AN APPROACH TO PRICING IN THE TOURIST CAMPSITE MARKET

Alejandro Francisco García Pozo
José Luis Sánchez Ollero
Macarena Marchante Lara
Universidad de Málaga
jlsanchez@uma.es

INTRODUCTION

In Spain, campsites are currently included within the tourism accommodation industry as one of the three main types of extra-hotel accommodation: tourism apartments, rural houses, and campsites. Depending on their installations and services, campsites are classified into one of four categories: luxury, first, second, and third. According to the INE (Spanish National Institute of Statistics), guests in Spanish tourist campsites formed 6.32% of the total number of guests staying in tourist accommodation (hotels, campsites, tourist apartments and rural lodgings) and represented 8.2% of all overnight stays.

Despite its relative importance, there are few studies on this subsector of the accommodation industry. In Spain, the most noteworthy are those of Feo (2003) — the only study to analyse campsites at the national level — and García & Sancho (2008). The Regional Government of Andalusia recently published a descriptive study of regional demand for this sector (Junta de Andalucía, 2009).

The aim of the present study was to analyze the pricing mechanisms within this tourist sector, using a hedonic pricing model with a semilogarithmic functional form, and to investigate the influence of the attributes that form this tourist sector on the final price in the Spanish market. To this end, we identified which of these attributes significantly influenced pricing for this type of tourist accommodation and quantified this effect to assess their relative impact on pricing. First, we define the structural framework of campsites in Spain and outline the hedonic methodology used. We then provide details of the data used and describe the criteria applied to select the variables included in the model. Following this, we present the empirical model and the results obtained from it. Finally, we draw some conclusions based on the results obtained.
DESCRIPTIVE ANALYSIS OF CAMPSITES IN SPAIN

Between 2001 and 2007, the camping sector underwent a 6.6% increase in the total number of clients, with an cumulative annual growth rate of 0.91%. The consolidated number of campsites in Spain up to December 2007 was 1152 (239 luxury and 1st category, 674 2nd category and 239 3rd category). These provided accommodation for 6,457,106 guests of whom 67% were Spanish residents. There was a mean of 670 spaces per campsite, distributed in 200 pitches with spaces for 3-4 people per pitch. Each establishment employed between 7 and 8 workers. Seasonal fluctuations account for the significantly low average stay per pitch of around 38%.

There has been a steady decrease in the number of 2nd-category establishments, whereas luxury and 1st category sites have increased by the same percentage. This appears to be due to campsites adapting to the constant requests from clients to improve the quality of the services and installations, as shown in the econometric analysis.

At the same time, the increase in category has been linked to an increase in the average size of the campsite. Several authors have suggested that this variable is key to improving the profitability and survival of campsites (for example, see Feo 2003, pp. 89).

DATA. DESCRIPTION AND LIMITATIONS

The 2007 annual guide published by the Federación Española de Clubes Campistas (the Spanish Federation of Camping Clubs; FECC) provides information on all the Spanish campsites. The final sample included information on 119 observable features of 1048 establishments, providing an extremely detailed description of tourism campsites in Spain.

Nevertheless, despite its merits, the database used is limited in that it only provides information on supply and thus this is the only aspect that can be modelled.

Of all the potential variables, the independent variables (descriptive statistics and the definition of the variables) were finally included in the empirical models. The choice of variables was based on their economic significance, their expected impact on the price of the service, and on econometric criteria related to their statistical significance within the selected empirical models. We analyzed peninsular Spain and grouped the establishments into 4 geographic areas: Andalusia; Central Spain (including Extremadura, Castilla La Mancha, Madrid and Castilla León); the East (including Murcia, the Valencian Community and Catalonia); and the North (Aragón, Navarra, La Rioja, the Basque Country, Cantabria, Asturias and Galicia). These areas served as four dummy variables for inclusion in the model.

Regarding the dependent variable, and to standardize the information on each establishment, a mean daily price for the stay was estimated. This price includes the use of one pitch supplied with electricity, occupied by two adults and two children, with one car and a caravan during the high season.
ECONOMETRIC SPECIFICATIONS

Since the database used enabled us to obtain information on the price of camping services and on a wide variety of attributes of these services, we applied hedonic methodology to this analysis.

The versatility of the hedonic pricing model and the attributes of tourism products has led to this model being applied in this sector, although its use is not widespread and has rarely been used to explain the impact of the attributes on pricing. In fact, we know of no scientific study that has used this methodology regarding camping in Spain.

Having defined the variables that might become part of the estimated hedonic model, the results from the selection criteria for the functional form suggest using a semilogarithmic form, applying White’s method (1980) to all regressions to deal with heteroscedasticity of the error term in the regressions.

The estimated semilogarithmic model is as follows, using the dummy variable for the East area as the reference category:

\[
\ln \text{Precio} = \beta_0 + \beta_1 \text{CALIFICAC} + \beta_2 \text{BUNGALOWS} + \beta_3 \text{AC_DIR_MAR} + \beta_4 \text{DE_COSTA} + \beta_5 \text{WC} + \beta_6 \text{SERV_GENER} + \beta_7 \text{NUM_PISCINAS} + \beta_8 \text{EXTENSION_HA} + \\
\beta_9 \text{CENTRO} + \beta_{10} \text{ANDALUCIA} + \beta_{11} \text{NORTE}
\]

RESULTS AND CONCLUSIONS

The estimations clearly show the relative importance of the variable that represents the category attribute and those referring to geographical characteristics. This is also the case for the variable number of general services offered by the establishment.

Firstly, regarding the implicit hedonic prices estimated for the statistically significant variables, it should be noted that these implicit prices represent the marginal valuation by suppliers and clients for each attribute, all others remaining constant. Second, it should also be emphasised that the greatest valuation, in absolute terms, is due to the fact that the establishments are located in areas different from the reference area (the East), given that when a campsite is located in the Central Spain, the market reduces its valuation by more than 6€, with reductions of 3247€ and 4099€ when they are located in Andalusia or in the North, respectively. We also draw attention to the relevance of the category to the market (2188€ for each category) and the variables proximity to the coast (2761€), direct access to beaches (1821€), and availability of bungalows at the sites (1259€). The latter information is supported by García Manrique (2000) regarding the importance of bungalows to family tourism within this accommodation segment. The remaining quantitative variables have a lower marginal value, ranging from around 3.2 euro-cents for providing an additional toilet up to 97.7 euro-cents for each extra general service provided.

On the one hand, these results explain the territorial expansion of campsites in Spain and, on the other, the gradual increase in the number of higher category establishments in contrast to the decrease in 2nd category establishments observed in recent years, which is consistent with the work of Feo (2003).
In view of the fact that the statistical data used for the econometric model refer to a specific period, future research should include a short-term analysis to study variations in the results obtained, making it possible to establish a policy-making mechanism for public and private entities interested in the Spanish tourist campsite sector.