

Tourism intermediaries and innovation in the hotel industry

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This paper examines the influence of tourism intermediaries on innovation in SMEs in the hotel industry from the perspective of the global value chain approach. The paper contributes towards characterising the changing patterns of governance in the tourism global value chains. In addition, it provides useful information about SMEs' innovation for tourism destination managers. The dataset for this study comes from a survey of hotel SMEs in Spain. The results indicate that dependence on tour operators leads to lower levels of marketing innovation, while dependence on on-line travel agencies stimulates it. Dependence on traditional travel agencies is observed to be associated with less product innovation. Overall, dependence on tourism intermediaries implies lower autonomy in a hotel's determination of rates and margins, but can favour innovation by means of stimulating the introduction of information and communication technologies and quality standards.

Keywords: SMEs; innovation; tour operator; OTA; global value chain

JEL codes: R11, L14, L83, O31.

Introduction

In tourism, an industry of persistent change, one of the main constants for over sixty years has been the significant role and resilience of tour operators. Tour operators have been and remain a major factor in the tourism industry (Fletcher et al., 2013; Holloway, Humphreys, & Davidson, 2009). Nevertheless, recent years have witnessed a vertiginous transformation of this sector. Information and Communication Technologies

(ICTs) have revolutionised all business processes and modified the relationships within the Tourism Global Value Chains (TGVCs) (Guttentag, 2015; Law, Buhalis, & Cobanoglu, 2014; Romero & Tejada, 2011). As Buhalis and Licata (2002) pointed out, tourism intermediaries were particularly affected by these changes. The structure of intermediation has been substantially modified by the emergence of new intermediaries and new distribution channels (Fletcher et al., 2013; Kracht & Wang, 2010). This process implies changes in the patterns of governance of TGVCs with significant implications for the SMEs operating in the hotel industry.

Practitioners, academics and policymakers have long been interested in understanding the factors that influence innovative behaviour in tourism SMEs (Rodríguez, Hall, & Williams, 2014; Tejada & Moreno, 2013; Thomas & Wood, 2014). There are numerous wide-ranging views regarding the influence that tour operators and other intermediaries may exert on innovation in SMEs that provide primary tourism services. Several authors have pointed out that tour operators can stimulate innovation in other tourism agents (Rønningen, 2010), while others have observed a negative influence of tour operators that inhibits innovation in the SMEs that operate with them (Bastakis, Buhalis, & Butler, 2004; Buhalis, 2000). This paper adds new evidence to this discussion through studying the touristic intermediaries' influence on the innovation of tourism SMEs based on a survey of hotel companies in Spain.

The results indicate that tourism intermediaries influence innovation of hotel SMEs through various channels and in various directions. Tour operators inhibit the marketing innovation of hotel SMEs, while online travel agencies (OTAs) may well stimulate it. Traditional travel agencies may exert a negative influence on innovation in hotel companies. In addition, both tour operators and OTAs may favour innovation by stimulating the use of ICTs and the adoption of quality standards.

Literature review and research hypotheses

The tourism industry involves a wide range of activities and types of enterprises operating in an increasingly complex global marketplace. Major tour operators and hotel chains hold a dominant position; however, hospitality SMEs are essential to the tourism industry, occupying important niches in the processes of production and distribution (Bastakis et al., 2004; Romero & Tejada, 2011). The Global Value Chain (GVC) literature emphasises the influence that the patterns of the chains' governance exerts on the innovation of local producers (Gereffi, Humphrey, & Sturgeon, 2005; OECD, WTO, & WBG, 2014).

Substantial research has been developed on trends and impact of GVCs at the aggregate level of economies and sectors (OECD, 2013; OECD & WTO, 2015). However, still very few contributions examine the interaction of GVCs and innovation at the level of individual firms (OECD & WBG, 2015). In this respect, several studies have pointed out the opportunities for fostering competitiveness of local SMEs via learning from the global leaders of the chains (Gereffi, 1999; Giuliani, Pietrobelli & Rabellotti, 2005). The nature of this influence is particularly complex in the case of SMEs. The opportunities for SMEs depend not only on the type of GVCs in which they operate, but also on the business and institutional environment in each economy (OECD et al., 2014). Moreover, SMEs' participation in GVCs is highly heterogeneous and uneven across and within countries (OECD & WBG, 2015). Hence a lack of consensus surrounding this issue can be observed (Pietrobelli & Rabellotti, 2011).

It is commonly accepted that the SMEs inserted into GVCs are under pressure to improve their performance and increase their competitiveness, which can contribute to foster local tourist destination development. Several researchers suggest that the most viable response for them to face this challenge is to innovate (Gereffi, 1999; Giuliani, Pietrobelli & Rabellotti, 2005). In addition, the participation of SMEs in GVCs may

increase the degree of accessibility of the output and input markets and this could facilitate innovation (OECD et al., 2014; WTO, 2016). Nevertheless, other studies support the argument that the participation in GVCs can undermine the capacity of SMEs to innovate and, therefore, can decrease the added value of their activities (Bazan & Navas-Aleman, 2004; Pietrobelli & Rabellotti, 2011). This occurs when local suppliers are discouraged from engaging in high-value-added functions, such as design, marketing and sales, since these constitute the core competences of a small number of large powerful buyers, which are the leaders in the GVCs.

Though researchers have principally applied the GVC framework to trace the shifting patterns of manufacturing industries, TGVC studies are currently undergoing major growth (Christian, 2016; Hjalager, Tervo-Kankare, & Tuohino, 2016; Mosedale, 2006; Romero & Tejada, 2011; Song, Liu, & Chen 2013; Tejada, Santos & Guzmán, 2011).

In the same way, tourism innovation studies have increased exponentially in the last two decades (Alsos, Eide, & Madsen, 2014; Gomezelj, 2016; Hjalager, 2010; Narduzzo & Volo, 2018; Rodríguez et al., 2014; Thomas & Wood, 2014). However, few studies have particularly focused on innovation in hotel SMEs (i.e. Pikkemaat & Peters, 2006; Tejada & Moreno, 2013) in spite of the key role played by SMEs in the tourism industry.

This article specifically focuses on product innovation and marketing innovation. Product innovation can be defined as "the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses" (OECD & Eurostat, 2005, p. 48) while marketing innovation represents "the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing" (OECD &

Eurostat, 2005, p. 49). Furthermore, this paper particularly aims to study the influence of intermediaries on the innovative behaviour of hotel SMEs. In this respect, tour operators and both traditional and online travel agencies constitute the three types of intermediaries to be considered herein.

- *Tour operators*

Several studies highlight how global tour operators are leading the TGVCs because they assume the chain's coordination and control the tourist product. The role of these actors is always relevant, but differs under the alternative patterns of governance of the TGVCs (Erkuş-Ozturk & Terhorst, 2010; Tejada, Santos, & Guzmán, 2011). Traditionally, tour operators have granted small firms access to new markets, and have even controlled the market place through the directing of tourist flows (Alegre & Sard, 2015; Holloway et al., 2009; Sigala, 2008). Moreover, tour operators may possibly offer technology and systems which the individual SME could not afford or implement on its own, such as access to booking systems, to systems for financial transactions, and help in the development of their own websites. In particular, Rønningen (2010) highlights the role of tour operators as the drivers of innovation in small tourism firms. Tour operators need efficient suppliers to develop competitive travel packages. The search for many of these suppliers is a hard and costly task for operators. Accordingly, tour operators would rather help their suppliers to improve via innovation than look for other suppliers. Zach & Hill (2017) find that a tourism firm's choice of innovation partners is linked with mainly current collaborators and shared knowledge within the network. Rønningen, in line with other researchers (Hjalager, 2002; Novelli et al., 2006), concluded that those SMEs that are linked to tour operators are often involved in organisational, process and market innovations due to their

cooperation with those intermediaries. In contrast, product innovation could be more difficult to develop for tourism SMEs. Small enterprises usually imitate more than innovate in this sector. Notwithstanding, tour operators prompt them to introduce new services. Additionally, Aarstad (2018, p. 8) shows that “*tourism firms complement imitation and innovation strategies*”.

Other researchers stress the tour operators’ role as the main information channel between tourists and producers, particularly for small enterprises. Moreover, they identify tour operators as key players in the policies and actions designed to help all tourism stakeholders, by making positive contributions to ensuring sustainability (Budeanu, 2005; Sigala, 2008). Therefore, tour operators can raise tourism SMEs’ awareness and trigger their actions to pursue sustainability through ‘*green innovation*’ (OECD, 2013b).

On the other hand, various studies have observed a possible negative influence of tour operators that inhibits innovation in the SMEs that operate with them (Bastakis et al., 2004; Buhalis, 2000; Tejada & Moreno, 2013). The large tour operators are the most powerful members of the chain. Hence, they can take advantage of the unfavourable business environment for smaller firms. Tour operators “*demand maximum service and quality standards with the minimum contract price*” (Bastakis et al., 2004, p. 162). Exercising the TGVC’s governance and control over their suppliers, they pressure tourism SMEs into reducing their profit margins. They may even suggest that hotels incorporate the drastic reduction of some services, as such that of linen change (Buhalis, 2000). From this perspective, many improvements may be rejected or abandoned due to the influence of large tour operators and therefore SMEs can find it extremely difficult to encounter the resources for innovation. These circumstances may lead to a “*vicious cycle of declining quality*” (Bastakis et al., 2004, p. 162). This

negative view regarding the effect of tour operators on innovation in hotel SMEs dominates tourism studies.

In this respect, the following hypothesis is postulated in this paper:

H1. The dependence on tour operators has a negative effect on the introduction of product and marketing innovations by hotel SMEs.

- *Travel agencies*

Despite traditional sales channels remaining highly relevant for the hotel industry (Stangl, Inversini, & Schegg, 2016; Toh, Deckay, & Raven, 2011), in recent years, hotels have increasingly employed a vast array of online intermediaries (Abrate & Viglia, 2016; Schegg & Scaglione, 2013; Kracht & Wang, 2010). Formerly, global distribution systems (GDSs) were essential in the distribution systems due to their centrality (Christian, Fernández-Stark, Ahmed, & Gereffi, 2011). Travel agencies could book directly in real time to suppliers in the global tourism market through GDSs. However, ICTs has altered the relationship between GDSs and suppliers, such as hotels (Buhalis & Law, 2008). Facing the fall in bookings, GDS firms reacted by creating OTAs, as such Travelocity by Sabre or Expedia by WorldSpan and Microsoft (Smith, Darrow, Elieson, Guenther, & Rao, 2007). One pathway of innovation is the hybridisation of travel agencies and metasearch companies. Thus, several mega meta-OTAs are being consolidated to become larger actors in the global tourism industry (Floater & Mackie, 2016).

Among the most important aspects in the relationships between hotel SMEs and OTAs, the high cost of making a reservation via an OTA should be pointed out (Floater & Mackie, 2016). Smaller hotels might currently be paying a 20-30-percent commission for OTA bookings, while large hotel chains negotiate usually a uniform 15-percent

commission (Lee, Guillet, & Law, 2012; Toh, Raven, & Dekay, 2011). Unit commission is correlated to the OTA's ranking position. That is, OTAs arrange a better position on their webpage for the hotels with more available rooms (Ling, Guo, & Yang, 2014). Therefore, OTAs absorb a large part of the hotel industry's profits. This may imply less investment on innovation due to revenue '*leaked*' from the hotel industry to OTAs. Nevertheless, hotels that are listed on OTAs reach an increase in bookings from their own distribution channels: the so-called '*billboard effect*' (Anderson, 2009). Due to the high marketing and technology investments of the OTAs (Toh et al., 2011), their websites are more visible on Internet searches (Anderson & Ming, 2017). The high visibility that hotels can reach through OTAs can allow them to increase their sales by direct channels. Therefore, they may be stimulated to make new innovations on their own channels.

Thus, the following hypothesis is postulated in this paper:

H2. The dependence on OTAs has a positive effect on the introduction of product and marketing innovations by hotel SMEs.

Finally, traditional travel agencies have survived in spite of concurrent disintermediation and re-intermediation activity (Schegg & Scaglione, 2013; Kracht & Wang, 2010). These actors of TGVCs are geographically closest to the tourist. That allows them to add value to tourism products in several ways. The role of traditional travel agencies is not only to offer tourism services to customers on behalf of primary suppliers. They are also consultants, providing valuable information to their customers (Guzmán, Moreno, & Tejada, 2008). There is no evidence in the literature of their possible influence on innovation in hotel SMEs. However, those tourists that still operate with traditional travel agencies are probably older and more conservative and

may be less open to innovation (Grønflaten, 2011). Therefore, SME hotels that sell their rooms through traditional travel agencies have fewer incentives to innovate.

Accordingly, the following hypothesis is postulated in this paper:

H3. The dependence on traditional travel agencies has a negative effect on the introduction of product and marketing innovations by hotel SMEs.

Data and variables

Data for this study comes from a survey conducted in the first quarter of 2016 on Spanish SMEs operating in the hotel industry, whereby SMEs are defined as businesses with fewer than 200 employees but at least one employee. Self-employed people without their own employees were excluded from the survey since that type of hotel establishment was considered irrelevant from the perspective of innovation. The SMEs participating in the survey were randomly selected from the System of Iberian Balance Analyses (SABI) database. The stratified sample, with quotas for size groups, is representative of the SME population of the hotel industry in Spain with an error of $\pm 5.0\%$ at a confidence level of 90 percent. The surveying technique used is that of computer-assisted telephone interviewing (CATI). A response rate of 22.29% was obtained in the fieldwork. The final dataset for this analysis is made up of 322 valid observations. No bias was detected between respondents and non-respondents.

Dependent variables

The dependent variables in this paper are those for product and marketing innovation. The *product innovation* variable captures whether the companies introduced new or significantly improved services onto their markets before their competitors (these services may have already been available in other markets) in the three years previous to the survey. Therefore, this indicator exclusively captures ‘new-to-market’ innovations and not mere ‘new-to-firm’ innovations (OECD & Eurostat, 2005). The

marketing innovation captures whether the companies introduced new techniques for product promotion, new methods for product placement or sales channels, or new methods of pricing services in the three years previous to the survey. The questions were adapted from the Community Innovation Survey (Eurostat, 2012) and are based in the definitions of innovation provided in the Oslo Manual for Innovation Studies (OECD & Eurostat, 2005).

In addition, a second exercise in the paper explores the influence of intermediaries on other dimensions of the hotels' management related to innovation. To this end, three variables are included to capture the *hotel's perception on the influence of the intermediaries in the characteristics of the provision of the hotel services* (i.e. introduction of quality standards), *the acquisition or use of new information and communication technologies (ICTs)*, and *determination of prices or commercial margins*. The companies interviewed were asked to indicate whether they suffered high, medium, low, or no pressure from the touristic intermediates regarding the previous three aspects. The answers were coded taking values from 0 to 3, higher figures indicating greater pressure from the intermediaries.

Explanatory variables

The explanatory variables aim to capture the influence of different patterns of insertion in TGVCs based on the nature of the relationships between the hotels and the tourism intermediaries. In this respect, three different types of intermediaries are considered: tour operators, traditional travel agencies and OTAs. Firstly, a set of three variables captures the *proportion that each type of intermediary represents for the hotels' sales in 2012*. A second set of variables captures the *change* (increase or decrease) *in the relative importance of each type of intermediary in the period 2012-15*.

Control variables

Finally, a set of control variables is included to isolate the effect of the explanatory variables. These control variables have been selected on the basis of previous studies on tourism innovation (Martínez-Ros & Orfila-Sintes, 2009; Tejada & Moreno, 2013; Vila, Enz, & Costa, 2012).

The location of a hotel conditions its touristic specialization and the type of tourist received, thereby influencing the innovation decisions. A dummy variable differentiates the companies with hotel(s) located (principally) in coastal versus interior areas (*coastal*). A second control captures the (average) category of the hotel(s) run by the company (*category*). This variable takes values from 1-7, based on the Spanish hotel classification system² which differentiates between hotels with 1-2 silver stars (values 1 and 2) and 1-5 golden stars (values from 3 to 7). The size of the company in terms of the number of employees is also included in the models (*size*) and a dummy variable captures whether the hotel(s) of the company is (are) part of a hotel chain (*chain*).

Other factors favouring innovation in hotels are also used as controls. Human capital is undoubtedly a key factor for innovation, hence two variables are considered in this respect. On the one hand, the level of education of the business owner/manager is included, using a scale differentiating between no studies, primary and/or compulsory secondary education, professional training studies, non-compulsory secondary education and University studies (*education*). On the other hand, the investment in staff training (internal or external) over the last 3 years (2013-15) is also considered, differentiating between no, low, medium and high investment (*training*). Finally, a binary variable is included in the models to capture the effect of cooperation in innovation activities with other enterprises or institutions in the previous three years (*cooperation*).

Table 1 shows some descriptive indicators of the sample. Twenty percent of the companies interviewed had introduced product innovations and 77 percent had introduced marketing innovations. The companies interviewed perceived low-medium pressure from their intermediaries on the different aspects of their activity considered in this paper. The hotel(s) of the average company in the sample had (on average) 3 golden stars and was located in interior areas with 27 employees, and it did not participate in a hotel chain. The average company in the sample commercialised its rooms principally through direct sales to their clients, but approximately 48 percent of their sales were made through tourism intermediaries, whereby OTAs were the most important intermediaries, followed by tour operators. Intermediaries gained importance in the period 2012-15 due to the increasing role of OTAs, whereas the participation of traditional travel agencies and tour operators decreased. The hotel companies interviewed declared themselves to have carried out a low-medium level of investment in training and less than 20 percent of them had cooperated with other companies or institutions for innovation purposes. On average, the business owners/managers had completed secondary or University education.

Insert Table 1 around here

Results

Firstly, logistic binary regressions were estimated by considering the variables for product and marketing innovation as dependent variables. The results are shown in Table 2. According to the values of the Condition Indices (CI) and the Variance Inflation Factors (VIF), the existence of a serious problem of multicollinearity in the analysis can be ruled out. The maximum value of the VIF is 1.74 and the maximum value of the CI is 16.60.

Insert Table 2 around here

Regarding the control variables, the hotel category is observed to be statistically significant for marketing innovations with a positive influence. Furthermore, being part of a hotel chain seems also to have a positive influence on marketing innovation. The educational background of business owners/managers is observed to have a positive influence on product and marketing innovation, as does the investment in training for the staff. Both facts indicate the high relevance of human capital for business innovation. Finally, cooperation activities for innovation have a positive effect on product innovation, but not on marketing innovation.

The overall results indicate that, in the case of hotel SMEs in Spain, the influence of intermediaries on hotel innovation does not seem to be strong. Nevertheless, several significant effects are observed.²

On the one hand, the hotels that depend more on tour operators to sell their capacity are less innovative in terms of their marketing. However, no effect is observed in this respect regarding product innovation. These results support hypothesis H1 regarding only marketing innovation.

Therefore, the connection of hotel SMEs with tour operators seems to facilitate their access to their clients, and hence the marketing strategy of each hotel turns out to be more conservative and is largely transferred to the tour operator. However, this dependence can cause strong pressure from tour operators in the determination of the room rates and a decrease in the profit margins of hotels.

This result is, to some extent, in line with Buhalis's pioneering work (2000), which focuses on Mediterranean hotel SMEs and their conflict with Northern European tour operators. Major tour operators force hotel SMEs to reduce their profit margins and

prices in exchange for ensuring their visibility in the global market. As a consequence, all investments of hotel SMEs are jeopardised, including those in innovation activities. Conversely, our results are in contrast with those of Orfila-Sintes & Mattsson (2009), who suggest that the connection with tour operators is positively related with innovative behaviour in the hotel industry.

Furthermore, those hotels that sell an increasing percentage of their rooms via OTAs innovate more in their marketing. These hotel companies are actively facing the challenge of digitalization and are adapting their marketing to the progress of ITC technologies. Hotels that are listed on OTA websites can additionally increase their direct sales due to their higher visibility on online channels. Moreover, many consumers work across different devices, initiating a purchase on a mobile phone and completing it later on a PC. Therefore, hotels innovate on their own sales channels in order to take advantage of the complementariness between the various advertising channels and attain a higher balance and diversification of said channels (Inversini & Masiero, 2014; Toh, DeKay & Raven, 2011). However, no effect of OTAs on product innovation in hotel SMEs is observed. Hence, those results support hypothesis H2 regarding only marketing innovation.

Finally, those hotels that tend to sell an increasing percentage of their rooms through traditional travel agencies introduce less product innovation. These seem to be companies with traditional management oriented towards mature clients that are not interested in innovative products, but in a traditional hotel experience. These hotels face, however, a decreasing market for their services since this type of tourist is receding, and hence they will suffer the consequences of an unfavourable specialization (Law et al., 2015). No influence of traditional travel agencies is observed on marketing

innovation. Therefore, the results support hypothesis H3 regarding only product innovation.

In addition, the structure of intermediation in the tourism sector and the hotels' marketing strategies influence other dimensions of the management of the hotels, along with the effects on innovation. This impact is analysed in the regression results presented in Table 3 to give a more complete picture on the influence of intermediaries on hotel SMEs. This table shows the ordinal logistic regression models estimated for the hotel's perception of:

- The influence of the intermediaries in the characteristics of the provision of the hotel services (i.e. introduction of quality standards);
- The acquisition or use of new information and communication technologies (ICTs);
- The determination of prices or commercial margins.

Insert Table 3 around here

On the one hand, those hotels that depend 'more' and 'increasingly' on tour operators and OTAs to sell their rooms suffer a greater pressure on the conditions and quality of their services and on the adoption of ICTs. From this perspective, those tourist intermediaries might exert a positive influence on the management hotel companies (see Table 3). This result, which is in line with Rønningen (2010), indicates that tour operators increasingly need efficient suppliers to develop tourism products of a more competitive nature. Furthermore, as can be seen in Table 3, hotel SMEs specialised in coastal areas suffer lower pressure from intermediaries in these fields

compared to hotels in interior areas, as the negative and significant coefficients of the *coastal* variable indicate.

Likewise, hotel SMEs that cooperate with other institutions and companies in innovation activities are under a higher pressure on the quality of their services and the ICT adoption, which is in line with prior research (Novelli et al., 2006; Zach, 2016).

On the other hand, a higher dependence on tourism intermediaries, such as tour operators, traditional travel agencies, and OTAs, is associated to higher pressure on the determination of rates and commercial margins. This is in line with the previous literature (Inversini & Masiero, 2014; Romero & Tejada, 2011; Stangl et al., 2016; Toh et al., 2011). The strength of this influence seems to be of similar magnitude for all types of intermediaries. Yet those hotel SMEs that are increasing their dependence on traditional travel agencies appear to be experiencing the greatest pressure in this respect. As noted above, those smaller firms with traditional management will subsequently suffer greater consequences of an unfavourable specialisation, such as high commission from traditional travel agencies.

Conclusion

Tour operators have been identified as the agents that assume the governance of the Tourism Global Value Chains (TGVCs). However, changes in the composition and functioning of TGVCs, principally due to the application and development of ICTs, may modify this leading role. In particular, the emergence and consolidation of OTAs poses a major structural change in the tourism sector.

Previous research in this area has shown mixed results regarding the influence of the models of governance on innovation in tourism SMEs. While certain studies suggest a negative effect of tour operators, which hampers innovation in hotel SMEs, others state that tour operators could stimulate innovation in the hospitality sector. The current

study, based on a representative sample of Spanish hotel SMEs, indicates that the use of the various distribution channels by hotel companies and the role of tourism intermediaries have various effects on product and marketing innovation in these businesses. The nature and direction of these effects are complex and vary across the different types of tourism intermediaries.

On the one hand, the dependence on tour operators conditions lower levels of marketing innovation, while dependence on OTAs may stimulate hotel SME innovation in the marketing of their services. The role played by tour operators implies greater bargaining power towards the suppliers of tourist services, especially the smaller suppliers, in terms of pricing strategies and marketing activity. Tour operators directly carry out the marketing of tourism packages, given that they have the required resources and capabilities to directly distribute their products in international markets. On the other hand, hotel companies that depend more on traditional travel agencies to market their rooms are less innovative regarding their services.

In addition to their effect on innovation, the dependence on tourism intermediaries implies a hotel's lower autonomy in the determination of rates and margins. This pressure, however, is not observed to have negative effects on product innovation, as suggested in previous studies. On the contrary, tourism intermediaries influence the conditions and characteristics of hotel services thereby favouring improvements in service quality and the adoption of quality standards and ICTs. Nevertheless, these positive effects are observed to be less important for hotels in coastal areas compared to those in interior areas due to the different behaviour of tour operators and the different patterns of governance of TGVCs. Moreover, the investments in ICTs could often be associated with the connection with the management systems of the tourism intermediaries, and hence they can increase the dependency on

tour operators and OTAs. Consequently, these improvements could benefit the intermediaries even more than the hotel companies themselves in certain cases.

According to data presented in this paper, OTAs are becoming the predominant and most influential tourism intermediaries. They are assuming an increasing role in the governance of the TGVCs at the expense of tour operators, who are losing their significance.

Furthermore, dependence on traditional travel agencies is associated with greater pressure on hotel rates and margins. This distribution channel carries more weight for those hotels that are less active in terms of innovation, which are oriented towards a traditional and accommodating type of tourist. This segment of the tourist demand is shrinking, as a global trend, and therefore hotel SMEs with this marketing strategy are being sucked into a vicious circle. These hotels do not innovate and upgrade their services and are not proactive in the adoption of ICTs, which leads them to increasingly depend on traditional travel agencies to sell their rooms. Traditional travel agencies put severe pressure on the hotel margins, and therefore these hotels lack the financial resources to upgrade their services and innovate.

Likewise, although tour operators seem to exert certain positive effects on the improvement of hotel services and ICT capabilities, a high dependence thereon could inhibit the innovation and improvement of hotel marketing strategies. The weakness of the marketing strategy of hotels could limit the possibilities of hotel companies diversifying their distribution channels (through direct selling, among other alternatives).

These results have straightforward implications for business strategy and tourism policy. There is a potential field for policy actions oriented towards favouring innovation in hotel SME marketing strategies and processes. Supporting marketing

improvements by means of digitalisation could allow hotels to reduce their dependence on tour operators and OTAs. These efforts should be oriented not only towards investing in ICTs, but also towards using them to develop alternative distribution channels, thereby avoiding a situation of high dependence on specific intermediaries. Furthermore, tourism policy could strive to stimulate product and marketing innovation in those traditional hotel companies that are more dependent on traditional travel agencies and find themselves trapped in a vicious circle of deterioration.

The results of this work referred to the hospitality sector in Spain and cannot be directly extrapolated to other areas. The nature of the relationships between the intermediaries and the hotel companies can vary across different tourism typologies and destinations, and can also depend on the characteristics and strategies of the local hotel companies. In particular, the analysis of the supply side provided in this paper could be enriched with additional information from the demand side, such as the characteristics, motivations and needs of the hotels' clients. Consequently, more research is needed in order to attain sound conclusions on this issue, which is also affected by the rapid changes currently affecting TGVCs. In this respect, the expansion of tourist rentals thanks to new tourism intermediaries, such as Airbnb, implies a major challenge for hotel companies and an interesting transformation of the tourism value chain which deserves increasing attention.

1. A star system denoting seven categories is employed in Spain which differentiates between 5, 4, 3, 2 or 1 gold stars and 2 or 1 silver stars (in descending order). Hotels receive up to five gold stars according to the minimum technical requirements relating to hotel facilities and services offered. The hotel must show in the principal entry a normalized plate with the category in the main entrance.
2. Models for process and organisational innovation were also estimated, but no significant results were found for the relationships with intermediaries.

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