DRIVERS OF ENTREPRENEURSHIP INNOVATION IN TOURISM SECTOR: ENTREPRENEURSHIP, KNOWLEDGE AND INTERNATIONALIZATION

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Resumen

La innovación, la internacionalización, el conocimiento y la actividad emprendedora son variables altamente entrelazadas, como la literatura especializada ha mostrado en diferentes trabajos. Sin embargo, existe una laguna en los

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trabajos empíricos que se refiere a sectores concretos. No obstante, existen ciertos trabajos que analizan las características específicas del turismo. Este artículo trata de llenar este vacío, ofreciendo un estudio transversal países para el caso de los emprendedores del sector turístico, donde se han desarrollado modelos de datos de panel de efectos fijos con datos de Global Entrepreneurship Monitor (GEM) y una muestra de 17 países.

Palabras clave: innovación, internacionalización, actividad emprendedora, conocimiento, sector turístico, datos de panel, GEM.

Abstract

Innovation, internationalization, knowledge and entrepreneurship are variables highly interwoven, as literature has shown more or less profusely. Nevertheless there is a lacuna in empirical works referred to wide spaces, and some claims have been made to inform generic literatures on those subjects with the specificities of tourism. This article tries to fill up this gap, offering a cross-sectional study for the case of entrepreneur od tourism sector, where panel data models of fixed effects have been developed with data from Global Entrepreneurship Monitor (GEM) and a sample of 17 countries.

Key Words: Innovation, Internationalization, Entrepreneurship, Knowledge, tourism sector, Panel Data, GEM.

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1. INTRODUCTION

In many countries and regions tourism could be a key industry in beating the recession, as it is also key that companies in the sector commit to innovation as a way to maintain or achieve competitive advantages. Innovation is the way to improve services, reduce costs and is clearly a motor of change. Innovation helps enterprises to adapt better to the surrounding social, cultural and economic changes, which in today's world are characterized by the globalization of markets, the speed of changes in technology and changes in the organisational structures of companies.

At the micro level, innovation has positive effects on competitiveness, cost profiles, market attractiveness, and evidently in enterprise survival of tourism

sector (Miles, 2001; Hjalager 2002, 2010; Hall and Williams 2008; Volo, 2005). However, the conservative mindset of many entrepreneurs, the fear of risk, or the problems arising from the limited size of many businesses or the particular nature of tourist activity, while still being a service industry (Miles, 2008), frequently act as a deterrent to innovation in the industry. Furthermore, the success of a company may lead the entrepreneur to forget the importance of continuing to innovate.

Entrepreneurship is very closely related to innovation because it frequently involves the creation of something new or in a new way: new combinations, new methods of productions, new ventures, new markets and new wealth (Brush et al. 2003). Entrepreneurial spirit has traditionally had a great presence in the tourist industry in general (Li, 2008). In the same way as other emerging sectors, the tourist sector comprises a constantly changing dynamic industry, which aims to mould itself to the changes in the environment so as to satisfy consumer needs in the most effective way possible. The entrepreneur is the principal agent of change, capable of identifying market opportunities and of organising the available resources to cover these gaps. Nevertheless, as stated by Rusell and Faulkner (2004), despite playing a major role in the development of tourist destinations, the figure of the entrepreneur has not been the subject of sufficient research. The importance of the entrepreneur and entrepreneurial activity in the tourist industry has largely been underestimated or misunderstood.

Schumpeter defines an entrepreneur as a person who undertakes innovations (Schumpeter, 1934). Today the term entrepreneur is used more to describe a person who implements new combinations in a company (new products, processes, product quality, new markets, new organisational formats, etc.).

In view of all this we believe that learning and understanding the sources and the behaviour of tourist industry entrepreneurs in relation to innovation is of great importance in order to develop more effective and appropriate policies (at both public and enterprise level). Neverthless, empirical knowledge about the effects of innovation in tourism is limited (Hjalager 2010; 2002; 1998; Shaw and Williams 2009, 2004; Hall and Williams 2008; Peters and Pikkemaat, 2006). On the other hand, entrepreneurship in tourism innovation systems has been "another neglected approach on the research agenda" (Hjalager 2010, 9); and Li (2008), assures that there continues to be a lack of research into entrepreneurship in the field of hospitality and tourism management.

The objective of this article, therefore, is to contribute to the knowledge regarding innovation in tourist industry entrepreneurs from an empirical viewpoint. We aim to investigate how innovation is affected by factors such as internationalisation, knowledge and entrepreneurial activity in the industry itself.

In this study we will look at relationships between entrepreneur's innovation, and internationalization, knowledge and entrepreneurship in the tourism sector.

Panel data models with fixed effects will be developed with data from Global Entrepreneurship Monitor (GEM) and World Tourism Organization for the period 2002-2008, and a sample of 17 countries.

This study intends to overcome the limitations of other empirical studies conducted with samples from just one country or region. We also have the advantage of having at our disposal primary data obtained directly from entrepreneurs in the sector.

This article is organized into four sections. After this introduction, the next section is devoted to summarizing the main theories related to the themes we focus on. The third section presents the empirical study. Finally, in the fourth section we summarize the most important conclusions and policy recommendations.

2. THEORETICAL APPROACH

2.1. Innovation in the services sector

Over the last three decades the tourist industry has had to deal with major changes which have drastically affected both the supply and demand of the sector's services. The literature has identified innovation as one of the most important factors in this changing context which allows companies to achieve or maintain a competitive position in the market.

Most studies of innovation in tourism have been conducted over the past decades, as Buhalis and Law (2008) and Hjlager (2010) have recently surveyed[3]. The main conclusion we can take from their studies is that innovation plays an unquestionable role in the services sector and more specifically in the tourism industry.

However, despite the recognised importance of innovation, it is still an unresolved issue in many companies, especially in smaller ones. The industry's small and micro enterprises show little willingness to innovate, tending to imitate or adapt more than to innovate (Hjalager, 2002; Volo, 2004). Companies have also proven to be unwilling to achieve economies of scale, which renders innovative activity difficult in the sector (Novelli et al, 2006; Pikkemaat and Weiermair, 2007).

Following Van Ark et al. (2003) innovation in services is a multidimensional concept referring to a new or substantially renewed service concept, client interaction channel, service delivery system or technological concept that individually, or in combination, leads to one or more new or renewed service functions

[3] Among others we can cite the following interesting works: Hjalager (1997, 2002, 2007, 2010); Peters and Pikkemaat, 2006; Volo, 2005, Camisón and Monfort-Mir, 2012; Hall and Williams, 2008; Lerner and Haber, 2001; Shaw and Williams, 2009.

that are new to the firm: This innovation permits changes to the service or goods offered on the market, and structurally requires new technological, human or organizational capabilities of the service organization. This definition is multidimensional because it covers the notions of technological and non-technological innovation, such as those in new concepts, new interfaces with clients or new supply systems.

In this line, Hjalager (2010, 1997), taking inspiration from the Schumpeterian approach, classifies innovations in tourism into five categories: product or service innovations, process innovations, managerial innovations, management innovations (marketing) and institutional innovations. This classification shows the wide range of possible innovations in tourism, but there is often a close interplay between different categories of innovation. This is not unique to tourism but is a central element in the services sector.

The literature recognizes that the tourist industry has not been slow to adopt technological innovations, but characteristically does not concentrate so much on the development of new products and processes. Nevertheless some empirical studies conclude that the tourism sector innovates less in technology than the manufacturing sector, and there is no statistical significance in non-technological innovations (Camisón and Monfort-Mir 2012)

2.2. Innovation and entrepreneurship in the tourism sector

Currently entrepreneurship is regarded as a process focussed on innovation, growth and uniqueness (Gartner 1990). Since a macroeconomic point of view, literature has shown a positive correlation between innovation, entrepreneurship and economic growth (Audretsch et al. 2006; Acs et al. 2002; Acs et al. 1994; Wennekers and Thurik 1999). As Audretsch (2005) suggests, entrepreneurship is the missing link in economic growth because it encourages knowledge spillover from universities and private firms, allowing the commercialization of ideas that would normally remain unmarketed. Entrepreneurship is very closely related to innovation because it frequently involves the creation of something new or in a new way: new combinations, new methods of productions, new ventures, new markets and new wealth (Brush et al. 2003). OECD (2005) has stated that entrepreneurship is a factor that favors innovation, and for Hjalager (2010) entrepreneurship is a crucial determinant in the competitiveness of the tourism sector, because it promotes the redirection of products.

Entrepreneurial spirit has traditionally had a great presence in the tourism sector in general and especially in the hotel and travel industry (Li, 2008). In the same way as other emerging sectors, the tourism sector comprises a constantly changing dynamic industry, which aims to mould itself to changes in the envi-

ronment (technological, social, etc,) so as to satisfy consumer needs in the most effective way possible. The entrepreneur is the principal agent of change, capable of identifying market opportunities and of organising the available resources to cover these gaps. Nevertheless, as stated by Rusell and Faulkner (2004), despite playing a major role in the development of tourist destinations, until now the figure of the entrepreneur has not been the subject of sufficient research.

Entrepreneurship has an important function in the evolution of tourism (Rusell and Faulkner 1999), and tourism and hospitality are typical and fertile environments for entrepreneurs (Li 2008), characterized by high firm's mortality and birth rate (Reynolds, 1994).

Schumpeter (1934) stated that innovation is positively related to a firm's size. In this sense, the bigger companies are the more innovative ones (Rogers 1995). In line with this argument, it is not strange to note that the largest hotel chains now include innovation in their strategic plans (Monfort and Camisón, 2009). Contrarily, Van de Ven et al (1999) affirm that big enterprises have numerous possibilities to promote innovation but they also have some weakness such as organizational inertia or less flexibility to adapt themselves to changes in the environment. These limitations are less likely to be present in SMEs, and it can be demonstrated that numerous innovations are generated by SMEs (Menkveld and Thurik 1999; Acs and Audretch 1990) because innovation helps to assure the survival and success of organizations (Audretsch and Fritsch 2003).

Some studies focused on small areas or one country have verified a positive relationship between entrepreneurial orientation and innovation in some tourist activities, at micro and small enterprise level (Wiklund, 1999; Nybakk and Hansen, 2008). So, in our empirical study we intend to investigate if entrepreneurship is a driver of innovation in new companies in the tourism sector. Entrepreneurial activity and innovation are therefore connected. It may be supposed that the most entrepreneurial people are more willing to introduce modifications in their products, services, organisation, etc. At the same time, the most entrepreneurial people have more possibilities to identify new business opportunities, and so start new business ventures.

Consequently the first hypothesis to verify is:

H1. Entrepreneurial activity positively affects the innovation of entrepreneurs in the tourism sector.

2.3. Innovation and knowledge in tourism sector

In general terms, literature has shown a positive correlation between innovation, entrepreneurship and economic growth (Audretsch et al. 2006; Acs et al. 2002; Acs et al. 1994; Wennekers and Thurik 1999). Knowledge also has an im-

portant mediating role in these relationships because given a level of knowledge investment and severity of knowledge filter, the greater the entrepreneurship, the greater the economic growth. Then, entrepreneurship is a mechanism for facilitating knowledge spillovers and their marketing (Audretsch 2005; Audretsch et al. 2006)

Knowledge can be defined as the use of skills and experience to take decisions or to prepare adequate environments for action in companies. Knowledge is of central importance in taking informed decisions and planning the right policies at both macro and micro level. In this line, Welch (2001: 21) affirms that "ultimate competitive advantage lies in the ability to learn, to transfer that learning across components, and to act on it quickly".

In the service sector, and especially in the tourist business, there is very close interaction between customers and employees, which largely motivates customer opinion and satisfaction. However, the tourist business is frequently characterised by the lack of resources (managerial and human), which hinders the process of knowledge acquisition. The sector has frequently employed low and medium-qualified workers, making up for their low productivity by paying low salaries (Monfort and Camisón, 2009). Consequently this low level of qualifications among the workers leads to a low level of knowledge acquisition and innovation.

The idea of service innovation was first discussed by Ian Miles (1993), who studied the special nature of services. He recognized some trends in the services sector, in the shape of products, processes and company organization. This perspective recognizes the importance of non-technological innovations in the economy and particularly in the services sector, where the knowledge of customers (demand side) is especially important, due to its interactive role, since many of the services are delivered and consumed at the same time.

Despite the fact that researchers have been interested in the study of knowledge for some time, research into knowledge in the tourism sector has been relatively sidelined as stated by Xiao and Smith (2007). This is not a minor problem, since among other factors the lack of qualified human capital, typical in the sector, is identified as one of the factors hindering knowledge acquisition and in consequence innovation (Monfort and Camisón 2012, 2009)

Knowledge plays a capital role in innovation (Hjalager, 2002; Lawson and Samson 2011). Innovation is impossible in companies without highly qualified people, who are proactive to cooperation and innovation. Similarly, it is not possible without adequate technology and technological knowledge (Zahra and Nielsen 2002). Knowledge of markets is also necessary (Afuah 1997; Lawson and Samson 2001).

In the tourism sector, the situation is quite unique as knowledge bases are continuously evolving and being renewed. This knowledge basis is often external to

the tourism sector (high technology), and this fact implies a continuous interaction between traditional actors of tourism and agents of innovations from outside the tourist sector (Aldebert et al. 2011). Two main aspects have to be considered when studying knowledge in the tourism sector: knowledge management and knowledge transfer. Literature about them has grown recently. For different surveys see: Cooper (2006), Shaw and Williams (2009), Hallin and Marnburg (2008) and Xiao and Smith (2007).

Following Polanyi (1958), knowledge has to be understood as a competitive instrument. Specifically, for tourism it is very important to understand knowledge as a resource (Cooper, 2006) and a competitive advantage (Enz et al. 2006). Even if it is not easy to manage knowledge and to transfer it, the more it is used, the more profit it generates (Ahmed et al. 2002). That is the reason why we have included knowledge in our empirical study.

H2: Improvements in knowledge acquisition in the sector result in higher product innovation indices among entrepreneurs.

2.4. Innovation and internationalization in tourism sector

Innovation is also related to internationalization. Morrison and Roth (1992), Grossman and Helpman (1991) and Hadjimanolis (2000) demonstrated that globally implanted firms are usually characterized by a higher level of R&D. Frohman (1982) and Kotabe et al (2002) explain that not all enterprises are ready to gain from the results of innovation; a certain degree of internationalization is necessary. These authors affirm that internationalization affects the returns of innovation, because they influence the factors that determine the success of innovation: innovative capacity and appropiability.

The literature (see a synthesis in Kafouros et al. 2008) explains that the internationalization of companies increases their innovation capacity in different ways: it opens access to more and better resources, ideas and know-how; it increases learning in the organization since innovation is an intensive process of information and knowledge; it facilitates access to a greater diversity of researchers; it allows better penetration in local markets due to commitment to local researchers; it reduces the cost of R&D inputs; and it benefits from R&D spillovers.

On the other hand, internationalization also affects the exploitation and appropriation of innovation, reducing risk (it reduces cycle-related fluctuations in local or regional markets), generating scale economies; facilitating the reaction to the demands of foreign clients, exploiting more markets, charging a premium to product prices and offering them to a major number of potential clients and obtaining complementary strategic assets (by international alliances).

So, the literature sustains the idea that the internationalization of business activity improves innovation. Nevertheless, theoretical and empirical studies of innovation and internationalization have mainly been focused on the manufacturing sector or any selective services sector such as retailing, while tourism has been relatively neglected (Shaw and Williams 2004; Williams and Shaw 2011).

Williams and Shaw (2011), in their recent theoretical work on internationalization and innovation in tourism affirm that internationalization is seen as a key element of innovation in tourism, even more, that internationalization can be understood as a form of innovation (29-31).

Derived from this stream of the literature, our third hypothesis is:

H3: Greater levels of internationalisation improve entrepreneurs' product innovation in the tourism sector.

3. INNOVATION IN THE TOURISM SECTOR. AN EMPIRICAL APPROACH

3.1. Data and methods

One of the problems in analyzing innovation in the tourism sector, from an empirical point of view, is the methodological constraints that arise from the design of secondary data sources, developed for the manufacturing sector (Camisón and Monfort-Mir, 2012). Besides this methodological problem, there is little literature on the measurement of innovation in the tourism sector and reliable specific indicators have not been designed (Volo, 2004, Pikkemaat and Peters, 2006).

To solve this problem, we have used the Global Entrepreneurship Monitor (GEM) database[4]. GEM is an international project devoted to obtaining information on entrepreneurship. It uses a homogeneous questionnaire that allows a wide range of primary data to be obtained about entrepreneurs in all sectors of activity. The Global Entrepreneurship Monitor project (GEM) defines the total early-stage entrepreneurial activity (TEA) as the proportion of the adult population (i.e., 18-64 years of age) in each country who are involved in operating a business that is less than 42 months old (Bosma, et al, 2008). In addition, GEM attempts to measure the different characteristics of entrepreneurs and the socioeconomic factors that explain the differences between countries.

As previously mentioned entrepreneurs play an important role in innovation (Brush et al. 2003, OECD, 2005 and Hjalager, 2010) and in economic growth (Audretsch, 2006, Acs et al, 2002, Galindo, and Méndez, 2008). Taking into ac-

[4] Specifically, we have used the database APS-Global (2002-2008), establishing a filter to obtain data on the tourism sector with statistical software SPSS. It is chosen this time period because after 2008, the data APS-Global does not allow establishing a filter to extract specific data of one sector.

count these economic factors, the GEM observatory provides a homogenous measurement for all the countries comprising the Project. Following the thesis of Furman et al. (2002) which states that entrepreneurial activity has different effects on economic growth and that it is necessary to analyse the characteristics of the entrepreneurs and the socioeconomic conditions in which the entrepreneurial activity is developed so as to better understand its effects on growth in the countries. The GEM observatory prepares an extensive survey for entrepreneurs which measures, among other things, innovation, knowledge and internationalisation.

In view of the importance for the sector and the prominence which the theory gives to internationalisation, knowledge and entrepreneurial activity itself, we chose the items of the survey which permit the study of the theoretical relationships analysed. It should be stressed that only the data from surveys conducted on tourist sector entrepreneurs were used, since one of the items of the GEM Survey classifies entrepreneurs according to ten activity sectors[5]. So, we have used the APS-Global (2002-2008) database, establishing a filter to obtain data on the tourism sector using SPSS statistical software.

To develop our empirical analysis we will consider the following equation:

$$Ln(INV)_{it} = \beta_0 + \beta_1 Ln(TEAT)_{it} + \beta_2 Ln(KN)_{i(t-1)} + \beta_3 Ln(INT)_{it} + \varepsilon_{it} \qquad (1)$$

Where:

- *INV* is product innovation of tourism sector entrepreneurs. To measure this variable a response to an item of GEM questionnaire is used, specifically "TEA: how many (potential) customers consider a product new/unfamiliar?" We have chosen the options "all or some customers". This item is based on the Schumpterian concept of innovation, since a product does not have to be totally new, as long as customers perceive it to be new (Bosma, et al. 2008).
- *INT* is export intensity. This variable is a response to an item of the GEM questionnaire and the option aimed at the most internationalized tourism sector entrepreneurs has been chosen.
- $KN_{(t-1)}$ is the knowledge, skill and experience required to start a new business, an item of the GEM questionnaire (2002-2008) for the case of tourism sector entrepreneurs.
- *TEAT* is the Total Entrepreneurial Activity Index in the tourism sector, obtained from the GEM project.

[5] In particular these sectors are: agriculture, farming and fishing; mining and construction; manufacturing; transport, storage and communication; trade; hotels and restaurants; financial intermediation and real estate activities; business services; government, health, education and social services; personal-consumer services activities.

To estimate the preceding equations, a panel data methodology has been used for a balanced sample of seventeen countries[6], for the period 2002-2008. A panel model with fixed effects has been selected. The general specification of panel data with fixed effects is:

$$Y_{it} = \alpha_{it} + \sum_{k=1}^{K} \beta_{kit} X_{kit} + U_{it} \qquad (2)$$

where *i* denotes the countries, *t* the time periods; α_{it} is a parameter that shows the specific effects of each cross-section, in this case, of each country (this parameter is constant on time); and U_{it} collects the effects of omitted variables that are particular to the cross-section and period considered.

Equation 1 has been estimated with Generalized Least Square (GLS)-Cross-section weights. This method permits a feasible GLS specification assuming the presence of cross-section heteroskedasticity (Wooldridge 2008), and it characteristically increases the value of Durbin Watson in comparison with results with Panel Least Squares.

3.2. Results and discussion

Table 1 shows the results of the estimation of equation 1, where we can appreciate the relationship between the product innovation of entrepreneurs in the tourism sector and the factors that could promote it, such as export intensity, knowledge and skills, and entrepreneurship.

Table 1. Model 1

Dependent Variable: LOG(INV)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.120794	0.809406	2.620185	0.0105
LOG(TEAT)	0.176969	0.084024	2.106160	0.0382
LOG(KN(-1))	0.192387	0.170631	1.127501	0.2628
LOG(INT)	0.125898	0.054965	2.290496	0.0246

[6] Argentina, Belgium, Brazil, Croatia, Denmark, Finland, France, Germany, Iceland, Ireland, Netherlands, Norway, Slovenia, Spain, Sweden, United Kingdom, United States.

Countries Effects	
ARG	0.369477
BEL	-0.069363
BRA	-0.646033
CRO	-0.593549
DEN	0.386851
FIN	0.485011
FRA	0.189346
GER	-0.088806
ICE	0.323224
IRE	-0.050735
NET	-0.339120
NOR	0.107575
SLO	0.124966
SPA	-0.161840
SWE	-0.058022
UK	0.083874
USA	-0.062856

Weighted Statistics			
R-squared	0.634422	Mean dependent var	5.126979
Adjusted R-squared	0.549715	S. D. dependent var	2.733621
S.E. of regression	0.321782	Sum squared resid	8.490596
F-statistic	7.489602	Durbin-Watson stat	1.918813
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.544093	Mean dependent var	3.865827
Sum squared resid	8.731369	Durbin-Watson stat	2.108015

In this estimation, it can be seen that R-squared is 63.44%. Although it might be thought that R in the equation is not particularly high, this paper focuses on the three analysed variables given their importance for the sector. However, we are aware that entrepreneurial innovative activity in the tourism sector also depends on other factors such as company size, market structure, the profitability of innovation and growth (growth possibilities) (Bhattacharya and Bloch, 2004), the existence of territorial clusters and the driving force of technology (Hjalager, 2010), market changes and changes in the political environment (Combs et al, 1987) and expenditure on innovation (Griliches, 1990)

If we focus on each one of the hypotheses, it can be seen that H1 can be confirmed and that a positive relationship exists between entrepreneurial climate and entrepreneurial innovation in the tourism sector (β_1 is 0.17), which fits the thesis of Brush et al. (2003), OECD, (2005) and Hjalager, (2010). So the study shows that entrepreneurial characteristics and attitude also lead to profits for the company by way of innovation and not only through the generation of new business.

H2 may also be confirmed (β_2 is 0.19), proving, in short, that knowledge, as might be expected, impacts positively on the innovative activity of entrepreneurs in the tourism. In this way we can conclude that "learning orientation" is a characteristic which has positive effects on innovation and by extension on company performance, which confirms Hjalager's theory (2002). This result is also in line with Shaw and Williams (2009), who state that tourism needs to pay greater attention to the integration of innovation and knowledge (Shaw and Williams 2009).

Finally the empirical study shows that internationalisation is an important factor which explains innovation in the sector, leading in turn to greater profits, thus confirming hypothesis H3 where the relationship between both variables is positive and significant (β_3 is 0.12). These results confirm the ideas of Frohman (1982) and Kotabe et al. (2002) who consider that a certain level of internationalisation is required for companies to reap all the benefits of innovation.

4. CONCLUSIONS, LIMITATIONS AND FURDER RESEARH

Innovation in the tourism sector is a major topic subject in the literature, where, from a theoretical point of view, it has been argued that innovation plays an indisputable role in the tourism industry. Internationalization has been presented as a necessary condition for innovation. Knowledge also plays an important role in innovation, and can be understood as a resource for competitiveness. Lastly, entrepreneurship encourages knowledge spillovers and innovation.

Our empirical data-panel studies focus on drivers of innovation. The main conclusions of this paper are that higher internationalization, as well as an improvement in the skills and knowledge of entrepreneurs, and more entrepreneurship in the tourism sector, affects positively and significantly innovation activity of entrepreneurial firms in the sector. Though, successful innovation depends on the entrepreneur's knowledge so entrepreneurial and economic policy strategies are needed in order to promote the accumulation of knowledge in companies, which in turn enables entrepreneurs' investment in R&D to generate the greatest positive effects on company results.

However, it is necessary to stress the difficulty of applying effective innovation and training policies in a hugely diversified sector dominated by SMEs and

micro-enterprises, where the setting up of collaboration initiatives is also made difficult by the geographically disperse nature of the sector.

The positive relationship between innovation and internationalisation leads us to the obvious conclusion that enterprises must make an effort to internationalise and innovate at the same time and that a good innovation strategy must not forget the internationalisation of business as demonstrated by Golovco and Valentini (2011) in the case of SMEs. Both factors can generate virtuous circles and so could by the subject of future research.

Internationalisation, which is, without doubt, an advantage and a motor of future growth does, however, pose great problems for entrepreneurs, whose companies are often not very large. Due to their reduced size it is more difficult for small and micro-enterprises to access the benefits of internationalisation as noted by Pikkemaat and Peters (2006).

One solution to this limitation could be cooperation and integration through enterprise networks created to open up business to foreign markets. Entrepreneurial cooperation is a well-established formula which allows an entrepreneur (whatever the size of the enterprise) to combine efforts and achieve the advantages of scale without being forced to renounce the identity or even the ownership of the enterprise. To this end institutional support can be a determining factor. The authorities are able to promote and drive cooperation structures and even, in the absence of private initiative, develop public-private initiatives so that small-sized companies can overcome their limitations when it comes to internationalisation and innovation. More than financial support, what is often needed is drive and public initiative. The bywords would thus be: cooperate, internationalise and innovate.

It is also important to investigate the direct relationship between internationalisation in the economic performance of enterprises in the sector and the relationship with innovation. However, this subject is so extensive that it will be studied in future research work.

Finally it must be noted that a limitation of this study is that it only focuses on product innovation since the sector is also characterised by more intensive innovation in other aspects, such as marketing, ways of providing services or the organisation of service management. If we recognise the multidimensional nature of innovation in the tourism sector, the data used do not allow us to identify the impact that types of innovation other than product innovation could have on business results. Neither can we investigate the relationship which exists between these types of innovation and factors such as the ones presented in the study (internationalisation, entrepreneurship and knowledge). A sustained improvement to the database over a period of several years would be needed in order to address this objective by means of a methodology such as the one used in this study.

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