

NO NEED TO CHOOSE BETWEEN INNOVATION AND INTERNATIONALIZATION: WHEN PURSUING TWO STRATEGIES AT A TIME LEADS TO FIRM SUPERIOR PERFORMANCE

by Costanza Nosi, Tommaso Pucci, Lorenzo Zanni

1. Introduction

Innovation and internationalization have traditionally been studied as two independent strategic options (Hagen et al., 2014). Scarcity of resources at the firm's disposal has been identified as the main reason preventing companies, especially small- and medium-sized enterprises (SMEs), from the combined adoption of innovation and internationalization (Roper and Love, 2002; Kumar, 2009). However recently scholars have started questioning such an assumption claiming that there might indeed be a relationship between the two strategic conducts (e.g. Wakelin, 1998; Lachenmaier and Wößmann, 2006; Cerrato, 2009; Ito and Lechevalier, 2010). According to this literature, innovation and internationalization are intertwined development paths (Kylläheiko et al., 2011). Firms in fact tend to grow and make profit by commercializing goods and services in foreign countries (internationalization), following a market pattern, by developing new products and services (innovation), or by combining both strategic behaviors (Lecerf, 2012).

Nevertheless, the literature on concomitant innovation and internationalization has mainly focused on larger companies (Hessels, 2007). While SMEs' resource constraints are said to prevent them from boasting of high innovation capabilities and going international at the same time, larger businesses are claimed to be more productive and internationally active. However, recently academics show increasing interest in the innovation and internationalization processes of small- and medium-sized enterprises. The simultaneous pursue of both strategies has been recognized in fact as an effective way for achieving superior performance on the part SMEs, often enabling their actual survival (Lee et al., 2012; Halilem et al., 2014), as well as allowing their growth (Cassiman and Golovko 2011; Lecerf, 2012).

Albeit the increasing interest of the academic community in the concomitant internationalization and innovation processes of SMEs the literature points out some aspects that need to be further investigated. In particular, important unexplored topics include the contemporary pursue of innova-

tion and internationalization strategies on the part of SMEs, the resulting performance of adopting such a strategic choice, and the antecedents of innovating and going international (e.g. Boly et al., 2014; Boermans and Roelfsema, 2015; Etemad, 2015; Hilmersson, and Papaioannou, 2015; Enjolras et al., 2016).

Trying to shed light on these themes, the present study investigates the joint implementation of innovation and internationalization on the part of SMEs and measures the impact that their concomitant adoption exerts on firm performance. Furthermore, the study seeks to shed light on the antecedents of firm innovation and internationalization focusing on the relationship between the firm resources and capabilities and internationalization and innovation.

The analysis is based on a sample of 169 Italian small and medium enterprises working in the gold-fashion business. Such a business includes three value chains that are strongly related: Jewelry, textile-clothing, and leather. The choice to explore this industry is due to the fact that the gold-fashion is a typical industry of the Made in Italy, characterized by a large number of SMEs, which extensively adopt internationalization and both product and process innovation strategies to achieve a competitive advantage over rivals (Simoni et al., 2010a; Simoni et al., 2010b).

In order to test the hypothesized relationships among investigated variables, structural equation modeling (SEM) is used.

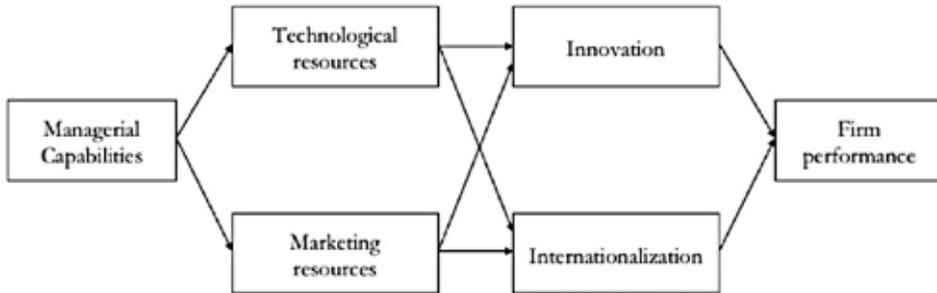
The manuscript is organized as follows. First, the proposed conceptual model is shown, a literature review of the investigated themes is provided and research hypotheses are framed. Second, the adopted research methodology is outlined. Furthermore, the results of the study are presented. Finally, theoretical and managerial implications, as well as conclusions are provided.

2. Theoretical background and research hypotheses

In the attempt to explore the joint implementation of innovation and internationalization on the part of SMEs and to measure the impact that their concomitant adoption exerts on firm performance, a novel conceptual model has been worked out and tested in the present research. The model considers the concomitant relationships existing between firm performance, innovation and internationalization, as well as their antecedents here identified as the firm managerial capabilities, innovation and marketing resources.

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Figure 1: shows the proposed conceptual model.



The antecedents of innovation and internationalization: Managerial capabilities, and technological and marketing resources

In the attempt to answer some questions raised by the literature concerning the antecedents of firms' innovation and internationalization, the present research takes into account some business' internal factors that might be at the origin of a higher or lower firm's appraisal to innovate and go international. In so doing, firm's marketing and technological resources are considered as antecedents of innovation and internationalization, and managerial capabilities are considered positively related to both technological and marketing resources. Here below, the literature supporting our hypotheses is provided.

Marketing and technological resources and capabilities contribute considerably to the firm success and profitability (Ramaswami et al. 2009). Whereas previous studies have contributed to understand how and to what extent some relevant factors, such as technological (e.g. Krasnikov and Jayachandran, 2008) and marketing resources and capabilities (e.g. Spillan and Parnell, 2006; Pucci et al., 2011; Pucci et al., 2013) influence firm performance, critical issues remain concerning the impact that these elements have on both enterprise internationalization and innovation (Ren et al., 2015).

Marketing resources and capabilities are claimed to significantly influence the internationalization strategies of firms in a given sector (Kotabe and Helsen, 2004; Bortoluzzi and Balboni, 2011). It is therefore relevant to investigate marketing in exploring the success of SMEs, which enter and compete in international markets. According to Drucker (1993), in fact, given that the main purpose of a firm is to create customers, the only two

levers that can be exploited to achieve it are marketing and innovation. It is now generally accepted in the literature that the firm innovation capability is associated with the possession of distinct critical resources, especially of a technological type (Cohen and Levinthal, 1989; Cohen and Levinthal, 1990), and with the organization human capital (Caloghirou et al., 2004). Some authors have suggested that resources and technological capabilities positively influence the firm internationalization process (Kyläheiko et al., 2011). A further key factor affecting both firm innovation and internationalization performance is a firm's marketing capability (Ren et al., 2015). Some scholars have already shown how marketing resources positively influence the performance of firms, especially of SMEs.

In order to understand how technological and marketing resources are created, developed and exploited, a further effort has been made to understand the factors underlying these processes. In so doing, we assume that the firm's managerial capabilities play a fundamental role in displaying such resources and have therefore to be taken into account once exploring these phenomena.

According to the resource-based view (RBV), firms attain superior performance thanks to the possession of distinctive resources (Wernerfelt, 1984). Resource heterogeneity is key to enable some firms to outperform others. Competitive advantages can be in fact achieved and sustained by enterprises that possess resources, which are valuable, rare, hardly imitable, and non-substitutable (Barney, 1991). Whereas Barney (1991) focuses on internal resources as key for sustaining competitive advantage, other scholars (e.g. Prahalad and Hamel, 1990; Hamel and Prahalad, 1994; Sanchez and Heene 1996) concentrate on firm competences and capabilities. These are capacities possessed by firms to deploy and combine resources in order to realize strategic objectives (Amit and Schoemaker, 1993). Capabilities are rooted in the organization and in its processes and routines, characterized by causal ambiguity and path dependency (Winter and Szulansky, 2002), thus hard to transfer and reproduce in settings other than those where they initiate (Sanchez and Heene, 2004).

Academics acknowledge that firms' ability to deploy resources through capabilities may be more important than the firm resource endowment in fostering performance (Vorhies et al., 2009). This clarifies why by deploying resources through capabilities some firms are able to overcome competitors with a comparable resource endowment (Krasnikov and Jayachandran, 2008). However, whereas scholars recognize that firm performance differentials can be understood by examining the interactions between capabilities and resources (Gebhardt et al., 2006; Cerrato and Depperu, 2010), they have not yet fully explored which provisions are critical and to what extent such provisions carry some weight in the exploitation of the firm resources (Ngo and O'Cass, 2012).

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The effective allocation of resources along this process allows managers to take advantage of rising opportunities and eventually achieve competitive advantages (Day, 1994). Managerial capabilities can be categorized based on the traditional business functions: human resources management, operations management, and the management of financial resources. The first involve the development of an organization human potential in line with the planned strategic objectives; operations provide the production and marketing of goods and/or services that are valuable for the customer; financial management involves the administration of the firm financial assets (Hooley et al., 2005). Recently Kyläheiko et al. (2011) have suggested that the firm growth is primarily based on the capability of the management to look at current markets and technologies from different standpoints and the ability to craft new combinations.

Based on these assumptions, our first research hypothesis is:

H_p 1: Managerial capabilities, and technological and marketing resources are antecedents of innovation and internationalization.

2.2 Innovation, internationalization, and firm performance

In the literature, it has already been acknowledged that firm innovation leads to superior performance (e.g. Damanpour et al., 1989; Lengnick-Hall, 1996) and that innovation and internationalization are positively related (e.g. Glaum and Oesterle, 2007; Lee et al., 2012). Opposing to the established literature that considers innovation and internationalization strategies as alternative pathways to attain superior performance (Roper and Love, 2002; Kumar, 2009; Kyläheiko et al., 2011), recent researches recognize that the joint implementation of internationalization and innovation can enhance firm performance (e.g., Wagner 2007; Hagemeyer and Kolasa 2011).

Innovation is claimed to lead enterprises to start internationalizing or get involved in international endeavors, such as through exports (Cassiman and Golovko 2011). Working abroad itself is considered a source of innovation. Operating in foreign markets in fact often exposes firms to higher levels of competition, which may also increase the pressure to innovate (Hernández et al. 2016). It seems therefore that internationalization not only boosts firm performance but also triggers innovation (e.g., Wagner 2007; Hagemeyer and Kolasa 2011). Overseas firms achieve learning, which enhances their innovation performance (Sheamur et al., 2015): Innovative firms entering foreign markets have in fact the opportunity to access and assimilate new knowledge to develop new innovations attaining competitive advantages not only overseas, but also in the domestic market (Golovko and Valentini, 2011; Filippetti et al., 2016).

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Recent contributions dealing with internationalization in emerging countries assert that participation in foreign markets also exposes the firm's employees to international good practices, allowing enterprises to absorb new and innovative ways of doing business (Zahra et al. 2009). Internationalization enables access to external financial sources, providing successful entry in new networks of potential investors more willing to take part in innovation practices (Lecerf, 2012).

Some scholars claim that firms need to reach a certain degree of internationalization to seize the advantages of innovation. Innovation is in fact considered a critical source of productivity and profitability for companies that compete internationally (Rodríguez and Rodríguez, 2005; Castaño et al., 2016). Enterprises that operate in multiple countries get also in contact with different innovation contexts (customer needs, culture, habits, etc.) that spur them to be more innovative in the aim of making profit (Crisuolo et al., 2010).

With relation to the characteristics of internationalization strategies, it is acknowledged that they can diverge steadily based on the essential firm features, such as entrepreneurial and strategic orientation (Cedrola et al., 2016), productivity, skill intensity, management characteristics, but also innovation. It is demonstrated that internationally active SMEs are frequently more productive and more innovative, and engage larger shares of skillful workers (Castellani and Zanfei, 2007).

Finally, few recent researches made on Dutch (Boermans and Roelfsema, 2015), Italian (Giovannetti et al., 2011), French (Lecerf, 2012), German (Becker and Egger, 2013), Chinese (Ren et al., 2015), and Brazilian SMEs (Hernández et al. 2016) claim that innovation and internationalization can be somehow intertwined and concurrently contribute to boosting firm performance. Our second research hypothesis is then:

Hp. 2: Innovation and internationalization are positively related to firm performance.

3. Methodology

3.1 Data collection

A structured questionnaire has been submitted between June and October 2015 to a sample 169 companies located in the province of Arezzo (Tuscany – Italy), operating in the gold-fashion industry. The questionnaire consists of 44 questions divided into 5 sections: 1) structural data of the company; 2) characteristics of the supply-chain relationships; 3) organization of the production process; 4) characteristics of the product/market combination and 5) performance.

The decision to investigate this business relates to the fact that the gold-fashion is a typical industry of the Made in Italy, characterized by a large number of small and medium-sized businesses, which widely adopt internationalization and both product and process innovation strategies to achieve a competitive advantage over rivals (Simoni et al., 2010a; Simoni et al., 2010b).

Furthermore, the spatial agglomeration of firms in the Province of Arezzo constitutes an interesting research field to achieve the objectives of the present work. In fact, with the resolution 69/2000 the Regional Council recognized two industrial districts in the Arezzo territory: the *gold district* and the *textile-clothing Casentino-Val Tiberina district*. These industries are strongly interconnected and together with other businesses, such as food and mechanics, represent pillars of the Made in Italy production system (Rabino et al., 2008; Santoni and Zanni, 2011). For this reason, they have been object of investigation of previous relevant studies (see Lazzeretti, 2003; Zanni, 2006).

The target universe accounts for 1,441 enterprises: 839 operating in the gold industry and 602 in the fashion industry. The average redemption rate of the survey is equal to 11.72%. The 169 respondents are all small and medium firms: 10.96% for the fashion industry: $n = 66$ and 12.27% for the gold industry: $n = 103$ respectively.

3.2 Measures

Managerial capabilities (Manag. Cap.) have been computed by using a three-item construct, which assesses the ability to effectively manage: The firm financial resources, human resources, and operations (Hooley et al., 2005).

According to the European taxonomy (OECD, 2011), in low-tech industries, such as the gold-fashion business, the measurement of the level of technological resources based on R&D investments is problematic due to the lack of in-house R&D structured functions or laboratories. Thus, a mul-

ti-item construct was used to operationalize the variable Tech. Resources by measuring the investments in production technologies, plants, certification, training, design and engineering, ICT, industrial property rights over a three-year time period (Santoni and Zanni, 2011).

Marketing capabilities are developed by enterprises through the repeated employment of intangible resources, namely knowledge and skills, to solve marketing issues (Vorhies et al., 1999). These marketing skills and knowledge are exploited to deliver outputs that are valuable for consumers and eventually advance enterprise performance (Orr et al., 2011). Since in the literature marketing capabilities are claimed to be developed by experts of marketing, the marketing resources variable (Market. Resources) was operationalized as the share of employees working in the marketing department.

A multi-item construct (Santoni and Zanni, 2011) was used to operationalize Innovation by measuring the presence of product/process and organizational innovations realized during the three-year time period 2012-2014.

In line with previous studies (Filatotchev and Piesse, 2009; Kyläheiko et al., 2011; Ren et al., 2015), firm Internationalization was operationalized by using the share of foreign sales in a firm's total sales.

A construct validated by the literature was used to assess firm performance: organizational performance (De Luca et al., 2010). The variable was operationalized using a three-item scale evaluating the self-assessment of firm performance with respect to designed objectives, main rivals, and the whole industry performance.

Table 1: Measurement items and validity assessment (N = 169)

| Measure | Item description |
|---|---|
| Organizational performance ^a $\alpha = 0.956$ (De Luca et al., 2010) | <i>Please rate your firm's overall performance in the last three years with respect to:</i> x_1 . Its own stated objectives. x_2 . Main competitors' performance. x_3 . Industry performance. |
| Innovation ^b $\alpha = 0.744$ (Santoni and Zanni, 2011) | <i>Please indicate which of the following innovations was introduced over the past three years (more than one answer possible)</i> x_4 . Product innovation x_5 . Materials innovation x_6 . Process innovation x_7 . Organizational innovation |
| Managerial capabilities ^a $\alpha = 0.839$ (Hooley et al., 2005) | <i>To what extent do the following statements apply to your organization?</i> x_8 . Strong financial management capabilities x_9 . Effective human resource management x_{10} . Good operations management expertise |

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| | |
|---|---|
| Tech. resources ^a $\alpha = 0.785$ (Santoni and Zanni, 2011) | Please rate your firm's investments in the last three years with respect to: x_{11} . Production technologies x_{12} . Plant x_{13} . Quality certification x_{14} . Training x_{15} . Design x_{16} . ICT x_{17} . Industrial property rights |
| Internationalization | Foreign sales / Total sales |

^a Five-point scale anchored at 1 = not at all and 5 = to an extreme extent.

^b Items measured as dummy variables

Firm size (Size) and age (Age) were used as control variables. Firm size was operationalized as the logarithm of a firm's number of employees and age was measured as the logarithm of years from foundation. Table 1 shows the items and the reliability of the used multi-item constructs.

Table 2 shows the descriptive statistics and correlations among investigated variables. The value of the Variance Inflation Factor (VIF mean = 1.45 – Appendix 1) indicates that there is no multicollinearity among the variables (Kutner et al., 2004).

Table 2: Descriptive statistics and correlation

| | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] |
|--------------------------|-------|-------|-------|--------|-------|--------|-------|-------|
| [1] Org. Perf. | 1.000 | | | | | | | |
| [2] Innovation | 0.314 | 1.000 | | | | | | |
| [3] Internationalization | 0.305 | 0.425 | 1.000 | | | | | |
| [4] Manag. Cap. | 0.178 | 0.118 | 0.165 | 1.000 | | | | |
| [5] Tech. Resources | 0.434 | 0.616 | 0.330 | 0.151 | 1.000 | | | |
| [6] Market. Resources | 0.052 | 0.189 | 0.333 | 0.093 | 0.184 | 1.000 | | |
| [7] Size (Log) | 0.176 | 0.307 | 0.273 | -0.010 | 0.462 | 0.198 | 1.000 | |
| [8] Age (Log) | 0.033 | 0.166 | 0.059 | 0.031 | 0.085 | -0.011 | 0.264 | 1.000 |
| Mean | 3.031 | 0.303 | 0.303 | 3.669 | 1.713 | 0.050 | 1.942 | 2.884 |
| St. Dev. | 1.013 | 0.341 | 0.372 | 0.836 | 0.754 | 0.121 | 1.196 | 0.921 |
| Min | 1 | 0 | 0 | 1.333 | 1 | 0 | 0 | 0 |
| Max | 5 | 1 | 1 | 5 | 4.571 | 0.830 | 5.521 | 4.883 |

$N = 169$. Correlation coefficients greater than 0.166 in absolute value are statistically significant at 95%.

In order to evaluate the relationships among investigated variables, structural equation modeling (SEM) is used (the compact form of the model is shown in Figure 1). The SEM technique is adopted because it is a

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powerful statistical method for examining multivariate data involving complex relationships between variables (Hoyle, 1995), and it is more and more extensively used in the social sciences field of study (de Carvalho and Chima, 2014).

4. Results

Table 3 shows the results of the path analysis on the hypothesized structural equation model. The goodness-of-fit test statistics of the model indicate a good fit being all values below the thresholds accepted by the literature (Hair et al., 2009): RMSEA = 0.064; CFI = 0.938; SRMR = 0.064. The results show that a higher level of managerial capabilities is positively associated with the investments made both in technological resources ($b = 0.213$) and in marketing resources ($b = 0.126$), thus confirming our first research hypothesis. Both types of resources are positively associated with a higher degree of internationalization ($b = 0.205$ and $b = 0.362$ respectively).

Table 3 – Path analysis

| Paths | Overall model | | |
|------------------------|---------------|---------|-------|
| | Std. Coeff. | S.E. | z |
| <i>Total effects</i> | | | |
| Tech. Resources | | | |
| ← Manag. Cap. | 0.213** | (0.086) | 2.46 |
| Market. Resources | | | |
| ← Manag. Cap. | 0.126* | (0.077) | 1.64 |
| Internationalization | | | |
| ← Market. Resources | 0.205*** | (0.069) | 2.98 |
| ← Tech. Resources | 0.362*** | (0.077) | 4.70 |
| ← Size | 0.062 | (0.078) | 0.80 |
| ← Age | 0.016 | (0.068) | 0.24 |
| Innovation | | | |
| ← Market. Resources | 0.013 | (0.070) | 0.18 |
| ← Tech. Resources | 0.803*** | (0.054) | 14.90 |
| ← Size | -0.028 | (0.077) | -0.36 |
| ← Age | | | |
| ← Age | 0.139** | (0.067) | 2.07 |
| Org. Performance | | | |
| ← Internationalization | 0.224*** | (0.076) | 2.95 |
| ← Innovation | 0.288*** | (0.091) | 3.17 |

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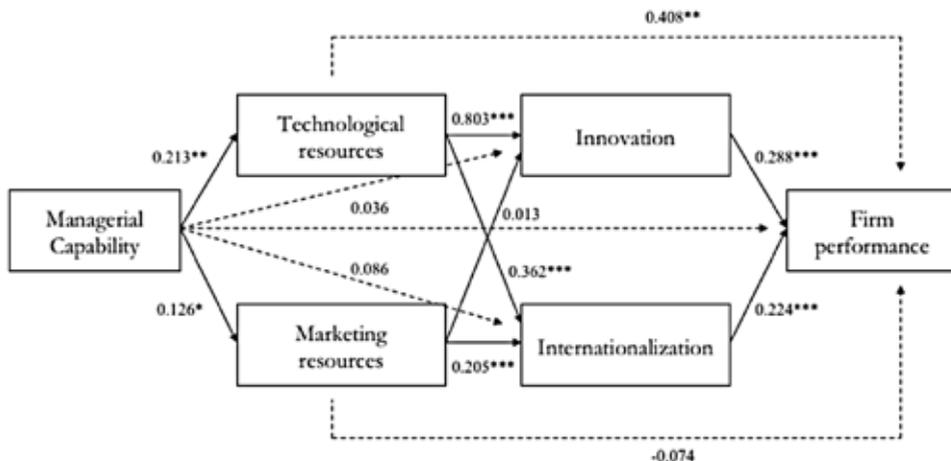
| | | | |
|---------------------------|----------|---------|-------|
| – Size | 0.022 | (0.081) | 0.28 |
| – Age | -0.045 | (0.075) | -0.60 |
| – Innov. X Intern. | 1.037*** | (0.253) | 15.26 |
| <i>Indirect effects</i> | | | |
| Innovation ← Manag. Cap. | 0.060** | (0.027) | 2.26 |
| Internat. ← Manag. Cap. | 0.047** | (0.020) | 2.37 |
| Org. Perf. ← Manag. Cap. | 0.081** | (0.037) | 2.16 |
| Org. Perf. ← Tech. Res. | 0.401*** | (0.085) | 3.38 |
| Org. Perf. ← Market. Res. | 0.357* | (0.199) | 1.58 |
| χ^2 | 237.872 | | |
| p | < 0.001 | | |
| RMSEA | 0.064 | | |
| CFI | 0.938 | | |
| SRMR | 0.064 | | |
| Overall R^2 | 0.862 | | |

$N = 169$. * $p < 0.100$; ** $p < 0.050$; *** $p < 0.001$.

Differently, only technological resources are associated with a higher level of innovation ($b = 0.803$). Our second research hypothesis is therefore only partially supported. Finally, both innovation ($b = 0.224$) and internationalization ($b = 0.288$) have a positive and significant effect on performance. This finding confirms our third research hypothesis.

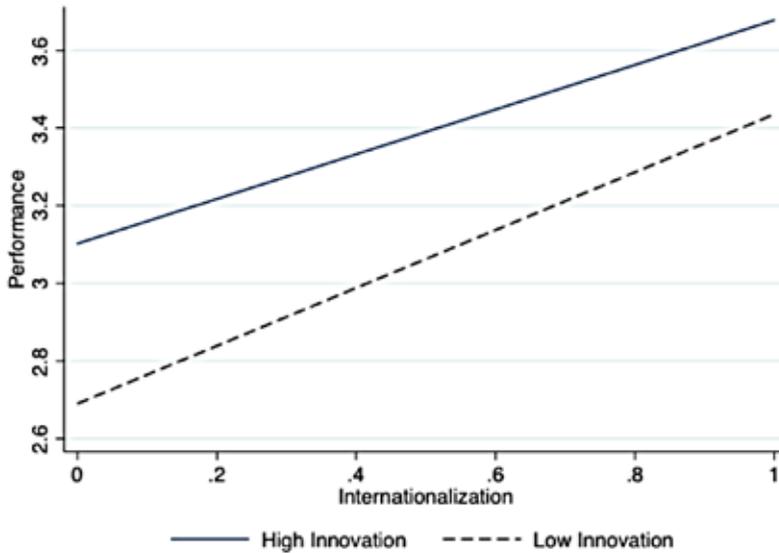
The only significant direct effect that was not hypothesized is between technological resources and firm performance ($b = 0.408$). Figure 2 shows the direct effects of analyzed variables.

Figure 2 – Direct effects of analyzed variables



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Figure 3 – Interaction effect between innovation and internationalization on performance



Relatively to the interaction effect between innovation and internationalization, the coefficient is positive and significant, confirming that the two conducts are complementary strategic options, and their concomitant adoption leads a superior performance.

A simple slope analysis was conducted at 1.5 standard deviation above and below the mean (Preacher et al., 2006) for innovation.

Figure 3 illustrates the plot of the interaction effect between innovation and internationalization. For higher levels of innovation outcomes, there is a more positive and monotonic relationship between internationalization and firm performance.

5. Discussion, implications and conclusions

In this paper we investigated innovation and internationalization with the aim of verifying whether they are complementary or alternative strategic options for SMEs, and how they relate to firms' performance. In order to understand the effect that the joint adoption of the two strategies has on performance, the antecedents of innovation and internationalization were examined adopting the RBV perspective. Thus, firm resources and capabilities were investigated. First, the hypotheses relative to the association between firm managerial capabilities and investments in technological and marketing resources were tested. Second, the relationship between these resources and innovation and internationalization was explored. Lastly,

the relationship between these two strategic options and firm performance was examined.

The findings reveal that managerial capabilities are positively associated with the employment of both firm technological and marketing resources, confirming what previously found by many authoritative contributions (e.g. Prahalad and Hamel, 1990; Teece et al., 1997). The firm capability of managing and allocating critical resources along the value creation process is at the basis of competitive advantage (Amit and Schoemaker, 1993), and such ability may be even more important than resource endowment per se in fostering firm performance (Vorhies et al., 2009).

Further, the results show that while both technological and marketing resources are positively associated with the firm international performance, this does not hold true with relation to innovation performance. According to RBV, marketing resources and capabilities are firms' internal determinants of internationalization performance (Collis, 1991; Zou and Stan, 1998) because they help to identify marketing opportunities and provide valuable outcomes for customers (Wang et al., 2012). Thus, they are claimed to increase the possibility of firms to grow in the foreign markets (Kotabe et al., 2002). Similarly, also technological intensity seems to be a key predictor of firm internationalization performance (Dhanaraj and Beamish, 2003). In particular, many authors have already recognized that technological resources may be at the basis of a superior performance that can be exploited abroad (Zahra et al. 2003; Rodriguez and Rodriguez, 2005; Brock and Jaffe, 2008; Tsang et al., 2008). Improvements in production technologies, ICT, and training may increase the efficiency of the firm activities, while investments in design, quality certification and industrial property rights could contribute to strengthen product differentiation. Both these advantages constitute valuable means for succeeding domestically and in the foreign markets (Wang et al., 2012). Interpreting such a result according to the RBV perspective, it is confirmed that being highly firm specific, therefore difficult to imitate by competitors (Dierickx and Cool, 1989), both technological and marketing resources play a critical role in the internationalization of firms (Kyläheiko et al., 2011 Ren et al., 2015).

Different findings have been found with respect to innovation performance of investigated firms. In this case, only resources of a technological, and not of a marketing type are positively associated with superior innovation performance. If it is now generally accepted in the literature that the firm innovation capability is associated with the possession of distinct critical resources, especially of a technological type (Cohen and Levinthal, 1989; Cohen and Levinthal, 1990), our results disprove what suggested by some authors, that is marketing resources and capabilities positively influence the innovation level of the firm (Dutta et al., 1999; Weerawardena, 2003). This outcome can be partly explained by the characteristics of the

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industry investigated in our study. The gold-fashion industry is in fact a low-tech sector, where the capability of a firm to innovate is mainly linked to the ability to exploit resources of a technological type (e.g. Santamaria et al., 2009), rather than of a market-related type. This result seems to be also substantiated by the fact that an unexpected direct effect of technological resources over the firm performance was found.

Finally, our findings reveal that innovation and internationalization are both positively related to firm performance. According to Drucker (1993), given that the main purpose of a firm is to create customers, the only two levers that can be exploited to achieve it are marketing and innovation. In particular, the interaction between the two strategic options is positive and significant confirming their complementary effect on the firm performance (Filatotchev and Piesse, 2009; Kyläheiko et al., 2011). The implementation of one strategy, rather than reducing the amount of available resources to use for further development (Roper and Love, 2002; Kumar, 2009), seems to reinforce the resource deployment capability of the firm. Businesses, which successfully innovate and enter foreign markets at the same time are able to give rise to virtuous processes, such as new knowledge assimilation, identification of new market opportunities, positive spillovers in the domestic market that eventually positively reverberate on the firm overall performance (Golovko and Valentini, 2011).

The results provide some interesting managerial implications. First, managers and entrepreneurs do not necessarily need to choose between innovation and internationalization. On the contrary, it could be more convenient to adopt a balanced approach to crafting and executing innovation and internationalization strategies given the synergistic impact that they have on firm performance. Innovations implemented at the product, process, as well as at the organizational level can be profitably combined with entering foreign markets in the pursue of the overall business success. Second, to be competitive in the overseas markets investments should be focused on fostering intangible resources both of a marketing and of a technological type, rather than on tangible assets that would probably be more easily imitable by foreign competitors. Furthermore, firms operating in low-tech sectors should probably dedicate higher investments in technological resources, if they aim to foster innovation given that these seem to be more crucial than marketing resources. Efforts made to enhance the activities downward the value chain could in fact dissipate important assets to be allocated more effectively in technology. Finally, entrepreneurs should strive for the development of managerial capabilities. And this is particularly relevant for small- and medium-sized enterprises. SMEs are in fact traditionally characterized by lack of managerial capabilities and this could be not only a reason for underperforming in the domestic market, but also abroad due to the inability of the firm to meet the challenges of

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the international environment. Therefore, business owners should exploit professional management in the aim of effectively deploying the firm resources and eventually achieving successful innovation and internationalization strategies. This could be evidently done either by hiring qualified managers or by cooperating with skilled consultants.

The findings of this research need to be interpreted in light of some limitations. The first limitation is due to the way investigated variables were operationalized. Firm innovative performance and marketing resources were measured by using proxies that may possibly provide only partial information. In the case of innovation performance, the measure could fail to assess the real innovation capability of a firm. In the case of marketing resources, the proxy could fail to integrate the plurality and complexity of the resources connected to the firm marketing function. Additionally, organizational performance was measured using a self-reported scale that, albeit validated by the literature, may represent a potential source of common method bias. Finally, although we used an econometric model to account for possible mutual causation among variables treating it as unobserved heterogeneity at the firm level, the cross-sectional nature of the data does not allow to completely eliminating the problem.

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No need to choose between innovation and internationalization: when pursuing two strategies at a time leads to firm superior performance
by Costanza Nosi, Tommaso Pucci, Lorenzo Zanni

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Abstract

Whereas commonly innovation and internationalization have been studied disjointedly, many academics have recently questioned the relationship that there might be between these two strategic choices. The present study aims to determine whether businesses can concurrently attain internationalization and innovation instead of selecting for only one of the two strategies in pursuing superior performance. The paper tests the relationships between firm managerial capabilities, technological and marketing resources, innovation and internationalization strategies, and firm performance based on the assumptions of the resource-based view. The hypotheses are tested using the data from a survey on 169 Italian SMEs. The outcomes reveal that innovation and internationalization are complementary, and not alternative in the attainment of firm superior performance, both technological and marketing resources are positively associated with the business internationalization, whereas only technological resources contribute to the business innovativeness. Additionally, managerial capabilities are key for deploying the firm overall resource endowment.

Riassunto

Innovazione e internazionalizzazione sono state tradizionalmente studiate in maniera disgiunta. Recentemente, invece, alcuni autori hanno cominciato a interrogarsi sulla relazione che potrebbe esserci tra le due strategie. Lo studio intende determinare se le imprese che perseguono contemporaneamente innovazione e internazionalizzazione, anziché optare per una delle due condotte strategiche, conseguono performance superiori. Il manoscritto testa la relazione tra capacità manageriali, risorse tecnologiche e di marketing, strategie di innovazione e internazionalizzazione, e performance dell'impresa adottando il paradigma della resource-based view. Le ipotesi sono testate su un campione di 169 PMI italiane. I risultati rivelano che: innovazione e internazionalizzazione sono strategie complementari nel perseguimento di performance superiori, sia le risorse tecnologiche che di marketing sono positivamente associate all'internazionalizzazione, mentre soltanto quelle tecnologiche sono associate all'innovazione. Infine, le capacità manageriali sono essenziali per gestire il patrimonio di risorse aziendali.

Keywords (Parole chiave): innovation, internationalization, firm performance (innovazione, internazionalizzazione, performance dell'impresa)

Jel Classification: L25 - Firm Performance: Size, Diversification, and Scope