Factors That Foster Export Commitment: an Empirical Study in Small and Medium-Sized Enterprises

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Previous research on the internationalization of small and medium-sized enterprises (SMEs) has highlighted the role of resources and capacities in the positioning of SMEs in a competitive global environment. Based on resources and capacities theory, this study examines the relationship between resources (material and immaterial) and capacities (technological, business, financial, human and commercial) and the international commitment of SMEs. The study also examines the relationship between these capacities and the level of export commitment using structural equation techniques. The study is based on a sample of 128 internationally-diversified SMEs from the Spanish region of La Rioja. Using different modelling techniques, the results of the study confirm the existence of a significant relationship between different SME resources and the export policies of SMEs. Specifically, we find that the size of a company, the extent of its coverage of the domestic market, its international experience, having growth as a business objective, its commitment to technological activities, and the international experience of its managers all have a positive effect on its international commitment. Finally, we consider some of the potential implications of the results obtained in this study in both research and business practice.

Keywords: export commitment, structural equations, systemic model, small and medium-sized enterprise (SME).

Introduction

The importance of international activity in small and medium-sized companies has been highlighted very clearly in existing literature. The internationalization of SMEs has been studied using different models based on theories stemming from different fields of business research (Hilmerson, 2014). SMEs have specific characteristics that distinguish them from large enterprises and are likely to influence their foreign market entry mode choice in terms of their level of commitment to the foreign market (Laufs & Schwens, 2014). These characteristics include individualized leadership, limited information and limited financial and personnel resources. This could lead SMEs to take different internationalization decisions from large companies in terms of objectives, planning and rationalization, commonly more associated with big companies (Child & Hsied, 2014). However, small companies are more flexible, which arguably enables them to identify international business opportunities more quickly (Kontinen & Ojala, 2011). The relevant factors for the internationalization of SMEs have therefore been explained from different perspectives according to the underlying theoretical approach used in each case. Nevertheless, there seems to be a certain consensus that the problem of the international competitiveness of companies is a complex variable influenced by numerous different aspects.

Export activity is, on the one hand, a reflection of the internationalization and degree of international competitiveness of a company and, on the other, one of the most important instruments in the internationalization of many small and medium-sized companies (Leonidou et al., 2010; Bruneckiene & Paltanaviciene, 2012). Exports as a means for penetrating international markets, and the one that entails least risk and effort by avoiding the high fixed costs associated with the deployment of assets abroad. This, together with the fact that SMEs face limitations in terms of resources (economic, human, etc.) and capacities (international experience, managerial experiences in these areas, etc.), means that exports are the main mechanism used to launch business internationalization processes (Wolff & Pett, 2006). In light of the importance of export commitment and its behavior in SMEs, as well as the various limitations observed in literature, this research aims to address a number of resulting gaps. Specifically gaps linked to three aspects:

- the analysis of resources and capacities, promoters of the international behavior.
- a joint and systemic study of all the internal factors with power to influence SMEs.
- the determination of the specific weight each business capacity might have as a stimulus to exportation.

The clarification of these three gaps in business literature is this work's raison d'être.

These aspects justify the need for a more in-depth examination of the studies that have analysed the relevance of export activity. Authors like (Aaby & Slater, 1989), or (Cavusgil & Zou, 1994) coincide in affirming that we can group the factors that influence the export behaviour of companies at two main levels: external or exogenous factors, relating to the economic, institutional, national and international context; and internal or endogenous factors, associated with the intrinsic characteristics of companies. According to (Zou & Stan, 1998), the classification of the factors determining export commitment as internal or external factors is justified theoretically by industrial organisation theory (exogenous factors) and resources and capacities theory (endogenous factors). From the perspective of industrial organisation theory, the explanation for the maximum degree of internationalization is not to be found in perfect competition but rather in markets of imperfect competition and oligopolies. Resources and capacities theory treats corporate internationalization as another form of growth, and plays down the importance of sector as the maximum condition for the success of this process.

This research study aims to identify, from the perspective of resources and capacities theory, the main factors determining export commitment in SMEs. The determination of the resources and capacities more favorable to promote exporting commitment in SMEs will clarify the resource pattern which must be provided to this type of enterprises. Consequently, they will be able to consolidate their exporting policy. This is one of the objectives sought by this article.

To explore this question, we decided to use a structural equations modelling technique that brought together the internal factors of the company identified as significant in the literature. This technique allowed us to develop and test complex models such as the one we aimed to study.

We must analyze how symbiosis between the different resources and capacities of enterprises takes place and is revealed in a joint and systemic way. The joint study of these factors brings us closer to studying the exporting reality of SMEs. Therefore, using this type of SEM methodology we can cover this second gap.

The study is structured into five sections, including this introduction. In section two, we review the theoretical framework used - resources and capacities theory - and present the research hypotheses. Section three describes the methodology used in the study and the measurement of the study variables. Section four discusses the main results achieved with this study, and the final section sets forth the conclusions drawn and identifies future lines of research.

Given the structural equation methodology, results will allow us to identify what group of resources and capacities inherent to SMEs have the largest weight or incidence in the profile configuration of an exporting SME. In this way, in addition to providing an identification of the third gap, we bring some light on the priorities for investment in resources and capacities that the managers of those SMEs who want to diversify their business through international expansion must have.

### Theoretical Framework and Research Hypothesis

The present study on the export activity of SMEs focuses on the endogenous factors of SMEs themselves determining export activity. We decided to use this approach was based on two aspects: firstly, the resources and capacities paradigm considers that the key to the success of strategies carried out a company (in this case an internationalization strategy) lies within the company itself, and that this is where a company’s main source of competitive advantage can be found; and secondly, the scope of application of the study – SMEs – suggests that the resources and capacities generated and acquired by companies may have the greatest specific influence on their strategic behaviour with respect to internationalization. This decision is endorsed by numerous studies that have adopted the same approach (Naidu & Prasad, 1994; Haar & Ortiz-Buonafina, 1995; Fernandez & Nieto, 2006, Leonidou et al. 2010, Fernandez-Ortiz et al., 2012; Swoboda et al., 2014; Bortoluzzi et al., 2014; Chen et al., 2014).

The section below reviews the literature on export propensity and describe the different resources and capacities that have been analyzed in literature as influential in the export commitment of SMEs and outline the research hypotheses.

Size, as reflected in the literature, is one of the main variables associated with the international activity of companies (Naidu & Prasad, 1994; Andersson et al., 2004; Wang et al., 2013; Swoboda et al., 2014; Casillas et al., 2014). There seems to be a consensus among researchers on the highly synthetic influence attributed to size as a factor that encompasses a wide variety of resources and capacities (Cavusgil, 1984). In fact, (Mittelstaedt et al., 2003) argue that company size is a necessary condition and sufficient for determining export success.

There are a number of significant studies which found a positive relationship between firm’s size and its export propensity to export (Andersson et al., 2004; Suarez et al., 2006; Filatotchev et al., 2009; Merino et al., 2014). Thus, larger companies are more committed to exports. We therefore propose the following hypothesis:

**H1:** Company size is positively related to the degree of export commitment of a company.

The degree of national growth indicates the level of national coverage achieved by a company through its different business policies. All exporting companies are different, not only in terms of their degrees of geographical expansion at international level but also because all companies, both internationalised firms and exclusively national companies, may display different levels of geographical expansion in their national markets or in foreign markets they develop in the future.

Numerous studies have related the degree of commitment to international markets as a proxy for the possession of resources and know-how. Similarly, the scope of the national operations of companies has been proposed as a factor determining international growth, where locally-based companies may prefer to commitment
themselves to national expansion before tackling foreign markets (Trakarnthy & Netwong, 2010).

According to (Johanson & Widersheim-Paul, 1975), before a company is ready to start exporting, it must complete a process of geographical diversification in its domestic market. (Trakarnthy & Netwong, 2010) argue that companies that supply local markets they are familiar with will first try to grow in the national market. However, once all the opportunities in that market have been exhausted, they may consider extending their activities to foreign markets by searching for new business opportunities through growth beyond their national borders. (Suarez et al., 2006) performed an empirical study in which they observed that the propensity and intensity of export activity are positively influenced by the experience companies acquire in the development of their geographical markets. Thus, it’s prudent to hypothesize:

**H3**: The higher the level of expansion of a company’s products in the domestic market, the stronger the export commitment of that company.

Companies with extensive experience in the export market tend to perceive lower levels of uncertainty in their export activities and have a better understanding of the forces at play in the export market, thus achieving better results than other firms. Noteworthy empirical studies that have affirmed the existence of a positive relationship between the international experience of companies and export results include those by (Aaby & Slater, 1989), or (Cavusgil & Zou, 1994). According to these authors, experience in the international scenario can provide companies with capacities to select the most appropriate markets for starting their export activities formulate the most appropriate strategies and implant them more effectively.

International experience leads to greater international commitment (Papadopoulos & Martin, 2010; Child & Hsieh, 2014). In light to the above, the third hypothesis is intended to capture the relationship between international experience and international commitment.

**H3**: Companies with more international experience will exhibit a stronger commitment to exports.

Many authors also highlight the importance of having good human resources in order to undertake internationalization processes (Lall, 1980; Heneman et al., 2002; Ruzzier et al., 2007). The assignment of qualified personnel to perform foreign trade activities, as well as their levels of motivation, training and language knowledge, are strongly correlated with greater export success (Aaby & Slater, 1989). Any internationalization process, as a business growth strategy, will be conditioned by the qualification and motivation levels of company personnel. We therefore considered the following hypotheses:

**H4**: Human capacities are positively related to the level of export commitment.

The existence of certain organisational objectives, such as growth, stability, profit and diversification, has been positively correlated with the export behaviour of companies by numerous authors (Naidu & Prasad, 1994). Other studies, such as those by (Cavusgil & Nevin, 1981; Haar & Ortiz-Buenañina, 1995), have analyzed objectives such as profit and stability in connection with export commitment. A validated empirical comparison of these hypotheses can be found in (Axinn, 1985).

Therefore, we consider that management’s perception of the importance of these objectives for a company will influence the development of its export activity.

**H5**: The greater the importance attributed by directors to certain business objectives (growth, volume and market share), the stronger the export commitment of the company.

Management’s perception of these objectives is one of the most relevant factors determining the decision to start operating in or to consolidate foreign markets (Zou & Stan, 1998; Chetty & Blankenburg, 2000). The directors will be the ones who finally decide to start, develop and end international activities, determining at each moment the commitment that should be assumed by their company in foreign markets.

Literature in this respect (Cavusgil, 1984; Aaby & Slater, 1989; Suarez et al., 2006) has identified different advantages of export activity which, if positively perceived by management, can have a positive influence on the development of the company’s export activities. These three advantages are greater profitability, smaller risk and lower costs in the foreign market when compared with the national market.

The working hypothesis in this respect can be formulated as follows:

**H5**: The perception of the advantages of exporting by company directors positively influences the company’s degree of commitment to foreign markets.

The literature distinguishes four sources of barriers to exports, relating to knowledge, resources, procedures and exogenous factors (Ramaswami & Yang, 1990; Leonidou, 2004; Filatotchev et al., 2009; Arteaga et al., 2010; Uner et al., 2013). What is interesting about these barriers are not the aspects themselves but rather their perception by the manager responsible for taking export decisions. The stronger the manager’s perception of these obstacles, the more negatively they will effect export activity and vice-versa (Serra et al., 2012). The nature of managers’ expectations and attitudes, including their perception of the success of exporting ventures, generally affects export behaviour and results (Aaby & Slater, 1989; Leonidou, 2004). Companies whose managers have high, and at the same time realistic, expectations of export activities will probably be less reluctant to dedicate resources to such operations.

This allows us to propose the following hypotheses:

**H6**: The perception of the shortage of resources as a barrier to exporting is negatively related to the export commitment of companies.

**H7**: Ignorance of foreign markets is negatively related to the degree of export commitment.

If a company has different classes of resources and/or distinctive capacities, or these are underused, it may be in the company’s interests to examine the options for developing these through mechanisms such as exports. In contrast, the shortage or lack of availability of such resources and capacities may limit the scope and way in which companies can undertake new activities. Limitations in terms of the resources available to SMEs can undermine their capacity to move out of their domestic markets. In order to undertake exporting activities, companies must allocate the necessary financial and human resources and
appoint managers to carry out the necessary activities, such as search of information, formulate policies, etc. (Cavusgil & Nevin, 1981) or plan export processes (Cavusgil, 1984). (Diamantopoulos & Inglis, 1988) confirmed empirically that companies with strong export commitments in turn assigned more employees to support their export activities and had better organised export departments. Sui & Baum (2014) showed that resources are significantly more important for the survival of born-globals than for other strategies. Other authors (Haar & Ortiz-Buonafina, 1995, Entrialgo et al., 2002) also considered that companies should keep surplus resources to strengthen their commitment to exports and, “to push” the company to examine the possibilities of business expansion to optimize these surplus resources.

The hypothesis in this respect would be expressed as follows:

H0: A company's capacity to realign its resources toward exports positively influences its degree of commitment to exports.

Although different authors have recognised that exporting is the stage of the export commitment that entails least costs and fewer risks. However, it also requires an injection of financial resources, and this is particularly important in the case of small companies. Thus, by recognizing that financing is one of the main factors restricting the growth of SMEs (Yang et al., 2004), we may conclude that the proper management of financial resources is more important for strengthening a company’s export commitment than the resources themselves. In fact, if a company lacks financial capacities and resources, it may put off strategic decisions on international expansion that are not crucial for the company in question.

Financial structure (Gumede, 2004) and financial flexibility (Haar & Ortiz-Buonafina, 1995) may become variables that explain the export propensity of a company. The hypothesis in this respect would be as follows:

H1: Companies with strong financial capacities will display strong export commitments.

Literature in this respect argues that better qualified managers will increase confidence in the decision-taking process, as well as the perception that exports are an appropriate method for achieving business objectives. The relationship between the characteristics of a company’s management team and its level of internationalization is explained in the first study by Fernandez-Ortiz et al., 2009.

Presumably, the stronger the international orientation of management, the easier it will be to identify business opportunities abroad (Zou & Stan, 1998) and the more tolerant the company will be assume risks stemming from export activity.

(Dichtl et al., 1990; Ganotakis & Love, 2012) consider that the characteristics of managers are important for explaining the organisational behaviour of companies. In short:

- Qualifications: the professional qualifications, training and education level of managers, if these are considered to reflect their capacities, have been positively associated with stronger commitments to export by companies with foreign markets. Managerial experience helps firms become exporters, but once over the exporting hurdle it is education, both general and specific, that has a substantially positive effect (Ganotakis & Love, 2012; Serra et al., 2012). The level of international managerial experience also influences the internationalization process (Ciravegna et al., 2014).

- Professional experience: the professional experience of directors in terms of previous jobs, technical experience or product knowledge has also been positively associated with export commitment (Cheong & Chang, 1988). They argue that “individuals with higher levels of international orientation will probably perceive potential changes and opportunities in foreign markets more quickly.” (Athanassiou et al., 2000) observed that companies with more internationally-experienced senior management are more likely to implement internationalization strategies. These authors argue that the experience accumulated by senior managers can reveal business contacts abroad, increase its chances of achieving export agreements and consequently growth (Reid, 1983), enhance management capacity and increase “aggressiveness” and results in foreign markets (DaRocha et al., 1990).

Based on the foregoing, we may establish the following working hypothesis:

H10: The professional qualifications of the management team is positively related to a strong commitment to exports.

Number and variety of trips abroad: the international experience of managers is considered to be an influential factor on the degree of international orientation (DaRocha et al., 1990; Obben et al., 2003). This may be reflected in better knowledge of foreign business practices, contacts with potential clients and, in short, the identification of market opportunities.

H11: The management team’s experience in international markets positively influences a company’s degree of commitment to exports.

- Language knowledge: besides reflecting a manager’s cognitive characteristics, such as his/her greater psychological proximity to certain foreign countries, it also reflects an important aspect in the company’s preparations for export (Hambrick & Mason, 1984). (Dichtl et al., 1990; Holzmuller & Kasper, 1990) conclude that directives with a good command of languages are more likely to undertake export operations than directors who only speak one language. The result of exporting activity, analyzed in terms of export propensity and export growth, has been positively associated with language knowledge by different authors, such as (Serra et al., 2012). We therefore propose the following hypothesis:

H12: The command and knowledge of foreign languages by management teams is positively related to the a company’s degree of commitment to exports.

Similarly, different authors have argued that a negative relationship exists between age and entrepreneurial attitude. Some authors suggest that organisations with younger directors are more likely to adopt riskier strategies and more innovative alternatives to achieve growth. (Obben et al., 2003) argue that more senior directors are less committed to export activities than younger directives. According to authors like (Westhead et al., 2001), and (Serra et al., 2012), skills, abilities and relationships acquired by managers as they gain experience can
influence the decision to enter foreign markets. To reflect this, a hypothesis can be advanced that:

\( H_{1a} \): The age of management teams is negatively related to the degree of export commitment.

The professional level, education and attitude of marketing teams, as well as the importance company attribute to marketing strategies and instruments used in their activities, will condition the company’s capacity to consolidate its presence in foreign markets.

Numerous authors have considered that aspects inherent to products can explain the export behaviour of companies (Gripsrud, 1990). We therefore propose the following hypothesis:

\( H_{1b} \): Companies with strong commercial capacities will display a stronger commitment to exports.

Technological assets are very important because they can give companies certain advantages over their competitors, improve business costs and serve as an important source of differentiation (Filatotchev et al., 2009). Therefore, this technological dimension may be one of the factors that prompts companies to strengthen their commitments to exports (Serra et al., 2012).

After analysing the literature, technological intensiveness is found to be consistently to the export commitment (Yang et al., 2004; Harris & Li, 2099; Filipeşcu et al., 2013).

We therefore considered the following working hypotheses:

\( H_{1c} \): Technological capacities are positively related to a company’s degree of commitment to exports.

**Research Methodology**

The proposed study focused on a specific location in order to avoid variations related to the macroeconomic context, as recommended by (Cavusgil, 1984). When choosing a sample of companies located in a relatively homogeneous geographical, cultural, legal and political space, the potential impact of certain uncontrollable variables on the results of the research are minimised. The original sample comprised 343 small and medium-sized Spanish companies. The scope of the study was the region of La Rioja (Spain). Specifically, given the concentrated geographical scope of the study, the companies targeted in this study were selected from among all the SMEs in La Rioja. For the purpose of this research study, small and medium-sized companies were defined in accordance with the criteria established by the European Commission (1996), Euro-Info 88/ES.

The measurement instruments used consisted of primary information, obtained by means of a self-administered postal survey, and secondary information provided by the Economic Development Agency of La Rioja. As regards the primary information, the questionnaire consisted of items relating to organisational, business and managerial aspects relating to exporting. The secondary information was used to complement accounting, financial and corporate data. A pre-test was performed with 16 managers associated with exports. The design and representativeness of the sample was also evaluated. For this purpose, we used the Chi-square statistic to analyse distribution by sectors, size, company form, age and exporting status. This revealed the absence of significant differences between the sample obtained and the distribution of the study population. We tested nonresponse bias in terms of number of employees and international –to-total sales ratio (Papadopoulos & Martin, 2010) and did not find any significant differences between the firms that agreed to participate and those that did not.

Since this research focused on analysing the export commitment of companies that had already started exporting, the final analysis eventually concentrated on 128 exporting companies in the sample. The dependent variable - export commitment – was studied using a structural equations model in order to accurately reflect the complexity existing in the relationships between the determining factors (Shook et al., 2004). The use of this methodology to study factors associated with exporting activity has increased substantially in recent years (Papadopoulos & Martin, 2010; Halilem et al., 2014).

**Measurements**

**Operativisation of the Independent variables, Validity and Reliability**

When using multi-item measurement scales, an initial factorial principle components analysis was performed whenever necessary. This analysis was also confirmed using the structural equations model. This allowed us to improve the parsimony of the proposed model, reducing the number of items. The confirmatory factorial analysis (Amos 19,0) enabled us to estimate the relationships between the concepts to be measured and the indicators used for this purpose. A summary is presented in the Table 1.

**Operativisation of the Dependent Variable**

The dependent variable in the analysis model was the export commitment of the companies. We tried to identify the degree of commitment to exports of the companies using a latent variable formed by quantitative and qualitative indicators. Criticisms regarding the use of export propensity as a sole indicator of the level of export commitment prompted us to propose this measurement. Thus, we introduced quantitative measurements, export propensity (Cavusgil, 1984; Monreal-Perez et al., 2012; Villar et al., 2014; Ciravegna et al., 2014), number of countries, and the export sales volume of the company (Diamantopoulos & Martin, 2010). We also used a qualitative indicator, namely the level of satisfaction achieved by management with respect to foreign sales in the last three years (Bijmolt & Zwart, 1994).

We obtained this scale after performing a confirmatory factorial analysis of certain goodness-of-fit indexes that reflected very acceptable indexes (Chi-square: 1,911 p: 0,385; GFI: 0,981; AGFI: 0,903; RMSEA: 0,00; NFI: 0,942).

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**Operativisation of Independent Variables, Validity and Reliability**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Proxies from literature (the selected variables appeared in bold)</th>
<th>Measurement</th>
<th>Authors</th>
<th>Analyses performed</th>
<th>Results</th>
<th>Reliability and adjustment measurements</th>
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<td>No. of employees (H1)</td>
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<td>Number of employees on full-time contracts</td>
<td>Bijnol &amp; Zwart, 1994; Naidu &amp; Prasad, 1994; Yang et al., 2004; Serra et al., 2012; Monreal-Perez et al., 2012; Wang et al., 2013; Merino et al., 2014; Bortoluzzi et al., 2014</td>
<td>Analysis of the correlation between the three proxies analysed in the literature</td>
<td>Positive and significant</td>
<td>Not applicable since only one estimator was used</td>
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<td>Turnover</td>
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<td>Age of the company</td>
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<td>Leonidou, 2004; Andersson et al., 2004; Monreal-Perez et al., 2012; Halillem et al., 2014; Bortoluzzi et al., 2014</td>
<td>Not requires since a separate study is performed</td>
<td>Not applicable</td>
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<td>Degree of national expansion (H2)</td>
<td>Question about the geographical scope of products</td>
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<td>International experience (H3)</td>
<td>Number of years the company has been exporting</td>
<td>Naidu &amp; Prasad, 1994; Diamantopoulos &amp; Martin, 2010; Villar et al., 2014; Navarro-Garcia et al., 2015</td>
<td>Not applicable</td>
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<td><strong>Human capacities</strong></td>
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<td>Qualifications (H4)</td>
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<td>Personnel expenditure/Total Employees</td>
<td>Lall, 1980</td>
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<td>University education</td>
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<td><strong>Business objectives (H5)</strong></td>
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<td>Increase in market share</td>
<td>Likert question</td>
<td>Naidu &amp; Prasad, 1994; Haar &amp; Ortiz-Buonafina, 1995</td>
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<td>CFA with the three proxies used</td>
<td>GFI: 0.933; AGFI: 0.872; CFI: 0.764</td>
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<td>Increase in sales volume</td>
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<td>Greater profitability</td>
<td>Likert question</td>
<td>Cavusgil &amp; Nevin, 1981; Cavusgil, 1984; Axinn, 1985; Aaby &amp; Slater, 1989; Kraus et al., 2015</td>
<td>Factorial Analysis with various items and CFA with three factors</td>
<td>3 Factors: “Advantages Perceived”, “Lack of Information” and “Lack of Resources”</td>
<td>Cronbach’s Alpha: 0.82; 0.78 and 0.88 (respectively) GFI: 0.91; 0.9 and 0.92 (respectively)</td>
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<td>Less risk</td>
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<td><strong>Perception of obstacles to exporting</strong></td>
<td>Lack of resources (H7a)</td>
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<td>2 Factors: “Self-financing” and “Coverage of Fixed Assets”.</td>
<td>Cronbach’s Alpha and Composite Reliability: 0.9 and 0.87 for the first factor and 0.83 and 0.70 for the second. GFI: 0.945; AGFI: 0.911; CFI: 0.951</td>
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<td>Ignorance of markets (H7b)</td>
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<td><strong>Capacity to realign resources (H8)</strong></td>
<td>Realignment of resources</td>
<td>Likert question</td>
<td>Entiralgo et al., 2002</td>
<td>Not applicable</td>
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<td><strong>Financial capacities (H9)</strong></td>
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<td>Own financing</td>
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<td>Self-financing</td>
<td>Reserves/total liabilities</td>
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<tr>
<td>Financial solvency</td>
<td>Operating assets/Liquid liabilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management’s perception of financial capacities</td>
<td>5-point Likert scale</td>
<td>Haar &amp; Buonafina, 1995</td>
<td>Factorial Analysis with various items and CFA with two factors</td>
<td>2 Factors: “Self-financing” and “Coverage of Fixed Assets”.</td>
<td>Cronbach’s Alpha and Composite Reliability: 0.9 and 0.87 for the first factor and 0.83 and 0.70 for the second. GFI: 0.945; AGFI: 0.911; CFI: 0.951</td>
<td></td>
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<tr>
<td>Coverage of fixed assets</td>
<td>(EA + Equity/Fixed assets)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Realignment of resources</td>
<td>Other equity/Fixed assets</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Managements capacity (H10a,b,c,d)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>Average age of the management team</td>
<td>Serra et al., 2012</td>
<td>Not required since a separate study is performed</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Training qualifications of management</td>
<td>Qualifications and training of the managers</td>
<td>Dichtl et al., 1990; Holzmuller &amp; Kasper, 1990; Ganotakis &amp; Love, 2012.</td>
<td>Not required since a separate study is performed</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>International professional experience</td>
<td>International experience acquired by the company’s managers</td>
<td>Da Rocha et al., 1990; Obben et al., 2003; Ciravegna et al., 2014</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
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<tr>
<td>Language knowledge</td>
<td>Foreign language proficiency</td>
<td>Westhead et al., 2001; Obben et al., 2003; Serra et al., 2012</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>
Table 1. Variable Proxies from literature (the selected variables appeared in bold)

<table>
<thead>
<tr>
<th>Variable (the selected variables appeared in bold)</th>
<th>Measurement</th>
<th>Authors</th>
<th>Analyses performed</th>
<th>Results</th>
<th>Reliability and adjustment measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Marketing capacities (H11)</strong></td>
<td>Marketing capacities</td>
<td>Company personnel devoted to marketing activities of the company’s total work force.</td>
<td>-</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Production technology</strong></td>
<td></td>
<td>Production technology compared with competitors</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Development of new products</strong></td>
<td></td>
<td>Development of new products compared with competitors</td>
<td></td>
<td></td>
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<tr>
<td><strong>Expenditure in R&amp;D</strong></td>
<td></td>
<td>Level of expenditure in R&amp;D as a percentage of the company’s total sales</td>
<td>Yang et al., 2004; Filatotchev et al., 2009; Serra et al., 2012; Monreal-Perez et al., 2012; Filipescu et al., 2013; Halilem et al., 2014; Hsu et al., 2015</td>
<td>Factorial Analysis with various items and CFA with two factors</td>
<td>2 Factors: “Technological Effort” and “Technological Position”.</td>
</tr>
<tr>
<td><strong>Management’s perception of technological capacities</strong></td>
<td></td>
<td>Perception of the company’s technological capacities</td>
<td></td>
<td></td>
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<tr>
<td><strong>Technological position of the company</strong></td>
<td></td>
<td>Opinion scale on the technological position of the company.</td>
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</table>

**Analysis and Discussion of Results**

In order to carry out our study, and based on the variables previously identified we performed a structural equation model (SEM), which allowed us to identify the variable export commitment as the variable to be explained, considering the different tangible and intangible resources available to a company as independent variables (Figure 1).

**Construction of the diagram of the sequences of causal relationships**

The causal relationship between the explanatory variables and the degree of export commitment is reflected by an arrow, originating from the explanatory variable, its destination being the dependent variable. The structural coefficient associated with each relationship (λij) appears parallel to each arrow. The estimated relationship of this structural coefficient (positive or negative) appears next to it in brackets. These structural parameters were the basis of the hypotheses described.

**Evaluation of the proposed model**

After performing an initial test to estimate the multivariate normality of the model (kurtosis and asymmetry test), this could not be accepted if the significance level was 95 %. In order to minimize the number of variables in the model and increase the degrees of freedom of same, we decided, following the recommendations of (MacKenzie et al., 1998), to group the observed measurements belonging to the same latent variable in a compound score. In the first estimate of the model, we observed that all the variances were positive and significantly different to zero.

![Figure 1. Equations Model studied](image-url)
insignificant (Estimate: 0.006; C.R: 0.54; p-value: 0.957), thus indicating the absence of a significant relationship between the “financial capacities” factor and the degree of export commitment. We were therefore unable to confirm the existence of a relationship between the SMEs’ financial capacities and their levels of export commitment.

After performing this adjustment, the degrees of freedom in the model totalled 136 and the $\chi^2$ was 195.07. Although the adjustment had been considerably improved, the model still contained insignificant relationships. Thus, the relationship between the exogenous latent variable “human capacities” and the degree of export commitment had a estimated value of –0.114 with a standard deviation of 0.108. This value was in the interval C.R: -1.056, giving a p-value of 0.291. This lack of significance meant that we were unable to verify Hypothesis 4. Therefore, we could not confirm the existence of a relationship between the human capacities of the SMEs and their higher or lower levels of export commitment.

Lastly, after eliminating the proposed relationship defined with the structural coefficient $\lambda$, the final model studied was defined by a Chi-square of 168.172, with 119 degrees of freedom (p-value: 0.02) and 11 structural relationships to measure. The weights of the regression are shown in the following table:

Table 2

<table>
<thead>
<tr>
<th>Weight of the regression in relation to export commitment</th>
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<tbody>
<tr>
<td>Estimate</td>
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<tr>
<td>National growth</td>
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<tr>
<td>Objectives</td>
</tr>
<tr>
<td>Perception advantages</td>
</tr>
<tr>
<td>International exp.</td>
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<tr>
<td>Qualifications</td>
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<tr>
<td>Expenditure in R&amp;D</td>
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<tr>
<td>Perception of shortages</td>
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<tr>
<td>Perception of ignorance</td>
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<tr>
<td>International experience</td>
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<tr>
<td>Size</td>
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<tr>
<td>Language</td>
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<tr>
<td>Perception technology</td>
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<tr>
<td>Availability of resources</td>
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</tbody>
</table>

As can be seen, all the relationships with the main dependent variable were significant to 95%.

After identifying and estimating the model, the next step was to study the adjustment of the data to the proposed model. The results of the goodness-of-fit indicators are as follows: Standardised Chi-square 1.51, GFI (0.83), RMSEA (0.064), AGFI (0.875), NFI (0.881), IFC (0.86), PNFI (0.086), PCFI (0.061) and AIC (247.77). After analysing the goodness-of-fit indexes, the data observed and the variance-covariance matrix of the proposed model were generally well adjusted.

Interpretation of the model

The relationship between the variables must be interpreted according to the significance of the relationship, the sign of this relationship and the weight of the estimate. The model provided empirical evidence of the main aspects that had the strongest influence on the dependent variable. Thus, managerial capacities had a greater explanatory capacity in global terms. Business experience in both the domestic market and the international market also had a positive influence on the degree of export commitment of the companies. Technological capacities were another factor that could be controlled by the companies, and their growth was positively related to an increase in company exports. Company size was positively related to export commitment. As mentioned previously, the resulting model does not provide enough empirical evidence to support our hypotheses on the relationships of business, human and financial capacities with export commitment.

Conclusions, Implications and Limitations

The relationship between company size and the degree of export commitment also reveals a strong and positive effect. Large companies have the necessary resources and capacities to develop their export policies. The management and coordination of the different target markets, logistical networks, distribution channels, etc., is easier if the company has a larger infrastructure. Larger companies also find it easier than smaller companies to consolidate their business relationships abroad.

As regards the relationship between the scope of companies’ national markets and their degree of commitment to exports, we noted that companies with larger distribution bases for their products in the national market were more committed to exports. This idea responds to the underlying logic of the theories of sequencing of internationalization processes (Johanson & Wiedersheim-Paul, 1975) and the theory of learning. Thus, as companies overcome the initial barriers that prevent them from moving out of their local markets, they gradually acquire and develop skills and capacities to market their products abroad. We find a similar result to that of (Wang et al., 2013).

The international experience of SMEs helps create an appropriate framework of relationships for them to develop exporting activities. It also has a positive and moderated influence on exporting commitment (Papadopoulos & Martin, 2010) and on export entrepreneurship (Navarro-Garcia et al., 2015). These results confirm the findings of other recent research such as Felicio et al., 2015 and are consistent with the assumption that the knowledge acquired through international experience is not exclusively country specific (Bortoluzzi et al., 2014). Exporting allows companies to develop values management considers to be essential for the positive development of exports. Knowledge of the needs of foreign clients, as well as all types of information relating to doing business in those markets, will most likely reduce the perception of difficulties and barriers when it comes to increasing export intensity, diminish levels of uncertainty and allow the company to become familiar with the business mechanisms in foreign markets (prices, competitors, channels and aid, etc.), thus making it easier for them to take decisions and adapt their policies accordingly (Cavusgil & Zou, 1994).

By using export strategy as an effective instrument for achieving certain business objectives, we considered a working hypothesis that revealed a strong dependent relationship between these business objectives and export intensity. This indicates companies start to make more and
more use of export policies once they see that exporting has responded to and fulfilled the objective of increasing company growth (in terms of both sales and market share).

The positive relationship between management’s perception of the advantages of exports and a stronger export commitment indicates that the management teams of companies that pursue very intense export activities perceive that exports will bring more profits, lower costs and fewer risks, and that export strategy must therefore be developed. This result is similar to those found by researchers such as (Kraus et al., 2015), who concluded that managers consider internationalization as less risky than concentrating solely on the home market.

The confirmation of a negative relationship between the perception of barriers and the degree of exporting commitment empirically confirms the fact that SMEs increase their international sales and international growth strategies due to, among other factors, better knowledge of the behaviour of foreign markets in general and to the capacity to reassign their resources to exports (we will develop this point in greater detail in the following section). This is an important observation and contribution to the empirical studies mentioned previously. The close relationship between the two factors summarising the limitations (shortages and ignorance) suggests that once an SME is present abroad, the limitations of certain resources and capacities in the company may be very closely related to the lack of knowledge of both foreign markets and the mechanisms necessary to operate effectively in those markets. As (Uner et al., 2013) note, the perceived barriers differ mainly for firms in the domestic marketing stage, pre-export stage and for born global firms.

As regards the demographic characteristics of SME management teams and their relationship with the consolidation of export activities, we considered working hypothesis relating to qualifications, experience in international markets, knowledge and command of foreign languages, and average age. Education has a moderate impact upon export propensity in Spain. The higher qualifications of management teams in certain companies may substantially explain the stronger commitment of certain SMEs to foreign markets. This may suggest that the greater technical expertise of managers, interacting with other resources and internal capacities, allows them to analyze and understand foreign markets as extremely important strategic markets for SMEs, thus prompting them to emphasize the importance of their companies’ presence in and commitment to those markets. Management’s international experience also has a positive influence on the exporting commitment of companies. Managers’ professional and academic experience in foreign markets gives them a closer and more realistic view of cultures in foreign markets, and their greater experimental knowledge of these markets may account for this relationship.

Companies that are more committed to technological activities also achieve greater export intensity. Thus, companies that are more strongly committed to technological activities also have a strong commitment to international markets. Technological potential therefore conditions the level of development, export intensity and exporting commitment of SMEs. This result is consistent with the finding of previous studies (Wang et al., 2013), and of particular relevance for companies that are not particularly technology-intensive, in which the role of exports can redress this initial disadvantage (Merino et al., 2014).

The model proposed here also highlights certain relevant characteristics of management which must be developed in greater depth. Thus, when companies intensify their exporting commitments, other aspects prevail in addition to the capacities of their management teams, namely experience in the national market, investment in technology and innovation (Shearmur et al., 2014), or company size. In addition to managerial aspects, consideration must also be given to the technical qualifications or training of the management team and particularly the inclusion of growth as a key strategy for the company. The new paradigm requires the adoption of innovative strategies to create valuable intangibles to compete.

This study also contributes a number of practical recommendations for the management of SMEs. Specifically, the results obtained here may be useful for managers of SMEs by drawing their attention to the variables they can control and which help explain the export commitment of their companies. In other words, this study shows managers that the main factors determining the export activities of their companies are not the environment or the sector in which they operate. Instead, the right combination of company resources and capacities is the factor that will determine their success in international markets.

However, this study has its limitations. Firstly, the analysis is limited to the endogenous factors determining export commitment. Thus, the inclusion in the model of variables normally used in external analyses would be a combination of industrial organisation theory and resources and capacities theory, and would therefore have greater explanatory capacity. Secondly, the sample was limited to a specific region in Spain. Therefore, a broader sample of companies would have to be studied before the results could be applied on a more general basis. In view of these limitations, future lines of research could focus on extending the geographical scope of the study and transforming it into a transnational study. Another potential line of research for the future could examine the specific characteristics of small and medium-sized companies in order to develop theories to explain the internationalization process in this specific context (Fills, 2001). Exporting is frequently considered to be the best way to survive if the local demand falls, which has been the situation in the Spanish economy since the beginning of the financial crisis. In this sense, this study shows how firms can improve their total sales by increasing their management and technological capacities.
References


Ruben Fernandez-Ortiz, Jesus Arteaga Ortiz, Monica Clavel San Emeterio. Factors That Foster Export Commitment...


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