Analysis of Package Holiday Prices in the Balearic Islands

María Sard
Eugeni Aguiló
Joaquím Alegre

Document de Treball 40

Directora de la col.lecció: Margalida Payeras Llodrà.
Disseny de la Coberta: Riera i Font.
Edició: Universitat de les Illes Balears. Servei de Publicacions i Intercanvi Científic. Cas Jai. Campus Universitari. Ctra. Valldemossa, Km. 7,5. E-07071 Palma (Balears)

ISSN: 1138-3259
DL: PM 2440 -2002.

Analysis of Package Holiday Prices in the Balearic Islands

Eugeni Aguiló, Joaquín Alegre and Maria Sard

Departament d'Economia i Empresa, Edifici Mateu Orfila i Rotger, Universitat de les Illes Balears, Carretera de Valldemossa, Km. 7.5, 07071 Palma de Mallorca, Spain. Tel: +34 971 172785. Fax: +34 971 173426. E-mail: maria.sard@uib.es

Analysis of Package Holiday Prices in the Balearic Islands

Abstract: The main purpose of this paper is to analyse the prices that tour operators fix in package holiday brochures, in order to determine whether they operate in a competitive or oligopolistic market. If they operate in a competitive market, each tour operator has no market power and so is unable to influence the prices set by market forces. In contrast, if they operate in an oligopolistic market, tour operators do have market power and they are able to fix a higher price without losing their market share. In this paper, two specific analyses are made. Firstly, a study is made of a sample of package holiday prices set by German and British tour operators in the Balearic Islands, to find out whether there are statistically significant price differences among tour operators due to factors other than those associated with the characteristics of the holiday product. The findings of this first analysis point to differences in tour operator prices disassociated with the characteristics of the package holiday product. We interpret this to be an oligopolistic feature of the tour operator market. The data generated can also be used to estimate the influence that hotel chains exert when tour operators fix their brochure prices. Our second analysis therefore examines whether there are statistically significant differences in the mean prices of hotels belonging to chains and those that do not. Although it might seem that, by grouping together into chains, hotels could offset tour operators' market power (reflected by higher prices in brochures), the results of the investigation show that there is a concern with occupancy rates rather than with prices.

Keywords*:* The German and British tour operating industry; the Balearic Islands; Package holiday prices.

INTRODUCTION

The Balearic Islands might well be one of the regions that best symbolised Mediterranean sun and sand tourism. This type of holiday emerged in the 60's and represented a turning point in the evolution of tourism. Before this date, few tourists visited the islands and all were from the upper classes. After 1960, due to a number of economic and cultural changes, the middle and lower classes were able to afford vacations. One of the most important changes was the package holiday, created by tour operators. Due to the sheer quantity and standardisation of package holidays, tour operators generated economies of scale and lower prices for tourists, who started to arrive in mass numbers. European consumers showed a growing tendency towards this type of vacation, partly due to the lower prices that tour operators could offer for the same end product (Travel and Tourism Intelligence, 2000). These lower prices are the result of the wholesale negotiation of the different components that make up the package holiday, principally accommodation and transport. In this paper, we will focus on negotiations with hoteliers, since the main European tour operators are vertically integrated with charter airlines. Due to the lack of availability of relevant data, there is a shortage of studies on price negotiations between hoteliers and tour operators. Therefore, although we consider that empirical evidence is necessary, the last choice open to us was to arrange several interviews with different hoteliers to find out about price negotiations with tour operators. The results of these interviews highlight the fact that the tour operators who reserve greater numbers of hotel beds are the ones that obtain lower prices. Obviously, these tour operators are the large ones. We can therefore start with the assumption that large tour operators have market power over mass destination markets. The main purpose of this paper is to study the prices that tour operators set in their package holiday brochures in order to determine whether they operate in a competitive or oligopolistic market. If tour operators operate under perfect competition in the market of origin, they might well set a marginal cost price. On the other hand, if the market of origin is oligopolistic, they might fix a price above the marginal cost, without losing their market share.

The existence of economies of scale in sales, marketing and purchasing means that there are conditions that strongly favour concentration in the tour operator industry

(Williams, 1996). In 1999, both German and British tour operators dominated the European market, as seven of the ten main tour operators belong to one of these two nationalities (FVW Europäische Veranstalter in Zahlen, dokumentation 1999/2000). Moreover, in both countries, the large tour operators have large market shares: in 1999, the seven large German tour operators had a market share of 83% (FVW), whilst the four large British tour operators controlled 71.6% of the package holiday market, with this percentage increasing to 86.6% for the Spanish market (AC Nielsen). In addition, the Balearics attract large numbers of German and British tourists, accounting for 70% of the total foreign tourists in 2000[1], and, as Williams states (1996), destinations that are dependent on the British and German markets are, in fact, locked into relationships with powerful tour operators from these countries. The first objective of this paper is to contrast these companies' market power when selling the Balearic Islands to clients. To do this, holiday prices in tour operator brochures were analysed. These prices are determined by taking into account a series of product characteristics, such as the hotel rating, type of board and so on. However, for the purposes of our study, the identity of the tour operator and the company's degree of concentration are also included in the analysis. The former is the key variable used to identify whether price differences in homogeneous types of holidays can be identified that are attributable to the tour operator, whilst the latter may reveal whether tour operators have market power.

Mention should be made of the fact that, in the Balearic Islands, several hotel chains have been formed and launched on the international market. As hotel associations, these hotel chains have far greater market power and could negotiate higher prices with tour operators than individual hotels. Thus they could offset the power of tour operators in the islands. This hypothesis is the other point that we wished to analyse in this paper. We therefore included another variable in the analysis to show whether the holiday accommodation was arranged at a hotel belonging to a hotel chain or at an individual hotel. We then went one step further and distinguished between hotels from a hotel chain with some kind of agreement with tour operators and those without. This analysis may show whether there are price differences among

1 Govern de les Illes Balears (2000) "El turisme a les Illes Balears, dades informatives, any 2000". (Government of the Balearic Islands. 2000. "Tourism to the Balearic Islands. Informative data for the year 2000").

homogeneous holiday products due to the existence of an agreement or due to membership of a hotel chain.

In summary, in this paper we will examine the German and British tour operating industry and the role that hotel chains play through an analysis of package holiday prices for holidays to the Balearic Islands. The evidence supplied by prices is not sufficient. However they do provide a good enough approximation to make an analysis of the market structure of the tour operator package holiday industry. The paper is divided as follows: in the next section, we first review literature on tour operators and then we describe the data used in the paper. After that, we show some descriptive results of package holiday prices, in order to identify the price effect of some relevant package holiday characteristics. A covariance analysis is then carried out, in order to evaluate the statistical significance of those variables identified as being relevant in determining package holiday prices. Finally, some observations on the package holiday industry are offered before reaching an overall conclusion.

A REVIEW OF LITERATURE

It is implicit among those who work in the tourist industry that tour operators dominate mass destination markets. Although numerous assertions are made regarding the importance of tour operators, little detailed research has been done on the subject. In our opinion, analyses of the package holiday industry are still in the early stages, despite the industry's relevance in most European markets. Several researchers have discussed the structure of the industry, but the conclusions, in some cases, have turned out to be contradictory. Sheldon (1986) argues that the US package holiday industry is polarised into a few large stable firms and many small less stable firms, and he concludes that the market is contestable. Fitch (1987) presents descriptive evidence of market power in the UK package holiday industry. Baum and Mudambi (1994) argue that the UK package holiday industry is oligopolistic and prone to price instability. Taylor (1996) queries whether the UK industry is contestable or oligopolistic and concludes that the UK market is contestable. Curtin and Busby (1999) state that, due to economies of scale, tour operators have enormous purchasing power (monopsony), as well as considerable control over the distribution and sale of their product in the marketplace (monopoly control). The above papers are based on theoretical arguments. Evans and Stabler

(1995) use descriptive statistics to argue that the UK industry is segmented into strategic groupings, where large firms are oligopolistic and small ones are competitive. Gratton and Richards (1997) introduce some empirical evidence on package holiday prices and tour operator market shares. They conclude that the UK package holiday industry is contestable, whilst the German one is a stable oligopoly. Davies and Downward (1998, 2000) use econometrics and the results give empirical support to Evans and Stabler's theory of strategic groupings. To be more specific, they argue that the UK package holiday industry is segmented according to size.

On the other hand, some papers study the tour operating industry in the destination, rather than in the market of origin. Taylor (1995) analyses package holiday price competitiveness in several Mediterranean destinations and concludes that Spanish hotels are price-acceptant, and he emphasises the high tour operators' bargaining power. Sinclair et al. (1990) examine package holiday prices in Malaga and conclude that there are statistically significant price differences among UK tour operators. Aguiló et al. (2001) study German package holiday prices in Majorca and come to the conclusion that there are statistically significant price differences, unrelated with the characteristics of the package holiday.

Furthermore, due to antimonopoly legislation, certain takeovers or mergers involving tour operators have been analysed by The Monopolies and Mergers Commission (the British authority on mergers and takeovers) and the European Commission (the European authority on mergers and takeovers). In 1988, The Monopolies and Mergers Commission investigated the acquisition of Horizon Travel by the Thomson Travel Group and reported that the British tour operator market was competitive. They demonstrated the competitiveness of the market on the basis of the followings facts: the price competitiveness of the market, low profitability, relatively easy entry by new firms to the tour operating industry and higher prices in Germany and other European countries. On the other hand, in 1999 the European Commission investigated and blocked the acquisition of First Choice by Airtours, alluding to several features that indicated a dominant position in the British tour operating market. Incidentally, when other takeovers were investigated by the European Commission, involving tour operators of different nationalities, it was not considered that they had acted to the detriment of the competition (Airtours/Frosch Touristik and TUI/Thomson).

At this point it should be said that we consider that the European Commission does not investigate the power that these macro European tour operators might have in the near future over certain market destinations, like the Balearic Islands, where almost 20% of tourists are brought there by Thomson and TUI, which nowadays belong to the same travel group.

THE DATA USED

The data used in this paper has been taken from 28 German and 20 British tour operator summer 2000 brochures[2]. The brochures correspond to the following German tour operators: Phoenix, LTU, ITS, Alltours, Dertour, C&N, SLR, TUI, Club Blaues Meer, Frosch Touristik, Niag Reisen and Öger Tours: and to the following British tour operators: Thomson, First Choice, Cosmos, Thomas Cook, Virgin and Airtours. The German data is more varied in terms of tour operator size than the British data, and we can observe large tour operators (TUI, C&N and LTU), medium ones (Dertour, FTI and ITS) and small ones (Alltours, Club Blaues Meer, Niag, Öger, Phoenix and SLR). Meanwhile, the British data corresponds to large tour operators (Thomson, Airtours, Thomas Cook and First Choice) and medium ones (Cosmos and Virgin). The brochures describe the characteristics of each holiday product in detail, (i.e. the category of hotel, its proximity to beaches, the existence of a swimming pool etc.) and they give an overall price rather than a price for each component of the holiday. Many of the characteristics described in the brochures are related to the hotel's star rating[3], regulated by law. However, it should be stressed that the star rating does not constitute an exhaustive description of the hotel, and there are other characteristics that influence package holiday prices. More specifically, we consider these influential characteristics to be: the area, hotel star rating, beds per room, type of board, proximity to an urban nucleus,

---

2 Terramar, Spanien und Portugal; Neckermann, Young and Sport; Neckermann, Flugreisen; Neckermann, Family; Condor Individuell; Air Marin, Spanien und Portugal; Fischer Reisen, Flugreisen; Kreutzer; Bucher Reisen; Smile anf Fly; Jahn Reisen; Maris Reisen; THR Tours, Jet and Bett; THR Tours, Urlaub Mal Anders; Tjaerborg; FTI; FTI, Preis Pardise; ITS, Spanien und Portugal; DER, Der Sonnenseiten; Alltours, Flugreisen; 1,2 Fly; TUI Schönen Ferien; TUI Schönen Ferien Free World; Öger Tours,Sommer 2000; Club Blaues Meer Reisen, Mallorca; Shauinseland Reisen, Belearen; Niag Reisen, Mallorca; Phoenix, Flugreisen Sommer 2000; Airtours, Summer Sun; Archers Direct, Summer Sun; Price Beaters; Cosmos, Summer Sun; JMC, Summer Sun; JMC, Select; JMC, Essentials; Club 18-30; Skytours; Thomson, Summer Sun; Thomson, Small and Friendly; Thomson a la Carte; Club Freestyle; Portland Direct; Just; Virgin, Summer Sun; Sovereign, Summer Sun; First Choice, Summer Sun; Eclipse, Summer Sun; 2wentys.

3 Sinclair et al (1990) point out that hotel rating is a gut indicator of the services and facilities that the hotel offers.

picturesque surroundings, a lift, childcare, a playground, air conditioning, TV, satellite TV, a garden, entertainment, no-smoking areas, a swimming pool, tennis, bicycles, sports, a sauna, a gym, golf, a room with sea views, a mini bar, proximity to a natural area, proximity to beaches, the total number of hotel rooms and floors and whether it is exclusive to the tour operator.

Tour operator package holiday prices for the same hotel vary, depending on the specific characteristics of the package offered (the beds per room, type of board, area etc) and other facts (i.e. transport costs, the length of stay and time of year). For the purposes of our analysis, as in Aguiló et al. (2001), we examine the influence of the product's characteristics on prices, rather than the influence of transport costs and the time of year of the holiday in question. Thus, this analysis focuses on holiday stays at Balearic Island hotels with between one and five stars, only taking into account prices for the first week of August 2000 (the high season) with departures from Düsseldorf and Gatwick. The high season was chosen because it is the time of year (May-October) when more tourists visit the Balearic Islands. Nearly 50% of the tourists that visit the islands come during the months of June, July and August[4]. The selection of the first week of August was arbitrary. Our choice of Düsseldorf was based on the fact that it deals with 20.9% of all German tourists travelling to the Balearic Islands. Meanwhile, for British tourists Gatwick was chosen because it channels 29.9% of British tourists[5]. Comparisons between nationalities are possible, because the mean price of a charter flight from Gatwick or Düsseldorf to the Balearic Islands does not present a significant difference.

The data compiled was considered suitable for an analysis of the tour operator price structure in the Balearic Islands, because the study examined 8,921 tour operator holiday products at 693 different hotels, while there are 713 officially registered hotels in the Balearic Islands. Furthermore, because tour operators reserve nearly 90% of all Balearic Island hotel rooms, this means that the results are a good indicator of the tour operating industry.

[4] Conselleria de Turisme (2000) (Autonomous Community Dept. of Tourism. 2000)

Our thesis can be reflected by a general model, which shows the implications of price elasticity on mark-ups. As is widely known, the marginal revenue (MR) and price (P) of a firm are related by:

$$\frac{P}{MR} = \frac{e}{e-1}$$

where ε is the absolute value of the price elasticity of the demand. Since a profit-maximizer equates marginal revenue (MR) with marginal costs (MC), the optimal mark-up is equal to the right hand of the equation, which is Lerner's index of market power. Thus the mark-up moves inversely to the elasticity. So, the greater the degree of market power a firm has, the more inelastic the demand curve for the service is. Therefore, the higher the degree by which the price of the service exceeds the firm's marginal cost and the greater the mark-up.

Like Papatheodorou (2001), we argue that tour operators perform in two related but different scenarios: the destination and country of origin. In the Balearic Islands, tour operators act as the demand side and hoteliers as the supply side. It is well known that the accommodation sector has limited market power in comparison with the tour operator, so the demand curve for accommodation is quite elastic, that is tour operators are price sensitive and thus the hoteliers' mark-up is low. So hoteliers' profits depend on the number of tourists that tour operators bring to their hotels. This has two important implications: firstly, it strengthens tour operators' bargaining power and, secondly, it highlights the relevance of occupancy rates for hoteliers. On the other hand, in the countries of origin (Germany and the UK), tour operators are the agents that supply package holidays to tourists, so they act as the supply side and the tourists represent the demand. Graham (2001) argued that in Britain, over the last 30 years, the proportion of the population that travels has remained almost constant, whilst in Germany this figure has increased. This means that the demand for tourism in these countries has remained constant or increased. Of these tourists, the numbers travelling

[5] Govern de les Illes Balears (1999) "El turisme a les Illes Balears, dades informatives, any 1999". (Government of the Balearic Islands. 1999. "Tourism to the Balearic Islands. Informative data for the year 1999").

to the Balearic Islands between 1990 and 2000 grew at a mean annual accumulative rate of 7.56% in the case of German tourists and 6.5% for British tourists (Aguiló et al., 2002). Moreover, the Balearics show a strong dependence on regular visitors, with a high repetition rate among tourists (35.7%) and strong intentions to return (80.80%) (Aguiló et al., 2002). The latter could indicate an inelastic demand curve and, in Aguiló et al (2001), this is confirmed with an estimated price elasticity of the demand of 0.33 for German tourists and 1.14 for British tourists. British people are more sensitive to prices than the Germans, but the demand for tourism can be considered to be quite inelastic. Although the mass tourism tour operating industry as a whole is characterised by small margins, the previous data highlights the impact of loyal consumers on the margins of those tour operators who market the Balearic Islands as a destination, and it questions the statement that tour operators put destination-based business (above all hoteliers) at a bargaining disadvantage because they have taken the initiative in persuading their clients which destination to visit.

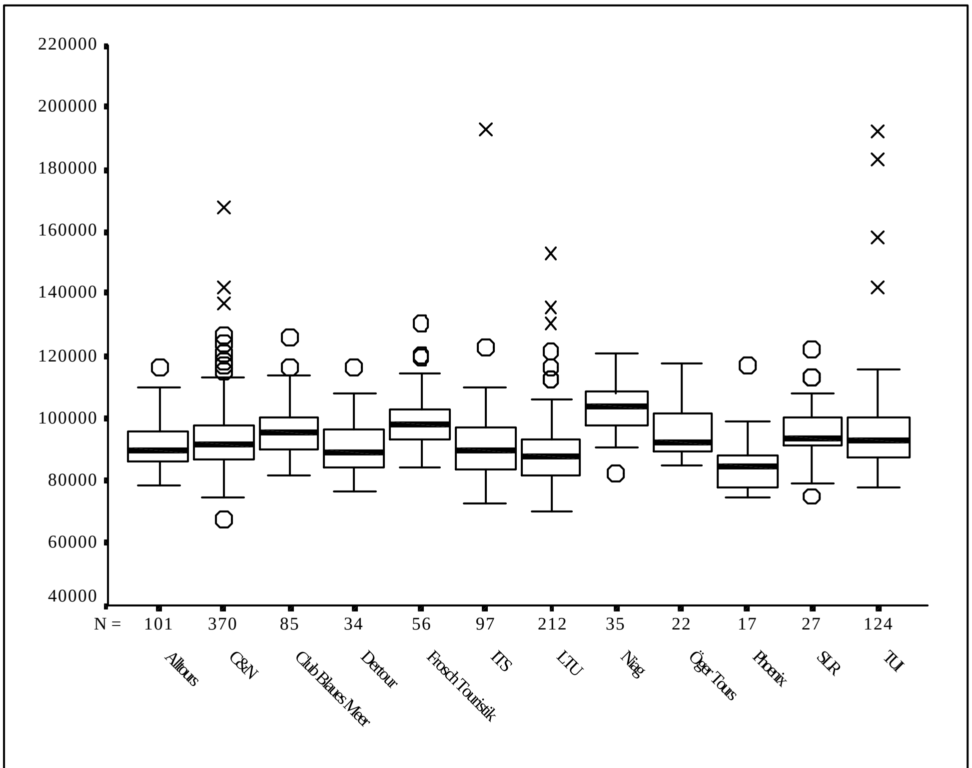
The above model allowed us to analyse the theoretical behaviour of tour operators in the two markets that concern them: the destination (the Balearic Islands) and country of origin (Germany and Great Britain). With the data obtained, an empirical analysis was then made of tour operators' market power and the role that hotel chains play. Firstly, a study was made of possible price differences due to the tour operators themselves, unrelated with the characteristics of the holiday product, which could be interpreted as an oligopolistic feature of the market. Secondly, another analysis was made to check whether price differences arise if hotels belong to a chain. An initial descriptive analysis was carried out in order to identify the price effect of some relevant characteristics of the package holiday. Then a covariance analysis was made. In this way, we could isolate the effect that tour operators and hotel chains have on prices, checking whether there are differences and, if so, what kind of differences.

A Descriptive Analysis

Tour operators

The variability of package holiday prices is dependent upon several factors, some associated with the characteristics of the holiday and some related to the tour operator organising the package. To analyse the effect of the tour operator's identity on prices we had to homogenize the product offered. We could only compare prices among tour operators if the products were homogenous. Initially, the hotel star rating, type of board and beds per room were expected to be the main causes of variations in price. Therefore, the holiday product used in our analysis featured a double room, half board and a three-star hotel. Figures 1 and 2 show boxplots of the prices fixed by tour operators of both nationalities for this market segment[6]. In Figure 1, clear differences in distributions and in the median position can be seen. Niag Reisen, FTI and Club Blaues Meer's median prices are in a range clearly above the rest, while SLR, Öger Tours, TUI and C&N show similar distributions.

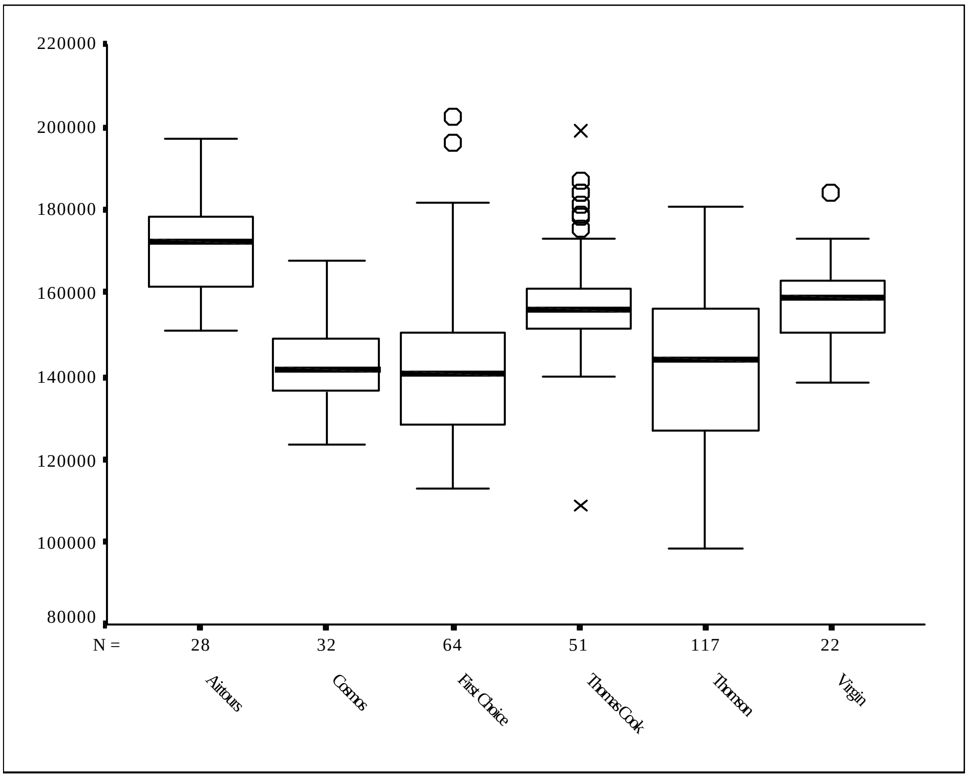
Figure 1: German tour operator package holiday prices for a stay at a three-star hotel in a double room on half board.



---

[6] In each of the boxes, the central line indicates the distribution median, while the height of the box represents the inter-quartile range. The area is proportional to the frequency of observations. The feet extend (at most) up to 1.5 times the inter-quartile range, aiding the detection of observed extremes (marked as circles).

Figure 2: British tour operator package holiday prices for a stay at a three-star hotel in a double room on half board.



In the case of British tour operators, Figure 2 shows that the price distributions are characterized by a clear order: the distribution of Airtours' prices is higher than the rest, followed by Thomas Cook, Virgin and, finally, Cosmos, First Choice and Thomson, which take third place in the ranking.

A careful interpretation of this information allows us to infer that factors other than the hotel's star rating, type of board and number of beds per room affect prices. Although other price factors are considered in the covariance analysis, these results point to a differential effect based on the tour operator.

Once we had highlighted the differential effect caused by the tour operators, we continued with our analysis of their role. We should not forget that tour operators are intermediaries between the hotel industry and holiday consumers. Their capacity to control the market in a certain area or for a certain segment of the demand could be reflected by both the hotels (through the negotiation of low prices) and the tourists (by setting higher brochure prices). Regrettably, the effect of the former cannot be estimated using the data available, but we can explain the possibilities open to tour operators when they fix the price of a package holiday. If they have market power over a particular destination (and we assume that large ones have), they will obtain lower prices per room. At this point, in general terms, large tour operators have two alternatives. Firstly, they can fix lower prices in their brochures, so their mark-up will not benefit, but instead the tourists. That occurs when large tour operators do not have market power in the tourists' country of origin. In contrast, when they do, they can raise the mark-up and benefit from it. Obviously, as has already been said, it will depend on the price elasticity of the tourists visiting the Balearic Islands. The first case will reflect market power over the hoteliers, whilst the second is a demonstration of market power over hoteliers and tourists. Although the mark-up of each package holiday sold is not so high, the total number of packages sold determines the tour operator's profits. Therefore, tour operators are anxious to increase their market share. At this point it is necessary to state that small tour operators are a different strategic group. They do not have bargaining power with the holiday accommodation sector, as they have a small market share and must fix higher prices in brochures to cover their costs, not because they have the market power to do so. We agree with Evans and Stabler (1995) and Davies and Downward (1998 and 2000) as regards the fact that the package holiday industry is segmented according to size.

In order to focus on their capacity for control and influence on prices, we created two new variables: *the product concentration degree*, which measures the importance of the products offered by each nationality of tour operator for each market segment, according to star ratings and types of board, and the *area concentration degree*, which measures the importance of the products offered by each nationality of tour operator for each area, according to star ratings. The *product concentration degree* was calculated as the percentage number of products offered by each tour operator for each hotel star rating and a specific type of board, when compared with the total number of products offered for this segment. A 10.9% value for this variable for a half-board Neckermann holiday at a three-star hotel means that this tour operator is responsible for 10.9% of all half-board package holiday products at three-star hotels. A dispersion graph showing this variable and the mean price of each tour operator according to hotel star ratings and types of board can be seen in Figures 3 (British tour operators) and 4 (German tour operators).

Figure 3: A British tour operator dispersion graph according to star ratings and types of board

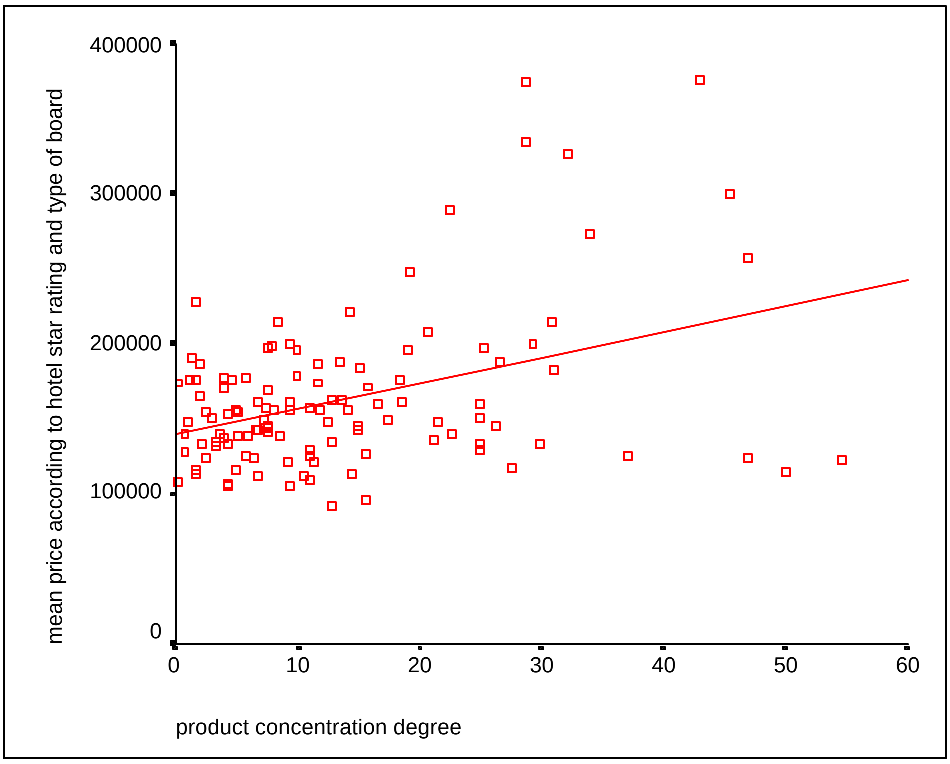
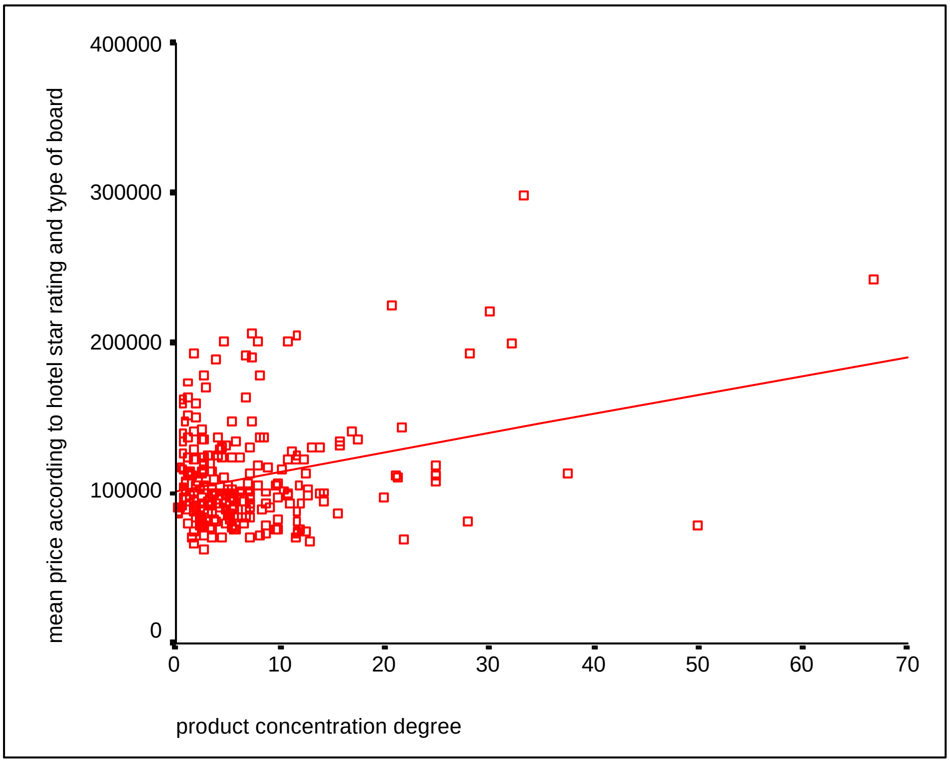


Figure 4: A German tour operator dispersion graph according to star ratings and types of board



For British tour operator products, the dispersion graph shows a positive relation between the *product concentration degree* and the average price according to star ratings and types of board. There is a Pearson coefficient of 0.384, confirming that the relation is statistically significant and positive.

The results obtained for German tour operators revealed a Pearson coefficient of 0.293 but, although the coefficient is statistically significant and positive, the general picture is not so clear. This could be due to the fact that the data covers small and large tour operators. Therefore a further analysis was needed to define the relation and this was done in the next section.

The *area concentration degree* was calculated as the percentage number of products offered by each tour operator for each hotel star rating in a particular area, in relation to the total number of products offered in the same area. A 14.2% value for this variable for a Neckermann three-star holiday in Cala Ratjada means that this tour operator is responsible for 14.2% of all package holiday products offered at three-star hotels in Cala Ratjada. A dispersion graph showing this variable and each tour operator's mean price according to areas and hotel star ratings can be seen in Figures 5 (British tour operators) and 6 (German tour operators). For products offered by British tour operators, the dispersion graph shows a positive relation between the *area concentration degree* and the average price according to areas and star ratings. There is a Pearson coefficient of 0.188, confirming that the relation is statistically significant and positive.

Although the coefficient is statistically significant and positive (0.139) for German tour operators, as with the previous concentration variable, the general picture is not so clear.

Figure 5: A British tour operator dispersion graph according to areas and star ratings

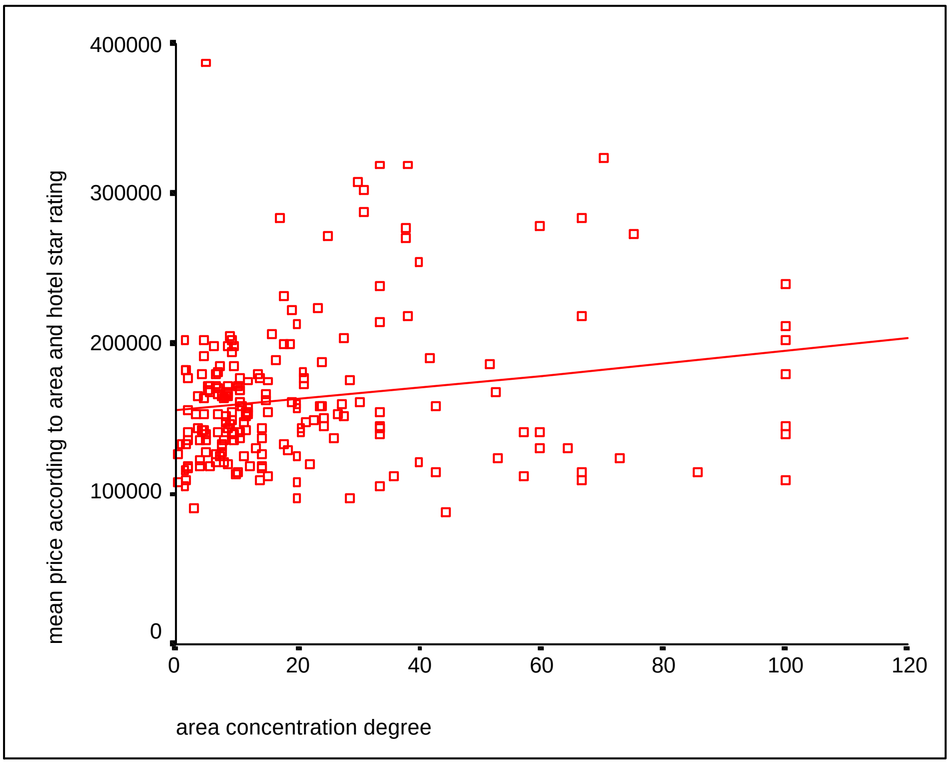
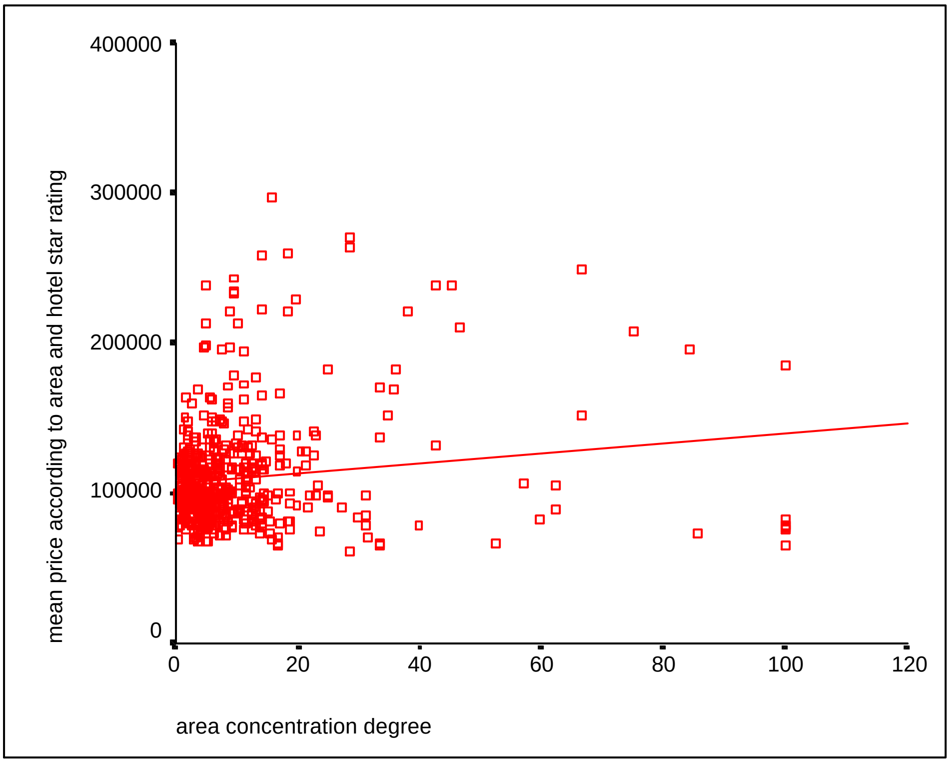


Figure 6: A German tour operator dispersion graph according to areas and star ratings



We were able to make two initial preliminary conclusions from this descriptive analysis of tour operators: 1) There are price differences among international companies. 2) As a British tour operator's control over a market segment or area increases, it is able to fix higher prices, whilst for German tour operators, although the coefficients are statistically significant and positive, the general picture suggests that a covariance analysis needs to be made before any conclusions can be reached.

Hotel chains

The grouping together of hotels into hotel chains is seen, among other things, as an attempt to offset European tour operators' growing market power (Bardolet, 1990, page 228; Doxa, 1988). On this subject, a survey was made of all known hotels chains with establishments in the Balearic Islands, in order to build upon the data available. In some cases, the information was enlarged upon, by using data available on web pages and in brochures. The information enabled us to identify three different situations for hotels where such products are offered: 1) the hotel does not belong to a hotel chain (No chain), 2) the hotel belongs to a hotel chain and has some kind of agreement with tour operators (Chain with an agreement) and 3) the hotel belongs to a hotel chain but has no agreement with tour operators (Chain without an agreement). After this distinction was made, the mean difference between the three situations for products based on half-board, double room accommodation at a three- star hotel was calculated. We expected holidays at establishments belonging to hotel chains to be more expensive than those at hotels not belonging to hotel chains, as the former would be able to negotiate higher prices with tour operators and thus tour operators would charge higher prices to consumers. As regards the existence of an agreement with tour operators, it was anticipated that holidays at hotels belonging to chains with agreements would be more expensive than those without an agreement, as tour operators would want to benefit their partner. Nevertheless, our analysis of brochure prices reflects different results, shown in the following tables:

Table 1: The mean price in pesetas for German package holidays

Mean price	**Chain without an agreement** (93257)	**Chain with an agreement** (90827)
No chain (92985)	-272 (0.7)	2157 (0.254)
Chain without an agreement (93257)		2430 (0.06)

Table 2: The mean price in pesetas for British package holidays

Mean price	**Chain without an agreement** (148909)	**Chain with an agreement** (139707)
No chain (149896)	986 (0.7)	10189 (0.03)
Chain without an agreement (148909)		9202 (0.01)

Tables 1 and 2 show the mean price for each category in brackets, the difference in the various categories' mean prices and its significance in brackets. The results are very explicit and present a similar pattern for both nationalities: products offered at hotels that belong to hotel chains with agreements with tour operators have lower average prices than those that do not have agreements or do not belong to hotel chains. The results are statistically significant for British holiday products. However, for German products, while the mean price difference between hotels with or without agreements verges on the 5% significance limit, the mean price difference between hotels with agreements and those that do not belong to a hotel chain is not statistically significant. On the other hand, there are non-statistically significant mean price differences between hotels that do not belong to hotel chains and those that belong to one but do not have an agreement. To continue our examination of the role of hotel chains, a variable reflecting these three situations was included in our covariance analysis, named *agreement with T.O.*

The results obtained can be interpreted as follows: hotel chains that have some kind of agreement with tour operators are more concerned with obtaining higher occupancy rates than with higher prices, as the latter can mean lower occupancy rates. Thus, if the products offered are cheaper at these hotels, they could have higher occupancy rates. In support of our theory, Dunning and McQueen (1982, page 86) explain that: "*hotels associated with tour operators will also presumably be able to plan* *and maintain higher occupancy rates because the parent company is in a control position in channelling tourists towards its own hotel.*"

At a first glance, the conclusions obtained from this basic analysis of hotel chains were unexpected. Nevertheless, they were also relevant, as package holiday prices fixed in brochures reveal that what leads to bargaining power is not the hotel chain *per se*, but association with tour operators.

A Covariance Analysis

Our covariance analysis allows us to compare the importance of different product characteristics on the overall price, as well as differential effects associated with tour operators and hotel chains. The former were detected in preliminary works, such as Sinclair et al. (1990) and Aguiló et al. (2001), while the latter are new to the field.

Given the previous results, it was deemed appropriate to consider the hotel star rating, type of board and number of beds per room as factors determining the price of the package holiday. Although the package holiday's main characteristics are covered by these variables, the brochures specify each product in detail and this information was included in our data to improve the analysis. Some of this information might be superfluous, in terms of its relationship with the hotel category or its redundancy. This is the case, for example, of characteristics such as satellite TV, TVs in rooms, childcare or playgrounds. Nevertheless, our aforementioned analyses also show that the identity of the tour operator and the *product concentration degree, area concentration degree* and *agreement with T.O.* variables influence the final price of a package holiday. These variables must be included in the analysis in order to find out the market structure and behaviour of the German and British tour operating industries. With this specification, the tour operator's significance cannot be attributed to product characteristics other than those covered by the hotel star rating. Additionally, the estimated parameters might offer an overview of price strategies used by tour operators. The concentration variables, the *product concentration degree* and *area concentration degree*, were expected to be positive, pointing to large tour operators' market power. The *agreement with T.O.* variable gave an unexpected result. Our initial hypothesis regarding this variable and its initial inclusion in the analysis was based on the belief that the grouping together of hotels into chains might offset large tour operators' growing market power. The previous findings reflect another theory that needs to be confirmed with the covariance analysis. The price of the package holiday specified in the brochure was the variable used to analyse the differences. Table 3 and Table 4 (for the British and Germans respectively) show the results of the covariance analysis of the variables, which proved to be statistically significant.

Table 3: A covariance analysis of the price variable of British package holidays.

Dependent Variable: price			
Source	**DF**	**F-ratio**	**Pr>F**
Model	35	233,31	0,000
Residual	2306		
Total	2341		
		R square=0.776	

Variables	**DF**	**F-ratio**	**Pr>F**
Intercept	1	3686,8	0,000
Hotel star rating	4	208,17	0,000
Beds per room	2	211,67	0,000
Area	10	33,744	0,000
Type of board	3	90,253	0,000
Tour operator	5	90,812	0,000
Product concentration degree	1	75,639	0,000
Area concentration degree	1	16,08	0,000
Number of floors	1	21,284	0,000
Room with sea view	1	8,127	0,004
Mini bar	1	69,947	0,000
Playground	1	17,28	0,000
Proximity to a natural area	1	75,994	0,000
Swimming pool	1	28,825	0,000
Entertainment	1	7,009	0,008
Sauna	1	51,675	0,000
Golf	1	65,664	0,000

Table 4: A covariance analysis of the price variable of German package holidays.

Dependent Variable: price			
Source	**DF**	**F-ratio**	**Pr>F**
Model	50	382,05	0,000
Residual	6475		
Total	6525		
		R square=0.745	

Variables	**DF**	**F-ratio**	**Pr>F**
Intercept	1	6068,3	0,000
Hotel star rating	4	1037,1	0,000
Beds per room	3	448,69	0,000
Area	14	41,545	0,000
Type of board	3	93,002	0,000
Tour operator	11	27,907	0,000
Agreement with T.O	2	8,0195	0,000
Product concentration degree	1	126,75	0,000
Number of floors	1	32,189	0,000
Room with sea view	1	194,02	0,000
Mini bar	1	69,681	0,000
Air conditioning	1	8,0816	0,004
Sat TV	1	55,577	0,000
Playground	1	69,237	0,000
No smoking areas	1	22,359	0,000
Proximity to a natural area	1	62,405	0,000
Swimming pool	1	12,003	0,001
Entertainment	1	116,7	0,000
Sauna	1	55,518	0,000
Golf	1	96,054	0,000

As can be observed in the above tables, the *agreement with T.O.* variable is only statistically significant for German package holidays. This could be due to the fact that few British tour operators have agreements with hotel chains. The parameters for German tour operators confirm the findings of the previous analysis, because, if we take the *Chain without an agreement* variable as our reference, the difference with *Chain with an agreement* is statistically significant and negative (ß=-3576), showing that the important thing is the agreement and not the chain, since the concern is the occupancy rate. The difference between *Chain without an agreement* and *No chain* is shown not to be statistically significant (ß =-823, sig. 0.087). The *area concentration degree* variable is only statistically significant and positive for British products (ß =201). Thus, if a British tour operator increases its presence in a certain area by 10%, the product's mean price increases by 1.2%. However, the *product concentration degree* variable is statistically significant and positive for both nationalities (ß =626 for the British and ß =511 for the Germans). These estimations imply that if a tour operator increases its product concentration by 10%, the mean price of a British and German package holiday will increase by 3.7% and 4.7% respectively. These increases could seem too moderate to be considered a feature of an oligopoly, but it has to be remembered that package holiday prices must be perceived by tourists to be cheaper than if they organized the holiday themselves. These results confirm that the greater control over a market segment or (in the case of British products) area that a tour operator in the Balearic Islands has, the greater market power it has by fixing higher prices, thus demonstrating the oligopolistic features of this market.

The identity of the tour operator is statistically significant for both nationalities. Aguiló et al. (2001) explained these results in two ways. Firstly, possibly there are characteristics that cannot be observed in brochures, associated with the level of quality of the facilities offered by the tour operator. The second explanation points to the monopolistic nature of competition in this type of market. Sinclair et al. (1990) attribute price differences to the greater effectiveness of certain advertising campaigns or to the inability of smaller companies to take advantage of the economies of scale that large ones enjoy. The authors' above explanations for price differences, based on the identity of the tour operator, seem to be reasonable but they are impossible to contrast. Obviously, the specific price strategy of each tour operator is unknown, but we do know that tour operators are concerned with market shares. When the home market is mature in terms of travel, as is the case of England and Germany, there are two main ways to increase one's market share: 1) tour operators can increase their share by expanding into emerging markets or 2) they can reduce their home market prices to capture part of their rival tour operators' share. Knowledge of this market will allow us to discuss the findings of the estimation of price differences among tour operators (Table 5).

Table 5: The estimation of price differences among tour operators

PHOENIX	-10077	**THOMSON**	-21541
ALLTOURS	-6845	**FIRST CHOICE**	-12324
DERTOUR	-6598	**COSMOS**	-7523
LTU	-6298	**THOMAS COOK**	-3206
ITS	-5329	**VIRGIN**	0
C&N	-3068	**AIRTOURS**	19025
SLR	-665		
TUI	0		
CLUB BLAUES MEER	913		
FROSCH TOURISTIK	5302		
NIAG REISEN	5616		
ÖGER TOURS	9067		

Large tour operators were expected to fix the highest prices, leaving small tour operators far behind, as they have market power in both the destination and country of origin. TUI is the German and European tour operator with the greatest market share and, among the large tour operators, it is the one that fixes the highest prices. TUI has followed a growing strategy of expansion into other markets in order to increase its market share. The remaining two large tour operators, C&N and LTU, fix prices that are lower than TUI's. C&N might follow a lower price strategy to increase its market share and challenge TUI's leadership. On the other hand, LTU reduced its market share dramatically from 1994 to 1999 and, in January 2001, it was taken over by REWE, so the low prices in the summer of 2000 can be interpreted as an attempt to capture tourists from its rivals and increase its market share. On the other hand, of the large British tour operators, Airtours is the one that establishes the highest prices. This tour operator holds second place in terms of its share of British and European markets. Just like TUI, Airtours has grown by expanding into other countries and by product diversification. Although Airtours is not the British market leader (a place held by Thomson), it behaves as if it were. Thomson shows the lowest prices, a result that clearly conflicts with the previous statements, but the acquisition of Thomson by TUI in 2000, due to financial problems, might explain the low prices of the British leader. In this market, due to the costs and low profit margins involved, a high number of package holidays must be sold in order to break even (Davies and Downward, 1998) and large tour operators have much more room for maneuvre, as they obtain lower prices when negotiating with the tourist accommodation sector.

As for the medium-sized German tour operators (Dertour, ITS and FTI), the first two fix lower prices in an attempt to increase their market share. Medium-sized tour operators do not have the substantial bargaining power that large ones have and so they fail to obtain low prices in negotiations with the supply side. However, if they want to become large, they have to gain customers and thus set low prices in their brochures. During the last few years, the last of the aforementioned tour operators, FTI, has suffered from internal problems, leading to its acquisition by Airtours. These problems can be associated with the high prices established in the summer of 2000. Despite its classification as a small tour operator, amongst this group Alltours is the one with the greatest market share and we can put its strategy on an equal footing with ITS and Dertour's. The medium-sized British tour operators fix lower prices than the large ones (except Thomson), as they want to gain market share and become a large tour operator in order to increase their market power.

Finally, generally speaking, small German tour operators fix higher prices, except Phoenix and Alltours. This is due to their lower capacity to negotiate prices with the supply side and to the relatively exclusive distribution system created by large tour operators. When a tour operator is unable to reduce costs, due to its size, it must fix higher prices and have a lower market share.

To sum up, with the exception of small tour operators, the three tour operators that control the European market fix the highest prices so, although they have market power over the supply side and obtain the lowest prices in negotiations, these prices are not reflected by low package holiday prices. There is, therefore, enough evidence to state that large tour operators have market power in both the tourists' country of origin and in the Balearic Islands.

CONCLUSIONS

The Balearic Islands are a destination for mass tourism and, although those who work in the tourist industry make it implicitly clear that tour operators dominate this market, little research has been done on the subject. The aim of this paper was to contribute to research on the matter by providing empirical evidence. More specifically, we focused on two main objectives: 1) to find out the tour operator market structure by examining their influence on package holiday prices and 2) to determine the role that hotel chains play on price fixing. These aspects were analysed by studying the price structure of holiday packages in the Balearic Islands offered by a representative sample of German and British tour operators. The data compiled was substantial enough for the results to be considered representative of the industry.

The conclusions that we reached after our analysis of tour operators permit us to state that: 1) Price differences among tour operators are associated with different tour operator strategies, focused on increasing their market share. Generally speaking, market leaders are able to fix higher prices without losing their market share, while those who aim to increase their share fix lower prices in order to attract greater numbers of tourists. 2) Large tour operators have market power in both the tourists' country of origin and in the Balearic Islands, although tour operators' individual strategies may make the market seem competitive. Debbage (1990) also considered this when he argued that tour operators are potentially able to reap the advantages of their oligopolistic and oligopsonistic power to the detriment of consumers and destinations. 3) The type of tourist visiting the Balearic Islands succeeds in increasing mark-ups for both tour operators and hoteliers, and 4) The greater a tour operator's product or area concentration, the higher the package holiday price is.

In summary, the more tourists a tour operator is able to bring, the greater market power it has and thus it is more able to negotiate lower prices with the supply side, above all with hoteliers. On the other hand, market power over the demand side is demonstrated when it is able to fix higher prices in its brochures without losing any of its market share. Obviously, it can be seen that large and small tour operators in the German market behave in a different way. We agree with the theory of strategic grouping (Evans and Stabler, 1995; Davies and Downward, 1998, 2000), although our analysis is not focused on this subject.

Tour operators' dominance of the market, in relation to hoteliers, could be limited by grouping hotels into hotel chains, as this would allow chains to negotiate higher prices with tour operators than individual hotels can. Thus holiday products in brochures would appear with higher prices. As regards our initial hypothesis, though, we can conclude that membership or non-membership of a hotel chain does not result in higher brochure prices that could indicate greater bargaining power with tour operators. However, the results obtained reveal that holidays at hotels that have some kind of agreement with tour operators are on average cheaper. This permits us to conclude that hotel chains are more concerned with high occupancy rates than with high prices per room.

There is enough evidence to state that large tour operators have market power in both the tourists' country of origin and in the Balearic Islands, and this market power is indicative of an oligopoly. We are also able to affirm that hotel chains have a greater interest in keeping occupancy rates high than in high room prices.

BIBLIOGRAPHY

AGUILÓ, E., ALEGRE, J., CLADERA, M., and SARD, M. (2002), "La fase de post-estancamiento de un destino turístico maduro. Dressing up to screen the same blowsy tart?". Premio mejor trabajo inédito de la tercera tribuna FITUR/Jorge Vila Fradera 2002. Fitur, Madrid.

AGUILÓ, P.M, ALEGRE, J. ,and RIERA, A. (2001), "Determinants of the Price of German Tourist Packages on the Island of Mallorca". Tourism Economics, vol.7, issue 1, pages 59-74.

AGUILÓ, E, RIERA, A and ROSSELLÓ, J (2001), "Un modelo dinámico para la demanda turística en las Islas Baleares. Una evaluación del efecto precio del Impuesto Turístico". Documento de trabajo nº 29, UIB.

BARDOLET, E. (1990), "Demanda Turística y Marketing Turístico". Papeles de Economía Española, vol. Baleares, pp. 219-230.

BAUM, T., and MUDAMBI, R. (1994), "A Ricardian Analysis of the Fully Inclusive Tour Industry". The Services Industries Journal, vol.14, no. 1, pages 85-93.

CURTIN, S., and BUSBY, G. (1999), "Sustainable Destination Development: the Tour Operator Perspective". International Journal of Tourism Research, vol. 1, pages 135-147.

DAVIES, B., and DOWNWARD, P. (1998), "Competition and Contestability in the U.K. Package Tour Industry: some Empirical Observations". Working Paper 98.3.

DAVIES, B., and DOWNWARD, P. (2000), "Industrial Organization and Competition in the UK Tour Operator/Travel Agency Business, 1989-93: an Econometric Investigation". Working Paper no. 2000.3.

DEBBAGE, K. G. (1990), "Oligopoly and the Resort Cycle in the Bahamas". Annals of Tourism Research, vol.17, pages 513-527.

DOXA and SUBDIRECCIÓN GENERAL DE PLANIFICACIÓN Y PROSPECTIVA TURÍSTICA (1989), "Concentración y Asociacionismo Empresarial en el Sector Turístico. Documento de Sintesis". Estudios Turísticos, vol.103, nº9, pp. 3-33.

DUNNING, J.H. and McQUEEN, M. (1982), "Multinational Corporations in the International Hotel Industry". Annals of Tourism Research, vol.9, pages 69-90.

EVANS, N.G., and STABLER, M.J. (1995), "A Future for the Package Tour Operator in the 21st century?". Tourism Economics, vol.1, no.3, pages 245-263.

FITCH, A. (1987), "Tour Operators in the UK. Survey of the Industry, its Markets and Product Diversification". Travel and Tourism Analyst, March, pages 29-43.

FVW (anual), "Europäische Veranstalter in Zahlen, dokumentation 1993-2000".

GRAHAM, A. (2001), "Using Tourism Statistics to Measure Demand Maturity". *In* Tourism Statistics. International Perspectives and Current Issues, J.J. Lennon, eds, pp. 199-214. Continuum, London.

GRATTON, C., and RICHARDS, G. (1997), "Structural Change in the European Package Tour Industry: UK/German comparisons". Tourism Economics, vol.3, nº3, pages 213-226.

PAPATHEODOROU, A. (2001), "Why People Travel to Different Places". Annals of Tourism Research, vol. 28, no. 1, pages 164-179.

SHELDON, P.J. (1986), "The Tour Operator Industry. An Analysis". Annals of Tourism Research, vol.13, pages 349-365.

SINCLAIR, M.T., CLEWER, A., and PACK, A. (1990), "Hedonic Prices and the Marketing of Package Holidays: the Case of Tourism Resorts in Malaga". In Marketing Tourism Places. Edited by Ashworth, G.J. and Goodall, B., pages 85-103. London: Routledge.

TAYLOR, P. (1995), "Measuring Changes in the Relative Competitiveness of Package Tour Destinations". Tourism Economics, vol.1, no. 2, pages 169-182.

TAYLOR, P. (1996), "Oligopoly or Contestable Markets in the UK Package Tour Industry?". The Service Industries Journal, vol. 16, pages 379-388.

TRAVEL AND TOURISM INTELLIGENCE (2000), "The European Leisure Travel Industry". London: Travel and Tourism Intelligence.
[7]

WILLIAMS, A.M. (1996), "Mass Tourism and International Tour Companies". In Tourism in Spain-Critical Issues. Barke,M. , edited by Tonner,J. and Newton,M.T, pages 119-135. Wallingford: CAB International.