ANALYSIS OF THE MANAGEMENT OF ENVIRONMENTAL PROACTIVITY AND ITS STRUCTURAL DETERMINANTS IN THE FIELD OF HOTEL ACCOMMODATION

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Objective

Recent literature has shown that a firm's environmental commitment can be a potential source of comparative advantage and may translate into higher revenues that could offset the additional costs involved in implementing environmentally friendly measures. Environmental commitment may be due to pressure from consumers who demand good environmental practices from hotels, which in turn could result in the hotels making business decisions that manifest as environmentally proactive measures by the establishment. Together with these hotel management measures, establishments have other structural factors (such as their location or hotel category) that may influence the implementation of environmentally proactive policies. Using discrete choice binomial logit model, this article analyzes the impact of business policy and structural factors on the probability that a hotel establishment can be considered environmentally proactive.

Design/methodology/approach

Firstly, a database was created using economic and management data collected from 209 hotels in Andalusia. Data on their environmentally sustainable practices was also included. Following Miles et al (1978), this data was used to perform a nonhierarchical cluster analysis that allowed the hotels to be grouped into two categories: hotels that could be considered environmentally proactive (55) and those that could not. Secondly, discriminant analysis was performed showing that 98.32% of the hotels were correctly categorised. The aggregate variable generated by following this technique constituted the dependent variable in the binomial logit model. Nine independent variables related to economic, management, and structural data were analyzed to determine the probability of a hotel being environmentally proactive.

Results/Findings

The results of the descriptive analysis show the following: environmentally proactive establishments have more stars; more than 85% of them belong to a hotel chain; 79.63 of this group outsource services to improve management; they achieve a 5% higher average occupancy rate than hotels without environmentally proactive attitudes; and they achieve greater productivity (more than 6500 € per employee) than non-environmentally proactive hotels.

Our econometric results indicate that, compared to three-star hotels, the probability of a hotel being environmentally proactive is 20.16% for 4-star hotels and 75.35% for 5-star hotels. The probability of a hotel being environmentally proactive is higher than 17.5% when the hotel is part of a chain compared to non-chain hotels.

Table 1. Logit model

Variables	β_i	Odds-Ratio	Marginal effect
Hotel category (4 stars)	1.4144*	4.1140	0.2016
Hotel category (5 stars)	3.9950*	54.3268	0.7535
The establishment is part of a chain	1.3134**	3.7188	0.1751
The establishment is a family business	0.5715		
Establishment outsources services	0.3695		
Establishment located on the coast	- 1.2474**	0.2873	-0.1643
Establishment located in the capital city	- 1.5963**	0.2026	-0.2230
Average occupancy rate	0.0443**	1.0453	0.0064
Productivity (x1000)	0.0606*	1.0625	0.0088
Constant	- 7.6031*		
McFadden's R^2	0.2713		
LR Chi^2 (9)	64.79*		
Correctly classified (%)	81.34		
Area under ROC curve	0.8366		
Observations	209		

Regarding location, the probability of hotels on the coast and in provincial capitals being proactive is less than that of inland hotels (the reference category). Finally, hotels that achieve the best results in average occupancy and labour productivity increase their probability of being environmentally proactive (by 0.64% for every 1% increase in occupancy and by 0.88% per 1000 € increase in labour productivity, respectively).

Conclusions

We obtained three main conclusions:

Firstly, hotels can be categorised into two strategic groups based on whether or not they implement good environmental practices. Secondly, the probability that a hotel is environmentally proactive is positively related to the number of stars and belonging to a chain; it is negatively related to the hotel being located on the coast and in the capitals of provinces versus those located in the interior.

Finally, improvements in hotel occupancy, as a measure of client acceptance, and labour productivity favour the implementation of environmentally proactive practices.