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Economic Competitiveness: Effects of Clustering, Innovation Strategy and the Moderating Role of Location in the Colombian Hotel Industry

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ABSTRACT: Clustering in service industries has scarcely been investigated, while there is huge evidence of a positive impact on innovation and competitiveness in the case of manufacturing industries. We address this by exploring the potential moderator effect that location externalities have on the triangular relationship between clustering, innovation and competitiveness. In this empirical study of 131 hotels located nationwide in the emerging destination of Colombia, we found a negative moderated mediation effect. The impact on competitiveness is higher when the location holds low levels of resources. We uncovered and discuss one of the reasons for explaining the heterogeneous impact of clustering on service firms.

JEL Classification: D22; L83; R11; O33; O25.

Keywords: industrial cluster; organizational innovation; hotel industry; colombia; competitiveness.

Competitividad Económica: los efectos del clustering, la estrategia de innovación y el rol moderador de la localización en la industria hotelera colombiana

RESUMEN: El clustering en las industrias de servicios ha sido escasamente investigado habiendo extensivas evidencias de su influencia sobre la innovación y la competitividad en el caso de industrias manufactureras. Afrontamos esta carencia mediante la exploración de un posible efecto moderador que las externalidades de la localización tienen sobre la relación triangular entre el clustering, la estrategia de innovación y la competitividad. En este estudio empírico de 131 hoteles localizados por todo el país del destino emergente Colombia, encontramos un efecto

moderador mediado que es negativo. El impacto sobre la competitividad es mayor cuando la localización tiene niveles bajos de recursos. Exponemos y discutimos una de las razones que explica el heterogéneo efecto que tiene el clustering sobre las empresas de servicios.

Clasificación JEL: D22; L83; R11; O33; O25.

Palabras clave: cluster industrial; innovación organizativa; industria hotelera; colombia; competitividad.

1.   Introduction

The clustering of firms within a certain location —clustering— plays a crucial role on boosting innovation and firm's competitiveness (Asheim *et al.*, 2011; Albors-Garrigos and Hidalgo, 2012). Yet there is a vast empirical evidence of a positive impact within manufacturing industries (McCann and Folta, 2009), the evidence in service industries is still scarce, which is even minimal in the tourism industry (e.g. Gomelezj, 2016; Rodríguez-Victoria *et al.*, 2017). In this industry, there is an additional factor that should be added to the equation: the location's resources that firms can use for tourism purposes, including natural resources and communication infrastructures boosting connectedness and relatedness thanks to proximity (Kourtit, 2016). The critical debate is whether local competitiveness is mainly explained by the territory or whether it is a question of specialization or even of value and volume in a certain territory (Boix and Trullén, 2010; Galleto and Boix Domenèch, 2014). This is particularly relevant in service industries since the impact is heterogeneous and is deeply rooted in low territorial levels, namely regional and urban (Cuadrado-Roura, 2016). Consequently, location and clustering should be investigated jointly but considering them as different variables that may interact, with a particular focus on innovation as a key driver of competitiveness and growth as a response to the research agenda raised by Cuadrado-Roura (2016) for the «*new services economy*» and the issue of spatial concentration of services in major cities.

Clustering speeds up the process of innovation by means of the knowledge spill-overs effect (Expósito-Langa *et al.*, 2010; Hervas-Oliver *et al.,* 2015). This entails the collaboration of firms from related activities that are located proximal, which results in improved processes and products. Additionally, location matters in the tourism industry since the supply strongly depends on the place's natural resources and related hospitality activities (Tsai *et al.*, 2009). This shapes the location attractiveness for the tourism operators and the tourists themselves. The effect of the location can be even stronger in emerging tourism destinations, since these activities represent a significant portion of the regional and national GDP (WEF, 2015). Further, in places such as Latin America and the Caribbean, there have been actively public policies promoting the deliberative collaboration between firms in terms of clusters, where hotels are the main actors to attract visitors. Consequently, it is quite likely that clustering of hotels, innovation and location interact in ways we still ignore.

To address this challenge, we have conducted an empirical study among a sample of 131 hotels located nationwide in Colombia. We controlled for the effect of internal variables such as the implementation of a set of organizational innovations and size, external factors relative to the location and the networking of hotels in each location (clustering). The key research question is whether the relation clustering-innovation-competitiveness is similar to that observed in manufacturing industries and the role that location plays once the networking effect is considered. We theoretically contribute to the explanation of the heterogeneous effect that these variables may have on competitiveness in this particular industry and type of destination by including an analysis of moderation. Our practical implications will help both public bodies and hoteliers improve the destination's competitiveness in the global marketplace. To do so, we first provide the background for the expected relationships. In a next section, we explain the method used to explore the triangular relation by means of OLS and using the PROCESS macro in SPSS (Hayes, 2013). After the discussion of results and implications for theory and practice, we provide the main conclusion and argue why location plays a moderating role in this industry.

2. The impact of clustering, innovation and location on the hospitality industry's competitiveness

2.1. The impact of clustering on innovation and on competitiveness in the tourism industry of emerging destinations

The tourism industry is overall globalized in competition and markets, while there are a number of changes that challenge the consolidated tourist destinations (WEF, 2015). Firms competing in this industry should strive to respond differently if they want to be competitive. This is particularly relevant for emerging tourist destinations, which should first reach a preference position among the big wholesalers in this value chain (Dwyer and Kim, 2003).

Following Porter (1990, 2003), among the variety of options to do so, collaborating while competing has proved to be particularly fruitful when the local industry includes small to medium-sized enterprises and the number of competing tourist destinations is medium to high. Spatial density is a precondition for this form of deliberative collaboration to arise, while the active collaborative behaviour within the cluster is a necessary and sufficient condition for this density to be labelled as clustering (Molina-Morales and Martínez-Fernández, 2003).

Yet the effects of clustering have extensively been investigated in the manufacturing industry. One of the most studied effects is the increased level of innovativeness within clusters due to the knowledge spillovers, essentially by means of knowledge exchange within the cluster that may take either formal or informal forms (Hervás-Oliver *et al.*, 2015). In the less frequently studied service industries, this effect has also been proved in the particular case of the tourism industry. The firms belonging to

the cluster are more likely to capture the market changes and they do so quicker than non-clustered counterparts are able to do (Novelli *et al.*, 2006; Hjalager, 2010). This yields an increased capability to speed up the process of market knowledge absorption that leads to the adoption or implementation of new technologies, new productive systems or new methods of commercialization. Nordin (2003) found that, in the tourism industry, this is due to the regular interaction among firms and also between firms and institutions.

Yet the location features should be separated from the clustering of firms within the location since the contextual features is an external characteristic a firm can hardly control. Within the clustering effect, we are referring to the role of relational networks that happen in tourist destinations that are highly dense in terms of number of firms within the industry and related activities, following the arguments of Molina-Morales and Martínez-Fernández (2003). Thus, the critical issue is whether the firm collaborates actively in the cluster.

In addition to the impact of clustering on innovation, clustering was also found to have an impact on the firm's competitiveness (Camisón and Forés, 2015). There is empirical evidence in the tourism industry supporting the idea that clustered firms hold a superior performance relative to isolated counterparts (e.g. Chung and Kalnins, 2001; Enz *et al.*, 2008; Peiró-Signes *et al.,* 2015). However, the vast majority of these studies were conducted in developed economies. Following the argument of Rodriguez-Victoria *et al.* (2017), in developing economies there exists a kind of minimum differentiation effect, earlier developed by Hotelling (1929): firms closely located in an emerging tourist destination will tend to follow a similar strategy that will reinforce the effect of clustering in terms of the destination positioning in the global marketplace. This will yield a superior competitiveness. Accordingly, clustering will provide benefits to tourism firms that will take the form of increased levels of both innovation and competitiveness.

In addition, Campo *et al.* (2014), found that there is also an impact from innovation to increased competitiveness in their review of ten studies in the tourism industry. Nordin (2003), Carvalho and Sarkar (2014) and Pereira-Moliner *et al.* (2015) are some examples applied to developed economies, while Tseng *et al.* (2008) found a positive impact of innovation on hotel performance in Taiwan. Two literature reviews have also found this in the tourism industry (Hjalager, 2010; Gomezelj, 2016). Due to the triangular relationship between these constructs, it can be argued that there is a positive, induced effect of clustering on competitiveness through innovation, but there can also be expected a direct relationship between clustering and competitiveness in light of the empirical findings in both manufacturing and service industries. Furthermore, there is also evidence of the positive link from innovation to competitiveness. Accordingly, we propose the triangular relationship as follows:

Hypothesis 1: Clustering has a positive impact on the implementation of innovations in firms of emerging destinations.

Hypothesis 2: Clustering has a positive impact on the economic competitiveness of firms in emerging destinations.

Hypothesis 3: The implementation innovations has a positive impact on the economic competitiveness of firms in emerging destinations.

2.2. The moderator effect of location

Although the latter hypotheses have only been studied marginally in developed economies, the original contribution of this study is the exploration of the moderator effect that location may play. We have argued that clustering is different to the configurational features of the location that firms can hardly control. Among these characteristics, natural resources, infrastructures and institutional settings are relevant in the case of emerging tourist destinations (Orfila-Sintes and Mattsson, 2009). Natural resources are frequently the locational advantage of many emerging tourist destinations. Thus, the more resources there are available in the location for tourism, the more likely it is that hotels perform well.

As shown earlier, innovation has been proved to be determinant in the tourism industry. However, there is the possibility that the impact of innovation on competitiveness differs depending on the levels of innovation and the environmental setting. The regional innovation system tends to support in a lesser extent the surrounding firms' innovative efforts in emerging than in developed economies (Asheim *et al.,* 2011). Within emerging destinations, we can also found differences in terms of locational support to firm's innovation. Thus, when the location offers fewer resources, any improvement will have a higher impact than if the improvement is implemented in locations with more resources available. In fact, Chung and Kalnins (2001) found that the effect of agglomeration was lower in suburban than in rural areas of Texas (USA). Marco-Lajara *et al.* (2014) found that business agglomeration had a negative effect on the performance of hotels in a densely populated destination such as Benidorm (Spain). This seems to point out that the effect of innovation and clustering may be heterogeneous depending upon the locational features.

The overall argument may be due to the curve of marginal returns. When the firms depart from low levels of competitiveness, higher gains in such construct can be achieved. However, it is increasingly harder to maintain the same level of improvement as firms in the location increase their competitiveness. In addition to this, if the location can only offer marginal support for tourist firms, any innovation implemented will have a much higher impact on their competitiveness than if such innovation were implemented in another location. This is because the sources of improvements are scarcer in the former than in the latter location. Accordingly, our moderation hypothesis claims that the location moderates the relation between the implementation of innovations and competitiveness of tourist firms in emerging destinations (see figure 1 for the scheme of hypotheses), so that:

Hypothesis 4: In locations with low levels of tourism resources available, innovations will have a higher impact on firm's competitiveness than it will have in locations with high levels of tourism resources available.

Figure 1.   Scheme of tested hypotheses
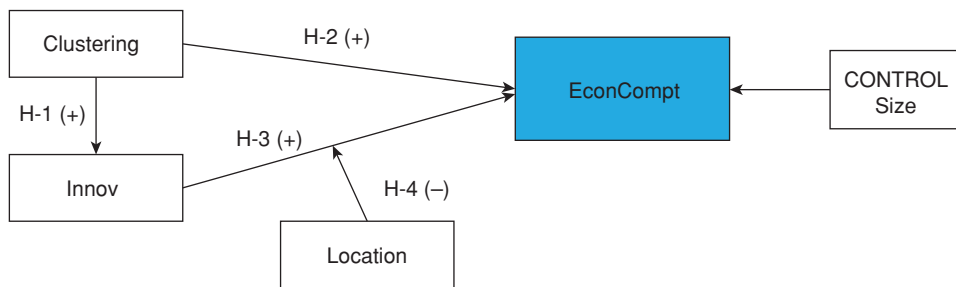
3.   Methods

3.1.   Population and sample

In order to test our hypotheses, we chose an emerging tourist destination such as Colombia and targeted hotels as the unit of analysis of tourist firms. This is because hospitality industry is the third major contributor to inward foreign currency in Colombia after petrol and coal. Hotels accounted for the majority of contribution of hospitability industry to GDP in 2014 (81%) according to DANE[1] data. The selection of hotels instead the full hospitality industry was required since the list of innovations to be implemented may differ if different types of activities were included. In this country, the world arrival of international tourists has increased 4.7% from 2013 to 2014 according to UNWTO data (2015). This country has implemented public policies trying to foster the creation of cluster initiatives, while it had performed poorly in innovation indicators (3.2 according to WEF indicators, 2015). These figures illustrates how well Colombia is representative of emerging tourist destinations, which is the target of our research.

We surveyed a sample of 131 hotels located nationwide. They were geographically representative of the population of 1,424 hotels according to the Chi-square test (see table 1). That population was available at last date of consultation (February 2014), according to the last official census of hotels made by DANE in 2013. The survey was performed between March and April 2014. We surveyed directly to CEOs of hotels since they are responsible of the main decisions relative to location, innovations to be implemented, whether to actively participate in a cluster and economic decisions relative to prices and the like.

3.2.   Variables

We measured competitiveness in economic terms, while we introduced three explicative variables of hotel's competitiveness: the implementation of organizational innovations, clustering and location. In addition, we controlled for size.

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[1]   National Administrative Department of Statistics of Colombia (DANE)

Table 1. Sample features and representativeness

	% Sample	*% Population 2014*	*Chi-squared statistic*
Atlantic Coast	19.4%	30.4%	0.04
Medellín	17.1%	25.2%	0.02
Bogotá	23.9%	32.2%	0.02
Pacific Coast	39.6%	12.2%	0.61
Sum of Chi-squared statistics:			**0.69**

CompetEcon: it is the variable for measuring the hotel's economic competitiveness by means of a multi-item 7-point Likert scale. Following Aiginger and Vogel (2015), we asked respondents to measure this in comparative terms as worse/better performance than competitors. We included four items that are most often used for measuring hotel performance (Sainaghi, 2010): Occupation, Tariff, Total Incomes, and Lodging Incomes. We averaged this in a single factor.

OrgInnov: this is our proxy measure of innovation. We asked respondents to rate the level of implementation of organizational innovations since Castellacci (2008) found that hospitality firms mainly developed process innovations. Additonally, Cuadrado-Roura (2016) also highlighted that most industries are transitioning towards a digital economy, so most of these innovations have to do with how these service firms, strongly rooted in the territory, address the main contemporary challenges owed to the digital servitization and globalization. Accordingly, we extracted 14 innovative organizational practices that practitioners considered as the most relevant to be implemented in Colombian hotels (as mentioned in the RedHotech, 2013 report). We included a 7-point Likert scale for measuring the level of implementation and averaged this into a single variable.

Location: this variable should measure whether the availability of resources within the location help hotels to develop their activity. We introduced a 7-point scale and asked respondents to express whether they feel that the location had a positive impact on the hotel's performance. We explicitly asked to exclude the potential effect that clustering within that location may have and asked specifically to only consider the location in terms of available resources for the hotel and tourist.

Clustering: this is a dummy variable. Two criteria should be met for this to take the value 1: the hotel should be located in a highly dense location of hotels and the manager should declare his/her hotel actively participated in the cluster. For the first issue, we used the suggestion of O'Donoghue and Gleave (2004) relative to the threshold of at least 1.4 in the location quotient-LQ as defined by Cromley and Hanink (2012). The LQ is the quotient of quotients, with numerator as the number of hotels in a region divided by the total number of firms in that region regardless their industry, and the denominator as the same expression referred to the country. Forty-six of the surveyed hotels (35%) met the criteria and were classified as "clustered".

Control variable: size. This variable was measured in terms of number of employees. This control variable was introduced in both equations.

All the scale and control variables were transformed with a natural logarithm and then were standardized (with the exception of the dummy variable) to eliminate the potential effect of different units and to have a known distribution of data following a Normal distribution with mean 0 and standard deviation of 1. The logarithm transformation should be considered to interpret the estimated coefficients since they will inform about the effect of marginal changes in explanatory variables on competitiveness. Table 2 reports the main descriptive statistics for each variable. Means and standard deviations are for untransformed variables, while correlations are reported after the transformations performed since they were used in the regression analysis.

Table 2.   Descriptive statistics

Variable	Mean(a)	s.d. (a)	[1]	[2]	[3]
[1] Innov	6.1	0.55			
[2] Size	46.6	57.05	0.24**		
[3] Location	6.4	0.87	0.43**	0.06	
[4] EconCompt	6.1	1.01	0.65**	0.21*	0.57**

(a)   Mean and s.d. are for the untransformed variables since the transformation yields normalized variables with mean 0 and s.d. equal to 1. Correlations are for the transformed variables (natural log and standardized).
(*)   correlation significant at the 0.05 level (2-tailed).
(**) correlation significant at the 0.01 level (2-tailed).

3.3.   Statistical method

Hypothesis (1) entails a positive impact from clustering to the hotel's economic competitiveness (represented in equation [1]). Equation [2] shows the expected signs in the specification of the main equation.

[1] $\text{OrgInnov (hotels)} = \alpha_i + \beta'_1 \times \text{Clustering} + \varepsilon_i$

[2] $\text{CompetEcon (hotels)} = \alpha_j + \beta_1 \times \text{OrgInnov} + \beta_2 \times \text{Location} + \beta_3 \times \text{Clustering} - \beta_4 \times \text{Location} \times \text{OrgInnov} + \beta_5 \times \text{Size} + \varepsilon_j$

For the sake of simplicity, we have used the macro PROCESS (v. 2.15) for SPSS of Hayes (2013) to test the triangular relationship and the moderated mediation of our model. We asked the method to perform a bootstrapping of 5000 replications bias corrected to reach significance levels of estimations, which is a more powerful approach than performing the Sobel test, since this test works well only in large samples and simple mediation models (Preacher and Hayes, 2008; Hayes, 2013). PROCESS performs ordinary least squares regressions.

The model explicit in figure 1 includes a mediation model with a moderation, which Hayes (2013) considers a conditional process model since the impact of clustering and innovation on competitiveness is conditional to the levels of location. An index is computed as a statistical test for the moderated mediation hypothesis (see Hayes, 2015). In our study, this value is the slope of the line relating the size of the conditional effect of clustering on competitiveness through innovation to the moderator *location*. This is computed as the estimation of the impact of clustering on innovation multiplied by the beta estimated for the interactive effect of location and innovation on competitiveness. A bootstrapping confidence interval will test this. Our hypothesis H4 requires that this index be significantly negative and that the estimated beta for the interactive effect of innovation and location on competitiveness be significantly negative.

4.   Results

Table 3 yields the results of estimates for equations [1] and [2]. Estimates for equation [1] showed that clustering has a significant positive effect on innovation implementation after controlling for the significant positive effect of size. Model 3 in Table 2 shows that size is irrelevant to explain hotel's competitiveness. The ANOVA was significant at *p*-value below 0.005 and the overall explanatory power of competitiveness is moderately high in model 3 (R-square of 0.63). In the explanation of competitiveness, there is a significant and positive impact of the implementation of organizational innovations (0.43) and clustering (0.26). This latter effect should be understood as the direct impact. Yet there is a significant indirect impact from clustering to competitiveness through innovation ($0.385 \times 0.260 = 0.100$) that yields an estimated total impact of 0.36. These results lend support to hypotheses H1 to H3 regarding the triangular relationship between clustering, innovation and competitiveness.

The effect of location on competitiveness is non-significant while the interactive effect of location and innovation on competitiveness is significantly negative (–0.19). Furthermore and following Hayes (2015), the estimation of the index of moderated mediation is significantly different from zero and the 95% confidence interval contains negative values with a point estimation of –0.077, obtained after 5,000 resamples. This means that the effect of clustering on competitiveness through innovation at conditional values of location has a negative slope. For a better understanding of the interactive effect, we have depicted the interactive effect of location and innovation in Figure 2. This interactive effect holds since the simple slope test is significant at *p*-value < 0.001. As the level of resources available in the location increases, the effect of OrgInnov on competitiveness decreases and it is higher for territories holding low than it is for locations with high availability of resources. Accordingly, there is empirical evidence that hypothesis H4 holds. Furthermore, our evidence validates also the conditional effect of clustering on competitiveness by means of the moderated mediation of innovation and location.

Table 3.   OLS regressions results

| Dependent variable: zLnOrginnov	Unstandardized coefficients (t-value)		
Variable	Model 1	Model 2	
Intercepts	0.000 (n.s.) (0.00)	–0.135 n.s. (–1.18)	
Size (LN employees)	0.242 (**) (2.83)	0.260 (**) (2.83)	
Clustering	—	0.385(*) (2.35)	
R-square	0.06	0.09	
Adjusted R-square	0.05	0.08	
F-value for change in R-square	8.02 (**)	4.76 (*)	
Dependent variable: zLnEcon-Comp	Unstandardized coefficients (t-value)		
Variable	Model 1	Model 2	Model 3
Intercepts	–0.562 (**) (–2.17)	–0.283 n.s. (–1.44)	–0.008 n.s. (–0.10)
Size (LN employees)	0.189(**) (2.51)	0.080 n.s. (1.48)	0.035 n.s. (0.60)
zLnOrgInnov	—	0.437 (***) (6.89)	0.436 (***) (5.36)
zLnLocation	—	0.313 (***) (5.10)	0.077 n.s. (0.80)
Clustering	—	0.247 (*) (2.07)	0.266 (*) (2.36)
OrgInnov x Location	—	—	–0.199 (*) (–2.05)
R-square	0.047	0.556	**0.630**
Adjusted R-square	0.039	0.542	**0.615**
F-value for change in R-square	6.33 (*)	48.1 (***)	24.9 (***)
Index of moderated mediation for Model 3	–0.077 CI at 95%: (–0.184, -0.012)		

All ANOVAs were significant at p-value < 0.005.
(*) significant at p-value < 0.050.
(**) significant at p-value < 0.010.
(***) significant at p-value < 0.001.
n.s. not significant.

Figure 2. Interactive effect of Location and Innovation Implementation
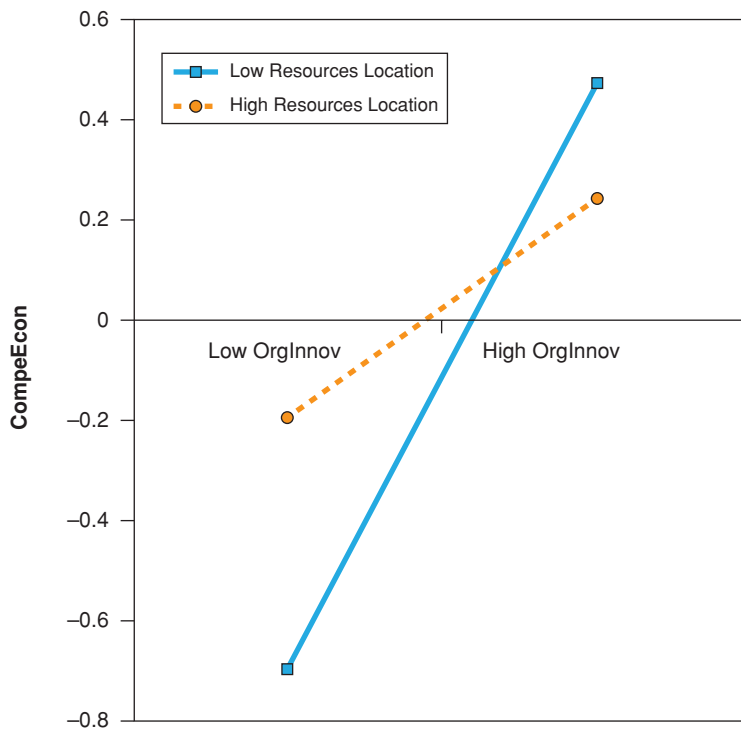
5. Discussion, implications and limitations

One of the relevant findings of this study is that, in emerging destinations, hotels located in a place where the density of hotels is high and that participate actively in networking (i.e. clustering) perform better than isolated hotels or those hotels that decide not to collaborate. In few words, clustering exerts a positive direct impact on competitiveness. Additionally, it provokes an induced positive effect by means of easing the implementation of a set of organizational innovations. This is in line with most of research on the effect of industrial clusters on innovation and competitiveness in both manufacturing and hospitality service industries (Chung and Kalnins, 2001; Enz *et al.*, 2008; McCann and Folta, 2009; Camisón and Forés, 2015; Peiró-Signes *et al.,* 2015). Our result is contrary to that of Marco-Lajara *et al.* (2014), who found a negative effect of densely populated destinations and business agglomeration in Spain. In emerging destinations, the effect of both clustering and innovation on competitiveness is positive.

A second finding is the interactive effect of location and innovation on competitiveness in emerging destinations. The resources available for tourism purposes in the destination interact with the implementation of organizational innovations so the

impact that can be expected from innovation is higher when the location lacks such resources or the level of availability is low. This may imply that innovation is particularly relevant for those places that hold low levels of tourist attractions related with natural resources or communication infrastructures. A marginal implementation of any organizational innovation will boost increased levels of competitiveness in these locations. However, the bad news is that the expected return of innovations on competitiveness will be lower when there are external resources in the location that are useful for the tourist. This is because the organizational innovations the hotel implement loses its relevance in the tourist's mind since in those places external resources may be more attractive. Similar results were obtained in developed countries such as Nordin (2003), Carvalho and Sarkar (2014) and Pereira-Moliner *et al.* (2015), and the are some examples applied to developed economies, while Tseng *et al.* (2008) found a positive effect of innovation on competitiveness in the Taiwanese hospitality industry. So far, we could not find similar investigations to which we could compare our results in terms of the partial mediation relationship.

A third relevant finding is the negative index of moderated mediation found. This means that clustering is negatively moderated in an indirect manner by means of the interaction above-mentioned. Thus, the effect of clustering on competitiveness is heterogeneous and is conditioned by the interaction between the type of location and the level of innovations implemented by clustered hotels. Clustering in locations with high levels of resources will have a lower impact than clustering in locations with low levels of this type of environmental resources. This will help explain partly the heterogeneous effect of clustering depending on innovations the firm implements and the availability of resources within the location it operates. Some other investigations have tried to explain that heterogeneous impact of clustering on innovation or competitiveness by means of differences internal to the firms, such as different absorptive capacity (Cohen and Levinthal, 1990), in particular among SMEs (e.g. Hervas-Oliver and Albors-Garrigos, 2009). Yet our contribution is the distinction between internal features within the cluster —i.e. how firms relate in a certain territory or *clustering*— and externalities related to the particular location. Future research should investigate the potential combinative effect of all (differences in absorptive capacity, clustering, and location).

The implication of these findings is that hotels should reflect on the type of innovations that are to be implemented depending upon the context where hotel is located. Hoteliers willing to open new hotels in emerging destinations should also consider carefully the type of location and its impact on clustering, innovation and the hotel's competitiveness. Public policy-makers should also think of shifting the type of innovations that are to be supported depending on contextual factors since not every location requires the same support. Accordingly, public policies trying to foster clustering and/or innovation should be defined in terms of the particular context.

Our findings shed light on a pervasive debate of whether all the clustered firms benefit from clustering in the same extent. We found that they do not. Yet further empirical research is required in other contexts and industries, even in manufactur-

ing industries. While clustering is beneficial in emerging destinations, the impact of innovation among clustered firms is lower when the location contains higher level of resources than when the location lacks these resources. In short, clustering is increasingly more beneficial for innovative purposes when the location has limited availability of resources for the main economic activity the firm develops. This type of moderated mediation is frequently excluded from analysis even in manufacturing industries, so it deserves further investigations.

Some limitations call for caution in interpreting our results. We only tested this in an emerging tourist destination. Further empirical research in emerging destinations is required to be able to generalize the finding of moderated mediation. Comparative studies between emerging and developed destinations will also be beneficial for the extension of this finding. We chose to measure clustering as a discrete choice in terms of whether or not the hotel collaborates actively. We acknowledge this simplification and recommend scholars to measure this as a continuous or scale variable in the future, since it is likely that the level of involvement in the network may differ across hotels and/or locations and this may have a different impact on firm's competitiveness.

Nevertheless, our results are pointing out the existence of heterogeneous effects of clustering on firms that strongly depend on location. Thus, location and clustering can be regarded as intertwined factors that deserve further attention in the quest of whether some places are more fertile areas than others for the development of this deliberative networking of firms within a certain territory, industry and type of economy.

6. Conclusions

This study raised the question of the impact that three constructs have on service firms' competitiveness for the particular case of emerging economies, namely collaborating deliberatively in an industrial cluster –clustering, the implementation of innovations and the location. To do so, we have surveyed 131 hotels located nationwide in Colombia, an emerging tourist destination. Among them, 35% were located and collaborated actively in a cluster of hotels. So far, this has been studied separately while empirical evidence of the effect of clustering on service firms and on emerging economies is still scarce.

We have found that clustering is paying off in this type of destinations since it has a positive direct and indirect impact on hotel's competitiveness. Accordingly, public policies fostering this type of collaborative arrangements should continue to support them in light of this positive result. The indirect impact is similar to that of manufacturing firms, since we found that clustering eases innovation and this improves competitiveness.

Yet this indirect impact is contingent to the level of innovations implemented and the location features relative to the availability of resources for tourism pur-

poses. We found that externalities linked to the location moderates that partially mediated relationship. If there are low levels of resources available in the location, the impact of innovation on competitiveness is higher than if there are high levels of resources. Finally, that interactive effect between innovation and location affects the mediated relation of clustering and competitiveness through innovation. Thus, public policy-makers should consider carefully the particular features of the location, the idiosyncratic relationships within clusters and the level of innovations these firms implement before designing supportive tools. Further, all public and private actors should expect different levels of return depending on the values these three constructs take.

From the practitioners' viewpoint, hotels in emerging destinations need to implement organizational innovations and collaborate actively in a cluster if they want to obtain high levels of competitiveness in this global industry. Additionally, the direct impact of clustering on both innovation and competitiveness is signalling that hoteliers should consider carefully whether there is a cluster in those locations they explore before opening new hotels. Not only is this relevant for the potential externalities around the cluster, but also for the particular case where externalities within the location do not offer enough resources for tourism. Furthermore, the spatial configuration of tourism activities may be partly explained by these intertwined relationships of the three constructs and locational externalities. It seems plausible that hotel's decisions relative to where to locate the hotel, the extent to what the firm will collaborate in the local cluster and the type and level of implementation of organizational innovations is influenced by these locational externalities.

This goes beyond the merely consideration of proximity advantages in spatial configurations in the tourism industry. We contribute to the debate around whether clustering is an issue grounded in the territory or is a question of specialisation or even a question of volume and value (see Boix and Trullén, 2010; Galleto and Boix Domènech, 2014). Following the conclusions of the review of cluster research of Cruz and Teixeira (2010), we found that clustering should be worked at the ground level. Not only is it a feature pertaining to the territory, it is a question of how well both levels are combined, the territory and the active participation in a highly dense population of firms. Clustering of hotels provide a more visible destination for the tourism agents. Yet this is only a first step in the quest for global competitiveness to meet the constantly changing demands from customers and the arising of other emerging destinations. To maintain the level of competeveness in this industry, firms should continue innovating. Tourists select the destination depending on the first issue of visibility and, after that, they choose the hotel depending on how well it meets their requirements. Thus it is a question of multileveled factors pertaining to the location, the clustering and finally to the firm's course of action within that location.

7. References

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