



Baltic Journal of Management

Linking intangible resources and export performance: the role of entrepreneurial orientation and dynamic capabilities

Albertina Paula Monteiro, Ana Maria Soares, Orlando Lima Rua,

Article information:

To cite this document:

Albertina Paula Monteiro, Ana Maria Soares, Orlando Lima Rua, (2017) "Linking intangible resources and export performance: the role of entrepreneurial orientation and dynamic capabilities", Baltic Journal of Management, Vol. 12 Issue: 3, doi: 10.1108/BJM-05-2016-0097

Permanent link to this document:

<http://dx.doi.org/10.1108/BJM-05-2016-0097>

Downloaded on: 22 May 2017, At: 20:46 (PT)

References: this document contains references to 0 other documents.

To copy this document: permissions@emeraldinsight.com

The fulltext of this document has been downloaded 3 times since 2017*

Access to this document was granted through an Emerald subscription provided by emerald-srm:333301 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

LINKING INTANGIBLE RESOURCES AND EXPORT PERFORMANCE: THE ROLE OF ENTREPRENEURIAL ORIENTATION AND DYNAMIC CAPABILITIES

Abstract

This research draws upon the Resource-Based View (RBV) and the Dynamic Capabilities View's (DCV) premise that a firm's resources and capabilities determine competitive advantage. Specifically, we develop and test a model entailing simultaneously the impact of intangible resources; and dynamic capabilities and entrepreneurial orientation on export performance. The results of a survey to 265 Portuguese exporting companies show that export performance is directly impacted by dynamic capabilities and entrepreneurial orientation. However, intangible resources do not have a significant direct impact on entrepreneurial orientation; they do have an indirect effect through the mediation of dynamic capabilities. These findings highlight the catalyst role of dynamic capabilities and entrepreneurial orientation, leveraging the role of intangible resources as antecedents of export performance. These findings are valuable inputs for exporting managers and public entities.

1. Introduction

Internationalization is increasingly important to the competitiveness of companies of all sizes. In this context, exporting is a strategic option for accessing and diversifying international markets for many companies. Operating in international markets poses considerable challenges to companies and calls for the best of their ability (Morgan, Vorhies and Schlegelmilch, 2006). Performance in international markets, and specifically export performance, has been studied within the Resource-Based View (RBV), which focuses on the

ownership of strategic resources. Moreover, the strategic role of intangible resources and capabilities and their impact on competitive advantage and performance has been emphasized by latter contributions in the area (Morgan *et al.*, 2006; Bakar and Ahmad, 2010). In particular, the role of dynamic capabilities as a source of sustainable competitive advantage has caught the researchers' attention (Teece, Pisano and Shuen, 1997; López, 2005; Teece, 2007; Wu, 2010).

The present study builds upon the theoretical frameworks of RBV and the Dynamic Capabilities View (DCV), and aims to understand the impact of resources and capabilities on export performance. Achieving sustainable competitive advantage requires the firm to continuously reinvent processes and strategies, launching new products, being proactive in the market and being willing to take risks (Miller, 1983; Covin and Slevin, 1989). Entrepreneurial orientation is thus vital in this process. Madsen, Alsos, Borch, Ljunggren and Brastad (2007, 94) have found that “intangible resources work together with dynamic capabilities to stimulate entrepreneurial strategies within the firm” and propose a model linking intangible resources, dynamic capabilities and entrepreneurial orientation. Madsen *et al.*'s (2007) study was conducted with small and medium (SMEs) Norwegian companies engaged in R&D activities and the authors have called for validation studies in other types of firms/firm's environments and country settings. We take this call one step further and test Madsen *et al.*'s (2007) model specifically regarding resources and capabilities available for international markets. Jantunen, Puumalainen, Saarenketo and Kyläheiko (2005) considered that further research on the relationship between entrepreneurial orientation and other intangible assets and performance in the context of changing markets was needed to enhance theory development in the field. We believe that the highly competitive international markets are a relevant context for further understanding the complex relationship of resources, capabilities and entrepreneurial orientation. We also extend this model to include the impact between the

different types of intangible resources. Specifically, we propose that relational resources positively impact informational resources. Lastly, we extend the model to include the joint impact of resources, capabilities and entrepreneurial orientation on export performance. As such, the aim of this paper is to examine both the direct and mediated effect of intangible resources, dynamic capabilities and entrepreneurial orientation in export performance. Specifically, we focus on informational and relational resources and on the dynamic capabilities of integrating and reconfiguring resources, learning and responding to a rapidly changing environment. Furthermore, we also focus on how these variables impact entrepreneurial orientation and export performance, both directly and indirectly. This is a novel approach, as we build upon three streams of literature (RBV, DCV and entrepreneurship) to propose an integrated model of how resources, dynamic capabilities and entrepreneurial orientation lead to superior performance in foreign markets.

Understanding the drivers of export performance in what concerns internal resources and capabilities is fundamental for companies. This will allow them to identify and/or reinforce entrepreneurial capabilities, as well as to develop relevant capabilities, such as dynamic capabilities. Public policy bodies may also benefit greatly from research on determinants of export performance. Improved export performance stimulates business growth and ensures the survival of businesses in the long term, thereby contributing to economic growth and value creation (Sousa, Martínez-Lopes and Coelho, 2008).

This paper is organized as follows: First, the theoretical foundations for this study are presented, leading to the hypotheses development and proposed model. Subsequently, we review the literature on export performance, resources and capabilities, and entrepreneurial orientation. In the following section, we put forward the methodology, including the research design and measures. Then, results are analysed. Finally, we discuss these results and present our conclusions.

2. Theoretical framework

2.1. Export performance

As a result of globalization, companies face foreign competition in the domestic market, which encourages them to explore and develop their activities in international markets (Etemad, 2005). Exports are considered an intermediate stage in the development of a company's activity, preceding direct investment abroad (Schlegelmilch and Crook, 1988). As such, export activities are the first and most common step in the internationalization process and can progress to more advanced forms of international expansion, such as a manufacturing license and a production centre in a foreign market (Vila and Kuster, 2007).

There is broad recognition in the literature that success in the domestic market does not guarantee success in foreign markets, which requires different strategies for companies to succeed in export markets (Cavusgil and Zou, 1994). According to Leonidou, Katsikeas and Samiee (2002), increasing market liberalization and competition in the world economy, combined with the performance difficulties encountered by exporters, explain the growth of research in this area.

Export performance is the result of a company's activity in the export market (Shoham, 1996) and refers to the "extent to which a firm's objectives, both economic and strategic, with respect to exporting a product into a foreign market, are achieved through planning and execution of export marketing strategy" (Cavusgil and Zou, 1994: 4).

Understanding the determinants of export performance has become particularly important, contributing to the development of several studies in this area (Sousa *et al.*, 2008).

Several studies have been developed to identify the determinants of export performance, which have been classified into internal and external factors (e.g. Cavusgil and Zou, 1994;

Katsikeas, Piercy and Ioannidis, 1996; Zou and Stan, 1998; Jantunen *et al.* 2005; Sousa *et al.*, 2008).

The importance of resources and capabilities as determinants of export performance has thus been widely supported by literature. Morgan *et al.* (2006) found that export performance is strongly correlated with the positional advantage of the firm in the international market. Similarly, Dhanaraj and Beamish (2003) concluded that resources are related to the degree of involvement in foreign markets, which influences positively export performance. However, RBV is a limited approach to understanding internationalisation performance. In order to survive and succeed in international markets, companies need to develop a set of dynamic capabilities. These will allow them to constantly learn and adapt to fast changing environments, technologies and competitiveness that intensify the challenges firms face in attaining self-sufficiency in knowledge creation (Jantunen *et al.* 2005; Camisón and Forés, 2010; Prange and Verdier, 2011).

2.2. Resources and capabilities

The premise that competitive advantage depends on the resources available to the firm is RBV's hallmark (Wernerfelt, 1984; Barney, 1991). Wernerfelt (1984: 172) stated that "a firm's resources at a given time could be defined as those (tangible and intangible) assets which are tied semi permanently to the firm". This was an innovative perspective for strategic management, aiming at analysing companies in terms of their resources rather than in terms of their products. The heterogeneity of firms' resources is the key determinant of profitability. According to this perspective, in order to be a source of competitive advantage, resources must be valuable, rare, difficult to imitate and have no readily available substitutes (Barney, 1991).

This broad definition of resources has been widely adopted in RBV literature seeking to link firm specific resources to competitive advantage and firm performance. Resources can then be of different types, such as technological, financial, human, physical and organizational resources (Loane and Bell, 2006; Bakar and Ahmad, 2010).

RBV also stresses the importance of capabilities since “they transform resources into products or services superior to those of competition” (Lu, Zhou, Bruton and Li, 2010: 420). Capabilities are “the organizational processes by which available resources are developed, combined, and transformed into value offerings for the export market” (Morgan, Kaleka and Katsikeas, 2004: 91).

Different typologies of assets have been proposed. Bakar and Ahmad (2010) identified six types of assets: physical, financial, reputational, organizational, human intellectual and technological. Recent approaches emphasize the importance of intangible assets compared to tangible resources. Morgan *et al.* (2006) highlight the importance of six types of intangible resources for export performance, including reputational, financial, human, cultural, relational and informational.

In this research, we focus on informational and relational resources for several reasons. Information and knowledge have been considered the most important asset for competitive advantage (Grant, 1996). For internationalizing companies, the lack of knowledge can be the main barrier to developing and implementing adequate marketing strategies (Loane and Bell, 2006; Morgan *et al.*, 2006). Knowledge is a resource referring to information/knowledge on customers, competitors, distribution channels and export markets. The effective access and use of relevant, accurate and timely information is required to address many of the problems faced by firms operating in foreign markets (Katsikeas and Morgan, 1994).

In what refers to relational resources, RBV literature has also widely supported the importance of inter-organizational ties and relationships (Davis and Mentzer, 2008).

Relational resources refer to the links between the firm and external entities such as customers, suppliers, competitors, government institutions and unions (Davis and Mentzer, 2008). These relationships generate social capital and allow companies to access the set of resources of other companies (Tsai and Ghoshal, 1998). In fact, RBV does not focus solely on internal resources, but considers that available resources include also those to which the firm has access. In international markets, the number, strength and quality of relational ties with customers and channels are strong drivers of export competitiveness (Morgan *et al.*, 2006).

The focus on resources solely does not properly explain how companies achieve competitive advantage in rapidly and unexpectedly changing environments to which they must adapt (Teece *et al.*, 1997; Eisenhardt and Martin, 2000). DCV emerged initially as an extension of RBV for highly dynamic markets (Eisenhardt and Martin, 2000; Wang and Ahmed, 2007; Ambrosini and Bowman, 2009; Barreto, 2010), thus suppressing some of the limitations pointed out to RBV. Maintaining competitive advantage in rapidly changing environments is particularly difficult in the sense that the duration of the advantage is unpredictable and time is an essential aspect of the strategy (Eisenhardt and Martin, 2000). This perspective is very relevant for exporting because international markets are fast-changing environments with fierce global competition, rapid technological change, and poorly developed markets to exchange or acquire know-how (Prange and Verdier, 2011).

Dynamic capabilities thus refer to specific strategic and organizational routines, through which companies reach new resource settings that create value in dynamic markets, or even cause a change in the market (Teece *et al.*, 1997; Eisenhardt and Martin, 2000). Responding to change in the market through the integration, transformation, renewal and recreation of resources and capabilities is the hallmark of dynamic capabilities (Wang and Ahmed, 2007; Hung-Hsin and Lee, 2009; Ambrosini and Bowman, 2009).

Maintaining these capabilities requires a management that is able to spot difficulties and trends, configure and reconfigure resources, adapt processes and organizational structures. This will allow firms to create and seize opportunities and systematically solve problems while remaining aligned with customers' preferences (Teece *et al.*, 2007; Ambrosini and Bowman, 2009; Barreto, 2010).

Wu and Wang (2007) operationalize dynamic capabilities as the ability of the company to integrate and reconfigure resources, to learn and respond to the rapidly changing environment.

Literature suggests that resources and capabilities are interrelated (Dhanaraj and Beamish, 2003; Morgan *et al.*, 2004). Gulati, Nohria and Zaheer (2000) argue that relationships allow firms to access information and other resources. In international contexts, information is a resource that is related to knowledge of foreign markets, customers, competitors and distributors (Morgan *et al.*, 2006). In their study, Madsen *et al.* (2007) have not analysed whether a firm's relation-based and knowledge-based resources are interconnected; however, based on Gulati *et al.*'s (2000) arguments, this study tests the following working hypothesis:

H1. Relational resources have a positive effect on informational resources.

To Zahra, Sapienza and Davidson (2006), dynamic capabilities are understood as the ability to reconfigure a firm's resources and routines in order to be useful for decision-making. Thus, the development of dynamic capabilities depends upon the resources available within firms (Madsen *et al.*, 2007). Firms' exposure to new knowledge is not a sufficient condition to successfully incorporate it, as they need to develop organizational mechanisms that enable them to synthesize and apply newly acquired knowledge in order to cope and enhance it, not only as a resource but also as an absorptive capacity (Jansen, Van Den Bosch

and Volberda., 2005). In fact, Wu and Wang (2007) emphasize that integration, learning and reconfiguration of resources only become significant when their own resources are abundant. Madsen *et al.* (2007) focused upon two types of intangible resources: knowledge- and relation-based resources. The authors found a positive relationship between such assets and dynamic capabilities in the context of companies involved in R&D activities in Norway.

In this context, similarly to Madsen *et al.* (2007), we intend to examine how organizational dynamic capabilities are enhanced by the presence of intangible resources available for international markets. Accordingly, the following research hypotheses are proposed:

H2. Informational resources have a positive effect on the development of dynamic capabilities.

H3. Relational resources have a positive effect on the development of dynamic capabilities.

Teece (2007) argues that dynamic capabilities enable firms to achieve superior long-term performance. Wu (2006), in the context of technology-based companies in a domestic market, finds a positive relationship between dynamic capabilities and performance. In the context of international business, we intend to test that:

H4. Dynamic capabilities have a positive effect on export performance.

The mediating role of dynamic capabilities in the relationship between organizational resources and export performance is evidenced in literature. Dynamic capabilities allow companies to create, develop and protect the resources that help them achieve long-term superior performance (Ambrosini and Bowman, 2009). Wu (2006) empirically confirms the

importance of dynamic capabilities in transforming resources into corporate performance (in technology based firms). We expect this impact to hold on international markets. Thus:

H5. Dynamic capabilities mediate the relationship between intangible resources and export performance.

2.3. *Entrepreneurial orientation*

Several researchers find that companies with entrepreneurial orientation can be successful since there is a positive relationship between entrepreneurial orientation and business performance (Miller, 1983; Covin and Slevin, 1989; Jantunen *et al.*, 2005). According to Naldi, Nordqvist, Sjöberg and Wiklund (2007), entrepreneurial orientation is a *sine qua non* condition for companies wishing to thrive in increasingly competitive business environments.

The entrepreneurial orientation emerges from an intentional strategic choice, where new business opportunities can be successfully undertaken (Lumpkin and Dess, 1996). There is, thus, an entrepreneurial posture mediating the vision and operations of an organization (Covin and Miles, 1999). Miller (1983), based on three dimensions (innovation, risk-taking and proactivity), claims that only companies that have high levels in all of them are considered entrepreneurial, characterizing the entrepreneurial orientation's unidimensional feature.

On the other hand, Lumpkin and Dess (1996) consider that although the five dimensions of entrepreneurial orientation (the three ones proposed by Miller (1983), plus autonomy and competitive aggression) are essential to understand the entrepreneurial process. These may occur in different combinations, depending on the type of opportunity that a company wants to achieve. These authors thus propose that entrepreneurial orientation is a multidimensional construct that can vary independently.

In this sense, entrepreneurial companies may seek to develop varied combinations of the different dimensions, in order to increase their performance in a given context. When this construct is combined with other variables, such as environmental or strategic factors, this independence is especially important (Kreiser, Marino and Weaver, 2002).

Innovativeness is defined as the development of original and creative solutions to address threats faced by the firm (Knight, 1997). It has become an important factor to characterize entrepreneurship, reflecting a trend for the company to engage in new ideas, innovations, experiences and creative processes that may result in new products, services or technological processes (Lumpkin and Dess, 1996). In terms of differentiation strategy, firms start considering innovation because they want to offer different solutions in different markets (Vila and Kuster, 2007). Innovation is an important dimension of entrepreneurial orientation (Lumpkin and Dess, 1996), and a means by which firms exploit new opportunities, despite involving greater risk, since investment in innovation may not have the expected return. The adoption of innovative actions can generate competitive advantages and thus contribute to business growth (Dess and Lumpkin, 2005). Research in internationalization suggests that innovation can be important to gain competitive advantage in international and global markets and that many international firms have greater opportunities to learn, which can lead to innovation (Hitt, Hoskisson and Kim, 1997).

Lumpkin and Dess (1996) define proactiveness as the anticipation of future problems, needs or changes. Frank, Kessler and Fink (2010) consider proactiveness as the company's strategic posture pertaining to its willingness and ability to anticipate new developments as soon as possible, and act as a "first mover" over its competitors, rather than waiting for new developments and trends. Given the increasingly global competitive environment, a proactive approach is seen as an important vehicle for the firms' survival and good business performance (Knight, 1997).

Innovative and proactive strategies are generally associated with risk taking (Naldi *et al.*, 2007). Risk is, generally, related to experience in light of uncertainty (Vila and Kuster, 2007). Morris, Lewis and Sexton (1994) define risk taking as the willingness to commit significant resources to opportunities with a reasonable probability of failure, which are usually mild and calculated risks. For Zahra (2008), the assumption of risk implies strong willingness to support innovative and experimental projects whose return is uncertain. When entrepreneurs perceive less risk in international activities, the company will become more committed to these operations and will advance through the phases of the internationalization process (Acedo and Florin, 2006).

Several researchers have found that firms with a strong entrepreneurial orientation could be successful since there was a positive relationship with corporate performance (Miller, 1983; Covin and Slevin, 1989). According to Naldi *et al.* (2007), entrepreneurial orientation is essential for firms that want to thrive in increasingly competitive business environments. However, literature suggests that entrepreneurial orientation depends on the firms' internal resources (Wiklund and Shepherd, 2005; Madsen *et al.*, 2007). Madsen *et al.* (2007) focus on the role of intangible resources (knowledge and relationships) and dynamic capabilities in the development of entrepreneurial orientation. These authors proposed that tangible and intangible assets work together with dynamic capabilities to stimulate entrepreneurial orientation. Specifically, their study highlighted the role of intangible resources in the development of dynamic capabilities and entrepreneurial orientation, considering the relation-based resources materialized in contacts and links of the firm. Moreover, dynamic capabilities were found to mediate the impact of relation-based resources on entrepreneurial orientation. Different aspects of the firm's network, explicitly invoking RBV, have been linked to performance, given that networks allow the creation of inimitable and non-substitutable value,

thus boosting the access to inimitable resources and capabilities and the access to key resources from its environment (e.g. information, access, capital, goods, services).

While Madsen *et al.*'s (2007) study focused on small and medium companies (SMEs) conducting R&D activities in Norway, we expect these relationships to hold for the resources specifically available for international markets. Thus, this study also seeks to test the following hypotheses:

H6. Informational resources have a positive effect on entrepreneurial orientation.

H7. Relational resources have a positive effect on entrepreneurial orientation.

H8. Dynamic capabilities have a positive effect on entrepreneurial orientation.

A strong entrepreneurial orientation may be the key to improving performance. Several researchers have found that entrepreneurial firms could be successful since there was a positive relationship between entrepreneurial orientation and corporate performance (Miller, 1983; Covin and Slevin, 1989; Covin, Slevin and Covin, 1990; Lumpkin and Dess, 1996). As previously stated, according to Naldi *et al.* (2007), entrepreneurial orientation is a *sine qua non* condition for firms that want to thrive in increasingly competitive business environments. Thus, we propose:

H9. Entrepreneurial orientation has a positive effect on export performance.

H10. Entrepreneurial orientation mediates the relationship between intangible resources and export performance.

Figure 1 below displays the proposed hypotheses.

Insert Figure 1

3. Methodology

A survey-based study was carried out to test the proposed model. A questionnaire including questions about the firm, its main export venture and intangible resources (informational and relational resources), dynamic capabilities, entrepreneurial orientation and export performance was designed.

3.1. Operationalization of constructs

Previously validated scales were used to operationalize the constructs.

Intangible resources include two dimensions – informational resources and relational resources. Informational resources are critical resources to create value and to develop and sustain competitive advantages (Grant, 1996; Teece *et al.*, 1997), and refer to relevant, precise and timely information for the problems faced by companies in export markets (Katsikeas and Morgan, 1994). Relational resources refer to networks between the company and different partners and stakeholders (Davis and Mentzer, 2008).

We measured informational and relational resources using Morgan *et al.*'s (2006) measurement scale. This scale considers four items to evaluate informational resources – rate the knowledge of the company compared to its main competitors regarding (1) Export market information; (2) Customer knowledge in this export market; (3) Competitors knowledge in this export market; and (4) Distributors knowledge in this export market. Additionally, this scale considers four items to evaluate relational resources – relationships of the company compared to its main competitors regarding (1) Strength of existing customer relationships in this export market; (2) Quality of our channel relationships in this export market; (3) Duration of relationships with our current distributors in this market; and (4) Closeness of existing customer relationships. A seven-point scale ranging from much worse to much better was used. This scale is deemed to adequately capture the resources needed for export markets

(Morgan *et al.*, 2006), and has been widely used in previous studies, confirming its validity (Venkatraman, 1986; Aaby and Slater, 1989; Jaworski and Kohli, 1993; Cavusgil and Zou, 1994; Rua and França, 2016).

Teece *et al.* (1997: 516) defined dynamic capabilities “as the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments”. These facets have been used as an operationalization of the construct (Teece *et al.*, 1997; Wu and Wang, 2007). We used Wu and Wang’s (2007) measurement scale, which consists of four items – rate the capabilities of the company compared to its main competitors regarding (1) Resource integration capability; (2) Resource reconfiguration capability; (3) Learning capability; and (4) Ability to respond to the rapidly changing environment. A seven-point scale ranging from much worse to much better was used. This scale has earned an increasing attention from scholars to assess dynamic capabilities (e.g. Tuan and Takahashi, 2009; Rua and França, 2016).

In relation to entrepreneurial orientation, we used Covin and Slevin’s (1989) measurement scale, including three dimensions: innovation, proactiveness and risk taking. These dimensions are measured using nine items, three to measure each of the three dimensions. Specifically, the items to tap into this construct are: (1) In general the top managers of my firm favour a strong emphasis on R&D, technology leadership and innovations; (2) Regarding the new products line, in the past 5 years, the company has marketed very many new lines of products; (3) Regarding the new products line, in the past 5 years, the changes in product or services lines have usually been quite dramatic (for innovation); (4) In dealing with its competitors, my firm (i) typically initiates actions which competitors respond to; (ii) (5) is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.; (iii) (6) typically adopts a very competitive, “undo-the-competitors” posture (for proactiveness); (7) In general,

top managers of my firm have a strong proclivity for high return high-risk projects; (8) Owing to the nature of the environment, top managers of my firm take bold and wide-ranging acts to achieve the firm's objectives; (9) When confronted with decision-making situations involving uncertainty, top managers of my firm typically adopt a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities (for risk-taking). A seven-point semantic differential scale was used to measure these items. According to Kropp, Lindsay and Shoham (2008), this is the most used scale in the operationalization of entrepreneurial orientation.

Export performance is deemed to result from the company's activity on the export markets (Shoham, 1996). Different performance indicators, both objective and subjective, have been previously used in literature (Katsikeas *et al.*, 1996; Sousa *et al.*, 2008). Export performance was measured by adopting Okpara's (2009) scale, which has often been used by several scholars (e.g. Abiodun and Rosli, 2014; França and Rua, 2016). This scale includes five items: (1) Our export market has been very profitable; (2) We have generated a high volume of sales from our export market; (3) We have achieved a rapid growth in our export activities in the last three years; (4) We have expanded our operations in the last three years; and (5) Overall the performance of our firm has been very satisfactory. All items were measured using a seven-point Likert scale.

The questionnaire was pre-tested with academics and exporting firms, with a view to detecting problems with respect to the wording, clarity of the instructions/questions, sequencing of questions, and design of the survey instrument.

The questionnaire focused on the export venture, i.e., a single product or product line exported to the main market. This was due to the fact that the unit of analysis as evaluating export performance in the context of overall business activities in foreign markets may be inaccurate because companies may have different strategies for primary and secondary

markets (Cavusgil and Zou, 1994; Piercy, Kaleka and Katsikeas, 1998; Lages and Montgomery, 2004).

3.2. Sample and administration of the questionnaire

The survey was carried out with Portuguese exporting companies in Northern Portugal from November 2011 to February 2012. The Portuguese official statistics body directory of exporting companies was used and a total of 1,510 exporters that provided an e-mail address was retrieved from the database. This list includes micro, small, medium and large-sized companies according to the European Union definition.

A link to the online questionnaire was sent by e-mail to top managers and/or export managers. Subsequently, two e-mail reminders and follow-up telephone calls were used to increase the response rate.

During data collection, a total of 293 questionnaires were received, 265 of which were usable, representing a response rate of 19.4% and 18%, respectively. Menon, Bharadwaj, Adidam and Edison (1999) affirm that a response rate between 15% and 20% is quite satisfactory when the respondent is the top management.

SPSS statistical software (version 19) and LISREL (version 8.8) were used for data analysis.

4. Results

4.1. Sample characteristics

Findings show that the sample is mostly composed of small companies, as 207 (78.1%) are SMEs, from which 137 (51.7%) are small businesses and 70 (26.4%) are medium enterprises. Only 23 (8.7%) companies are large and 35 (13.2%) are micro enterprises.

Regarding experience in the export activity, we found that 49.1% of companies have exported for over 15 years, 33.2% for 6 to 15 years, 13.2% for 3 to 5 years, while only 4.5% for less than 3 years. Regarding the percentage of sales to foreign market, 52.8% of firms export more than 40.0% of the total sales, 19.25% from 10 to 24%, 15.1% export less than 10%, and 12.8% export between 25% and 39%. Firms can expand their export activity to various markets and this study found that 44.2% export to 6 to 15 countries, 39.6% to less than 6 countries, 11% to more than 25 countries and 5.3% from 16 to 25 countries. The main market is located mostly in the European Union (72.8%), followed by Portuguese speaking African countries (17%). This is in line with the profile of Portuguese exporting companies (Banco de Portugal, 2015).

4.2. Structural equation model

Before the evaluation of the Structural Equation Model (SEM), a preliminary analysis of data was performed (missing values and outliers, the central and dispersion tendencies and the data for normality, the sample size and the non-responses bias). This analysis aims at preparing the data and assessing whether they meet the requirements to be submitted to a SEM analysis, and this is considered appropriate to validate the measures and test the proposed relationships. The analysis using SEM included two phases, the assessment of the measurement model and the assessment of the structural model.

4.3. Assessment of the measurement model

A Confirmatory Factor Analysis (CFA) was performed to validate the proposed measurement scales using the maximum likelihood estimation method. This method yields more reliable estimates when using covariance matrices (Byrne, 1998) and is most widely used (Anderson and Gerbing, 1988; Baumgartner and Homburg, 1996). Before applying this

technique, moderate violations of the key assumptions of normality and independence were found, but according to Diamantopoulos and Siguaw (2000), this method is also considered to be robust against violations of the normality assumptions.

The measurement model was evaluated in terms of constructs' unidimensionality, reliability and validity (convergent and discriminant). The evaluation results of the measurement model are depicted in Table 1.

We assessed the dimensionality, validity and reliability of the constructs. Specifically, in the first-order models, all items related significantly to factor in terms of loadings, thus confirming the unidimensionality of the single factor. All loadings of the observed variables have values above 0.70, confirming the convergent validity of the constructs (Garver and Mentzer, 1999). The average variance extracted (AVE) is greater than 0.50, providing evidence for discriminating validity of the constructs (Fornell and Larcker, 1981). Finally, all latent variables have a good level of composite reliability (CR), with values greater than 0.60, which proves the reliability of the scales (Bagozzi and Yi, 1988).

In the second-order models (entrepreneurial orientation), the statistical significance of associations between first and second order factors is confirmed; the coefficients exceed the minimum threshold of 0.40, confirming the convergent validity of the construct (Nunnally and Bernstein, 1994) and the square of the correlation is less than the AVE for each factor, evidencing discriminant validity of the construct (Fornell and Larcker, 1981).

Insert Table 1

4.4. Assessment of the structural model

The results show a good fit of the model ($\chi^2_{(96)}=156.77$), $p<0.05$, CFI=0.99, GFI=0.93, NNFI=0.99, RMSEA=0.048). Table 2 presents the standardized coefficients, the value of t and the significance level for each relationship postulated in the model, as well as the coefficient of determination for each construct.

The results show that relational resources influence the informational resources ($\gamma=0.54$, $t=8.45$, $p<0.001$), supporting H1. Informational and relational resources directly and significantly enhance the development of dynamic capabilities ($\beta=0.40$, $t=6.34$, $p<0.001$; $\gamma=0.38$, $t=5.91$, $p<0.001$), which supports H2 and H3. The impact of the informational and relational resources on entrepreneurial orientation is not significant, so H6 and H7 are not supported ($\beta=0.15$, $t=1.61$, ns; $\gamma=-0.03$, $t=-0.29$, ns). Dynamic capabilities have a positive and significant effect on entrepreneurial orientation ($\beta=0.35$, $t=3.36$, $p <0.001$), corroborating H8. In turn, both dynamic capabilities and entrepreneurial orientation directly impact on export performance ($\beta=0.26$, $t=3.89$, $p<0.001$; $\beta=0.45$, $t=5.31$, $p<0.001$), supporting H4 and H9. The results support six out of eight direct relationships proposed. We present in Table 2 the means, standard deviations and correlation matrix.

Insert Table 2

Additionally, this research posits two hypotheses regarding the mediating effect of dynamic capabilities and entrepreneurial orientation between the relationship of intangible resources and export performance. The significance of the mediating effect of the variables was assessed using Aroian testing (Baron and Kenny, 1986). The Aroian test is used to determine whether the indirect effect of the independent variable on the dependent variable via the mediator is significantly different from zero (Aroian, 1947).

The results show that relational and informational resources have an indirect effect on export performance, thus demonstrating the mediating effect of dynamic capabilities on this relation. The indirect effect of informational resources on export performance through dynamic capacity is 0.10 (0.40×0.26 ; $p <0.05$, $Z=2.20$). The indirect effect of relational resources on export performance through dynamic capabilities is 0.10 (0.38×0.26 ; $p <0.05$, $Z=2.11$). This result supports H5. However, informational and relational resources do not exhibit a significant indirect effect on export performance through entrepreneurial orientation

[0.07 (0.15x0.45; $Z=0.15$, ns); -0.01 (-0.03x0.45; $p < 0.05$, $Z=0.79$, ns)], leading to the rejection of H10. Figure 2 presents the results of the theoretical model, and Table 3 depicts the direct, indirect and total effects of the theoretical model.

Insert Figure 2

Insert Table 3

In sum, seven out of ten hypotheses were supported. Both informational and relational resources impact dynamic capabilities but not entrepreneurial orientation. Dynamic capabilities impact entrepreneurial orientation. Moreover, dynamic capabilities and entrepreneurial orientation directly impact export performance. In what concerns the indirect impact, only the mediating impact of dynamic capabilities is supported.

5. Discussion and conclusion

Exports are a key strategic option for many companies. Several investigations have been undertaken to identify the resources and capabilities that contribute positively to export performance. Our study adds to this literature by proposing and testing a model that captures the influence of the resource and capability base of a company in export performance. Specifically, this research evaluates the impact of intangible resources, namely informational and relational resources, on dynamic capabilities and entrepreneurial orientation, and determines whether these variables present a mediating effect on the relationship between intangible resources and export performance.

A survey carried out with top managers of 265 exporting firms validated six out of eight direct relationships and one out of two mediating relationships. We found that relational resources influence informational resources and dynamic capabilities, although they do not significantly directly impact entrepreneurial orientation. Entrepreneurial orientation is,

however, influenced by both types of intangible resources through the mediation of dynamic capabilities.

Export performance is positively affected (directly and indirectly) by dynamic capabilities and entrepreneurial orientation. Furthermore, dynamic capabilities also mediate the relationship between intangible assets and export performance. Entrepreneurial orientation, however, does not have a significant mediating impact on the relationship between intangible resources and export performance.

Concerning the first part of the model, linking resources, capabilities and entrepreneurial orientation, our results are consistent with Madsen *et al.*'s (2007) study, except for the direct relationship between informational resources and entrepreneurial orientation, which was not statistically demonstrated in this investigation. However, we did find an indirect impact through the mediating impact of dynamic capabilities. This stresses the importance of considering the instrumental role of dynamic capabilities in leveraging the stock of knowledge possessed by the firm. The constant demand (both internal or external) of new business opportunities appears to enhance the entrepreneurial orientation, thereby allowing firms with advanced dynamic capabilities to better steer their entrepreneurial strategies for innovation, risk taking and proactiveness.

In addition to finding support for these relationships in a different context, we have also posited the impact of relational resources on informational resources, which has not been considered in Madsen *et al.*'s (2007) study, and that we found to be positive. This is an important finding suggesting that relational resources may leverage the firm's knowledge base. Interestingly, a recently published qualitative study identified how relational capabilities (including a number of interactions/meetings with relevant stakeholders) were used by firms to identify, access and leverage new knowledge, thus enabling and supporting absorptive capacity and learning in inter-organisational networks (Martins, 2016).

Regarding the second part of the model, which looks at how the complex interplay of resources, capabilities and entrepreneurial orientation impact export performance, our results make an important contribution to the literature as they contribute to understanding how firms use their resource base to create value in international settings. The impact of resources and capabilities on performance has been proposed within RBV literature (Teece, 2007) and has been supported at the national level in the context of technology based firms by Wu (2006). Exports provide a valuable context for testing these relationships, as international markets are changing markets (Jantunen *et al.*, 2005) and require companies to compete with the best of their abilities. As noted by He, Brouthers and Filatotchev (2013: 45), RBV has been criticized for “assuming that resource-structure-performance inter-relationship applies universally and is not influenced by contextual factors”. Notably, empirical studies putting RBV to a test in exporting firms are surprisingly scarce. In addition to supporting the role of dynamic capabilities and entrepreneurial orientation as direct antecedents of export performance, our results support that, contrary to entrepreneurial orientation, dynamic capabilities have a leveraging role enhancing the use of intangible resources.

These results have important implications for theory and for practice, adding value to research in the field. They stress the importance of dynamic capabilities, which play a catalyst role both in the relationship between intangible resources and export performance, as well as between resources, entrepreneurial orientation and performance. As such, these findings contribute to filling in the gaps identified by Sousa *et al.* (2008) regarding the need for export performance studies that consider the (direct, indirect and total) effects of mediating variables. In addition, this finding partly validates criticisms to limitations of RBV to explain firm’s competitiveness. In fact, without the ability to achieve new resource configurations as environmental conditions shift (Eisenhardt and Martin, 2000), resources are clearly insufficient conditions for competitive advantage. Simultaneously, our results highlight the

relevance of entrepreneurial orientation for improving performance in international markets (Miller, 1983; Covin and Slevin, 1989; Covin, Slevin and Covin, 1990; Lumpkin and Dess, 1996; Naldi *et al.*, 2007).

Turning to managerial implications, these findings stress the importance of differentiated dynamic capabilities, in particular the ability to integrate, reconfigure, learn and respond to a rapidly changing environment, in order to identify future needs and market trends that allow to explore new business opportunities. These capabilities are crucial for leveraging firms' resource base. In fact, our results show that resources do not have a significant direct impact on entrepreneurial orientation; their effect is indirect through the mediation of dynamic capabilities. Managers can and should develop company's dynamic capabilities, in order to achieve better levels of entrepreneurial orientation and superior export performance. Innovation, proactiveness and risk taking are important for identifying and carrying international business opportunities abroad. These findings are also important for public bodies. Public efforts to foster entrepreneurship may have limited success if they are not accompanied by comprehensive efforts to develop firms' generic dynamic capabilities allowing them to respond and remain competitive in turbulent environments. Public entities can also develop instruments and programs to support firms' efforts on export markets through the promotion of formal and informal networks allowing companies to communicate, share and learn with each other. Gulati *et al.* (2000) have highlighted the fact that firm's relationships are a unique and inimitable resource, noting that a network perspective can also provide new insights for the resource-based view of the firm. For these scholars, higher returns will only be achieved through the access to better information and opportunities by firms whose relationships allow them to occupy a central place in strategic networks. Therefore, public entities should define an incentive system in order to stimulate the development of the companies' dynamic capabilities.

As with most studies, this research is not without limitations that should be considered when interpreting and generalizing the results. First of all, there are limitations derived from the potential bias caused by the sample size and measurement. Although the e-mail is a commonly used tool, we cannot generalize the results to the total population. It may also be argued that evaluating the different variables in this study based on the opinion of one respondent per firm may not accurately reflect the reality of companies, as more than one person make decisions, especially in large companies, and may have different opinions on the export activity (Leonidou and Katsikeas, 1996).

Some of the limitations mentioned above provide future directions for research. The study ignores the moderating effects of some variables (e.g. hostile external environment), as well as the effect of control variables such as firm size and demographic characteristics of the respondents, which could lead to further insights. Considering that dynamic capabilities include the ability to develop new capabilities, they might be theorised to underpin the development of associated knowledge and relational resources in these new areas. Testing the impact of dynamic capabilities on intangible resources might contribute to our understanding of how dynamic capabilities contribute to firms' performance.

A clear understanding of how companies develop differentiated dynamic capabilities is paramount for managers, public bodies and researchers aiming at contributing to firms' competitiveness and performance.

References

- Aaby, N.E. and Slater, S.F. (1989), "Managerial influences on export performance: A review of the empirical literature 1978–88", *International Marketing Review*, Vol. 6 No. 4, pp. 53-68.

- Abiodun, T.S. and Rosli, M. (2014), "The mediating effect of reconfiguring capabilities on the relationship between entrepreneurial orientation and export performance of small and medium enterprises", *European Journal of Business and Management*, Vol. 6 No. 34, pp. 345-357.
- Acedo, F.J. and Florin, J. (2006), "An entrepreneurial cognition perspective on the internationalization of SMEs", *Journal of International Entrepreneurship*, Vol. 4, pp. 49-67.
- Ambrosini, V. and Bowman, C. (2009), "What are dynamic capabilities and are they a useful construct in strategic management?", *International Journal of Management Reviews*, Vol. 11 No. 1, pp. 29-49.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychology Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Aroian, L.A. (1947), "The probability function of the product of two normally distributed variables", *The Annals of Mathematical Statistics*, Vol. 18 No. 2, pp. 265-271.
- Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16, pp. 74-94.
- Bakar, L.J.A. and Ahmad, H. (2010), "Assessing the relationship between firm resources and product innovation performance: a resource-based view", *Business Process Management*, Vol. 16 No. 3, pp. 420-435.
- Banco de Portugal (2015), *Análise das Empresas do Setor Exportador em Portugal: Estudos da Central de Balanços*, Banco de Portugal, Lisboa.

- Barney, J.B. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Baron R. M. and Kenny, D. A. (1986), "The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182.
- Barreto, I. (2010), "Dynamic capabilities: a review of past research and an agenda for the future", *Journal of Management*, Vol. 36 No. 1, pp. 256-280.
- Baumgartner, H. and Homburg, C. (1996), "Applications of structural equation modeling in marketing and consumer research: a review", *International Journal of Research in Marketing*, Vol. 13, pp. 139-161.
- Byrne, B. (1998), *Structural Equation Modeling with LISREL, PRELIS, and SIMPLIS: Basic Concepts, Applications and Programming*, Lawrence Erlbaum Associates, Mahwah.
- Camisón, C. and Forés, B. (2010), "Knowledge absorptive capacity: new insights for its conceptualization and measurement", *Journal of Business Research*, Vol. 63 No. 7, pp. 707-715.
- Cavusgil, S.T. and Zou, S. (1994), "Marketing strategy-performance relationship: an investigation of the empirical link in export market ventures", *Journal of Marketing*, Vol. 58, pp. 1-21.
- Covin, J.G. and Miles, M.P. (1999), "Corporate entrepreneurship and the pursuit of competitive advantage", *Entrepreneurship Theory and Practice*, Vol. 23 No. 3, pp. 47-63.
- Covin, J.G. and Slevin, D.P. (1989), "Strategic management of small firms in hostile and benign environments", *Strategic Management Journal*, Vol. 10 No. 1, pp. 75-87.

- Covin, J.G., Slevin, D.P. and Covin, T.J. (1990), "Content and performance of growth-seeking strategies: a comparison of small firms in high-and low technology industries", *Journal of Business Venturing*, Vol. 5, pp. 391-412.
- Davis, D.F. and Mentzer, J.T. (2008), "Relational resources in interorganizational exchange: the effects of trade equity and brand equity", *Journal of Retailing*, Vol. 84 No. 4, pp. 435-448.
- Dess, G.G. and Lumpkin, G.T. (2005), The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship, *Academy of Management Executive*, Vol. 19 No. 1, pp. 147-156.
- Dhanaraj, C. and Beamish, P.W. (2003), "A resource-based approach to the study of export performance", *Journal of Small Business Management*, Vol. 41 No. 3, pp. 242-261.
- Diamantopoulos, A. and Siguaw, J.A. (2000), *Introducing LISREL*, Sage Publications, London.
- Eisenhardt, K.M. and Martin, J.A. (2000), "Dynamic capabilities: what are they?", *Strategy Management Journal*, Vol. 21 No. 10/11, pp. 1105-1121.
- Etemad, H. (2005), "SMEs' internationalization strategies based on a typical subsidiary's evolutionary life cycle in three distinct stages", *Management International Review*, Vol. 45 No. 3, pp. 145-186.
- França, A.S. and Rua, O.L. (2016), "Influence of entrepreneurial orientation and absorptive capacities in export performance", *Tourism & Management Studies*, Vol. 12 No. 1, pp. 196-202.

- Frank, H., Kessler, A. and Fink, M. (2010), "Entrepreneurial orientation and business performance – a replication study", *Schmalenbach Business Review*, Vol. 62, pp. 175-198.
- Fornell, C. and Larcker, D. (1981), "Evaluating structural equation models with unobserved variables and measurement error", *Journal of Marketing Research*, Vol. 18, pp. 39-50.
- Garver, M.S. and Mentzer, J.T. (1999), "Logistics research methods: employing structural equation modeling to test for construct validity", *Journal of Business Logistics*, Vol. 20 No. 1, pp. 33-57.
- Grant, R.M. (1996), "Toward a knowledge-based theory of the Firm", *Strategic Management Journal*, Vol. 17, pp. 109-122.
- Gulati, R., Nohria, N. and Zaheer, A. (2000), "Strategic networks", *Strategic Management Journal*, Vol. 21, pp. 203-215.
- He, X., Brouthers, K.D. and Filatotchev, I. (2013), "Resource-based and institutional perspectives on export channel selection and export performance", *Journal of Management*, Vol. 39 No. 1, pp. 27-47.
- Hitt, M.A., Hoskisson, R.E. and Kim, H. (1997), "International diversification: effects on innovation and firm performance in product-diversified firms", *Academy of Management Journal*, Vol. 40 No. 4, pp. 767-798.
- Hung-Hsin, C. and Lee, P-Y. (2009), "The driving drivers of dynamic competitive capabilities: a new perspective on competition", *European Business Review*, Vol. 21 No. 1, pp. 78-91.
- Jansen, J.J.P., Van Den Bosch, F.A.J. and Volberda, H.W. (2005), "Managing potential and

realized absorptive capacity: how do organizational antecedents matter?”, *Academy of Management Journal*, Vol. 48 No. 6, pp. 999-1015.

Jaworski, B.J. and Kohli, A.K. (1993), “Market orientation: Antecedents and consequences”, *Journal of Marketing*, Vol. 57 No. 3, pp. 53-70.

Katsikeas, C.S. and Morgan, R.E. (1994), “Differences in perceptions of exporting problems based on firm size and export market experience”, *European Journal of Marketing*, Vol. 28 No. 5, pp. 17-35.

Katsikeas, C.S., Piercy, N.F. and Ioannidis, C. (1996), “Determinants of export performance in a European context”, *European Journal of Marketing*, Vol. 30 No. 6, pp. 6-35.

Knight, G.A. (1997), “Cross-cultural reliability and validity of a scale to measure firm entrepreneurial orientation”, *Journal of Business Venturing*, Vol. 12 No. 3, pp. 213-225.

Kreiser, P., Marino, L. and Weaver, K. (2002), “Assessing the psychometric properties of the entrepreneurial orientation scale: a multi-country analysis”, *Entrepreneurship Theory and Practice*, Vol. 26 No. 4, pp. 71-95.

Kropp, F., Lindsay, N.J. and Shoham, A. (2008), “Entrepreneurial orientation and international entrepreneurial business venture startup”, *International Journal of Entrepreneurial Behaviour & Research*, Vol. 14 No. 2, pp. 102-117.

Jantunen, A. Puumalainen, K. Saarenketo, S. and Kyläheiko. K. (2005), “Entrepreneurial orientation, dynamic capabilities and international performance”, *Journal of International Entrepreneurship*, Vol. 3, pp. 223-243.

- Lages, L. F. and Montgomery, D. B. (2004), "Export performance as an antecedent of export commitment and marketing strategy adaptation: evidence from small and medium-sized exporters", *European Journal of Marketing*, Vol. 38 No. 9/19, pp. 1186-1214.
- Leonidou, L.C. and Katsikeas, C.S. (1996), "The export development process: an integrative review of empirical models", *Journal of International Business Studies*, Vol. 27 No. 3, pp. 517-551.
- Leonidou, L.C., Katsikeas, C.S. and Samiee, S. (2002). "Marketing strategy determinants of export performance: a meta-analysis", *Journal of Business Research*, Vol. 55 No. 1, pp. 51-67.
- Loane, S. and Bell, J. (2006), "Rapid internationalisation among entrepreneurial firms in Australia, Canada, Ireland and New Zealand: an extension to the network approach", *International Marketing Review*, Vol. 23 No. 5, pp. 467-485.
- López, S.V. (2005), "Competitive advantage and strategy formulation: the key role of dynamic capabilities", *Management Decision*, Vol. 43 No. 5, pp. 661-669.
- Lu, Y., Zhou, L., Bruton, G. and Li, W. (2010), "Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging economy", *Journal of International Business Studies*, Vol. 41, pp. 419-436.
- Lumpkin, G.T. and Dess, G.G. (1996), "Clarifying the entrepreneurial orientation construct and linking it to performance", *Academic of Management Review*, Vol. 21 No. 1, pp. 135-172.
- Madsen, E.L., Alsos, G.A., Borch, O-J., Ljunggren, E. and Brastad, B. (2007), "Developing entrepreneurial orientation: the role of dynamic capabilities and intangible resources", *Regional Frontiers of Entrepreneurial Research*, available at:

http://www.swinburne.edu.au/lib/ir/onlineconferences/agse2007/madsen_p94.pdf
(accessed 2 november 2011).

Martins, J.T. (2016), "Relational capabilities to leverage new knowledge", *The Learning Organization*, Vol. 23 No. 6, pp. 398-414.

Menon, A., Bharadwaj, S.G., Adidam, P.T. and Edison, S.W. (1999), "Antecedents and consequences of marketing strategy making: a model and a test", *Journal of Marketing*, Vol. 63 No. 2, pp. 18-40.

Miller, D. (1983), "The correlates of entrepreneurship in three types of firms", *Management Science*, Vol. 29 No. 7, pp. 770-791.

Morgan, N.A., Kaleka, A. and Katsikeas, C.S. (2004), "Antecedents of export venture performance: a theoretical model and empirical assessment", *Journal of Marketing*, Vol. 68, pp. 90-108.

Morgan, N.A., Vorhies, D.W. and Schlegelmilch, B.B. (2006), "Resource-performance relationships in industrial export ventures: the role of resource inimitability and substitutability", *Industrial Marketing Management*, Vol. 35, pp. 621-633.

Morris, M.H., Lewis, P.S. and Sexton, D.L. (1994), "Reconceptualizing entrepreneurship: an input-output perspective", *SAM Advanced Management Journal*, Vol. 59 No. 1, pp. 21-31.

Naldi, L., Nordqvist, M., Sjöberg, K. and Wiklund, J. (2007), "Entrepreneurial orientation risk taking, and performance in family firms", *Family Business Review*, Vol. 20 No. 1, pp. 33-47.

- Nunnally, J. and Bernstein, I. (1994), *Psychometric Theory* (3rd ed.), McGraw-Hill, New York.
- Okpara, J.O. (2009), “Entrepreneurial orientation and export performance: evidence from an emergency economy”, *International Review of Business Research Papers*, Vol. 5 No. 6, pp. 195-211.
- Piercy, N.F., Kaleka, A. and Katsikeas, C.S. (1998), “Sources of competitive advantage in high performing exporting companies”, *Journal of World Business*, Vol. 33 No. 4, pp. 278-393.
- Prange, C. and Verdier, S. (2011), “Dynamic capabilities, internationalization processes and performance”, *Journal of World Business*, Vol. 46 No. 1, pp. 126-133.
- Rua, O.L. and França, A. (2016), “Recursos intangíveis e desempenho das exportações”, *Tourism & Management Studies*, Vol. 12 No. 2, pp. 165-172.
- Schlegelmilch, B.B. and Crook, J.N. (1988), “Firm-level determinants of export intensity”, *Managerial and Decision Economics*, Vol. 9 No. 4, pp. 291-300.
- Shoham, A. (1996), “Marketing-mix standardization: determinants of export performance”, *Journal of Global Marketing*, Vol. 10 No. 2, pp. 3-73.
- Sousa, C.M.P., Martínez-López, F.J. and Coelho, F. (2008), “The determinants of export performance: a review of the research in the literatures between 1998 and 2005”, *International Journal of Management Reviews*, Vol. 10 No. 4, pp. 343-374.
- Teece, D.J. (2007), “Technology and export behavior”, *Strategic Management Journal*, Vol. 28, pp. 1319-1350.

- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.
- Tsai, W. and Ghoshal, S. (1998), "Social capital and value creation: the role of intrafirm networks", *Academy of Management Journal*, Vol. 41 No. 4, pp. 464-476.
- Tuan, N.P. and Takahashi, Y. (2009), "Resources, organizational capabilities and performance: some empirical evidence from Vietnam's supporting industries", *International Review of Business Research Papers*, Vol. 5 No. 4, pp. 219-231.
- Venkatraman, N. (1986), Measurement of business performance in strategy research: a comparison of approaches, *Academy of Management Review*, Vol. 11 No. 4, pp. 801-814.
- Vila, N. and Kuster, I. (2007), "The importance of innovation in international textile firms", *European Journal of Marketing*, Vol. 41 No. 1/2, pp. 17-36.
- Wang, C.L. and Ahmed, P.K. (2007), "Dynamic capabilities: a review and research agenda", *International Journal of Management Reviews*, Vol. 9 No. 1, pp. 31-51.
- Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic Management Journal*, Vol. 5 No. 2, pp. 171-180.
- Wiklund, J. and Shepherd, D. (2005), "Entrepreneurial orientation and small business performance: a configurational approach", *Journal of Business Venturing*, Vol. 20 No. 1, pp. 71-91.
- Wu, L-Y. (2006), "Resources, dynamic capabilities and performance in a dynamic environment: perceptions in Taiwanese IT enterprises", *Information & Management*, Vol. 43, pp. 447-454.

- Wu, L-Y. (2010), “Applicability of the resource-based and dynamic-capability views under environment volatility”, *Journal of Business Research*, Vol. 63 No. 1, pp. 27-31.
- Wu, L-Y. and Wang, C-J. (2007), “Transforming resources to improve performance of technology-based firms: a Taiwanese empirical study”, *Journal of Engineering and Technology Management*, Vol. 24, pp. 251-261.
- Zahra, S.A. (2008), “Being entrepreneurial and market driven: implications for company performance”, *Journal of Strategy and Management*, Vol. 1, No. 2, pp. 125-142.
- Zahra, S.A., Sapienza, H.J. and Davidsson, P. (2006), “Entrepreneurship and dynamic capabilities: a review, model and research agenda”, *Journal of Management Studies*, Vol. 43 No. 4, pp. 917-955.
- Zou, S. and Stan, S. (1998), “The determinants of export performance: a review of the empirical literature between 1987 and 1997”, *International Marketing Review*, Vol. 15 No. 5, pp. 333-356.

Figure 1. Research model

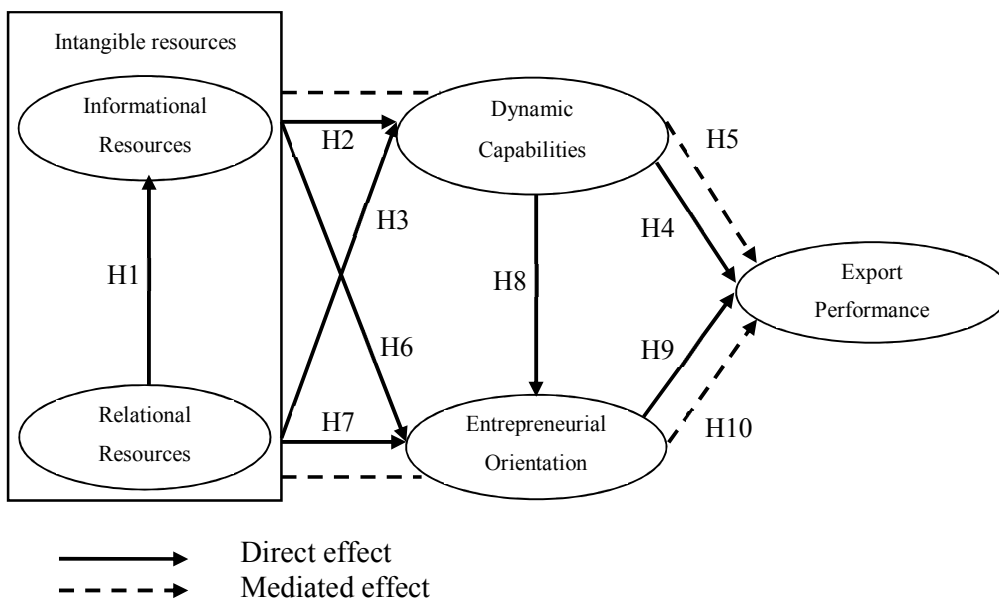
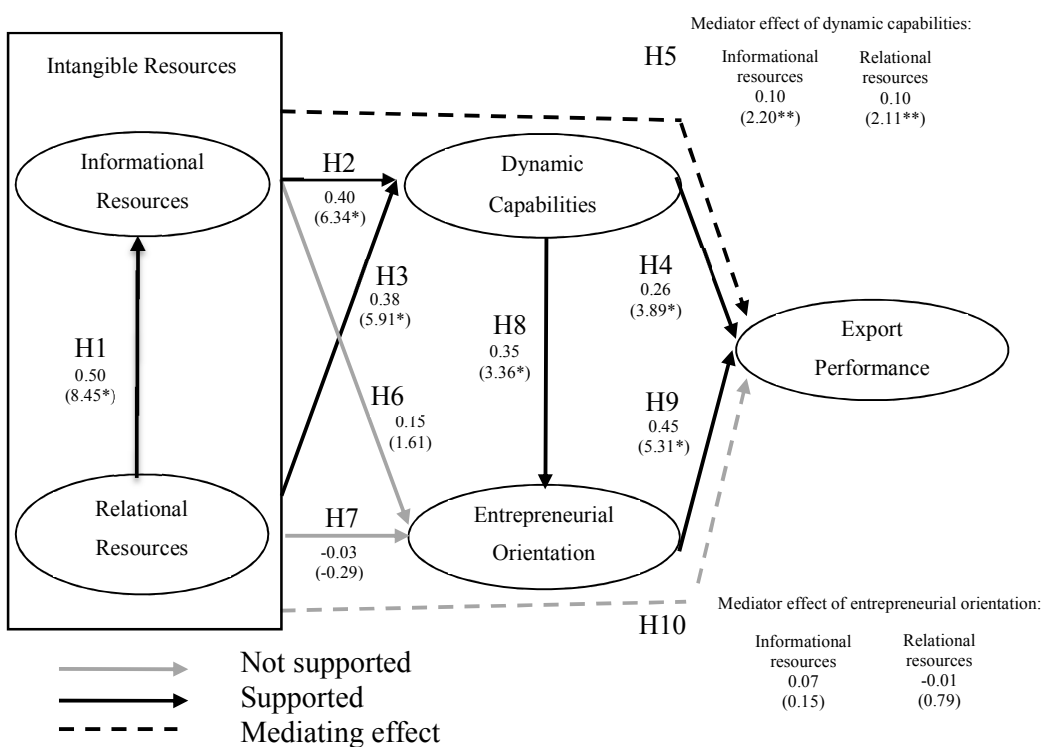


Figure 2. Research findings model



Notes: Coefficients standardized and t-value (between parenthesis). * significant at the 0.001 level; ** significant at the 0.05 level.

Table 1. Measurement model results

Construct	Standardized coefficients
Intangible Resources	
Relational resources (CR=0.90, AVE=0.74)	
Strength of existing customer relationships in this export market	0.82*
Duration of relationships with our current distributors in this market	0.85*
Closeness of existing customer relationships	0.91*
Informational resources (CR=0.92, AVE=0.80)	
Export market information	0.91*
Customer knowledge in this export market	0.89*
Knowledge of competitors in this export market	0.87*
Dynamic capabilities (CR=0.95, AVE=0.81)	
Resource integration capability	0.87*
Resource reconfiguration capability	0.93*
Learning capability	0.94*
Ability to respond to the rapidly changing environment	0.86*
Entrepreneurial Orientation	
Innovation (CR=0.87, AVE=0.71)	
Very many new lines of products	0.82*
Dramatic changes in product or services lines	0.86*
Proactiveness (CR=0.82, AVE=0.64)	
Initiates actions which competitors respond to	0.72*
Very often the first business to introduce new products/services	0.80*
Risk taking (CR=0.87, AVE=0.71)	
Strong proclivity for high-return high-risk projects	0.80*
Bold, wide-ranging acts are necessary to achieve the firm's objectives	0.93*
Bold, aggressive posture is adopted	0.78*
<i>Factors of first and second order:</i>	
Innovation - Entrepreneurial orientation	0.64*
Proactiveness - Entrepreneurial orientation	0.76*
Risk taking - Entrepreneurial orientation	0.57*
<i>Correlation between factors:</i>	
Innovation - Proactiveness ($R^2=0.41$)	0.64*
Innovation - Risk taking ($R^2=0.18$)	0.43*
Proactiveness - Risk taking ($R^2=0.20$)	0.45*
Export performance (CR=0.92, AVE=0.79)	
Rapid growth in export activities	0.93*
Expanded operations	0.93*
Overall satisfactory performance	0.81*
Notes: CR=Composite Reliability; AVE=Average Variance Extracted; * Correlation is significant at the 0.001 level	

Table 2. Means, standard deviations and correlation matrix

Construct/Dimension	M	SD	1	2	3	4	5
1 Export performance	4.60	1.62	1.00				
2 Dynamic capabilities	4.74	1.15	0.45	1.00			
3 Informational resources	5.04	1.17	0.32	0.61	1.00		
4 Entrepreneurial orientation	4.03	1.47	0.56	0.43	0.35	1.00	
5 Relational resources	5.28	1.00	0.28	0.60	0.54	0.27	1.00

Notes: All correlations are significant at the 0.05 level.

Table 3. Direct, indirect and total effects of the theoretical model

Effects	Direct	Indirect	Total
Export Performance effects			
Relational Resources – Export performance	0.06	0.22	0.28
• Relational Resources - Informational Resources - Dynamic - Export Performance		0.06	
• Relational Resources - Dynamic Capabilities - Export Performance		0.10	
• Relational Resources - Informational Resources - Dynamic - Entrepreneurial Orientation - Export		0.06	
Informational Resource – Export performance	0.08	0.16	0.24
• Informational Resources - Dynamic Capabilities - Export Performance		0.10	
• Informational Resources - Dynamic Capabilities - Entrepreneurial Orientation - Export Performance		0.06	
Dynamic Capabilities – Export performance	0.26	0.16	0.42
• Dynamic Capabilities - Entrepreneurial Orientation - Export Performance		0.16	
• Dynamic Capabilities - Export Performance	0.26		
Entrepreneurial Orientation – Export Performance	0.45		0.45
Entrepreneurial Orientation effects			
Relational Resources – Entrepreneurial Orientation		0.21	0.21
• Relational Resources - Informational Resources - Dynamic Capabilities - Entrepreneurial Orientation		0.08	
• Relational Resources - Dynamic Capabilities - Entrepreneurial Orientation		0.13	
Informational Resources – Entrepreneurial Orientation		0.14	0.14
• Informational Resources - Dynamics Capabilities - Entrepreneurial Orientation		0.14	
Dynamic Capabilities Effects			
Relational Resources – Dynamic Capabilities	0.38	0.22	0.60
• Relational Resources - Informational Resources - Dynamic Capabilities		0.22	
• Informational Resources - Dynamic Capabilities	0.38		
Informational Resources Effects			
Informational Resources- Informational Resources	0.54		0.54

Notes: All correlations are significant at the 0.05 level.