

Tourism Global Value Chains and Technological Capabilities in the hotel industry

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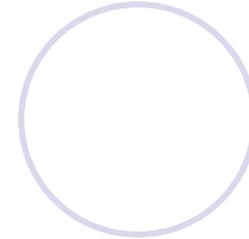
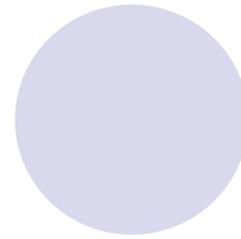
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INTRODUCTION (I)



- Studies on GVC have a focus on the industrial sector. Only a few studies applied to the tourism sector (Guzmán, Moreno & Tejada, 2008; Song, Liu & Chen, 2013; Christian, 2016).
- The role of tour operators as that of agents who assume the governance of Tourism Global Value Chains (TGVCs) has been highlighted (Bastakis, Buhalis & Butler, 2004; Erkuş-Öztürk & Terhor, 2010; Romero & Tejada, 2011).
- However, the patterns of governance and upgrading in TGVCs constitute an issue that calls for a much deeper analysis.

INTRODUCTION (II)



- To carry out upgrading processes, SMEs need to improve their innovation capabilities by investing in people, better organization and in equipment (Schmitz, 2004).
- This paper analyzes the determinants of SME investments into their technological capabilities (TCs).
- **Research questions:**
 - Is the development of technological capabilities at company level influenced by the patterns of insertion and governance in the TGVCs?
 - Do global tourism intermediaries stimulate or hamper upgrading processes in hotel SMEs?

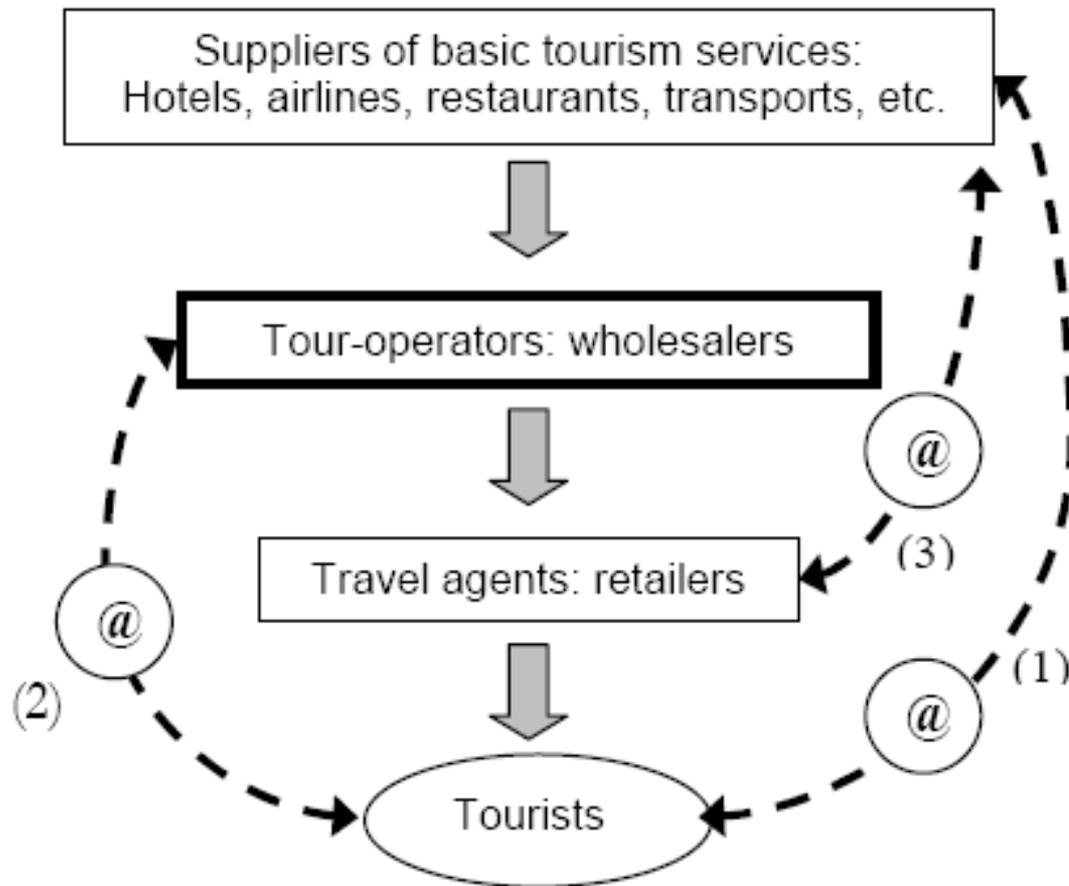
LITERATURE REVIEW (I)



- Global tour operators as the leaders of TGVCs by assuming the coordination of the chain and the control of the touristic product (Erkuş-Öztürk & Terhor, 2010; Christian, 2016; Guzmán et al., 2008).
- ‘Intermediary-driven’ value chains (Romero & Tejada, 2011):
Large vertically-integrated tour operators design and assemble the touristic products and coordinate the TGVC from their central position between the suppliers of primary tourism services (hotels, restaurants, transport companies, etc.) and the retailers (travel agencies).

LITERATURE REVIEW (I)

Tourism Value Chain



LITERATURE REVIEW (III)



- The hotel firms participating in TGVCs can be coordinated principally via market relations.
 - Hotel quality standards imply a clear definition of the characteristics of their services.
 - Hotels use a variety of channels and intermediaries to commercialize their services (tour operators, traditional and online travel agencies, and direct sales to tourists).
- However, hotels experience certain subordination towards tour operators and on-line travel agencies, when these assure hotel companies a significant percentage of their room occupation (Bastakis et al., 2004; Romero & Tejada, 2011).

LITERATURE REVIEW (IV)



- The patterns of the chain's governance influence the upgrading of local SMEs (Gereffi et al., 2005; Humphrey & Schmitz, 2002; OECD, WTO & WBG, 2014)...
- However, a lack of consensus exists regarding the direction of this effect (Pietrobelli & Rabellotti, 2007).
- Evidence for tourism:
 - Positive effects: Rønningen (2010); Christian et al. (2011); Williams and Shaw (2011).
 - Negative effects: Bastakis et al., (2004)

DATA COLLECTION



- Survey conducted in the first quarter of 2016 on Spanish SMEs operating in the hotel industry.
- Businesses with less than 200 employees; self-employed people without employees were not included.
- Stratified sample, with quotas for size groups, representative of the business population of the hotel industry in Spain (error of $\pm 5.0\%$ and confidence level of 90%).
- Final dataset made up of 322 valid observations.

DEPENDENT VARIABLES: INVESTMENT IN TECHNOLOGICAL CAPABILITIES

- Investment for the improvement of the TCs in the three years previous to the survey (2013-2015)
 1. Internal Research and Development (R&D): creative work carried out inside the enterprise (R&D_in).
 2. External R&D: acquisition of external knowledge for innovation (R&D_ext).
 3. Acquisition of machinery, non-ICT equipment and buildings (Non_ICT).
 4. Acquisition of computers, software or ICT equipment (ICT).
 5. Training (internal or external) for innovation activities (Training).
- 4-item Likert scale ranging from “no investment” (0) to “high level of investment” (3).

EXPLANATORY VARIABLES: PATTERNS OF INSERTION INTO TGVCS

- Measuring the relevance of the commercialization channels to sell hotel rooms posing international linkages:
 1. Percentage of sales through foreign tour operators in 2015 (For_tour).
 2. Percentage of sales through traditional foreign travel agencies in 2015 (For_agen).
 3. Percentage of sales through online travel agencies, such as Booking and Expedia (Online_agen) in 2015.

CONTROL VARIABLES



- Attitude towards risk (Risk_taking).
- Attitude towards proactivity or proactiveness (Proact).
- Size of the firm, measured in terms of number of employees (Size).
- Percentage of employees with University education (Education).
- The hotel is member of a chain (yes/no) (Chain).
- The hotel is member of a corporate business group (yes/no) (Group).
- The enterprise cooperated in innovation activities with other enterprises and/or institutions during the period 2013-2015 (yes/no) (Cooperation).

ORDINAL LOGISTIC REGRESSION RESULTS

	R&D_in			R&D_ext		
	β	S.E.	Sig.	β	S.E.	Sig.
$[\theta = 0]$	-.493	.223	**	-.652	.225	***
$[\theta = 1]$.633	.222	***	-.483	.221	**
$[\theta = 2]$	2.673	.263	***	2.858	.273	***
For_tour	.018	.006	***	.017	.006	***
For_agen	.005	.011		-.004	.011	
Online_agen	.003	.004		.003	.004	
Chain	.125	.325		.529	.332	
Group	.368	.295		.519	.300	*
Size	.003	.003		.000	.003	
Education	.010	.004	**	.008	.004	**
Cooperation	.655	.260	**	1.069	.271	***
Risk_taking	.540	.105	***	.525	.105	***
Proact	.584	.103	***	.394	.102	***
<i>Goodness of fit</i>						
Chi-square	108.951 (***)			114.462 (***)		
Pseudo R ²	0.273			0.286		

ORDINAL LOGISTIC REGRESSION RESULTS.

	Non_ICT			ICT			Training		
	β	S.E.	Sig.	β	S.E.	Sig.	β	S.E.	Sig.
$[\theta = 0]$	-.837	.223	***	-.661	.221	***	-.623	.220	***
$[\theta = 1]$.343	.217		.265	.216		.572	.218	***
$[\theta = 2]$	2.246	.249	***	2.082	.243	***	2.544	.260	***
For_tour	.014	.006	**	.014	.006	**	.009	.006	*
For_agen	-.006	.011		-.004	.011		.011	.011	
Online_agen	.005	.004		.007	.004	*	.002	.004	
Chain	.083	.322		.402	.326		.443	.324	
Group	.175	.292		-.016	.295		.149	.293	
Size	.007	.003	**	.007	.003	**	.001	.003	
Education	-.002	.004		.005	.004		.002	.004	
Cooperation	.134	.255		.545	.260	**	1.431	.269	***
Risk_taking	.477	.103	***	.325	.101	***	.310	.102	***
Proact	.575	.102	***	.406	.100	***	.437	.100	***
<i>Goodness of fit</i>									
Chi-square	80.356 (0.000)			71.916 (0.000)			92.407 (0.000)		
Pseudo R ²	0.209			0.190			0.237		

CONCLUSIONS



- Foreign tour operators favor the development of TCs in the hotel industry by means of stimulating investments by SMEs.
- Hotel SMEs seek to keep and strengthen their relationships with tour operators to assure a minimum occupancy.
- Some investment in TCs are linked to the integration with the tour operator.
- Strong commercial pressure of tour operators on the hotel profit margins.
- However, uncertain final impact on hotel companies' profitability.

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