**Which Organisational Capabilities Matter for SME Export Performance?**

**Abstract**

As a result of the increasing tendency towards a global economy, international business involvement is becoming particularly relevant for smaller companies. Exporting constitutes the most popular, quickest and easiest way for many small firms to internationalise. The aim of the paper is to provide a comprehensive picture of the determinants of SME export performance, by investigating the potential relationship between organisational capabilities and both objective and subjective measures of performance. Based on the literature review and mainly embedded in the resource-based view of the firm, we uncover a collection of organisational capabilities that are especially salient to these firms and their growing international involvement. The suggested conceptual model is tested with a sample of Italian exporting SMEs using regression analysis. The results show that entrepreneurial and innovative capabilities are the most influential antecedents of both objective and subjective measures of international performance. Finally, we discuss the managerial implications of our findings.

**Keywords:** Organisational capabilities; SME internationalisation; export performance.

**1. Introduction**

The internationalisation process of SMEs has gained a lot of attention in the international business (IB) literature over the last four decades. In particular, given that exporting is still the dominant foreign entry mode for SMEs, an important research stream has highlighted the many determinants of export intensity (Miesenbock, 1988; Zou & Stan, 1988; Sterlacchini, 2001; Ribau et al, 2016). The emergence of the International Entrepreneurship (IE) field has focused attention on those firms which are characterised by a clear international entrepreneurial orientation (Covin et al, 2014; Lamotte & Colovic, 2013; Thanos et al. 2017). It has progressively developed over the last two decades a body of literature, especially focusing on early and fast international ventures, born global firms, and international new ventures (Zucchella et al, 2007; McDougall et al, 1994; Jones et al, 2011; Keupp & Gassman, 2009). Both perspectives seem to highlight the role of entrepreneurs, among other factors like firm resources and networks. More recently, some authors have caled for more studies on the role of capabilities, as a link between entrepreneurial resources and organisational performance (Knight & Liesch, 2015; Etemad, 2017).

Notwithstanding the high number of contributions on these topics, the role played by organisational capabilities in driving export performance is still poorly understood (Knight & Cavusgil, 2004; Weerawardena et al, 2007; Weerawardena et al 2015; Cavusgil & Knight, 2015). The adoption of a capabilities perspective is relatively recent in IB and IE studies, and the operationalisation of these variables is still in its infancy (Kuivalainen et al, 2010; Zhang et al, 2009). Different literature streams outline the roles of some resources, like for example the entrepreneurial team (Shrader et al, 2000; Bloodgood et al, 1996; Luo et al, 2005) and its network (Komulainen et al, 2006; Zhou et al, 2007), technological and financial resources (D’Angelo, 2012; Lamotte & Colovic, 2013), marketing resources (McAuley, 1999; Knight et al, 2004; Moen et al, 2003), but the organisational capabilities perspective is less studied. Some capabilities (e.g. entrepreneurial capabilities) are often ascribed to entrepreneurs as individuals (Busenitz & Arthurs, 2007; Karra et al, 2008), but it is increasingly recognised that they can be detected also at the organisation level (Covin & Slevin, 2002) and they seem to play a crucial role on firms’ growth, including export growth. Also networks, innovation and marketing need to be considered in terms of organisational capabilities, because it is through capabilities that opportunities are detected and internal and external resources are effectively exploited in order to generate competitive advantage and market growth.

A recent review of the existing literature on SME internationalisation (Ribau et al. 2016), based on 554 articles written between 1977 and 2014, highlights – among the research gaps which still need to be addressed - a better understanding of the effects of innovation and networking capabilities on SME international performance. In addition the review supports the need to study contemporarily international new ventures/born global firms and traditional international SMEs: “we found that when analyzing internationalization from a wider perspective - SME internationalization - a deeper and broader perspective is still in high demand” (Moreira et al., 2016). This research intends to study both entrepreneurial and organizational capabilities in smaller firms, considering both early and fast internationalizing and the more traditional (gradually internationalizing) firms, with the idea that it is possible to look for similar variables determining their export performance. Much of the literature in the last 30 years has been looking for differences among these two typologies of smaller firms, while we aim at looking for common determinants of international growth.

This paper aims at providing an answer to the following research questions, which address the above-mentioned research gaps. What is the role of organisational capabilities in determining the export performance of SMEs? And, in particular, how do entrepreneurial, environmental-learning, marketing, networking and innovative capabilities affect their export performance? Many scholars have suggested that, in order to provide a more comprehensive picture of export performance, both objective and subjective measures should be employed (Cavusgil & Zou, 1994; Dimitratos et al, 2004; Katsikeas et al, 2000; Shoham, 1998; Shoham et al, 2002; Sousa, 2004; Wheeler et al, 2008). There are very few studies which adopt both objective and subjective measures of export performance (Stoian et al, 2011). We look to remedy this limitation by carrying out our empirical analysis using both the classic measure of export intensity as an objective measure of export performance, together with a subjective measure derived from managers’ responses to a questionnaire survey.

**2. Literature Review and Hypotheses**

This paper adopts the resource-based view (RBV) in analysing the determinants of the export performance of SMEs. The appropriateness and explanatory power of the RBV for the study of the international performance of firms has been confirmed by numerous scholars (Dhanaraj & Beamish, 2003; Ibeh & Wheeler, 2005; Matanda & Freeman, 2009; Morgan et al, 2006; Prange & Pinho, 2017). The bundle of organisational resources and capabilities is idiosyncratic to every firm and is at the core of its competitive advantage according to the RBV (Eisenhardt et al, 2000; Kor et al, 2007). MNEs are acknowledged to possess idiosyncratic resources which enable them to generate economic returns over and above their opportunity costs when used in foreign markets (Graham, 1978). In IB theory, the notion of firm-specific advantage is the one which best fits with the internal resources and capabilities approach. Particular firm-specific advantages for the internationalisation of firms include knowledge, information or techniques (Caves, 1971), technological expertise or entrepreneurial skills (Graham, 1978), ownership of a brand name, possession of special marketing skills, patented technology, favourable access to sources of finance, team-specific managerial skills, plant economies of scale and economies of vertical integration (Kindleberger, 1969).

The progressive refinement of a body of literature on organisational capabilities lies at the crossroads between innovation and evolutionary economics (Dosi et al, 2000), strategic management (Prahalad & Hamel, 1990; Mahoney & Pandian, 1993), strategic entrepreneurship (Hitt et al, 2002) and marketing (Day, 1994). This field provides an ontology, which permits a deeper exploration into the processes at the heart of competitive advantage and international performance. Specific attention to organisational capabilities is required, in order to separate the role of resources (which may be “passive” assets which are not effectively or properly used) from the role of processes which actively leverage on internal and external resources to drive competitiveness (Dosi et al, 2000; Barney, 2001). The ability to distinguish between the differential impacts of these key capabilities on international performance represents a relevant research gap, especially when smaller firms are involved (Macpherson & Holt, 2007; Cavusgil & Knight, 2015; Etemad, 2017; Prange & Pinho, 2017).

Earlier research suggests that, as firms expand into new foreign countries, they can leverage their skills and products over a broader array of markets and thus increase their growth and profitability (Zahra et al, 2000; Gabrielsson et al, 2008). According to Miller & Shamsie (1996), in increasingly dynamic and turbulent environments, knowledge-based resources and capabilities contribute most to firm performance. Those firms which are able to both create and manage knowledge (which is valuable, rare and difficult to substitute by others) are also able to increase their value and strengthen their competitive advantage (Kuivalainen, 2003). In dealing with small entrepreneurial ventures and born globals, the extant literature has highlighted the role of entrepreneurial capabilities, marketing capabilities and network capabilities. According to some researchers, these capabilities (Collis, 1994; Zollo & Winter, 2002; Foss, 1996) belong to different orders (higher and lower order), or involve different functional domains (cross-functional capabilities, versus functional-related and activity-related capabilities), thus affecting change, growth and long-run performance in differentiated ways and in a more or less pervasive manner (Grant, 1996).

Our review of the extant literature suggests that the export performance of SMEs may depend upon their possession of certain key capabilities, notably *entrepreneurial* capabilities, *environmental learning* capabilities, *marketing* capabilities, *networking* capabilities, and *innovation* capabilities. We now review both the theoretical arguments and the empirical evidence linking each of these capabilities to export performance. SMEs, in particular, require entrepreneurial capabilities in order to grow over time, beyond the founders’ and the Top Management Team (TMT) attitudes and individual capabilities. Small firms are challenged both by the paucity of their own resources and by the complexity of foreign markets, thus they need to rely on external resources to achieve international growth. The ownership of networking capabilities has been suggested as important in order to maintain and develop further a network capable of accompanying the firm’s growth, beyond the resources represented by the founders’ social network and actual network structure. Marketing capabilities are fundamental for achieving sales in multiple markets, leveraging on marketing resources available like brands, etc, and developing new marketing resources for new markets. Customer management and the ability to use the marketing mix variables in different markets are also vital for internationally-oriented small firms, which show a core competence in addressing customer needs in global niches (Zucchella et al, 2007). Also, product and process innovation is rarely reported formally in smaller firms and it mostly assumes an incremental nature (D’Angelo, 2012). Innovation may occur in a “soft” way, rather than through internal R&D and radical product and process innovations, and may be based on learning from the external environment (mainly from markets and customers) and applying entrepreneurially the acquired knowledge. Learning is vital for making sense of the environment, for opportunities exploration and exploitation and for supporting the development of all the other capabilities, in order to achieve the ability to renew them when necessary (Teece, 2007).

*Entrepreneurial Capabilities*

There is a lack of agreement among scholars regarding what constitutes the managerial factor in determining exporting and what specific export dimensions are influenced by managers (Leonidou et al, 1998). However, the key role played by the attitude of the entrepreneurs/managers in relation to international strategy has been widely recognised and emphasised in the literature (McAuley, 1999; Knight, 2000; Moen, 2002; Chetty & Campbell-Hunt, 2003; Luo et al, 2005; McDougall et al, 2003; Evangelista, 2005). Many scholars have studied the impact of managers’ entrepreneurial capability on SME internationalisation (Sapienza et al, 2005; Ripolles-Melia et al, 2007). The core argument in this line of research is that high entrepreneurial capability prompts more proactive, innovative and risk-taking decisions in terms of expanding the current product/market portfolio of the firm and that such decisions increase the propensity of internationalisation. In other words, managers’ with higher entrepreneurial capability in general perceive internationalisation as an attractive opportunity to expand the scope of their firm and maximise performance. Accordingly, a number of empirical studies in the literature have found a positive relationship between entrepreneurial capability and SMEs internationalisation (De Clercq et al, 2005; Jantunen et al, 2005). However, it is necessary to consider that, from an organisational learning perspective, entrepreneurial team orientations are shared in the organisation, and entrepreneurial human capital is developed across the entire organisation (Covin & Slevin, 2002). In this way, individual entrepreneurial capabilities evolve into organisational ones, thus multiplying the capacity of the organisation to explore and exploit opportunities in international markets, beyond the attitudes and skills of actual strategic leaders. In sum, for SMEs, developing entrepreneurial capabilities implies active exploration of new business opportunities abroad. Firms with limited tangible resources that are inclined to pursue foreign markets may need a strong international posture, in order to take the initiative to pursue new opportunities in complex markets, typically fraught with uncertainty and risk (Mort & Weerawardena, 2006). An entrepreneurial capability is likely to give rise to certain processes, practices, decision-making activities associated with targeting new markets abroad and thus possibly contributes to firm performance (Thanos et al., 2017; Knight & Cavusgil, 2004). Thus our first hypothesis is:

**H1: Entrepreneurial capabilities are positively related to SME export performance**

*Environmental Learning Capabilities*

Environmental learning capabilities are defined as the capacity of the firm to acquire, disseminate, unlearn and integrate environmental information to create value activities. They are characterized by the acquisition and dissemination of information from some relevant external environments. It has been reported in various studies that market information is critical for internationalisation start and performance. Learning is a fundamental process both in the Uppsala internationalisation model (Johanson & Vahlne, 1977) and in the IE field (McDougall & Oviatt, 1994), even though sources and patterns of learning may differ. It is suggested that early internationalisers rely more extensively on learning from “others” and from paradigms of interpretation, instead of learning from experience as traditional gradual exporters do (Schwens & Kabst, 2009). Some researchers have focused on technological learning as relevant to entrepreneurial ventures (Zahra et al, 2000), notably in high-technology and emerging industries. For SMEs belonging to diversified industries, and especially low technology industries, learning from their own markets and especially from customers may be particularly important. This may prove even more true for firms operating in foreign markets and thus exposed to multiple and diverse sources of market and customer learning. The latter thus focuses on the ability to integrate external information into actionable knowledge that management can use for its goals in international markets (Knight & Liesch, 2002; Weerawardena et al. 2014). Thus, the capability to learn from foreign markets, customers and competitors may enhance SMEs performance abroad (Selnes et al, 1996; Wren et al, 2000). Our second hypothesis is thus:

**H2: Environmental learning capabilities are positively related to SME export performance**

*Marketing capabilities*

Marketing capabilities have been defined by researchers from different perspectives, but their role in international performance is widely acknowledged (Fahy et al, 2000). Marketing capabilities refer to firms’ abilities to create value for foreign customers through effective segmentation and targeting, and through integrated international marketing activities by planning, controlling and evaluating how marketing tools are organised to differentiate offerings from those of competitors (Cavusgil & Zou, 1994; Johnson et al, 2006; Knight & Cavusgil, 2004; Weerawardena et al., 2014). Marketing-related activities are known to engender superior organisational performance (Kotabe et al, 1991). Within their markets, firms with good marketing skills attempt to offer products whose value buyers perceive to exceed the expected value of alternative offerings. The urge to continuously provide superior buyer value drives the firm to create and maintain a business culture that fosters the requisite business behaviours. Although SMEs might possess superior products and technology that meet the preferences of international customers well, they are less likely to reach foreign customers effectively without strong marketing skills. Superior marketing skills assist companies to operate more effectively in such competitive international marketplaces (Cavusgil & Zou, 1994; Zou & Cavusgil, 2002). In sum, strong marketing capabilities create specific marketing-related strategies aimed at maximising performance. Our third hypothesis is thus:

**H3: Marketing capabilities are positively related to SME export performance**

*Networking Capabilities*

A growing number of researchers have argued that SMEs overcome their size-related constraints through network relationships (Dubini & Aldrich, 1991; Coviello & McAuley, 1999; Johannisson & Monsted, 1997; Pinho & Prange, 2016). Networks can be analysed both from the perspective of key resources, especially for smaller firms where internal resources are limited, and from the perspective of capabilities (Foss, 1999), i.e. the organisational processes which develop, feed and structure continually network relationships. According to Walters et al. (2006), entrepreneurial and networking capabilities affect the performance of university spin-offs. Networking capabilities are defined as a firm’s ability to develop and utilise inter-organisational relationships. Networking is one of the major strategies pursued by SMEs in order to gain access to resources and cope with environmental uncertainty and impediments in their operations (Alvarez & Barney, 2001). Networks often are critical in providing the type of information that contributes to lowering risk and uncertainty inherent in international operations and they facilitate the acquisition of knowledge and the development of complementary resources (Nerkar & Paruchuri, 2005). Building and maintaining relevant, superior and effective networks are an integral part of a successful internationalisation process and international performance (Liesch et al, 2002; Johanson & Vahlne, 2009). Our fourth hypothesis is thus:

**H4: Networking capabilities are positively related to SME export performance**

*Innovative Capabilities*

The last group of capabilities considered in this study are innovative capabilities, which may be defined as the capacity to develop and introduce new processes, products, services, or ideas to international markets (Damanpour, 1991; Hurley & Hult, 1998; Kandemir & Hult, 2005; Prange & Pinho, 2017). Zaltman et al. (1973) suggest that one of the stages of the innovation process is initiation and “openness to the innovation” (Calantone et al, 2006; Kandemir & Hult, 2005). Openness hinges on the degree to which members of an organisation are willing to consider the adoption of an innovation or whether they are resistant to it. Innovative capability refers to the pursuit of creative or novel solutions to challenges confronting the firms, including the development or enhancement of products and services, as well as new administrative techniques and technologies for performing organisational functions (e.g. production, marketing and distribution). Innovativeness is also a crucial dimension for successful international ventures, influencing the performance of international SMEs positively (Knight & Cavusgil, 2004; Knight & Kim, 2009). In the expanded international market, innovative capability improves the competitiveness of firms that face local or regional firms as well as better-resourced MNEs. Coupled with a strong international entrepreneurial orientation, it serves as a source of processes, products, and services that fit targeted international markets better (Lumpkin & Dess, 1996; Steensma et al, 2000). Past and recent studies have confirmed the positive impact of innovative capability on export performance (D’Angelo, 2012; Knight et al, 2004; Lamotte & Colovic, 2013). Therefore innovative capability is also a potential driver of SMEs performance in international markets (Knight & Kim, 2009). Our final hypothesis is thus:

**H5: Innovative capabilities are positively related to SME export performance**

**Figure 1 - The suggested research model**



**3. Data and Methodology**

*Data Collection*

We collected our data through a questionnaire survey of Italian exporting SMEs belonging to industries representative of the Italian economy. We first followed the statistical definition of small and medium firms of the European Union (2005), according to which SMEs employ fewer than 250 people. The target population was defined as Italian-based SMEs involved in exporting activities, as exporting constitutes the preferred way of internationalisation for SMEs (Cassiman & Golovko, 2011; McAuley, 1999). A random sample representative of the manufacturing sectors was then drawn from the official database of the Italian Chambers of Commerce.

A self-completion questionnaire was used for data collection. This type of questionnaire is less costly, quicker to administer, does not suffer from interviewer bias, and is more convenient for respondents because they can complete the questionnaire when they want and at the speed that they want to go (Bryman, 2004). A covering letter explained the scope of the study, why it was important, and why the recipient had been selected. Confidentiality was guaranteed and an executive study report was offered in case of interest. The questionnaire was addressed to high-level decision-makers (e.g. the CEO, Chairman, Managing Director or General Manager) who knew the history and the international performance of the company. Targeting the high-level decision makers is a convention of SME research, because they should provide reliable data on the issues under investigation. The questionnaire structure has items and scales based on the conceptual model by Weerawardena et al. (2007) and the empirical study by Weerawardena et al. (2013).

In total, we received 253 questionnaires back. Some companies were re-contacted in order to recover or to clarify key missing/contradicting information. However, answers were only elicited for some queries, and 39 of the 253 questionnaires were excluded from the analysis. 214 questionnaires were considered usable by the research team. Our sample can be considered representative of the population of Italian manufacturing exporting SMEs, as per comparing our sample distribution to National Bureau of Statistics data.

*The Dependent Variable*

The dependent variable in the analysis was SME export performance. A review of the literature suggests that there are two main alternative approaches to the measurement of export performance: one based on managers’ ‘subjective’ assessments, and the other based on more ‘objective’ accounting measures such as the ratio of export sales to total sales (Cavusgil & Zou, 1994; Katsikeas et al, 2000). We thus use two measures of export performance in our analysis.

Our subjective measure (EP1) was based upon multiple perceptual indicators to capture the export performance of the firms. There are various arguments justifying the use of subjective performance measures. Firstly, they are easier to collect than objective measures (Shoham, 1998). Earlier research (Francis & Collins-Dodd, 2000; Robertson & Chetty, 2000) has shown that managers are often extremely hesitant to provide objective performance data on their operations. Secondly, the previous literature suggests that management evaluation of firm performance seems to be guided more by their subjective perceptions than by objective measurement (Madsen, 1989), which appears to support the use of subjective measures. The respondents were asked to indicate their degree of satisfaction (1 = very dissatisfied; 5 = very satisfied) with their international activities, and the EP1 scores for each firm were derived by confirmatory factor analysis. The value of Cronbach α was 0.91, and thus the construct showed satisfactory internal reliability. Furthermore, the indexes of unidimensionality (AVE = 0.57), reliability (omega = 0.94), and construct reliability (rho = 0.97) were all at satisfactory levels – see Table 2.

\*\*\*\*\* Table 2 about here \*\*\*\*\*

Our objective measure of export performance (EP2) was export intensity: i.e. the ratio of foreign sales to total sales). Export intensity is by far the most common export performance measure in empirical research (Katsikeas et al, 2000; Lages & Lages, 2004; Leonidou et al, 2002; Sousa, 2004; Sousa et al, 2008), and has already been applied in many previous studies (Zucchella et al, 2007; Zhang et al, 2009; Jantunen et al, 2005).

*The Organisational Capabilities Variables*

The measures for the five organisational capabilities were derived from different groups of statements included in the questionnaire. The statements were based on widely-used instruments used in the literature and published in leading journals, particularly the above mentioned two works by Weerawardena et al. (2007, 2013), though some were adapted to fit the purposes of this research. Each statement was assessed using a 5-point Likert scale (1 = completely disagree to 5 = completely agree; or 1 = few/incremental to 5 = many/radical in the section regarding innovation) so as to uncover managers’ perceptions of the firm-level capabilities in comparison to their competitors as relevant for international strategy formulation (Andersen & Kheam, 1998).

Thus the *entrepreneurial capabilities* (ENT)scale captures the extent to which the organisation and its leaders are proactive, innovative and risk-seeking regarding international activities. The variables refer to both characteristics of management recognised in literature as relevant (international experience, orientation) and to organisational processes which favour entrepreneurship at the firm level. The *environmental learning capabilities* (LRN)scale measures the extent to which market, customer and competitor knowledge is acquired, disseminated, unlearned and integrated into value creation activities of the firm. The *marketing capabilities* (MKT) scale refers to the firm’s ability to create value via key marketing elements and gather information among foreign customers and competitors. In the section related to *networking capabilities* (NET), the statements measure the extent of knowledge acquired by firms through networks. Finally, the section related to *innovation capabilities* (INN) scale refers to the innovative activities of the companies in different areas such as product/service, managerial, etc.).

The scores for each of the organisational capabilities variables were derived by confirmatory factor analysis. In each case, the values of Cronbach α were greater than the satisfactory level of 0.7, hence all the constructs showed satisfactory internal reliability. Furthermore, the indexes of unidimensionality (AVE > 0.2), reliability (omega > 0.7), and construct reliability (rho > 0.8) were all above the satisfactory levels – see Table 2.

*The Control Variables*

Other firm-specific factors may also have an impact on export performance. We therefore controlled for firm size, firm age, and industry in the analysis. Firm size (SIZE) was measured by the natural logarithm of the number of employees. As larger firms have larger pools of resources to exploit and the possibility of achieving advantages of scale in international operations, firm size is assumed to affect export performance positively. Firm age (AGE) was measured by the natural logarithm of the number of years the SME had been in existence. Age may influence a venture’s technological learning (Dodgson, 1993), international business activities (Brush & Vanderwerf, 1992) and the profitability of foreign operations (Zahra et al, 2000). Finally, we also controlled for the companies’ industries. The industries varied in their technological opportunities and ability to induce learning (Li, 1995), globalisation (Brown & Garten, 1995), and profitability (Brown & Garten, 1994). The 214 SMEs were each categorised to one of seven industries, and six dummy variables were defined were the following sectors: machinery (MACH), furniture (FURN), electronic (ELEC), construction (CONS), textile (TEXT) and food & beverage (FOOD).

\*\*\*\*\*\* Tables 1 & 2 about here \*\*\*\*\*

*Descriptive Analysis*

Our sample consisted of SMEs, with companies employing on average 45 people. The companies are relative mature with an average age of 34 years. The SMEs show an average export intensity (EP2) of almost 50%, whilst the average factor score for the subjective measure of export performance is 56. These data confirm that exporting is an important part of the operations of the SMEs in the sample – see Table 3

Table 3 also reports mean values for the two performance measures (i.e. EP1 and EP2) and the five organisational variables (i.e. ENT, LRN, MKT, NET, and INN) in each of the seven industrial sectors These data reveal marked differences in both performance measures across the seven sectors, with the chemical, textile, furniture and machinery appearing to have the highest levels of export performance according to both the subjective and the objective measures. There also appear to be marked differences in the average values of the organisational capability variables across the seven sectors, though formal one-way ANOVA only revealed statistically significant differences between the means of the entrepreneurial capability (ENT) variable: the highest values were reported for the SMEs in the furniture, chemical and textile sectors, These differences both confirm the need of controlling for industry differences in the regression analysis, and suggest fruitful lines for further analysis.

\*\*\*\*\* Table 3 about here \*\*\*\*\*

**4. Empirical Results**

The regression model was estimated using both the subjective (EP1) and objective (EP2) versions of the dependent variable. In both cases, the model was first estimated using only the control variables (firm size, firm age, and the six industry dummy variables), and then the five organisational capabilities variables were added to assess the extent of their explanatory power. The results are presented in Table 4.

\*\*\*\*\* Table 4 about here \*\*\*\*\*

The first pair of models uses the managers’ subjective assessments of export performance (EP1) as the dependent variable. When the model is estimated using just the control variables (Model 1), the results are not particularly good. The value of the coefficient of determination is only 0.097, and the only variable which shows statistical significance is firm size (SIZE). However, the inclusion of the five organisation capabilities variables (Model 2) leads to a very significant increase in the explanatory power of the model, with the value of the coefficient of determination rising to a very respectable 0.46. Firm size remains statistically significant, but of more interest is that two of the capabilities variables (viz. ENT and INN) have positive coefficients and are also statistically significant. However, the environmental learning capabilities (LRN), the marketing capabilities (MKT), and the networking capabilities (NET) variables are all statistically insignificant.

The second pair of models uses export intensity (EP2) as an ‘objective’ measure of export performance. The results are again poor when the model is estimated using just the control variables (Model 3), and the value of the coefficient of determination is only 0.14. Once again, the inclusion of the five organisation capabilities variables (Model 4) leads to a very significant increase in the explanatory power of the model, with the value of the coefficient of determination rising to 0.32. Firm size is again statistically significant, as are the possession of entrepreneurial (ENT) and innovation (INN) capabilities. In summary, these results appear to confirm the importance of entrepreneurial and innovation capabilities for SME export performance. However, our results suggest that environmental learning capabilities, marketing capabilities and networking capabilities are not important, in contrast to much of the received wisdom in the literature. Perhaps some marketing capabilities may have been “captured” in the assessment of entrepreneurial capabilities (Fillis, 2004). Indeed, the recent literature on the concept of entrepreneurial marketing suggests that these two aspects tend to merge in smaller firms (Kocac & Abimbola, 2009). Moreover, some studies have already challenged the mainstream idea that networks are important for foreign growth (Zucchella et al., 2006; Shirokova & McDougall-Covin, 2012), and perhaps networking capabilities are more a determinant of domestic, rather than overseas, sales growth.

**5. Discussion and Conclusions**

This paper has investigated the effects of some organisational capabilities (namely, entrepreneurial, environmental learning, marketing, networking and innovative capabilities) on export performance of a sample of Italian exporting SMEs, using both objective and subjective measures of international performance.

Building on the RBV and dynamic capability perspectives, our findings suggest how particular organisational capabilities can support SMEs’ superior performance in diverse international markets. Our results provide empirical evidence that exporter smaller firms with high level of entrepreneurial and innovative capabilities perform better internationally. The managerial determinant, as posited by the RBV and highlighted by numerous scholars (Boter & Holmquist, 1996; Crick & Chaudhry, 1997; Hutchinson et al, 2006; Lautanen, 2000; Lloyd-Reason & Mughan, 2002) was clearly the most influential for both the objective and subjective export performance modes of assessment. Moreover, on one hand, many past studies found that entrepreneurial capability is positively associated with performance (Wiklund & Shepherd, 2003; Zahra & Covin, 1995; Thanos et al., 2017); on the other hand, the empirical findings are not altogether consistent. For example, Lee et al (2001) found only weak evidence of a positive association with the start-up’s performance. Lumpkin & Dess (1996) considered the relationship with performance to be context-specific. Jantunen et al (2008) found that entrepreneurial capability had a significant and positive effect on international performance among the firms that had chosen to internationalise gradually or slowly, but not among a sub-sample of born globals. Moreover, the findings of Zahra & Garvis (2000) highlight the importance of entrepreneurial activities for success in general, but also on international markets, because entrepreneurial capability supports opportunity recognition and exploitation in expansion to new markets. They suggest that entrepreneurially-oriented firms actively seek new operating modes and methods that improve performance and facilitate the achievement of new valuable resource configurations. Hence, there is reason to assume that entrepreneurial capability contributes positively to international performance. Furthermore, as many past studies have argued, innovation is the life blood of most successful firms. Companies focus on continuously improving products, services, processes and administrative techniques within the firms. Innovation processes are needed to develop global products, stay abreast of growing global competitive pressures, and obtain better international performance. Organisations without the capacity to innovate may invest time and resources in studying markets, but are less able to translate this knowledge into practice. Innovative capability is a crucial dimension for successful international ventures, influencing the performance of international SMEs positively (Knight & Kim, 2009; Prange and Pino, 2017). Coupled with a strong entrepreneurial capability, it serves as a source of processes, products and services that fit better the targeted international markets (Lumpkin & Dess, 1996; Steensma et al, 2000). Therefore, innovative capability is a potential driver of SME performance in international markets.

Our empirical findings show a not significant relationship between networking capability and international performance, only if it is measured as export intensity. This finding seems to contrast with a mainstream literature both in IB and IE. Among the possible reasons for this finding, we advance the following hypotheses: first, networks are understood in different ways by entrepreneurs. They seem to recognise quickly the role of dyadic partnerships (for example with key customers, suppliers or distributors), but are equally disposed to recognise the role of “generic networks” as the work by Zucchella & Kabbara (2013) suggests. Second, networks may matter to explore opportunities, to access some markets, but they are not equally important for export performance. As some studies reported (Evers, 2011; Loane & Bell, 2006; Evers & O’Gorman, 2011), companies utilised network relationships in order to obtain information, resources, capabilities and the access to exchange partners to respond to foreign market opportunities. Finally, there may be some country-specific issues affecting the relationship between networks and export performance. Some studies (Zucchella et al, 2006; Shirokova & McDougall-Covin, 2013) do not find networks to impact respectively either on early foreign growth of Italian smaller firms or on the internationalisation of Russian entrepreneurial ventures. We think there is still much to understand about the role of networks and also about what entrepreneurs understand as networks. This can represent a major future research avenue.

Also environmental learning is not significantly related to export performance. This result may reflect the nature of our sample, which representative of a population of manufacturing firms, operating in relatively stable industries. Particularly, the Italian exporters in the manufacturing sector are characterised by the adoption of a niche strategy (Zucchella et al., 2006). This choice restricts to a niche the market and the competitive context of the firm, which may consequently reduce the need of a broader environmental learning effort.

Lastly, the empirical analyses show that marketing capability does not affect the international performance of SMEs. As McDougall & Oviatt (1996) explain, the marketing competences and skills, which provide the exporting SMEs with competitive advantage in its domestic and current international markets, may not be the same as those that create advantage in new international target markets. As an outcome for this, when a firm expands internationally, it must learn how to change and adapt their export or internationalisation strategies “to be congruent with their new environment”. In addition, we advance the hypothesis that in entrepreneurial firms, marketing capabilities are understood by respondents as part of the entrepreneurial capabilities. This is coherent with the key role assigned to market exploration and exploitation in entrepreneurial activity and with the relatively recent surge of the field of entrepreneurial marketing as applied to international ventures (Kocac & Abimbola, 2009). This represents an additional important research avenue for the future.

These results offer theoretical and managerial implications. Theoretically speaking, our findings suggest that, in order to be successful in international business, SMEs should develop specific competences that are relatively unique and inimitable, in order to maximize their utility international performance. As the RBV highlights, a firm’s foundational resources are important in diverse business environments because they provide a stable basis for the development of specific competences. These competences will be particularly useful to the extent that they are embedded in organisational culture via ongoing replication of routines, producing a unique configuration of resources. We contribute to IB and IE theory, in that we define a set of organisational capabilities and related them to both objective and subjective measures of international performance.

Managerially speaking, the results of this study reveal that firms’ export performance seems to hinge on the development and well-conceived manipulation of entrepreneurial and innovation capabilities. SMEs often tend to lack the large base of financial and tangible resources that characterise the traditional MNEs. The specific capabilities identified here help international SMEs to overcome the scarcity of traditional resources to succeed in foreign markets. The quality of the management team in international SMEs and the capability to generate innovation, in particular, are likely to hold particular relevance for company international success.

**6. Limitations and future research**

We acknowledge various limitations of the current study, which may help scholars in developing future research. Firstly, although this study analysed some organisational capabilities, future research should investigate additional capabilities, which may influence the export performance of smaller companies. Future research may investigate the impact of the different dimensions of the entrepreneurial capability (i.e. proactiveness, innovativeness, and risk-taking). In fact, many past studies have demonstrated that these dimensions may impact differently on international performance (Kropp et al, 2006; Zhou, 20007). As Lumpkin & Dess (1996) stated, different combinations of the dimensions of entrepreneurial capability may occur depending on the context and the type of entrepreneurial activity pursued. New research directions should also look in more depth at the potential roles of environmental learning, network, and marketing capabilities on export performance.

Secondly, even though we identified five critical organisational capabilities, future research needs to investigate both internal and external factors of SMEs that influence their international performance. Thirdly, although the empirical data focused on a sample of Italian SMEs, the findings could be of interest to firms in other European countries. As future research directions it would be interesting to replicate similar studies in distinct geographical contexts, so, the results could be generalised to larger populations. Fourth, the study was centred on a cross-sectional research design. Future studies should consider employing longitudinal analysis in order to illustrate the dynamics of exporting. In this way, complex constructs such as export performance could be analysed from a temporal perspective, allowing for the investigation of composite cause–effect relationships between its objective and subjective dimensions. Finally, other determinants of objective measures of exportl performance could be taken into consideration (e.g. number of export countries, number of export zones).

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**Table 1: Definitions of the Variables**

|  |  |
| --- | --- |
| **Variable** | **Definition** |
|  |  |
| ***Dependent Variable*** |  |
| **EP1** | Subjective measure of export performance  = factor score of 11 items regarding export performance |
| **EP2** | Objective measure of export performance  = export sales/total sales |
|  |  |
| ***Explanatory Variables*** |  |
| **AGE** | ln (firm age)  [years since establishment] |
| **SIZE** | ln (firm employment)  [number of employees] |
| **ENT** | Factor score of 12 items regarding entrepreneurial capabilities |
| **LRN** | Factor score of 12 items regarding environmental learning capabilities |
| **MKT** | Factor score of 13 items regarding marketing capabilities |
| **NET** | Factor score of 12 items regarding networking capabilities |
| **INN** | Factor score of 10 items regarding innovation capabilities |
|  |  |
| ***Industry Dummy Variables*** |  |
| **MACH** | = 1 if the SME is in the machinery industry; = 0 otherwise |
| **FURN** | = 1 if the SME is in the furniture industry; = 0 otherwise |
| **ELEC** | = 1 if the SME is in the electrical industry; = 0 otherwise |
| **CONS** | = 1 if the SME is in the construction industry; = 0 otherwise |
| **TEXT** | = 1 if the SME is in the textile industry; = 0 otherwise |
| **FOOD** | = 1 if the SME is in the food & beverage industry; = 0 otherwise |

**Table 2: Analysis of Construct Properties**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Construct** |  | **Cronbach α** | **AVE** | **Omega** | **Rho** |
| Export performance | EP1 | 0.91 | 0.57 | 0.94 | 0.97 |
| Entrepreneurial capabilities | ENT | 0.79 | 0.35 | 0.77 | 0.86 |
| Environmental learning capabilities | LRN | 0.86 | 0.43 | 0.90 | 0.95 |
| Marketing capabilities | MKT | 0.89 | 0.51 | 0.93 | 0.96 |
| Networking capabilities | NET | 0.91 | 0.58 | 0.94 | 0.97 |
| Innovation capabilities | INN |  | 0.55 | 0.92 | 0.96 |

Notes: (1) Cronbach α > 0.7 is considered satisfactory (Hair et al, 2010).

(2) AVE = average of items variance extracted by construct. AVE > 0.2 is considered satisfactory (Fornell et al., 1981).

(3) Omega = ratio of variance of the construct scores to the scale scores (McDonald, 1999). Omega > 0.7 is considered satisfactory (McDonald, 1999).

(4) Rho = correlation of scale scores with construct scores. Rho > 0.8 is considered satisfactory (McDonald, 1999).

**Table 3. Industry Analysis of the Sample**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Total sample** | **Machinery** | **Furniture** | **Electronic** | **Construction** | **Textile** | **Food & Beverage** | **Chemical** | **ANOVA**  **P-value** |
|  |  |  |  |  |  |  |  |  |  |
| **Number of firms** | 213 | 111 | 28 | 30 | 5 | 19 | 11 | 9 |  |
| **Export performance**  **(EP1)** | 56.19 | 56.97 | 58.14 | 52.10 | 41.70 | 58.93 | 47.71 | 66.53 | 0.101 |
| **Export performance (EP2)** | 49.84 | 50.64 | 63.82 | 37.23 | 35.00 | 53.26 | 35.55 | 56.90 | **0.002\*** |
| **AGE** | 34.3 | 35.7 | 34.5 | 29.3 | 29.0 | 40.1 | 23.4 | 37.5 | 0.202 |
| **SIZE** | 45.5 | 50.3 | 30.0 | 50.2 | 18.6 | 35.9 | 15.5 | 89.5 | **0.005\*** |
| **ENT** | 59.81 | 59.98 | 66.33 | 56.07 | 51.57 | 61.02 | 48.52 | 65.47 | **0.042\*** |
| **LRN** | 51.67 | 52.26 | 51.65 | 51.31 | 39.30 | 48.99 | 49.35 | 60.81 | 0.433 |
| **MKT** | 50.45 | 50.91 | 50.05 | 49.45 | 39.36 | 46.98 | 57.17 | 48.22 | 0.347 |
| **NET** | 49.52 | 49.77 | 49.02 | 51.03 | 34.69 | 45.64 | 44.80 | 65.11 | 0.213 |
| **INN** | 48.27 | 48.16 | 49.90 | 49.69 | 37.80 | 47.92 | 49.89 | 42.99 | 0.788 |

Notes: (1) The figures in each column show the mean values of the variables for the SMEs in each industry sector.

(2) The final column shows the results of comparing the mean values across the seven industry sectors using one-way ANOVA.

**Table 4: The Regression Results**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Dependent variable = EP1** | | **Dependent variable = EP2** | |
| **Model 1** | **Model 2** | **Model 3** | **Model 4** |
|  |  |  |  |  |
| **Constant** | **58.064\*\*\***  **(8.302)** | 12.391  (7.964) | **42.068\*\*\***  **(11.542)** | 5.676  (12.61) |
| **AGE** | -2.425  (1.727) | - 0.756  (1.375) | -2.100  (2.34) | -0.334  (2.181) |
| **SIZE** | **3.852\*\*\***  **(1.183)** | **2.482\*\*\***  **(0.948)** | **5.210\*\*\***  **(1.64)** | **4.542\*\*\***  **(1.502)** |
| **MACH** | -5.977  (6.358) | -6.955  (5.207) | -1.799  (8.839) | -4.465  (8.246) |
| **FURN** | -2.893  (7.102) | -8.198  (5.812) | 13.792  (9.874) | 5.277  (9.203) |
| **ELEC** | -10.817  (6.932) | -13.606\*\*\*  (5.651) | -15.262  (9.637) | -15.060\*  (8.949) |
| **CONS** | -19.550\*  (10.151) | -13.606\*  (8.220) | -15.217  (14.112) | -15.064  (13.016) |
| **TEXT** | -2.377  (7.451) | -4.215  (6.073) | 2.931  (10.358) | -2.218  (9.618) |
| **FOOD** | -12.771  (8.288) | -9.148  (6.885) | -13.049  (11.522) | -7.935  (10.903) |
| **ENT** |  | **0.500\*\*\***  **(0.074)** |  | **0.785\*\*\***  **(0.117)** |
| **LRN** |  | 0.088  (0.080) |  | -0.214  (0.128) |
| **MKT** |  | 0.024  (0.097) |  | -0.039  (0.127) |
| **NET** |  | -0.071  (0.081) |  | -0.180  (0.112) |
| **INN** |  | **0.284\*\*\***  **(0.074)** |  | **0.218\***  **(0.118)** |
|  |  |  |  |  |
| **Goodness of fit:** |  |  |  |  |
| ***R2*** | 0.097 | 0.46 | 0.14 | 0.32 |
| ***Adjusted R2*** | 0.062 | 0.42 | 0.11 | 0.28 |
|  |  |  |  |  |
| **Diagnostics:** |  |  |  |  |
| ***Shapiro-Wilk test***  ***(for normality)*** | P = 0.246 | 0.192 | **0.04** | **0.006** |
| ***Durbin-Watson test***  ***(for independence)*** | P = 0.303 | 0.934 | 0.726 | 0.542 |
| ***Breusch-Pagan test***  ***(for homoskedasticity)*** | P = 0.0685 | 0.261 | 0.090 | 0.059 |
| ***Variance Inflation Factors***  ***(for collinearity)*** | all vif < 2 | all vif < 2 | all vif < 2 | all vif < 2 |

Notes: (1) The results were generated using sandwich robust estimation. The chemical sector was taken as the reference sector.

(2) Standard errors are in brackets

(3) \*\*\* denotes significance at the 1% level; \*\* denotes significance at the 5% level; \* denotes significance at the 10% level.