

# NEW INSIGHTS INTO EXPENDITURES OF HOTEL GUESTS AND PRIVATE ACCOMMODATION GUESTS

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## ABSTRACT

The main purpose of this study was to analyse the level and structure of expenditure of hotel guests and private accommodation guests. Moreover, the aim was to determine the factors that influence their expenditure levels. The results are based on a survey conducted from January to December 2016 in Opatija and Rijeka, two neighbouring seaside Croatian tourist destinations. The sample consisted of 984 respondents divided into two groups, those staying in private accommodation and those staying in hotels. Descriptive analysis was used for sample profiling, and one-way analysis of variance was conducted to determine significant differences between hotel and private accommodation guests in terms of their socio-demographic and trip characteristics as well as in terms of their expenditure levels and structures. Finally, multiple regression analyses were conducted to identify the expenditure determinants for both groups of respondents.

The main findings indicate that there is a statistically significant difference in expenditure levels between hotel guests and guests staying in private accommodation. Furthermore, income, length of stay, trip organisation and traveling group have proven to be significant predictors of expenditure in the destination for both groups. However, it was found that the two groups differ with regard to other expenditure predictors.

**Keywords:** Tourist expenditure, expenditure determinants, private accommodation, hotel guests

## 1. Introduction

Rijeka and the Opatija Riviera are Croatian coastal destinations where about 1.6 million overnight stays occurred in 2016, representing 11% of overall overnight stays in the County of Primorje-Gorski kotar and 2% of total Croatian overnight stays (Croatian

Bureau of Statistics, 2017)<sup>1</sup>. Similar to other Croatian and Mediterranean destinations, these two destinations are affected by high seasonality issues since the majority of their tourism traffic occurs during the warmer months of the year. Both destinations are making efforts to find a way to smooth out seasonality by introducing innovative and more

diverse tourism products during the whole year. Rijeka and the Opatija Riviera have almost the same share of hotel and private accommodation, with private accommodation accounting for 35%, and hotels for almost 31%, of their total accommodation capacities (Croatian Bureau of Statistics, 2017)<sup>2</sup>. Given the high importance of tourism for the economy of these destinations, it was found necessary to investigate the expenditure patterns of their tourists, not only during the summer but also throughout the year. Previous research has shown that there is a statistically significant difference in expenditure levels between tourists staying in hotels and those staying in other types of accommodation, with the former tending to spend more in the destination than the latter (García-Sánchez et al., 2013; Laesser, Crouch, 2006; Smolčić et al., 2017; Svensson et al., 2011). Due to the fact that private accommodation represents a large part of the Croatian accommodation structure, as well as that of many Mediterranean destinations, it was found necessary to separately investigate the expenditure of hotel guests and private accommodation guests. Thus, the main purpose of this study was to investigate the differences, if any, in the spending patterns of hotel and private accommodation guests and to identify the determinants of their expenditure in the destination.

The average tourist expenditure in Croatian coastal destinations, although increasing, is still rather low. A survey on the attitudes and expenditures of tourists in Croatia showed that the average daily expenditure of tourists during the summer months of 2014 was 66€, which is about 14% higher than that realized in 2010 (Marušić et al., 2015). According to the same study, the average expenditure in Primorje-Gorski Kotar County was even lower than the Croatian average and amounted to 58€. These results indicate the need to investigate the structure and level of expenditure in order to find ways to increase it. This in turn will result with an enhancement of tourism economic benefits for the destination.

The study is based on a survey conducted in Rijeka and the Opatija Riviera from January to December 2016, consisting of 984 respondents who were divided into two groups, those staying in private accommodation and those staying in hotels.

## **2. Literature review**

The economic effects of tourism occur and can be measured on different spatial scales (global, conti-

ental, national, regional and local level) (Mayer, Voght, 2016). In all of these cases, the foundation of tourism economic impacts lies in the tourist expenditure level (Mihalic, 2002). Thus, assessing tourist expenditure is of great importance in assessing the economic impact of tourism for a host community and this often involves the estimation of average tourist expenditure per trip or per night (Tang, Turco, 2001). As Disegna and Osti (2016) highlighted, the measurement and determination of the economic benefits experienced by the destination requires analyses of micro data in which individuals or households are the principal unit of analysis. However, as destination marketers become more selective with their promotions, targeting high spending tourists, it is important to provide them with the spending characteristics of different types of tourists so that they can allocate (very often scarce) resources in order to reach and influence those tourists who will most benefit the host economy (Tang, Turco, 2001).

Due to the importance of tourist expenditure for a host economy, the research on the determinants of micro-level tourism expenditure is expansive and growing (Thrane, 2014, 2016). Recently, several authors have reviewed the research focused on tourist expenditure determinants (e.g. Brida, Scuderi, 2013; Marcussen, 2011; Mayer, Vogt, 2016; Wang, Davidson, 2010a). According to those studies, the research linking tourism expenditure to a set of predictors could be divided into two groups: on site studies (where the total trip expenditure of tourists visiting a specific site or destination is used as a dependent variable in the regression models) and household studies (regression models are utilized in quantifying how total tourism expenditure varies by a set of regressors for samples of households representative of some population) (Thrane, 2016). This study fits into the first group since it is based on the expenditures of tourists staying in Rijeka or the Opatija Riviera.

The statistical methods authors use range from variance analyses to regression methods (OLS or quantile regression), while some have used more advanced econometric techniques, such as the double-hurdle, Tobit or Heckit (Mayer, Vogt, 2016). It has to be pointed out that studies on tourist expenditure determinants differ regarding the form of expenditure that is used in models. As Brida and Scuderi (2013) summarised, expenditure levels in tourist expenditure studies are expressed

as total expenditure for the whole trip (per party, per household, per person), expenditure per day, expenditure per person, and expenditure per person per day. In addition, many authors follow the econometric practice and use the natural logarithm of expenditure rather than level values (e.g. Downward, Lumsdon, 2003; García-Sánchez et al., 2013; Marrocu et al., 2015; Smolčić Jurdana, Soldić Frleta, 2017; Thrane, 2014; 2016). The present study is in line with previous research, since the natural logarithm of total expenditure for the whole trip per person was used as the dependent variable in the OLS regression model.

Following Brida and Scuderi (2013), Marcussen (2011), Marrocu et al. (2015) and Thrane (2016), explanatory variables used in previous studies on expenditure determinants can be divided into three groups: variables related to economic and sociodemographic characteristics, trip-related characteristics and psychographic characteristics. It has to be emphasised that many studies reported ambiguous results because certain variables turned out to be significant predictors of tourist expenditure in some studies, but not in others. Moreover, in some studies, results indicate that spending depends positively on certain variables, although a negative relation was found in other studies. Thus it is evident that there is a need for further research on this issue (Wang, Davidson, 2010a).

Gender, age, marital status, education level, occupation, place of residence, and income are some of the most frequently used economic and sociodemographic variables. Income is one of the most employed and most relevant determinants of tourist expenditure (Marrocu et al., 2015). It is one of the variables that has been proved to contribute significantly to tourist expenditure, as reported earlier by many authors (e.g. Brida et al., 2013; Downward, Lumsdon, 2003; Cannon, Ford, 2002; Fredman, 2008; García-Sánchez et al., 2013; Marrocu et al., 2015; Smolčić Jurdana, Soldić Frleta, 2017; Wang, Davidson, 2010b; Thrane, 2014; 2016). Furthermore, Craggs and Schofield (2009) have reported a statistically significant relationship between gender and expenditure level, whereby females tend to spend more than males. According to Brida and Scuderi (2013), however, gender was found not to be a significant predictor of tourist expenditures in the majority of studies. Empirical studies differ considerably with respect to age as well, since there are many examples of both negative and positive age

effect on tourist expenditures (Thrane, 2016). The same applies to marital status. Studies of Cannon and Ford (2002) and Saayman and Saayman (2012) resulted in a non-significant relationship, while Kim et al. (2008) found a significant relationship between marital status and expenditure. Furthermore, according to Mayer and Vogt (2016) education level and occupation are significant occasionally as well, which could most probably be explained by the multicollinearities with the income variable. Additionally, Serra et al. (2015) and Wu et al. (2013) found that nationality is a significant independent variable, as did Marrocu et al. (2015) who reported that foreign tourists tend to spend more than domestic ones.

The empirical findings of the effect of trip-related variables on tourist expenditure are also often in conflict. In this group, variables that were used the most in previous research include length of stay, group size, type of accommodation, type of trip organisation, means of transportation, and tourist loyalty (first or repeat visit). Trip-related variables are not straightforward predictors of tourists' expenditures since previous studies have also reported ambiguous results. In most studies, length of stay is found to be positively and significantly related to tourist expenditures (Marrocu, 2015), although it has to be noted that it is usually positive when total travel expenditure is analysed, whereas the influence of length of stay tends to be negative when per day expenditure is a dependent variable (Mayer, Vogt, 2016). Group size is another very frequently used variable. Many studies have reported this variable to be a significant determinant of expenditure, although with a varying sign (Marrocu et al., 2015). For instance, while Craggs and Schofield (2009) and Downward and Lumsdon (2003) associated a positive sign with tourist expenditure, Wu et al. (2013) associated a negative sign. Furthermore, as Mayer and Vogt (2015) underlined, tourists staying in commercial accommodation (i.e. hotels) spend more than others, followed by tourists staying in rented apartments, whereas tourists staying in campgrounds or with friends/relatives generate the lowest expenditures. Chen and Chang (2012) reported that individually organised tourists tend to spend more in comparison with those who organised their trip and stay with a help of a travel agency, as also confirmed by Mayer and Vogt (2015). Many studies reported a significant influence of transportation means on tourist expenditure (Fread-

man, 2008; Marcussen, 2011; Svensson et al., 2011; Thrane, Fastad, 2011). Again, when it comes to the number of visits to a destination (loyalty), different results have been reported. According to Brida and Scuderi (2013) the majority of studies reported that loyalty is not significantly related to expenditure, while studies by Craggs and Schofield (2009) and Downward and Lumsdon (2003) reported a significant relationship between the number of visits and tourist expenditure.

Finally, the last group of explanatory variables refers to psychographic ones, which include motivations, tourists' evaluation of different elements, psychological characteristics and taste (Wang, Davidson, 2010a). Many authors (e.g. Brida, Scuderi, 2013; Smolčić Jurdana, Soldić Frleta, 2017; Wang et al., 2006) underlined that these variables are rarely included in the estimation models and emphasised the need for further research on the influence of psychographic variables on tourist expenditures.

### 3. Empirical research

The present research pools data obtained from a survey conducted via face to face interviews from January to December 2016 in Opatija and Rijeka, two neighbouring seaside Croatian tourist destinations. Respondents were individuals aged 18 or older who spent at least one night in one of these two destinations. The questionnaires were anonymous and offered in 4 languages. They gathered the socio-demographic profile of the respondents, the characteristics of their trip and stay as well as information on the level and structure of their expenditure in the destination. The sample consisted of 1,249 usable questionnaires; however, for the purpose of this paper, only questionnaires filled by respondents staying in hotels or private accommodation have been

used. Thus, a total of 984 questionnaires were used for the analyses. Descriptive analysis was used for sample profiling, and one-way analysis of variance, ANOVA, was conducted to determine significant differences between hotel and private accommodation guests in terms of their socio-demographic and trip characteristics as well in terms of their expenditure. Finally, multiple regression analyses were conducted to identify the expenditure determinants for both groups of respondents.

A stratified random sampling method was applied in selecting a sample using the period of the visit (month), the destination where respondents were staying (Rijeka or Opatija), the respondents' origin, and the type of accommodation. According to the Croatian Bureau of Statistics (2017)<sup>3</sup>, the majority of tourist arrivals in Rijeka and the Opatija Riviera in 2015 occurred in the period between early June and late September (59%). Given the evident seasonality of tourism demand, arrivals from June to September were considered as being high-season flows. Hence, almost 53% of the total sample relates to those respondents staying in the destination during the season (Table 1). On the other hand, arrivals occurring in the period from January to May and those occurring at the end of the year (from October to December) accounted for 27% and 20%, respectively, of the total sample.

As far as tourist origin is considered, foreign tourists accounted for 84% of total arrivals in Rijeka and Opatija (Croatian Bureau of Statistics, 2017)<sup>4</sup>. In this survey, foreign tourists accounted for 82.4% of the total sample (Table 1). In addition, as Opatija recorded a higher number of arrivals in 2016 in comparison with Rijeka (Croatian Bureau of Statistics, 2017)<sup>5</sup>, the majority of the respondents stayed in Opatija (70.7% of the total sample) (Table 1).

**Table 1** Sample characteristics (N= 984)

Characteristic	No. of respondents	%	Characteristic	No. of respondents	%
<b>Season</b>			<b>Accommodation</b>		
<i>January - May</i>	267	27.1	<i>Hotel</i>	699	71.0
<i>June - September</i>	515	52.4	<i>Private accommodation</i>	285	29.0
<i>October - December</i>	202	20.5			
<b>Origin</b>			<b>Destination</b>		
<i>Domestic</i>	173	17.6	<i>Opatija</i>	696	70.7
<i>Foreign</i>	811	82.4	<i>Rijeka</i>	288	29.3

Source: Authors

For the purpose of this paper, the sample was divided into two groups of respondents, those staying in private accommodation (29% of the total sample) and those staying in hotels (71% of the total sample) (Table 1).

**Table 2 Sociodemographic profiles of respondents and characteristics of their stay in the destination**

Characteristic	Hotel N=699	Private* N=285	F Sig.	Characteristic	Hotel N=699	Private* N=285	F Sig.
	%				%		
<b>Gender</b>			<i>F=0.148</i>	<b>Season</b>			<i>F=0.814</i>
Male	43.9	45.3	0.701	January - May	26.9	27.7	0.367
Female	56.1	54.7		June - September	54.1	48.1	
<b>Age</b>			<i>F=13.022</i>	October - December	19.0	24.2	
18 - 25	7.2	13.7	0.000	<b>Number of visit</b>			<i>F=0.016</i>
26-35	24.2	28.5		First visit	3.0	3.2	0.899
36-45	25.6	23.9		Repeat visit	97.0	96.8	
46-55	22.9	19.4		<b>Mode of transportation</b>			<i>F=2.460</i>
56-65	14.2	10.2		Car	54.6	69.8	0.117
66 and more	5.9	4.2		Bus	33.8	18.2	
<b>Educational level</b>			<i>F=0.899</i>	Train	2.3	2.8	
Elementary school	1.0	.7	0.343	Boat	0.4	0.7	
High school	34.1	42.8		Plane	8.2	8.1	
College	35.4	25.3		Motorbike	0.7	0.4	
University degree	29.2	30.2		<b>Trip organisation</b>			<i>F=100.971</i>
Other	0.3	1.1		Individually	61.1	91.9	0.000
<b>Monthly family income</b>			<i>F=2.614</i>	Package tour	38.9	8.1	
Up to 500 €	2.3	3.9	0.106	<b>Traveling group type</b>			<i>F=14.778</i>
501 – 1.000 €	10.2	13.7		alone	15.7	8.8	0.000
1,001 – 1,500 €	20.6	17.9		with partner	42.1	31.2	
1,501 – 2,000 €	20.0	19.6		with family members	27.2	37.9	
2,001 – 2,500 €	14.4	18.6		with friends/acquaintances	11.2	21.4	
2,501 – 3,000 €	13.3	11.2		with associates	3.9	0.7	
3,001 – 3,500 €	11.3	7.0		<b>Intention to return</b>			<i>F=3.426</i>
3,500 € and more	7.9	8.1		No	8.3	4.9	0.064
<b>Origin</b>			<i>F=5.688</i>	Yes	91.7	95.1	
Domestic	15.7	22.1	0.017	<b>Intention to recommend</b>			<i>F=0.155</i>
Foreign	84.3	77.9		No	3.3	2.8	0.694
<b>Destination</b>			<i>F=4.414</i>	Yes	96.7	97.2	
Opatija	72.7	66.0	0.036				
Rijeka	27.3	34.0					

Note: \*private accommodation guests.

Source: Authors

The results of one-way analyses of variance (ANOVA) indicate that age, tourist origin (domestic or foreign), destination (Opatija or Rijeka), type of trip organisation (individual or package trip) and traveling group type differed significantly across the two segments. However, no statistical significance at the 0.05 level was found for the rest of the respondents' characteristics (Table 2).

As shown in Table 2, the sample of hotel guests and private accommodation guests is balanced in terms of gender and number of visits. The results indicate that there is a significant difference in age between the two groups of respondents. The average age of hotel and private accommodation guests is 43 and 40, respectively. Fully 43% of hotel guests and 33% of private accommodation guests are older than 45. In terms of education level, there is no statistically significant difference between samples. As far as hotel guests are concerned, the majority of them (35.4%) hold a college degree while the majority of private accommodation guests (42.8%) hold a high school degree.

Results indicate that the majority of respondents (in both samples) have a family monthly income of 1001 - 2000€, although 19.2% of hotel guests and 18.1% of private accommodation guests have a family monthly income higher than 3001€. As expected, both samples (hotel guests and private accommodation guests) comprise a considerable number of foreign tourists, (84.3% and 77.9%, respectively). However, there is a statistically significant difference in terms of respondent origin between the groups. As far as destination is concerned, the majority of hotel guests chose to stay in Opatija (72.7%), while only 66.0% of private accommodation guests stayed in Opatija. In both cases, the majority of respondents stayed in the destination during the peak season (54.1% and 48.1% of hotel guests and private accommodation guests, respectively).

As Table 2 also indicates, 54.6% of hotel guests and 69.8% of private accommodation guests came to the destination by car. However, when it comes to type

of organisation there is a statistically significant difference between the two groups. The vast majority of private accommodation guests (91.9%) and only 61.1% of hotel guests have individually organised their trips. As far as travelling group type is considered, the majority of hotel guests are traveling with a partner (42.1%), while the majority of private accommodation guests are traveling with family members (37.9%).

In both cases (hotel and private accommodation guests), respondents stated that they have an intention to return (91.75% and 95.1%, respectively) as well as to recommend the destination to others (96.7% and 97.2%, respectively) (Table 2).

Results also showed that there is a statistically significant difference between hotel and private accommodation guests in terms of their length of stay ( $F=11.367, p=0.001$ ). Hotel guests spend less days in the destination since their average length of stay is 5.3 days in comparison with private accommodation guests who spend 6.6 days. In addition, results show that for both hotel and private accommodation guests, the main reasons for visiting Rijeka and Opatija are rest and recreation (indicated by 23.5% and 22.9% of hotel and private accommodation guests, respectively) or fun and new experiences (27.7% and 29.1%, respectively).

Table 3 summarises the expenditures of hotel guests and private accommodation guests. It has to be noted that respondents were asked to express only the expenditure that occurred in the destination. Accordingly, the total expenditure per stay per person does not comprise the traveling costs to and from the destination. It should also be noted that there are cases where respondents reported zero expenditure for one or more expenditure categories because of not spending money on the specific category. Thus, as suggested by Stynes and White (2006), blank responses were treated as zero spending in this study if the respondent reported positive spending in at least one other category.

**Table 3** The expenditure structure of hotel and private accommodation guests (€)

Expenditure categories per person per stay (€)	Hotel guests N=695	Private accommodation guests N=285	F Sig.
Accommodation	338.9	147.4	F=53.128 0.000
Food and beverages	72.0	107.2	F=17.141 0.000
Entertainment and culture	21.8	34.2	F=16.681 0.000
Sport and recreation	5.4	7.6	F=3.183 0.075
Shopping	41.9	57.0	F=9.573 0.002
Excursions	13.5	19.5	F=6.691 0.010
Other products and services	11.2	15.4	F=2.036 0.154
Total expenditure	504.7	388.0	F=13.265 0.000

Source: Authors

As Table 3 indicates, hotel guests on average spent more during their stay in the destination per person (504.7€) in comparison with private accommodation guests (388.0€). Besides the total expenditure per person per stay, a statistically significant difference between the groups was also found in five out of seven expenditure categories (expenditure on accommodation, food and beverages, entertainment and culture, shopping and excursions). On the other hand, there is no statistically significant difference in terms of the respondents' expenditures on sport and recreation and other services between the groups.

In terms of expenditure structure, in both groups (hotel and private accommodation guests), the largest portion of expenditure refers to expenditure on accommodation (67.2% and 38.0%, respectively) and expenditure on food and beverages outside the accommodation facilities (14.3% and 27.6%, respectively). In both cases, the smallest amount of money is spent on sport and recreation, only 1.1% of the budget of the hotel guests and only 1.9% of the private accommodation guests' budget (Table 3). Due to the fact that a statistically significant difference in the total expenditure per stay per person between the hotel and private accommodation guests was found, further analyses were conducted to find the expenditure determinants of both groups of respondents.

#### 4. Regression models

For the purpose of finding out what factors influence the expenditure of hotel and private accommodation guests, multivariate regression analyses were performed. In keeping with recommended econometric practice (Disegna, Osti, 2016; Downward, Lumsdon, 2003; Thrane, 2014; 2016), in this study the expenditures were logarithmically transformed.

As Marcussen (2011) recommended, the length of stay, type of accommodation, travel party size, type of destination, packaging, transportation mode, household income, nationality, activities, and respondents' age should be part of the set of relevant predictors of tourist expenditure. Thrane (2014) underlined that a regression model aimed at explaining variance in tourist expenditures should incorporate most of these variables and perhaps add a few extra. Thus, following the recommendations of Marcussen (2011) and later of Thrane (2014), both models in this study include educational level, average monthly household income, trip organisation (individually organised or not), length of stay, past behaviour (first visit or not), age, origin (domestic or foreign), period when tourists spent their time in the destination (season or offseason), destination (Opatija Riviera or Rijeka), traveling group type (traveling single/pair or in group) and transportation mode as explanatory variables.



**Table 4 Regression model 1: Factors affecting the hotel guests' expenditures**

Variables	Unstandardized Coefficients		Collinearity Statistics	
	B	Std. Error	Tolerance	VIF
(Constant)	5.056	.171		
Educational level	-.087**	.028	.799	1.251
Average monthly household income	.089***	.013	.758	1.319
Trip organisation (0 – individually; 1- organised)	.094*	.050	.740	1.352
Length of stay	.097***	.005	.968	1.033
Past behaviour (0 – first, 1 – repeat visitor)	.341**	.125	.966	1.035
Age	-.044**	.017	.849	1.178
Origin (0 – domestic, 1 – foreign)	.122**	.061	.886	1.129
Season (0 – season; 1 – offseason)	.028	.044	.926	1.080
Destination (0 – Opatija Riviera, 1 – Rijeka)	-.076	.048	.956	1.046
Traveling group type (0 - single and pair, 1 - group)	-.083*	.043	.972	1.029
Transportation mode (0 – car, 1 – other)	-.134**	.049	.723	1.384

Note:  $R^2 = 0.423$ ;  $F(11, 685) = 45.596$ ;  $p < 0.001$ ; Dependent variable: log tourist expenditure of hotel guests per person, per stay; VIF - variance inflation factors; \*Significant at 10%; \*\*Significant at 5%; \*\*\*Significant at 1%

Source: Authors

Tables 4 and 5 summarise the results of the OLS regression analysis in which the natural logarithms of the hotel guests' (Table 4) and private accommodation guests' (Table 5) total expenditure serve as the dependent variables. Davidson (2010a) pointed out that many studies reported low  $R^2$  or adjusted  $R^2$  value, and that in some cases independent variables

included in the analyses accounted for no more than 20% of the variance in expenditures. However, Thrane (2014) underlined that when it comes to  $R^2$  values, a model that explains less than 30% of the variance in expenditures will most likely yield unreliable results due to the omission of one or several relevant independent variables.

**Table 5 Regression model 2: Factors affecting the private accommodation guests' expenditures**

Variables	Unstandardized Coefficients		Collinearity Statistics	
	B	Std. Error	Tolerance	VIF
(Constant)	5.152	.230	.862	1.160
Educational level	-.005	.034	.699	1.430
Average monthly household income	.058***	.018	.961	1.041
Trip organisation (0 – individually; 1- organised)	.212**	.103	.861	1.161
Length of stay	.044***	.004	.938	1.066
Past behaviour (0 – first, 1 – repeat visitor)	.047	.163	.792	1.263
Age	.030	.023	.797	1.255
Origin (0 – domestic, 1 – foreign)	-.027	.075	.796	1.256
Season (0 – season; 1 – offseason)	.083	.062	.923	1.084
Destination (0 – Opatija Riviera, 1 – Rijeka)	-.208***	.061	.957	1.045
Traveling group type (0 - single and pair, 1 - group)	-.100*	.058	.844	1.185
Transportation mode (0 – car, 1 – other)	.054	.066	.862	1.160

Note:  $R^2 = 0.423$ ;  $F(11, 685) = 45.596$ ;  $p < 0.001$ ; Dependent variable: log tourist expenditure of hotel guests per person, per stay; VIF - variance inflation factors; \*Significant at 10%; \*\*Significant at 5%; \*\*\*Significant at 1%

Source: Authors

As seen in Table 4, the first model in this study explains 42.3% of total hotel guests' expenditure in the destination ( $R^2 = 0.423$ ;  $F(11, 685) = 45.596$ ;  $p < 0.001$ ). The second model also has high explanatory power since the variables in the model explain 44.9% of the variance in private accommodation guests' expenditures ( $R^2 = 0.449$ ;  $F(11, 272) = 20.123$ ;  $p < 0.001$ ) (Table 5).

In the case of hotel guests, the OLS results showed that nine out of eleven variables turned out to be significant predictors of their expenditure in the destination (Table 4). On the other hand, in the case of private accommodation guests, only six independent variables are found to be significant predictors of their total expenditure in the destination (Table 5).

As many authors previously reported (e.g. Brida, Scuderi, 2013; García-Sánchez et al., 2013; Marrocu et al., 2015; Thrane, 2014; 2016), the results in this study also confirm that monthly household income significantly contributes to the variance in expenditures in the case of hotel guests and private accommodation guests. As expected, length of stay has also been confirmed as a significant predictor of both hotel guests' and private accommodation guests' total expenditure in the destination, indicating that the longer the stay, the higher the total expenditure in the destination. In support of the results, many other studies have also demonstrated the positive relation between length of stay and tourist expenditure (e.g. Chen, Chang, 2012; Downward, Lumsdon, 2003; Fredman, 2008; Kim et al., 2008; Laesser, Crouch, 2006; Wang et al., 2006).

Furthermore, in both models, it was found that respondents who individually organised their trip tended to spend less in comparison with those who organised their trip through a travel agency. This could be explained by the fact that the respondents who used package tours paid for part of the products and services in advance and thus had more money in hand for spending in the destination. A similar result was reported by Lehto et al. (2004) who found that package tourists outspent independent travelers in shopping.

In the case of hotel guests and private accommodation guests, those respondents traveling solo or with a partner tend to spend more in the destination than those traveling with family members, friends or associates (Tables 4 and 5). These results are similar to those of Barquet et al. (2011) and Kruger et al. (2009) who reported that those who travel in small groups tend to spend more in comparison with those who are traveling in a larger group. The results of this study provide information that could

be useful for destination management and marketers in their activities connected to the planning of future destination products that should be more directed to, and tailored for, singles and couples, due to the fact that they spend more in both cases, as hotel guests and private accommodation guests.

In addition to the four previously mentioned explanatory variables, five more variables have been proved to be statistically significant predictors of hotel guests' expenditure in the destination (educational level, past behaviour, age, origin and transportation mode) (Table 5). The results show that hotel guests with a lower educational level tend to spend more in the destination in comparison with those who have a higher level of education, as reported earlier by Legohrel and Wong (2006). When it comes to the origin of the respondents, the results indicate that foreign hotel guests tend to spend more than domestic ones. Several authors have reported that the nationality variable affects tourist expenditures (Marrocu et al., 2015; Serra et al., 2015; Thrane, Farstad, 2012). It was also found that younger hotel guests spend more than older ones. This is in line with the existing literature and was found earlier by Mundambi and Baum (1997) and Wang et al. (2006). In addition, results indicate that the hotel guests who come by car spend more in the destination in comparison with others who use some other transportation mode. Similar results were reported by Kim et al. (2008) and Svensson et al. (2011). In the case of hotel guests, it was found that repeaters spend more in the destination than first-time visitors. This result was also found earlier by Marcussen (2011) and Saayman and Saayman (2009).

Results also indicate that private accommodation guests staying in the Opatija Riviera tend to spend more than those staying in Rijeka (Table 4), but on the other hand the destination was not found to be a statistically significant predictor of hotel guests' expenditure (Table 5).

An interesting finding was the one referring to the season of visit. In both cases (hotel and private accommodation guests), the season was not found to be a significant predictor of expenditure. These results confirm that the destinations are offering quality tourism products during the whole year and that the destination managements' efforts in enhancing the quality and diversity of the tourism offering of these destinations are recognised.

## 5. Conclusions and further research

The results of this study support the notion that tourist expenditure level is highly relevant for tour-

ism destination development (Craggs, Schofield, 2009; Fredman, 2008; Legohérel, Wong, 2006). In line with other studies and as seen from the results of this study as well, tourists staying in hotels spend more in the destination than other tourists. Because of the large portion of private accommodation guests, it is important to investigate the determinants of their expenditure in order to find ways of increasing it. The main findings indicate that there is a statistically significant difference in expenditure levels between hotel guests (504.70€ per person per stay) and guests staying in private accommodation (388.00€ per person per stay). Moreover, income, length of stay, trip organisation and traveling group have proven to be significant predictors of expenditure in the destination for both groups. However, it was found that the two groups differ with regard to other expenditure predictors. When it comes to private accommodation guests, it was found that their expenditure levels were influenced by the destination where they were staying (Opatija or Rijeka). In the case of hotel guests, the results revealed that educational level, age, origin, transportation mode and loyalty to the destination turned out to be statistically significant predictors of their total expenditure in the destination. It has to be underlined that, in this study, hotel guests stayed in the destination significantly shorter while their expenditure level was significantly higher in comparison with private accommodation guests. This is a clear sign to the management of these two destinations that when planning future accommodation facilities it is essential to take into consideration the fact that private accommodation accounts for a large portion of the current accommodation structure.

This study covers some gaps in the research on tourism demand in Mediterranean destinations. Although the attitudes and expenditures of tourists during summer months are well researched, very little attention has been given to the study of all-year-round tourism demand despite the ever-present seasonality issue. Thus, this research especially contributes to filling this gap in terms of sociodemographic tourist profile, tourist behaviour during their stay and tourist expenditures during the whole year. Moreover, the study separately assesses the level and structure of tourist expenditures of hotel guests and private guests. In addition, it reveals the determinants of their expenditure in the destination and identifies those guests who may be considered as having the highest economic value for the des-

tinuation. Thus, the results of this survey are highly important for destination managers and marketers and can help them to maximize the economic and social benefits of tourism by focusing their resources more efficiently on those tourists who are likely to bring the most benefits to the local community and economy. The results should be used by management and marketers in terms of tailoring tourism products for the singles and couples, due to the fact that they are spending more, as hotel guests and private accommodation guests. Furthermore, destination products should be more appealing to the younger hotel guests since they tend to spend more in the destination than others. In addition, in the expenditure structure of both, hotel and private accommodation guests, the largest portion of expenditure refers to expenditure on accommodation and on food and beverages. However, expenditures on other products and services (i.e. shopping, entertainment, excursions, culture, sport and recreation) are moderate. Thus, in order to increase the expenditure levels, other segments of tourism offering need to be enhanced, they need to be more innovative, authentic and with the greater possibilities of tourists' active participation. This could stimulate both, hotel and private accommodation guests' expenditures.

The main limitation of this study is the fact that it was restricted to Rijeka and the Opatija Riviera. Thus, for generalization purposes, future research should be enhanced by including different destinations and comparing the level, structure and determinants of tourists' expenditures between destinations. For a more complete picture, more variables could be included in the OLS models, especially those referring to the tourists' psychological characteristics (i.e. motivations, activities undertaken in the destination, tourists' attitudes, etc.) because of their scarce use in the literature (Brida and Scuderi, 2013). Despite the limitations, the study results have implications for decision-makers in tourism in terms of future effective resource allocation and market segmentation and in terms of better understanding tourist expenditure patterns.

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## REFERENCES

1. Barquet, A., Brida, J. G., Osti, L., Schubert, S. (2011), "An analysis of tourists' expenditure on winter sports events through the Tobit censored model", *Tourism Economics*, Vol. 17, No. 6, pp. 1197-1217.
2. Brida, J. G., Scuderi, R. (2013), "Determinants of tourist expenditure: A review of microeconomic models", *Tourism Management Perspectives*, Vol. 6, pp. 28-40.
3. Cannon, T. F., Ford, J. (2002), "Relationship of demographic and trip characteristics to visitor spending: An analysis of sports travel visitors across time", *Tourism Economics*, Vol. 8, No. 3, pp. 263-271.
4. Chen, C.-M., Chang, K.-L. (2012), "The influence of travel agents on travel expenditures", *Annals of Tourism Research*, Vol. 39, No. 2, pp. 1258-1263.
5. Craggs, R., Schofield, P. (2009), "Expenditure-based segmentation and visitor profiling at the quays in Salford, UK", *Tourism Economics*, Vol. 15, No. 1, pp. 243-260.
6. Disegna, M., Osti, L. (2016), "Tourists' expenditure behaviour: the influence of satisfaction and the dependence of spending categories", *Tourism Economics*, Vol. 22, No. 1, pp. 5-30.
7. Downward, P., Lumsdon, L. (2003), "Beyond the demand for day-visits: An analysis of visitor spending", *Tourism Economics*, Vol. 9, No. 1, pp. 67-76.
8. Fredman, P. (2008), "Determinants of visitor expenditures in mountain tourism", *Tourism Economics*, Vol. 14, No. 2, pp. 297-311.
9. García-Sánchez, A., Fernández-Rubio, E., Collado, M. D. (2013), "Daily expenses of foreign tourists, length of stay and activities: Evidence from Spain", *Tourism Economics*, Vol. 19, No. 3, pp. 613-630.
10. Marušić, Z., Čorak, S., Sever, I. (2015). *TOMAS Summer 2014: Attitudes and expenditures of tourists in Croatia*. Zagreb: Institute for Tourism.
11. Kim, S. S., Han, H., Chon, K. (2008), "Estimation of the determinants of expenditures by festival visitors", *Tourism Analysis*, Vol. 13, No. 4, pp. 387-401.
12. Kruger, M., Saayman, M., Saayman, A. (2009), "Sociodemographic and behavioral determinants of visitor spending at the Klein Karoo National Arts Festival", *Event Management*, Vol. 13, No. 1, pp. 53-68.
13. Laesser, C., Crouch, G. I. (2006), "Segmenting markets by travel expenditure patterns: The case of international visitors to Australia", *Journal of Travel Research*, Vol. 44, No. 4, pp. 397-406.
14. Legohérel, P., Wong, K. K. F. (2006), "Market segmentation in the tourism industry and consumers' spending: What about direct expenditures?", *Journal of Travel and Tourism Marketing*, Vol. 20, No. 2, pp. 15-30.
15. Lehto, X. Y., Cai, L. A., O'Leary, J. T., Huan, T.-C. (2004), "Tourist shopping preferences and expenditure behaviours: the case of the Taiwanese outbound market", *Journal of Vacation Marketing*, Vol. 10, No. 4, pp. 320-332.
16. Marcussen, C. H. (2011), "Determinants of tourist spending in cross-sectional studies and at Danish destinations", *Tourism Economics*, Vol. 17, No. 4, pp. 833-855.
17. Marrocu, E., Paci, R., Zara, A. (2015), "Micro-economic determinants of tourist expenditure: A quantile regression approach", *Tourism Management*, Vol. 50, pp. 13-30.
18. Mayer, M., Voght, L. (2016), "Economic effects of tourism and its influencing factors: An overview focusing on the spending determinants of visitors", *Zeitschrift fuer Tourismuswissenschaft*, Vol. 8, No. 2, pp. 169-198.
19. Mihalic, T. (2002), "Tourism and economic development issues", in Sharpley, R., Telfer, D. J. (Eds.), *Tourism and development: Concepts and issues*, Channel View Publications, Clevedon, pp. 81-111.
20. Mundambi, R., Baum, T. (1997), "Strategic Segmentation: An Empirical Analysis of Tourist Expenditure in Turkey", *Journal of Travel Research*, Vol. 36, No. 1, pp. 29-34.

21. Saayman, M., Saayman, A. (2009), "Why travel motivation and socio-demographics matter in managing a national park", *Koedoe*, Vol. 51, No. 1, pp. 1-9.
22. Saayman, M., Saayman, A. (2012), "Determinants of Spending: an Evaluation of Three Major Sporting Events", *International Journal of Tourism Research*, Vol. 14, No. 2, pp. 124-138.
23. Smolčić Jurdana, D., Soldić Frleta, D. (2017), "Satisfaction as a determinant of tourist expenditure", *Current Issues in Tourism*, Vol. 20, No. 7, pp. 691-704.
24. Stynes, D. J., White, E. M. (2006), "Reflections on measuring recreation and travel spending", *Journal of Travel Research*, Vol. 45, No. 1, pp. 8-16.
25. Svensson, B., Moreno, P., Martín, D. (2011), "Understanding travel expenditure by means of market segmentation", *Service Industries Journal*, Vol. 31, No. 10, pp. 1683-1698.
26. Tang, Q., Turco, D. M. (2001), "Spending behaviors of event tourists", *Journal of Convention & Event Tourism*, Vol. 3, No. 2, pp. 33-40.
27. Thrane, C. (2014), "Modelling micro-level tourism expenditure: Recommendations on the choice of independent variables, functional form and estimation technique", *Tourism Economics*, Vol. 20, No. 1, pp. 51-60.
28. Thrane, C. (2016), "The determinants of Norwegians' summer tourism expenditure: foreign and domestic trips", *Tourism Economics*, Vol. 22, No. 1, pp. 31-46.
29. Thrane, C., Farstad, E. (2012), "Nationality as a segmentation criterion in tourism research: the case of international tourists' expenditures while on trips in Norway", *Tourism Economics*, Vol. 18, No. 1, pp. 203-217.
30. Wang, Y., Davidson, M. C. G. (2010a), "A review of micro analyses of tourist expenditure", *Current Issues in Tourism*, Vol. 13, No. 6, pp. 507-524.
31. Wang, Y., Davidson, M. C. G. (2010b), "Chinese holiday makers' expenditure: Implications for marketing and management", *Journal of Hospitality Marketing and Management*, Vol. 19, No. 4, pp. 373-396.
32. Wang, Y., Rompf, P., Severt, D., Peerapatdit, N. (2006), "Examining and identifying the determinants of travel expenditure patterns", *International Journal of Tourism Research*, Vol. 8, No. 5, pp. 333-346.
33. Wu, L., Zhang, J., Fujiwara, A. (2013), "Tourism participation and expenditure behaviour: Analysis using a scobit based discrete-continuous choice model", *Annals of Tourism Research*, Vol. 40, pp. 1-17.

## **(ENDNOTES)**

- 1 Croatian Bureau of Statistics (2017), "Tourist arrivals and nights in 2016", First Release, No. 4.3.2.
- 2 *ibid.*
- 3 *ibid.*
- 4 *ibid.*
- 5 *ibid.*

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## UVID U POTROŠNJU HOTELSKIH GOSTIJU I GOSTIJU KOJI BORAVE PRIVATNOM SMJEŠTAJU

### SAŽETAK

Svrha je ovog rada analiza visine i strukture turističke potrošnje hotelskih gostiju i gostiju koji borave u privatnom smještaju. Pored navedenoga, cilj je bio utvrditi čimbenike koji utječu na njihovu razinu turističke potrošnje. Rezultati se temelje na istraživanju provedenom u Opatiji i Rijeci, dvjema susjednim hrvatskim destinacijama, u razdoblju od siječnja do prosinca 2016. godine. Uzorak čini 984 ispitanika podijeljenih u dvije skupine. Prvu skupinu čine oni koji borave u privatnom smještaju, a drugu oni koji borave u hotelima. Za profiliranje uzorka korištena je deskriptivna analiza, dok je analiza varijance (ANOVA) provedena kako bi se utvrdila eventualna postojanost značajnih razlika između hotelskih gostiju i onih koji borave u privatnom smještaju u smislu njihovih socio-demografskih obilježja, obilježja putovanja i boravka, kao i njihove razine i strukture turističke potrošnje. Naposljetku su provedene dvije višestruke regresijske analize kako bi se identificirale determinante turističke potrošnje za obje skupine ispitanika.

Rezultati ukazuju na postojanost statistički značajne razlike u razinama potrošnje između hotelskih gostiju i onih gostiju koji borave u privatnom smještaju. Nadalje, prihodi, duljina boravka, organizacija putovanja i tip grupe koja putuje zajedno pokazali su se kao značajni prediktori potrošnje u destinaciji kod obiju skupina. Istovremeno je utvrđeno da se dvije skupine razlikuju s obzirom na niz drugih prediktora turističke potrošnje.

**Ključne riječi:** turistička potrošnja, odrednice potrošnje, privatni smještaj, hotelski gosti