FACTORS AFFECTING THE EXPENDITURE OF DOMESTIC AND FOREIGN TOURISTS – THE EVIDENCE FROM RIJEKA AND OPATIJA, CROATIA

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Abstract
The purpose of this research was to analyse tourist expenditure determinants using a survey of domestic and foreign tourists visiting Rijeka and the Opatija Riviera during summer 2014. This study had two aims. The first was to investigate the differences, if any, between domestic and foreign tourist expenditures (both daily expenditure and total expenditure during the whole stay). The other aim was to determine the impact of a set of relevant control variables on daily tourist expenditure in the destination, separately for domestic and foreign tourists. Tourist characteristics and trip-related variables are used to identify the determinants of expenditures. In addition, tourist satisfaction levels were included in the models as explanatory variables. Descriptive statistical analysis was performed on the socioeconomic, demographic, travel and attitudes-related variables to obtain frequencies. Simple linear regression was performed to test for statistically significant differences between domestic and foreign tourist expenditures. Furthermore, multiple regression analyses were carried out separately on domestic and foreign respondents to determine what factors affect their respective expenditure. The findings provide evidence of the differences in expenditure between domestic and foreign tourists as well as the existence of different determinants of their daily expenditure levels. The study provides valuable information for tourism management since it reveals the type of tourists that have a higher economic impact on a destination. Research results could serve as guidelines for modifying tourism management and marketing policies, strategies and plans in order to attract the most interesting type of tourists and ensure their repeat visits.
Keywords: tourist expenditure, expenditure determinants, domestic and foreign expenditures

INTRODUCTION

The tourism industry in Croatia makes an important contribution to the Croatian economy in terms of the revenue it generates and the employment opportunities it creates. According to WTTC (2015a,b) total tourism contribution to the Croatian GDP in 2014 accounted for 28.3%, and it is estimated that it will reach up to 36.2% by 2025, whereas at the European level this contribution remains almost at the same level as in 2014 (10.4%). In addition, the total contribution of tourism to employment was 30.2% of total Croatian employment (WTTC, 2015a). Partly responsible for these related effects are the expenditures of foreign tourists visiting Croatia, particularly during summer months. In this paper, the expenditure patterns of domestic and international summer tourists are examined.

The purchasing behaviours of tourists vary because tourists differ in terms of their demographics, economic constraints, length of stay, motives, attitudes and many other aspects. These variations lead to differences in expenditure among tourists. Hence, the use of tourist arrivals, which does not reflect tourist consumption patterns and expenditures, cannot precisely measure the economic impact that tourism has on a destination (Wang and Davidson, 2010a). It should be noted that the impact of expenditure of domestic and foreign tourists on the national economy is significantly different. Both domestic and international tourists add value to an economy. However, domestic visitors contribute in an economic sense only if their alternative choice would be to travel abroad; otherwise they represent a redistribution of expenditure within the domestic economy (Kyriakidis et al., 2009). Thus, it is of great value to research the levels, structures and determinants of both domestic and foreign expenditure.

Tourist expenditure is one of the most critical variables of analysis for tourist destinations, since it directly determines the tourism sector's profitability (Kastenholz, 2005). Tourist expenditure affects many economic activities such as transportation, accommodation and restaurants (García-Sánchez et al., 2013). According to Craggs and Schofield (2009), tourism has long been viewed as a tool for economic development because of its ability to generate substantial economic benefits. The economic impact of tourism is driven by the number of tourists and the amount they spend. An increase in tourists' overall expenditure can be attributed to an increase in the total number of days tourists spend in a given destination, and/or to an increase in tourists' daily expenditure (García-Sánchez et al., 2013). Therefore, as the same authors have pointed out, from a policy point of view, it is very important to understand what the main determinants of both daily expenditure and total number of overnight stays are. Analysis of the main determinants of overnight stays is usually done on the macro level using time-series data while the main factors driving tourists' daily expenditure can be better analysed at the micro level, using a data set containing information on both tourist and trip characteristics (García-Sánchez et al., 2013). This study focuses on the micro level since tourist characteristics and trip-related variables are used to identify the determinants of daily expenditures realised in the destination by domestic and foreign tourists. In addition, tourist satisfaction levels were included in the models as explanatory variables as well.

The main purpose of this study was to investigate the differences, if any, in the spending patterns of domestic and international tourists as well as the determinants of their expenditure in the destination. Identification of the factors that influence tourist expenditure in the destination could provide valuable information for tourism management. In this way, management would be aware of the type of tourists that have a higher economic impact on a destination, and would be able to modify its policies, strategies and plans in order to attract the most interesting type of tourist and ensure their repeat visits.

1. FACTORS EXPLAINING TOURIST EXPENDITURE – LITERATURE REVIEW

The literature on the analysis of tourist spending determinants based on micro data is scarce in comparison with analysis based on aggregate data (Cannon and Ford, 2002; Nicolau and Más, 2005; Fredman, 2008; Cragges and Schofield, 2009; Brida and Scuderi, 2013). Namely, tourist expenditure and its determinants have been widely investigated in the literature from the macro perspective, with the general aim of assessing the economic impact of tourism (Marrocu et al., 2015), but less is known about tourist expenditure at a micro scale (Craggs and Schofield, 2009). Alegre and Pou (2004) point out that, although macro- and micro-economic studies serve different purposes, micro-econometric models have advantages over macro-econometric models in the way that the micro models do not deviate too far from theoretical economic consumer models. In addition, micro models allow for the control of participation bias, which is introduced when the analysis is based on aggregated data and they acknowledge the diversity and heterogeneity of consumer behaviours that are ignored in studies using highly aggregated data (Alegre and Pou, 2004).

According to the comprehensive review of econometric approaches for the analysis of tourism expenditure at the individual level presented by Brida and Scuderi (2013), the most widely used methodology to estimate expenditure equations is ordinary least squares regression (OLS). OLS has been used in the literature by many authors (i.e. Agarwal and Yochum, 2000; Aguiló and Juaneda, 2000; Downward and Lumsdon, 2004; Chhabra, 2006; Laesser and Crouch, 2006; Fredman, 2008; Wang and Davidson, 2010b; García-Sánchez et al., 2013). In line with the mentioned studies, this research includes OLS regression analysis too.

Expenditure levels, as a dependent variable, appear in the literature in different forms. According to García-Sánchez et al. (2013) there are studies based on calculating the average amount spent by tourists per trip (i.e. Mok and Iverson, 2000); then, there are researches that estimate expenditures per person on a daily basis (i.e. Aguiló and Juaneda, 2000; García-Sánchez et al. 2013). In addition to those mentioned, there are studies that try to categorize tourists according to how much they spend in total (including companions and vacation days), which is used as a dependent variable in the model (i.e. Jang et al, 2004). The present research fits into the second type since daily tourist expenditure represents the dependent variable in the models.

At the micro level, the majority of studies include the socio-economic and demographic characteristics of tourists (i.e. age, gender, marital status, occupation, income, nationality, etc.) as individual tourist expenditure determinants, along with trip-related variables (i.e. travel mode, size of travel group, length of stay, type of accommodation, services booked, etc.) (Alegre et al., 2011). Brida & Scuderi (2013) point out that psychological variables are rarely used, suggesting the need for further research into this area. Therefore, the model in this study includes psychological variables, since the consideration of satisfaction with the tourism offering, and the intention to return and to recommend the destination to others are determinants that fit in with the psychological approach to expenditure behaviour.

Starting with socio-economic and demographic variables, income has been a common positive correlate of expenditure (Jang et al., 2004; Nicolau & Más, 2005; Wang et al., 2006; Fredman, 2008, Wang & Davidson, 2010b; Thrane and Fastad, 2011; Brida et al., 2013; García-Sánchez et al., 2013; Marrocu et al., 2015). The role of age is not conclusive (Kastenholz, 2005), though some studies (i.e. Jang et al., 2004 and Jones et al. 2009) have found a positive relationship between age and total expenditure, while others have revealed an inverse relationship (i.e. Chhabra, 2006, Wang et al. 2006) or found no effect (i.e. Jang et al., 2004). The research results reported by Aguilo and Juaneda Sampol (2000) and Jang et al. (2004) found that the level of education is also a significant variable in explaining daily expenditure, indicating that tourists with a higher level of education spend more in the destination than those with lower education. Conversely, Nicolau and Más (2005) did not find a statistically significant relationship between level of education and tourist spending. Thrane and Fastad (2011). Serra et al. (2015) found that nationality is a significant independent variable. Furthermore, Kastenholz's (2005) findings indicate that foreign tourists tend to spend more in a destination than domestic tourists, while Cannon and Ford (2002) demonstrated that expenditure levels increased for out-of-state visitors, indicating that place of residence is also related to expenditure. The spending patterns of men and women may also vary in significant ways (Kim et al., 2011).

As far as trip-related variables are concerned, group size (Downward and Lumsdon, 2003) and duration of stay were shown to be positively correlated to overall expenditure levels (Downward and Lumsdon, 2004; Nicolau and Más, 2005; Serra et al. 2015). Aguilo and Juaneda (2000) found that, among others, type of accommodation also explains expenditure. Laesser and Crouch (2006), Svensson et al. (2011) and García-Sánchez et al., (2013) indicate that tourists who are staying in hotels tend to spend more in the destination than those who are staying in other types of accommodation.

Psychological variables include tourists' evaluation of trip/holiday/vendor, psychological characteristics, trip motives, and taste (Wang and Davidson, 2010a). Among these, motivation is the most employed independent variable, while, as Wang et al. (2006) point out, other variables referring to tourists' attitudes and perceptions are rarely employed. The findings of Serra et al (2015) reveal that recommendation of destination and return intention positively affect tourist spending. When it comes to satisfaction, a small number of authors have attempted to investigate its impact on tourist expenditure (i.e. Craggs and Schofield, 2009; Kim et al., 2011; Wang and Davidson, 2010b; Zhang et al., 2010; Chen and Chang, 2012; Serra et al. 2015). Nevertheless, no solid conclusion can be made in this regard due to the small number of studies.

As evident from the previous review, the empirical findings of the effect of the mentioned variables on tourism expenditure are often in conflict. Thus there is a need for further research in this field.

2. DATA AND METODOLOGY

The data used to study determinants of tourist expenditure were collected in Rijeka and the Opatija Riviera during the summer of 2014. In the period between early May and late August occurred 69% of the total number of tourist arrivals in Rijeka and Opatija Riviera in 2014 (429.924 tourists visited these destinations during summer months) (Croatian Bureau of Statistics, 2015). A stratified sampling method, as well as a self-administered questionnaire, was applied. Given the seasonality of tourist traffic, a larger portion of the questionnaires were filled during July and August (26.2% and 33.1%, respectively, of the total sample), while 19.5% of the questionnaires were filled during May and 21.2%, during June. Ultimately, 707 questionnaires were gathered, but only 523 useful surveys were retained for data analysis.

The questionnaire comprised four parts designed to garner a wide range of information from tourists staying at least one night in selected destinations. The first part considered 22 tourism offering elements of a destination. Respondents were asked to rate their satisfaction level with each item on a five-point Likert scale, with 1 set to strongly unsatisfied and 5 set to strongly satisfied. The second part was designed to gather socio-economic and demographic information. The third part of the questionnaire aimed to obtain information about the characteristics of stay in the destination. This part included items such as the length of stay, party size, type of accommodation, motivations, and the intention to return to the destination or recommend it to other tourists. The last part of the questionnaire collected data on expenditure related to accommodation, food and beverages, entertainment and culture, sport and recreation, shopping, and other expenses in the destination.

First, descriptive statistical analysis was performed on the socioeconomic, demographic and travel-related characteristic variables to obtain frequencies. Furthermore, descriptive statistical analysis was performed on the daily per capita expenditure in order to gain information on tourist expenditure levels and structure. The study had two aims. The first aim was to test for any differences between domestic and foreign tourist expenditures (both daily expenditure and total expenditure during the whole stay). The other aim was to determine the impact of a set of relevant control variables on daily tourist expenditure in the destination, separately for domestic and foreign tourists. In this regard, models included the following control variables, some of which have been linked successfully to tourism expenditures in past research: monthly family income (Thrane, 2002; Jang et al., 2004; Wang et al., 2006; Kim et al., 2011; Wang and Davidson, 2010b; García-Sánchez et al., 2013; Marrocu et al., 2015); education level (Aguilo and Juaneda Sampol, 2000; Jang et al., 2004; Craggs and Schofield, 2009; Kim et al., 2011; Saayman and Saayman, 2012; Wynen, 2013); gender (Jang et al., 2004; Craggs and Schofield, 2009); length of stay (Downward and Lumsdon, 2000, 2004; Laesser and Crouch, 2006; Fredman, 2008; Thrane and Farstad, 2011); number of visits (Jang et al., 2004; Svensson et al., 2011). Apart from the mentioned variables, this study includes some variables that have not been applied so often as predictors of tourist expenditure in the destination: intention to return, recommendation, trip organization, destination, and satisfaction with the destination's tourism offering. Furthermore, the sample was divided into two subsamples: domestic and foreign tourists. Following convention, OLS regression analysis was used as the estimation

technique (Thrane and Farstad, 2012). It has to be pointed out that expenditure in the destination did not include any measure of the transportation cost of travelling to, and returning home from, the destination since the focus of the research was only on the expenditure realised in the destination. Regarding functional form, natural logarithms of daily and total tourist expenditures were used as dependent variables in regression models. Thrane (2014) indicates that using a natural logarithm of positive expenditures, as opposed to their level form equivalents, tends to mitigate heteroscedasticity and often reduces the influence of outliers, yielding a better model fit. All estimations were carried out in SPSS, version 22.

3. EMPIRICAL RESULTS

For the purpose of this paper, the sample of 523 respondents was divided into two groups: domestic and foreign respondents (14% and 86%, respectively, of the whole sample). Among foreign tourists the majority were from Germany (19.8%), Italy (14.9%) and Slovenia (11.6%), followed by tourists from France (4.9%), Hungary (4.2%), the Czech Republic (4.2%), Bosnia and Herzegovina (4.0%) and the United Kingdom (3.6%).

The respondents' characteristics are presented separately for domestic and foreign respondents in Table 1.

Table 1: **Socio-demographic and travel-related characteristics of the respondents**

Characteristics	**Domestic (N= 74)**	**Foreign (N= 449)**	**Characteristics**	**Domestic (N= 74)**	**Foreign (N= 449)**
	%	**%**		**%**	**%**
Gender			*Accommodation*		
Male	*44.6*	*49.7*	*Hotel 3* or less*	*25.7*	*34.3*
Female	*55.4*	*50.3*	*Hotel 4* or 5**	*13.5*	*16.0*
Age			*Camp*	*4.1*	*8.0*
18 – 35	*58.1*	*46.1*	*Private apartments*	*18.9*	*25.4*
35 – 55	*29.7*	*38.5*	*Friends and relatives*	*32.4*	*11.6*
56 and more	*12.2*	*15.4*	*Hostel*	*5.4*	*4.7*
Education level			*Accommodation service*		
High school or less	*43.2*	*25.6*	*Full board*	*14.9*	*9.1*
College	*14.9*	*25.0*	*Half board*	*20.3*	*20.0*
University degree	*41.9*	*49.4*	*Bed and breakfast*	*21.6*	*27.8*
Monthly family income			*Only overnight stay*	*43.2*	*43.0*
1000 € or less	*32.2*	*10.5*	*Number of visit*		
1001 – 2000 €	*54.1*	*30.0*	*First visit*	*37.8*	*52.1*
2001 – 3000 €	*10.9*	*37.9*	*Repeat visit*	*62.2*	*47.9*
3001 € or more	*2.8*	*21.6*	*Length of stay*		
Destination			*1-3 days*	*33.8*	*25.6*
Opatija Riviera	*66.2*	*62.8*	*4-7 days*	*50.0*	*54.6*
Rijeka	*33.8*	*37.2*	*7 days and more*	*16.2*	*19.8*
Organisation					
Individual	*95.9*	*86.6*			
Organised	*4.1*	*13.4*			

Source: Authors

As seen in Table 1, the domestic sample consists of 44.63% and 55.4% of male and female respondents, respectively. More than 58% of respondents are 35 years old or younger and more than 56% hold a college or university degree. In the case of foreign respondents, 49% are male and 50%, female; more than 49% are 35 years old or younger, while 38% are between 35 and 55 years old. Fully 74% of foreign respondents hold a college or university degree. The majority of domestic and foreign tourists individually organised their trip. While 39% of domestic respondents are staying in hotels, 32% are staying with friends and relatives. On the other hand, more than 50% of foreign respondents are staying in hotels. The majority of respondents are staying between four and seven days in the destination, while more than 37% of domestic, and 52% of foreign, tourists are on their first visit.

The majority of domestic and foreign respondents would recommend the destination to others (94.6% and 92.4%, respectively). In addition, 90.5% of domestic, and 84.4% of foreign, respondents are planning to visit the destination again.

Table 2: **Level of satisfaction with destination offering**

Satisfaction with	Domestic		Foreign	
	Mean	Std. Deviation	Mean	Std. Deviation
Quality and hospitality	*4.1*	*0.512*	*4.2*	*0.478*
Diversity of facilities	*3.4*	*0.689*	*3.5*	*0.498*
Information	*3.7*	*0.647*	*3.9*	*0.618*
Destination preservation and maintenance	*3.9*	*0.697*	*4.1*	*0.576*

Note: A five-point Likert-type scale ranging from strongly dissatisfied (1) to strongly satisfied (5) was used.
Source: Authors

When it comes to satisfaction with the tourism offering in the destination, results indicate that satisfaction levels of domestic and foreign tourists are similar (Table 2). In both cases, respondents are the most satisfied with the elements of quality and hospitability and the least satisfied with diversity of facilities in the destination (i.e. sports and children facilities, entertainment opportunities, diversity of cultural events, excursion offer and shopping opportunities).

Table 3 reveals that in the case of total expenditure during the whole stay, tourists from Norway are spending the most in the destination (1021€ per stay per person), followed by Slovenians (935€) and Czechs (613€). Nevertheless, the highest daily expenditure is realised by Norwegians (171€ per person), Americans (115€) and Swedes (107€).

Results also revealed that the average total expenditure of tourists during their whole stay in the destination amounts to 451 € and their average daily expenditure per person, to 78 €. (Table 3).

Table 3: **Expenditure in the destination by the country of origin**

Country of origin	Total expenditure during whole stay/person	Daily expenditure/person
	Mean	Mean
Norway	*1021*	*171*
USA	*295*	*115*
Sweden	*543*	*107*
Belgium	*597*	*96*
UK	*433*	*91*
Austria	*493*	*90*
France	*372*	*83*
Germany	*449*	*82*
Italy	*448*	*81*
Czech Republic	*483*	*75*
Russia	*953*	*73*
Slovenia	*378*	*72*
Hungary	*397*	*71*
Poland	*316*	*69*
Netherland	*386*	*68*
Croatia	*406*	*65*
Swiss	*161*	*62*
Bosnia and Herzegovina	*384*	*62*
Other countries	*613*	*75*
Whole sample	*451*	*78*

Source: Authors

Average total expenditure during the whole stay per person amounts to 406€ for domestic tourists and to almost 460€ for foreign tourists (Table 4). Daily expenditure of domestic tourists is on average 65€ and that of foreign, almost 81€. In both cases, domestic and foreign respondents spent most of their tourism budget on accommodation (34% and 38%, respectively), then on food and beverages (24% and 23%, respectively); this is followed by expenditure on shopping (14% and 13%, respectively). Domestic respondents in the destination spent 13% of their budget on entertainment and culture, while foreign respondents spent 9%. Both, domestic and foreign respondents spent only 2% on sport and recreation.

Table 4: **Structure of domestic and foreign tourist expenditure**

	Domestic	Foreign
Total expenditure during whole stay/person (mean)	*406.4*	*459.9*
Total daily expenditure/person (mean)	*65.3*	*80.8*
Expenditure on accommodation (%)	*34*	*38*
Expenditure on food and beverages (%)	*24*	*23*
Expenditure on entertainment and culture (%)	*13*	*9*
Expenditure on sports and recreation (%)	*2*	*2*
Expenditure on shopping (%)	*14*	*13*
Expenditure on excursions (%)	*5*	*8*
Expenditure on other products and services (%)	*8*	*6*

Source: Authors

In order to test for any statistically significant differences between domestic and foreign tourist expenditures, simple linear regression was performed. Results confirmed that foreign tourists tend to spend more during their whole stay in the destination in comparison with domestic tourists (R= 0.105; F (1.521) = 5.835; p< 0.05). A statistically significant difference between the daily expenditure of domestic and foreign tourists was found as well (R= 0.145; F (1.521) = 11.112; p< 0.01), indicating that in the destination foreign tourists also tend to spend more per day than domestic tourists (reference group). It was expected that spending pattern of domestic tourists will be different due to the fact that domestic tourists are more familiar with the situation in these destinations than foreign ones. This result is in line with the results of the study by Kastenholz (2005).

Table 5: **Regression models – daily expenditure of domestic and foreign tourists**

Variables	Domestic			Foreign		
	Coefficient B	**Std. Error**	**Sig.**	**Coefficient B**	**Std. Error**	**Sig.**
(Constant)	*3.196*	*.629*	*.000*	*3.482*	*.248*	*.000*
Family income	*.156*	*.053*	*.005*	*.097*	*.014*	*.000*
Education level	*.099*	*.079*	*.218*	*.042*	*.029*	*.151*
Gender	*-.141*	*.134*	*.295*	*-.044*	*.045*	*.333*
Length of stay	*.015*	*.015*	*.312*	*-.012*	*.002*	*.000*
Past behaviour (number of visits)	*-.006*	*.007*	*.348*	*-.010*	*.006*	*.110*
Intention to return (0 – no; 1 – yes)	*-.230*	*.281*	*.416*	*.072*	*.081*	*.372*
Recommendation (0 – no; 1 – yes)	*.331*	*.369*	*.374*	*-.217*	*.110*	*.050*
Organisation (0 – individual; 1 – other)	*.589*	*.355*	*.103*	*.196*	*.067*	*.004*
Destination (0-Opatija Riviera; 1-Rijeka)	*.323*	*.154*	*.040*	*.064*	*.048*	*.182*
Satisfaction with quality and hospitability	*-.007*	*.186*	*.969*	*.154*	*.061*	*.012*
Satisfaction with diversity of facilities	*.033*	*.127*	*.796*	*.119*	*.051*	*.021*
Satisfaction with information	*-.091*	*.133*	*.497*	*-.040*	*.042*	*.335*
Satisfaction with destination preservation and maintenance	*.055*	*.131*	*.679*	*-.121*	*.047*	*.011*
Model diagnostics						
R^2	*.332*	*.542*		*.255*	*.474*	
R^2 adjusted	*.187*			*.232*		
F-statistics	*2.295*		*.015*	*11.424*		*.000*

Note: Dependent variable: log daily expenditure per person

Source: Authors

Multivariate regression analyses were performed for the purpose of finding out what factors influence the expenditure of domestic and foreign tourists. The first multivariate regression analysis included a natural logarithm of daily expenditures of domestic respondents in the destination, while the second analysis included a natural logarithm of daily expenditure of foreign tourists as a dependent variable.

Table 5 illustrates regression coefficient estimates. The model that includes the daily expenditure of domestic tourists in the destination explains 33% of the total variance in individual expenditure levels (R^2= 0.332; F (13,60)= 2.295; p<0.05). This is satisfactory since according to Thrane (2014) a model explaining less than around 30% of the variance in expenditures will most likely suffer from the omission of one or several relevant independent variables (which amounts to misspecification) and thus yield unreliable results. The model that includes foreign daily expenditure as a dependent variable has lower explanatory power since the variables in the model explain almost 26% of the variance in foreign expenditures (R^2= 0.255; F (13.435)= 11.424; p<0. 01).

In both cases (domestic and foreign expenditure), family income has been proved to be a significant predictor of daily expenditure since a significant positive relationship was found in both models. The results indicate that tourists with higher monthly family income tend to spend more in the destination than those with lower income. These results are in line with other studies that found a positive relationship between family income and travel expenditure (i.e. Agarwal and Yochum, 2000; Cannon and Ford, 2002; Thrane, 2002; Downward and Lumsdon, 2003; Jang et al. 2004; Nicolau and Más, 2005; Wang and Davidson, 2010b; Brida et al., 2013; García-Sánchez et al., 2013; Marrocu et al., 2015).

As for the daily expenditure of domestic respondents, in addition to family income, the destination itself turned out to be a significant variable, indicating that those domestic tourists who are staying in Rijeka tend to spend 32% more compared with those staying on the Opatija Riviera. This finding could be probably explained by the fact that possibilities of spending are more diverse in Rijeka than in Opatija.

On the other hand, regarding the model with foreign tourist expenditure as a dependent variable, in addition to family income, five other variables turned out to be significant (length of stay, recommendation, organisation of the trip, satisfaction with quality and hospitability, diversity of facilities and satisfaction with destination preservation and maintenance). Results show the negative effect of length of stay on daily expenditure, indicating that the longer the stay, the lower the daily expenditure. Downward and Lumsdon (2003), Kastenholz (2005) and Svensson et al. (2011) found similar results. An interesting finding is related to recommendation: it was found that tourists who are not planning to recommend the destination to others tend to spend more than those who would recommend the destination. One of the reasons for this could be that lower expenditure is a motivator of the latter to recommend the destination since they are not spending large amounts of money in the destination and consider that to be a positive factor of the destination. This finding is in line with the findings of Chhabra et al. (2002). The results also confirmed that tourists who organised their stay through a travel agency tended to spend more in the destination than those who individually

organised their stay. This could be explained by the fact that tourists who organise their stay through a travel agency usually pay their arrangement before taking the trip, hence, upon arrival at the chosen destination they have greater amount of money for spending since the majority of the costs related to travel and stay have been already covered. A negative effect was found in the case of satisfaction with destination preservation and maintenance. Tourists who are more satisfied with this dimension tend to spend less per day. Because the relationship between satisfaction with the tourism offering and tourist expenditure has seldom been tested, findings related to these variables are very important. In addition, in this model, as seen in Table 5, foreign tourists' satisfaction with quality and hospitability, as well as with the diversity of facilities, has been proved to be a significant predictor of their daily expenditure. Consequently, tourists who are more satisfied tend to spend more than those who are less satisfied with the mentioned dimensions.

The results of the regression analyses confirmed that not only are there differences between expenditures of domestic and foreign tourists, but there are also differences in factors that determine these expenditures. Given the importance that tourism expenditure has on local economy, it is of great importance to continuously investigate expenditure realised in the destination. Moreover, it is necessary to determine what factors affect total and daily expenditure in order to be able to exert influence on those elements that lie in the power of destination management which could help to enhance tourist expenditure.

4. CONCLUSION

This paper analyses the determinants of domestic and foreign tourist expenditure, an important variable in tourism demand analysis. It confirms that there are statistically significant differences in total and daily expenditure between domestic and foreign tourists. In both cases, results indicate that in comparison with domestic tourists, foreign tourists tend to spend more in the destination. Nevertheless, it has to be noted that although foreign tourists spend more in the destination and are an economically more attractive segment, the domestic market should not be neglected since it also adds value to the destination's economy.

Regression analyses were performed to test which of the independent variables affect the daily expenditure of domestic and foreign tourists. From these analyses, the following conclusions may be drawn:

- Family income has been confirmed as a significant predictor of daily tourist expenditure in the case of domestic and foreign tourists. The results confirm that tourists with higher income tend to spend more than those with lower family income.

- Duration of stay is an ambivalent variable, since it was found that it has a negative impact only on the daily expenditure levels of foreign tourists, while having no significant impact on the daily expenditure of domestic tourists. Destination is also an ambivalent variable. With regard to domestic tourists, those staying in Rijeka tend to spend more per day than those staying on the Opatija Riviera. On the other hand, the destination does not have any significant impact on the daily expenditure of foreign tourists.
- Foreign tourists who organised their trip through a travel agency tend to spend more compared with those foreigners who individually organised their stay. Recommendation and education level have been statistically significant predictors only of total expenditure of foreign tourists.
- Education level, gender, past behaviour, intention to return and satisfaction with information were insignificant in both models.
- In regard with satisfaction, foreign tourists who are more satisfied with quality and hospitability and with facilities in the destination tend to spend more per day than those less satisfied with those dimensions. At the same, foreign tourists who are more satisfied with destination preservation and maintenance tend to spend less per day. With regard to the daily expenditure of domestic tourists, satisfaction with any of the dimensions has not been proved to be a significant variable.

The empirical findings confirm the high complexity of the tourism product, as the evidence found indicates that expenditure levels depend on many factors, as revealed by results based on the regression models. Although this finding makes it difficult to provide a straightforward summary of the results, it provides a comprehensive picture of tourist expenditure in Rijeka and the Opatija Riviera. Thus, a number of implications that are relevant for both policy makers and destination managers can be derived, as the results of this study can contribute toward creating guidelines for tourism management aimed at boosting tourist expenditure levels. As mentioned by Alegre et al. (2011), the challenge for destination management and marketing is to be aware of the differences that can exist in the tourism market and to know how to respond adequately. Tourist expenditure could be enhanced by managerial practices aimed at strengthening, innovating and enlarging the tourism offering in the destination since this research revealed that tourists' satisfaction with facilities is a significant factor of their expenditure. It would be in the interest of the destination to include local services and product in its offering as much as possible. In this way, a larger share of tourism revenue would be likely to remain in the destination and be reinvested in the tourism offering. Therefore, in order for destinations to be economically sustainable, it is necessary to innovate and enhance the quality of the tourism offering so that tourism revenue increases rather than the number of arrivals.

Considering the limitations of the research it has to be pointed out that the models presented in this study did not consider all possible variables and the explanatory power of the second model is modest. Consideration of other relevant variables that characterise the tourists and their stay in the destination (i.e. composition of the travel group, type of accommodation, motives, transportation mode) might lead to models with higher explanatory power. In further research it is recommended that, along with a larger sample, research be conducted during a longer time period (including the season

and offseason). Thus, it would be possible to compare the expenditure levels, their structure and the factors that affect expenditure in the peak season and in the offseason.

REFERENCES

Agarwal, V.B. and Yochum, G.R.,(2000), "Determinants of tourist spending", in Woodside, A.G., Crouch,G. I., Mazanec, J.A., Oppermann, M. and Sakai, M. Y. (Eds.), *Consumer psychology of tourism, hospitality and leisure*, CABI Publishing, pp. 311-330.

Aguilo Perez, E. and Juaneda Sampol, C. (2000), "Tourist expenditure determinants for mass tourism markets", *Annals of Tourism Research,* Vol. 27, No. 3, pp. 624-637.

Alegre, J., and Pou, L. (2004), "Micro-economic determinants of the probability of tourism consumption", *Tourism Economics*, Vol. 10, No. 2, pp. 125–144.

Alegre, J., Cladera, M. and Sard, M. (2011), "Analysing the influence of tourist motivations on tourist expenditure at a sun-and-sand destination", *Tourism economics*, Vol. 17, No. 4, pp. 813-832.

Brida, J.G. and Scuderi, R., (2013), "Determinants of tourist expenditure: A review of microeconometric models", *Tourism Management Perspectives*, No. 6, pp. 28-40.

Cannon, T.F. and 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.

Chen, C.-M. and Chang, K-L. (2012), "The influence of travel agents on travel expenditures", *Annals of Tourism Research*, Vol. 39, No. 2, pp. 1258-1263.

Chhabra, D., Sills, E., and Rea, P. (2002), "Tourist expenditures at heritage festivals", *Event Management*, Vol 7, No 4, pp 221–230.

Craggs, R. and Schofield, P. (2009), "Expenditure-based segmentation and visitor profiling at The Quays in Salford, UK", *Tourism Economics*, Vol. 15, No. 1, pp. 243-260.

Croatian Bureau of Statistics. (2015), *Tourist arrivals and nights in 2014*. First Release, No. 4.3.2.

Downward, P. and Lumsdon, L. (2004), "Tourism transport and visitor spending: A study in the North York Moors National Park, UK" *Journal of Travel Research,* Vol. 42, No. 4, pp. 415-420.

Downward, P., and Lumsdon, L. (2000), "The demand for day-visits: An analysis of visitor spending", *Tourism Economics,* Vol. 6, No. 3, pp. 251-261.

Fredman, P. (2008), "Determinants of visitor expenditures in mountain tourism", *Tourism Economics*, Vol. 14, No. 2, pp. 297-311.

García-Sánchez, A., Fernández-Rubio, E. and 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.

Jang, S. C., Bai, B., Hong, G-S. and O'Leary, J. T. (2004), "Understanding travel expenditure patterns: A study of Japanese pleasure travellers to the United States by income level", *Tourism Management,* Vol. 25, No. 3, pp. 331-341.

Jones, T., Wood, D., Catlin, J., and Norman, B. (2009), "Expenditure and ecotourism: predictors of expenditure for whale shark tour participants", *Journal of Ecotourism*, Vol. 8, No. 1, pp. 32-50.

Kastenholz, E. (2005), "Analysing determinants of visitor spending for the rural tourist market in North Portugal", *Tourism economics*, Vol. 11, No. 4, pp. 555-569.

Kim, W.G., Kim, T., Gazloli, G., Park, Y., Kim, S.H. and Park, S.S. (2011), "Factors affecting the travel expenditure of visitors to Macau, China", *Tourism Economics*, Vol. 17, No. 4, pp. 857-883.

Kyriakidis, A., Hancock, H., Oaten, S.and Bashir, R. (2009), "Capturing the Visitor Economy: A Framework for Success", in Blanke, J. and Chiesa, T. (Eds.), The Travel & Tourism Competitiveness Report 2009: Managing in a Time of Turbulence, World Economic Forum, Geneva, pp. 65-76.

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.

Marrocu, E., Paci, R. and Zara, A. (2015), "Micro-economic determinants of tourist expenditure: A quantile regression approach", *Tourism Management*, Vol. 50, pp. 13-30.

Mok, C., and Iverson, T.J. (2000), "Expenditure-based segmentation: Taiwanese tourists to Guam", Tourism Management, Vol 21, No 3, pp 299-305.

Nicolau, J.L. and Más, F.J., (2005), "Heckit modeling of tourist expenditure: Evidence from Spain", *International Journal of Service Industry Management*, Vol.16, No.3, pp. 271-293.

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.

Serra, J., Correia, A. and Rodrigues, P.M.M., (2015), "Tourist spending dynamics in the Algarve: a cross-sectional analysis", *Tourism Economics*, Vol. 21, No. 3, pp. 475-500.

Svensson, B., Moreno, P., and Martín, D. (2011), "Understanding travel expenditure by means of market segmentation" *Service Industries Journal,* Vol. 31, No. 10, pp. 1683-1698.

Thrane, C. (2002), "Jazz festival visitors and their expenditures: linking spending patterns to musical interest", *Journal of Travel Research*, Vol. 40, No. 3, pp. 281-286.

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.

Thrane, C. and Fastad, E. (2011), "Domestic tourism expenditures: The non-linear effects of length of stay and travel party size", *Tourism Management*, Vol. 32, No. 1, pp. 46-52.

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.

Wang, Y., and 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.

Wang, Y., Rompf, P., Severt, D. and Peerapatdit, N. (2006), "Examining and identifying the determinants of travel expenditure patterns", *International Journal of Tourism Research,* Vol. 8, No. 5, pp. 333-346.

WTTC (2015a), "*Travel & Tourism Economic Impact 2015 – Croatia",* viewed 20 April 2015, http://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/croatia2015.pdf

WTTC (2015b), "Travel & Tourism Economic Impact 2015 – European Union", viewed 20 April 2015, http://www.wttc.org/-/media/files/reports/economic%20impact%20research/regional%202015/europeanunion2015.pdf

Wynen, J. (2013), "An estimation of the determinants of same-day visit expenditures in Belgium", *Tourism Economics,* Vol. 19, No. 19, pp. 161-172.

Zhang, L., Qu, H. and Ma, J. E., (2010), "Examining the Relationship of Exhibition Attendees' Satisfaction and Expenditure: The Case of Two Major Exhibitions in China", *Journal of Convention & Event Tourism*, Vol. 11, No. 2, pp. 100-118.

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