), 192-209.
- Obadia, C. (2013). Competitive export pricing: The influence of the information context. *Journal of International Marketing*, 21(2), 62-78.
- Obben, J. & Magagula, P. (2003). Firm and management determinants of the export propensity of small and medium-sized enterprises in Swaziland. *International Small Business Journal*, 21(1), 73-91.
- Omri, W., & Becuwe, A. (2014). Managerial characteristics and entrepreneurial internationalization: A study of Tunisian SMEs. *Journal of International Entrepreneurship*, 12(1), 8-42.
- Ordanini, A., & Rubera, G. (2008). Strategic capabilities and internet resources in procurement: A resource-based view of B-to-B buying process. *International Journal of Operations & Production Management*, 28(1), 27-52.
- Ordanini, A., Parasuraman, A., Rubera G. (2014). When the Recipe Is More Important Than the Ingredients: A Qualitative Comparative Analysis (QCA) of Service Innovation Configurations. *Journal of Service Research*, 17(2), 134-149.
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of international business studies*, 25(1), 45-64.
- Papies, D., Ebbes, P., & van Heerde, H. J. (2017). Addressing Endogeneity in Marketing Models. In P. S. H. Leeflang, J. E. Wieringa, T. H. A. Bijmolt, & K. H. Pauwels (Eds.), Advanced Methods in Modeling Markets (pp. forthcoming).
- Park, Y., El Sawy, O. A., & Fiss, P. C. (2017). The Role of Business Intelligence and Communication Technologies in Organizational Agility: A Configurational Approach. *Journal of the Association for Information Systems*, 18(9), 648-686.
- Pattnayak, S. S. and Thangavelu, S. M. (2014), "Productivity and learning-by-exporting: A firm-level analysis of Indian manufacturing", *The World Economy*, Vol. 37 No. 7, pp. 1016-1026.
- Pearl, J. (2009). Causality: Models, reasoning, and inference. Cambridge, England: Cambridge University Press.
- Pellegrino, J. M., & McNaughton, R. B. (2015). The co-evolution of learning and internationalization strategy in international new ventures. *Management International Review*, 55(4), 457-483.
- Piercy, N. F., Kaleka, A., & Katsikeas, C. S. (1998). Sources of competitive advantage in high performing exporting companies. *Journal of World Business*, 33(4), 378-393.

Pinho, J. & Martins, L. (2010). Exporting barriers: Insights from Portuguese small- and medium-sized exporters and non-exporters. *Journal of International Entrepreneurship*, 8(3), 254-272.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.

Raddats, C., Zolkiewski, J., Story, V. M., Burton, J., Baines, T., & Ziaee Bigdeli, A. (2017). Interactively developed capabilities: evidence from dyadic servitization relationships. *International Journal of Operations & Production Management*, 37(3), 382-400.

Ragin, C. C. (2000). Fuzzy-set social science. Chicago: University of Chicago Press.

Ragin, C. C. (2008a). Redesigning social inquiry: Fuzzy sets and beyond. Chicago: University of Chicago Press.

Ragin, C. C. (2008b). User's guide to fuzzy-set/qualitative comparative analysis. Available online at, <a href="https://www.fsqca.com">www.fsqca.com</a>.

Ragin, C. C. (2009). Qualitative comparative analysis using fuzzy sets (fsQCA). In B.

Ramdani, B., Mellahi, K., Guermat, C., & Kechad, R. (2014). The efficacy of high performance work practices in the Middle East: Evidence from Algerian firms. *The International Journal of Human Resource Management*, 25(2), 252-275.

Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship theory and practice*, 33(3), 761-787.

Reguia, C. (2014). Clusters and SMEs: An opportunity to be taken: Algerian Experience. In *Proceedings of International Academic Conferences*. May. No. 0100103. International Institute of Social and Economic Sciences

Reid, S. D. (1981). The decision-maker and export entry and expansion. *Journal of International Business Studies*, 12(2), 101-112.

Ren, S., Tsai, H. T., & Eisingerich, A. B. (2016). Case-based asymmetric modeling of firms with high versus low outcomes in implementing changes in direction. *Journal of Business Research*, 69(2), 500-507.

Reuber, A. R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies*, 807-825.

Ringle, C. M., Wende, S., & Becker, J.-M. (2015). SmartPLS. Boenningstedt, Germany: SmartPLS GmbH. Retrieved from <a href="https://www.smartpls.com">www.smartpls.com</a>

Ringle, Christian M., Wende, Sven, & Becker, Jan-Michael. (2015). SmartPLS 3. Bönningstedt: SmartPLS. Retrieved from http://www.smartpls.com

- Roberts, S., & Thoburn, J. (2003). Adjusting to trade liberalisation: the case of firms in the South African textile sector. *Journal of African Economies*, 12(1), 74-103.
- Robson, P. J., & Freel, M. (2008). Small firm exporters in a developing economy context: evidence from Ghana. *Entrepreneurship and Regional Development*, 20(5), 431-450.
- Ruzzier, M., Antoncic, B., Hisrich, R. D. & Konecnik, M. (2007). Human capital and SME internationalization: a structural equation modeling study. *Canadian Journal of Administrative Sciences*, 24(1), 15-29.
- Schlittgen, R., Ringle, C. M., Sarstedt, M., & Becker, J. M. (2016). Segmentation of PLS path models by iterative reweighted regressions. *Journal of Business Research*, 69(10), 4583-4592.
- Serra, F., Pointon, J. & Abdou, H. (2012). Factors influencing the propensity to export: A study of UK and Portuguese textile firms. *International Business Review*, 21(2), 210-224.
- Shamsuddoha, A. K., Ali, M. Y., & Ndubisi, N. O. (2009). A conceptualisation of direct and indirect impact of export promotion programs on export performance of SMEs and entrepreneurial ventures. *International Journal of Entrepreneurship*, 13(2009), 87-106
- Sheehan, N. T., & Foss, N. J. (2007). Enhancing the prescriptiveness of the resource-based view through Porterian activity analysis. *Management Decision*, 45(3), 450-461.
- Sheehan, N. T., & Foss, N. J. (2007). Enhancing the prescriptiveness of the resource-based view through Porterian activity analysis. *Management Decision*, 45(3), 450-461.
- Shih, T.-Y. & Wickramasekera, R. (2011). Export decisions within Taiwanese electrical and electronic SMEs: The role of management characteristics and attitudes. *Asia Pacific Journal of Management*, 28(2), 353-377.
- Shuman, J. C., & Seeger, J. A. (1986). The theory and practice of strategic management in smaller rapid growth firms. *American Journal of Small Business*, 11(1), 7-18.
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32(1), 273-292.
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of Management Review*, 32(1), 273-292.
- Sjödin, D. R., Parida, V., & Kohtamäki, M. (2016). Capability configurations for advanced service offerings in manufacturing firms: Using fuzzy set qualitative comparative analysis. *Journal of Business Research*, 69(11), 5330-5335.
- Skarmeas, D., Leonidou, C. N., & Saridakis, C. (2014). Examining the role of CSR skepticism using fuzzy-set qualitative comparative analysis. *Journal of Business Research*, 67(9), 1796-1805.
- Solberg, C. A., & Durrieu, F. (2006). Access to networks and commitment to internationalisation as precursors to marketing strategies in international markets. *Management International Review*, 46(1), 57-83.

Sousa, C. M. P., Martínez-López, F. J. & Coelho, F. 2008. The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Reviews*, 10(4), 343-374.

Srinivasan, T. N., & Archana, V. (2011). Determinants of export decision of firms. *Economic and Political Weekly*, 49-58.

Stoian, M. C., & Rialp-Criado, A. (2010). Analyzing export behavior through managerial characteristics and perceptions: A multiple case-based research. *Journal of Global Marketing*, 23(4), 333-348.

Stoian, M. C., Rialp, A., & Rialp, J. (2011). Export performance under the microscope: A glance through Spanish lenses. *International Business Review*, 20(2), 117-135.

Suárez-Ortega, S. M., & Álamo-Vera, F. R. (2005). SMESs internationalization: firms and managerial factors. *International Journal of Entrepreneurial Behavior & Research*, 11(4), 258-279.

Terjesen, S., Hessels, J., & Li, D. (2016). Comparative International Entrepreneurship A Review and Research Agenda. *Journal of Management*, 42(1), 299-344.

Uner, M. M., Kocak, A., Cavusgil, E. & Cavusgil, S. T. (2013). Do barriers to export vary for born globals and across stages of internationalization? An empirical inquiry in the emerging market of Turkey. *International Business Review*, 22(5), 800-813.

Van Beveren, I., & Vandenbussche, H. (2010). Product and process innovation and firms' decision to export. *Journal of Economic Policy Reform*, 13(1), 3-24.

Wagemann, C., & Schneider, C. Q. (2010). Qualitative comparative analysis (QCA) and fuzzy-sets: Agenda for a research approach and a data analysis technique. *Comparative Sociology*, 9(3), 376-396.

Wang, G., & Olsen, J. E. (2002). Knowledge, performance, and exporter satisfaction: an exploratory study. *Journal of Global Marketing*, 15(3-4), 39-64.

Weick, K. E. (1969). The social psychology of organizing (No. 04; HM131, W3.).

Wiedersheim-Paul, F., Olson, H. C. & Welch, L. S. 1978. Pre-export activity: the first step in internationalization. *Journal of International Business Studies*, 9(1), 47-58.

Woodside, A. G. (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Research*, 66(4), 463-472.

Woodside, A. G. (2014). Embrace• perform• model: Complexity theory, contrarian case analysis, and multiple realities. *Journal of Business Research*, 67(12), 2495-2503.

Woodside, A. G., & Zhang, M. (2012). Identifying x-consumers using causal recipes: "Whales" and "jumbo shrimps" casino gamblers. *Journal of Gambling Studies*, 28(1), 13-26.

World Bank (2017). *Algeria Overview*. [ONLINE] Available at: <a href="http://www.worldbank.org/en/country/algeria/overview">http://www.worldbank.org/en/country/algeria/overview</a>. [Accessed 21 June 2017].

Yang, C. H., Chen, J. R., & Chuang, W. B. (2004). Technology and export decision. *Small Business Economics*, 22(5), 349-364.

Yang, Y. S., Leone, R. P. & Alden, D. L. (1992). A Market Expansion Ability Approach to Identify Potential Exporters. *Journal of Marketing*, 56(1), 84-96.

Zahra, S, George, G. (2002). International entrepreneurship: The current status of the field and future research agenda M. Hitt, D. Ireland, D. Sexton, M. Camp (Eds.), Entrepreneurship: Creating an integrated mindset, Blackwell Publishers, Oxford, pp. 255–288

Zahra, S. A., & Garvis, D. M. (2000). International corporate entrepreneurship and firm performance: The moderating effect of international environmental hostility. *Journal of Business Venturing*, 15(5), 469-492.

Zou, S. & Stan, S. (1998). The determinants of export performance: a review of the empirical literature between 1987 and 1997. *International Marketing Review*, 15(5), 333-356.

## **List of Tables**

Table 1: Firms' Characteristics

| Number of Employees (Size)                      | Percent (Valid Percentages) |
|---|-----------------------------|
| Less than 10                                    | 20.7                        |
| 10 - 50   | 32.9                        |
| 51 - 250  | 25.6                        |
| 251 - 500                                       | 20.7                        |
| Firms' Age                                      | Years                       |
| Less than 2                                     | 10.2                        |
| 2 - 10  | 26.9                        |
| 11 - 25   | 34.7                        |
| 26 -50  | 24.0                        |
| Over 50   | 4.2                         |
| Firms' Ownership                                |                             |
| Sole Proprietorship                             | 35.2                        |
| Family Ownership                                | 40.6                        |
| Partnership                                     | 10.3                        |
| Other   | 13.9                        |
| Management Type                                 |                             |
| An appointed manager                            | 28.2                        |
| The Owner                                       | 71.8                        |
| Sector  |                             |
| Agriculture, forestry and fishing               | 3.6                         |
| Mining  | 1.8                         |
| Food, beverage and tobacco                      | 13.9                        |
| Textile and clothing                            | 6.1                         |
| Wood and paper product                          | 2.4                         |
| Printing, publishing and recorded media         | 4.2                         |
| Petroleum, chemical, plastic and rubber product | 17.0                        |
| Metal product                                   | 8.5                         |
| Construction                                    | 7.3                         |
| Furniture and other manufacturing               | 3.0                         |
| Other   | 32.1                        |

Table 2: Managerial Characteristics

| Managerial                   | Definitions  |
|------------------------------|--|
| Characteristics              |  |
| Export Knowledge             | Export knowledge refers to knowledge and skills related to export activities. These skills are generally related to foreign markets characteristics and practises, export procedures and transportation practices (Leonidou et al., 2011).   |
| International orientation    | International orientation concerns the decision maker's foreign travels, ability to speak foreign languages and international experience (Geneturk and Kotabe, 2001).  |
| Entrepreneurial orientations | Entrepreneurial orientation refers to the extent to which the decision maker's pursue new ideas and markets for exporting (innovativeness), seize international opportunities and seek information (proactiveness) and perceive export-related risks versus opportunities (risk-taking) (Ibeh, 2004) |
| Export Perception            | Export perception refers to the extent to which the decision maker's favourable perception towards export profits (Louter et al., 1991).   |

Table 3: Composite reliability, Cronbach's alpha, AVE and VIFs coefficients

|                             | Cronbach's Alpha | Composite<br>Reliability | AVE  | VIF  |
|-----------------------------|------------------|--------------------------|------|------|
| Entrepreneurial Orientation | 0.79             | 0.86                     | 0.55 | 1.60 |
| Export Knowledge            | 0.87             | 0.91                     | 0.72 | 1.80 |
| <b>Export Perception</b>    | 0.79             | 0.87                     | 0.63 | 1.18 |
| International Orientation   | 0.73             | 0.83                     | 0.56 | 2.01 |
| Age                         | 1.00             | 1.00                     | 1.00 | 1.07 |
| <b>Export Intention</b>     | 0.90             | 0.94                     | 0.84 | /    |

Table 4: Solutions for High Export Intention

| Export<br>Knowledge | International Orientation | Export perception | Entrepreneurial Orientation | Age        | Consistency | Raw<br>Coverage | Unique<br>Coverage |
|---------------------|---------------------------|-------------------|-----------------------------|------------|-------------|-----------------|--------------------|
|                     | $\circ$                   | •                 | •                           | $\bigcirc$ | 0.86        | 0.64            | 0.35               |
|                     |                           |                   | $\bigcirc$                  |            | 0.87        | 0.32            | 0.03               |

○ Absence of condition Presence of condition Solution coverage=0.68 Solution consistency=0.85

Table 5: Solutions for Low Export Intention

| Export<br>Knowledge | International Orientation | Export perception | Entrepreneurial Orientation | Age | Raw<br>Consistency |
|---------------------|---------------------------|-------------------|-----------------------------|-----|--------------------|
|                     | $\circ$                   | 0                 |                             |     | 0.82               |
|                     | $\bigcirc$                | $\circ$           |                             |     | 0.80               |

○ Absence of condition Presence of condition