

DETERMINANTS OF CRUISE PASSENGERS' EXPENDITURES IN THE PORT OF CALL*

*Maršenka Marksel***

*Polona Tominc****

*Stane Božičnik*****

Received: 18. 5. 2016

Review

Accepted: 3. 12. 2016

UDC 338.48:366

Cruise tourism generates different types of cruise consumption and related indirect, direct and induced expenditure effects, in homeports as well as in ports of call. Cruise passengers' expenditures produce positive economic effects for destinations, from increasing the incomes and employment, to tax incomes, duties, etc. Therefore, it is no doubt that cruise stakeholders and local economies can benefit from increased cruise passenger consumption. To stimulate higher consumption and passengers' satisfaction, it is necessary to design the supportive policy framework and build appropriate quality of products and services. Identifying influential variables of cruise passengers' expenditures in this sense enables the design of appropriate policies and measures. In the current research, based on a survey of 357 cruise passengers, several variables included in a new theoretical model of the expenditures determinants, such as gender, nationality, frequency of cruising and frequency of visits, were found to be statistically significantly associated with cruise passengers' expenditures. Several conclusions and suggestions to stimulate cruise passenger expenditures based on research findings are provided.

Keywords: Cruise tourism, Consumption, Behavioural intentions.

* The survey has been carried out within project FUTUREMED, which was co-funded by the European Union through MED programme.

** Maršenka Marksel, University of Maribor, Faculty of Civil Engineering, Transportation, Engineering and Architecture, Smetanova ulica 17, 2000 Maribor, Slovenia; e-mail: marsenka.marksel@um.si

*** Polona Tominc, University of Maribor, Faculty of Economics and Business, Razlagova 14, 2000 Maribor, Slovenia, e-mail: polona.tominc@um.si

**** Stane Božičnik, University of Maribor, Faculty of Civil Engineering, Transportation Engineering and Architecture, Smetanova ulica 17, 2000 Maribor, Slovenia; e-mail: stane.bozicnik@um.si

1. INTRODUCTION

Cruise passengers' expenditures, especially their volume and structure, have significant effect on profitability of cruise tourism and related industry sectors (Dwyer and Forsyth, 1998). Positive effects of cruise passengers' expenditures can be seen as direct, indirect or induced consumption effects. Direct passenger consumption effects derive from passengers' expenditures for goods and services consumed in destination of cruise that could be either city or even entire hinterland region or country. Indirect effects appear when local providers of goods and/or services, due to higher consumption, increase their own stock of goods and spread their services, consequently accelerating incomes and employment in economic activities linked to the cruise industry. Due to the higher personal incomes, householders increase their consumption as well, what implies the induced passenger consumption effects (STO, 2007). Due to cruise passenger consumption effects, mentioned above, cruise stakeholders can benefit a great deal by knowing the factors that relate or have impact on cruise passengers' expenditures and by adapting their offers to increase the volume of consumption. This will consequently increase the number of cruise passengers' and cruise industry, which will have a positive economic effect on the entire local economy. Therefore, the focus of this research is on depth analysis of demographic, geographic, psychological and travel-related characteristics of cruise passengers' expenditures in the port of call.

2. THEORETICAL BACKGROUND

Cruising, as addressed in this article, refers to sailing across oceans or sailing along the coasts, following certain travel plans or itineraries (Jankomin et al., 2001). Cruise ship represents all four aspects of the tourism industry: transport, accommodation, attractions and tour desk (CLIA, 2010). As an industry, cruising began to develop in the 70s' of the 20th century. In recent years, the industry was facing exceptional dynamic growth led by North American market demand. Nowadays, the largest cruise industry markets remain North America and Central America, followed by Europe, especially the Mediterranean region, Asia-Pacific and the rest of the world. Slovenia became cruise tourism destination in 2005, when the first cruise ships (18) disembarked at the port of Koper (STO, 2007). The number of cruise passengers in Koper is increasing constantly over the last 10 years and it reached 56.872 in 2015 (Luka Koper, 2016).

Despite the fastest growing market of cruise tourism, this sector is forced to continuous innovations in order to stay competitive. Innovative approach requires new port destinations, new concepts of cruise ships services and entertainments, out of ship activities, new thematic products. Recently, several demand changes appeared, such as younger cohorts, families, seekers of active vacation and low income tourists participating in cruising, influencing the need for more flexible cruise offers and new thematic cruises. Cruising has also become more popular for families due to them adjusted cruises. Tourists's interest is also changing, especially through showing the need for historical and cultural entertainment and active vacations. Cruising has become more accessible for people also since the price ranges drop as the result of strong pressure of competition and economies of scale. Increase of ship sizes enables cruise companies and destinations to enjoy the benefits of economies of scale, but consequently leads also to environmental and safety concerns and accordingly to increased need for supplementary infrastructure investments (STO, 2007).

Besides positive and negative effects incurred by cruise tourism on the natural and social environment, economic effect incurs as well and is shown as an increase of different types of consumption in homeports as well as in ports of call (STO, 2007). The cost-benefit analysis in the cruise industry sees the cruise passengers' expenditures as a very important variable (Brida and Risso, 2010), which is also in the focus of several researches, focused on demographic, economic, socio-cultural and other characteristics of cruise passengers. Hall and Braithwaite (1990) have discovered in the analysis of cruise passengers in the Caribbean that tourists participating in the cruise will most likely decide for additional activities such as sightseeing and shopping as other tourists. Several authors have studied tourist behaviour on a cruise, especially their motives, intention to return and satisfaction (Andriotis et al., 2010; Cessford et al., 1994; Qu et al., 1999; Polydoropolou et al., 2007; Duman et al., 2005; Petrick, 2005; Petrick et al., 2004; Gabe et al., 2006; Marti, 1992; Lois et al., 2001; Teye et al., 1998; Moscardo et al., 1996). Other studies focused on recognizing characteristics of total cruise passengers' expenditures, such as research performed by Brida and Risso (2010) within which they estimated, based on cross-sectional regression, the existence of different profiles of cruise passengers corresponding to different expenditure levels. They concluded that tourists with high level of expenditures differ from other tourist in terms of their income level, spending pattern, nationality, age, time spent in the hinterland etc. Other researchers focused on cruise passengers' expenditures on board and create a tentative model to identify the determinants of spending (Papathanassis et al., 2012). On the other hand, some studies focused on cruise passenger's

expenditures while visiting a harbour. They conclude that cruise passengers spend in total significantly less at their destinations than other tourists do. While cruise tourists tend to stay a shorter time in the hinterland, in average around 8 hours or less, other tourists tend to stay for a day or less. As per hour spending is very similar among mentioned groups, the length of stay can explain different levels of spending (Larsen et al., 2013). In a study of the port of Curacao (Miriel and Lennie, 2010), it was confirmed that the length of stay in the hinterland, repeated visits, previous information about the destination and highest educational levels had a positive effect on tourist behaviour in future, especially regarding the return to destination as regular tourists.

Significantly, more research was conducted in the field of tourist consumption patterns (Cai et al., 1995; Dardis et al., 1981; Prais and Houthakker, 1971, Sheldon and Mark, 1987, Jang et al., 2003). The researchers focused on groups of demographic, personal and philological determinants of tourist expenditures. In the field of tourism, different econometric models are used for analysing the individual tourist consumption (Brida and Scuderi, 2013). For cases of autonomous consumption or when different consumer groups are taken into consideration, the Tobit model (Bilgic et al., 2008; Cai, 1998; Lee, 2001) and discriminate analysis of the two groups (spenders and non-spenders) (Brida et al., 2013; Brida et al., 2014; Jang and Ham, 2009; Jang et al. 2007; Nicolau and Más, 2005) is applied.

3. MODEL AND HYPOTHESES

For understanding consumption, it is essential to comprehend the consumption behaviour that represents mental, emotional and physical activity of the individual in the process of selecting, purchasing, using and disposing of products or services with the aim to satisfy its needs and desires (Wilkie, 1994). As consumer behaviour is changeable (Block and Roering, 1979), it is important to perceive demographic, sociological and psychological determinants (Antondies and Raaij, 1998). Kotler et al., (2010) have defined four fundamental determinants of consumer behaviour: cultural, social, personal and psychological. Although the definition of consumer behaviour formed by Kotler et al. (2010) represents a good foundation for understanding consumer behaviour, it does not apply to all essential determinants of tourist consumer behaviour. Therefore, Papathanassis et al. (2012) adjusted Kotler's model to a tentative model, including monetary and external determinants, personal values and travel-related characteristics of tourists and crew on board spending. The tentative model has given an interesting insight into possible factors influencing the tourist spending, but also it exposed that defining the determinants is a "*far*

more complex process" (Papathanassis et al., 2012, p. 181) and several determinants should be taken into account when performing studies. As concluded by the authors themselves, the tentative model could ground further comprehensive research and test influencing determinants in the cruise industry. In the present research, the conceptual model is derived from the tentative model and is presented below in Figure 1.

The model has been developed and tested in the case of cruise passengers' expenditures in the port of Koper (Slovenia) and includes demographic (gender, age), geographical characteristic (nationality), travel-related (length of stay in hinterland, visit frequency, frequency of cruises), and psychological characteristic (experience with shopping and entertainment possibilities).

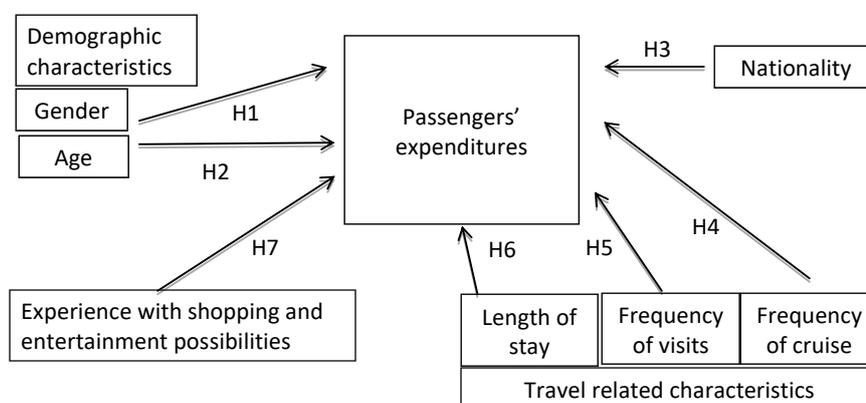


Figure 1: Conceptual model of research

The influencing factors in this research model were defined according to the characteristics of cruise tourism. Considering the length of stay the focus was on the length of stay in the hinterland and not on the total travel length. Considerably more attention was devoted to the tourist experiences compared to the tentative model. Tourist experiences were analysed in the hinterland in particular focusing on experiences with shopping and entertainment possibilities, when visiting hinterland. Hypotheses regarding variables, included in the model, were formed as follows.

3.1. Demographic characteristics

In literature, the role of gender, as an influential factor in tourist activities is vague. It is oftentimes recognized as a significant variable in relation to tourist travel (Eugenio-Martin and Campos-Soria, 2011; McGehee et al., 1996;

Craggs and Schofield, 2009; Thrane, 2002; Brida and Scuderi, 2013). Some studies have demonstrated that men and women have different reasons for travel and for selecting certain types of travel (Eugenio-Martin and Campos-Soria, 2011; McGehee et al., 1996). In the analyses of tourist consumption (Craggs and Schofield, 2009) it was exposed that the gender influences the volume of consumption, particularly that women spend more than men do. Other studies (Thrane, 2002) have exposed quite the opposite, concluding that men intend to spend more than women do. Brida and Scuderi (2013) studied the influence of the number of household members and whether the household was female-headed or an adult or a couple had children or not in a relationship, on tourist expenditures and it was found to be significant in more than half of estimates. On the other side, certain studies were not able to prove that gender had statistically significant influence on the overall tourist consumption (Brida and Scuderi, 2013; Agarwal and Yochum, 2000; Henthorne, 2000; Wang and Davidson, 2010). Considering all differences of tourist consumption between men and women, it is our intention to examine, if the gender has statistically significant impact on the volume of consumption in the hinterland.

H1: Gender is statistically significantly associated with the cruise passengers' expenditures.

Considerable numbers of studies show that age affects tourism consumption (Brida and Scuderi, 2013, Barsky and Nash, 2003; Craggs and Schofield, 2009; Jang and Ham, 2009; Jang Bai, Hong and O'Leary, 2004; Kastenholz, 2005; Perez and Sampol, 2000). Hung and Wang (2011) discovered that age and educational level of the head of household had a statistically significant effect on the share of income spent on tourism expenditures. In most cases, elderly tourists achieve the highest volume of tourism consumption. Alegre et al., (2013) evolved very similar conclusions. He underlines that the tourist consumption is increasing through the life cycle remarkably; the elderly spend more than the young. Hence, in early stages of the life cycle people accumulate their assets, while throughout the life cycle the consumption of basic commodities reduces and consequently the consumption of luxury goods, such as tourist amenities, increases (Weagley and Huh, 2004). Hung in Wang (2011) noted that the positive age effect on the share of income spent on tourist goods would appear among large consumers, meanwhile the age effect on small consumers was relatively negligible or even negative. The authors also explain the positive age effect through the fact that the elderly have more free time and financial assets to travel. Similarly, Koenker and Hallock (2001) interpreted that there was a different Engel curve for large and small consumers, which arose from different income elasticity of consumers. Age effect, can also be

explained by the fact that small (younger) consumers consider tourist good as inferior good, meanwhile large consumers (elderly) treat it as a normal good. On the other side, a study by Roehl (1993) concluded that age was not an influential factor. Although the findings regarding the age in literature are vague, we expect, that older passengers significantly differ from younger regarding the expenditures, therefore hypothesis H2 was formed.

H2: *Age is statistically significantly associated with the cruise passengers' expenditures.*

3.2. Geographic characteristics

An appreciable number of studies (Barsky and Nash, 2003; Laesser and Crouch, 2006; Perez and Sampol, 2000; Suh and McAvoy, 2005) have revealed that the geographical origin of tourists and the distance from the tourist destination has a significant impact on tourist expenditures. These studies concluded that it would have been inaccurate to generalize that tourists who travel longer distances have larger consumption as compared to those travelling shorter distances to target destination. Most likely, their consumption per day, will be even lower due to higher expenditures for transport (air tickets). As geographical origin has significant impact on tourist expenditures, it would be beneficial for the cruise industry to recognize which nationalities tend to spend more to better adjust cruise offers to their specific characteristics such as language, culture, customs. In regard to that our intention is to examine the following hypothesis:

H3: *Cruise passengers' expenditures differ regarding the passengers' geographical origin.*

3.3. Travel-related characteristics

Travel-related characteristics, such as length of stay, frequency of visits and cruise, are also considered in the research model. Repeated visits are desirable for every tourist services or products provider and the topic itself; the difference between the first visit and repeated visit was addressed several times in different studies from different viewpoints (Gyte and Phels, 1989; Mazursky, 1989; Oppermann, 1997; Watson et al., 1991). Most of these studies have shown certain differences between the aforementioned groups of tourists. However, none of those studies examined in more details how the repeat visit influences the consumption. Therefore, it remains quite unclear why tourists in general have different consumption during the first and during their second

visit. Oppermann (1996) addressed this area and explored the consumption of tourists regarding their visit to Rotoura in New Zealand. He noticed that tourists, who repeated their visit, stayed in specific locations and spent less per day than tourists who visited the city for the first time. He also discovered that repeated visitors consumed relatively equal amounts for each type of consumption (food, drinks, entertainment, attractions...), while the first time visitors spent the majority of their income on souvenirs. In his study, he also discovered that the first time visitors were willing to visit several sightseeing spots, also those which are less well known. In cases where the repeated visit was demonstrated as statistically significant, the different effects arose. Petrick (2005) noted that the tourists who participated in cruise for the first time were less price-sensitive and therefore they spent more. While the other research (Craggs and Schofield, 2009) indicates that first time tourists consume more than regular tourists do, other studies have shown the opposite connection (Lew and Ng, 2012). In some studies, no statistical significance could be determined (Brida and Scuderi, 2013). According to different conclusions deriving from different studies, we aim to explore the impact of the first time and repeated visits to the city on the cruise passengers' expenditures in the city and its hinterland. Therefore, we shall test the two hypotheses:

H4: Frequency of cruising is statistically significantly associated with the cruise passengers' expenditures.

H5: Frequency of visits to the destination is statistically significantly associated with the cruise passengers' expenditures.

The length of the travel has been proven in many studies as a positive and important factor of tourist consumption (Friedman, 2008; Jang et al., 2004; Kastenholz 2005; Koc and Altinay, 2007; Laesser and Crouch, 2006; Shani et al., 2010). Friedman (2008) has successfully proven (in the case of mountain tourism) that by increasing the length of stay by 1%, this will result in an increase of expenditures by 0.51%. Study of Thrane and Farstad (2011) discovered that the consumption per day was decreasing with the increasing trip length. Meanwhile Lew and Ng (2012) have successfully proven positive effect of trip length on certain segments of tourist consumption. The analogy of the trip length with an emphasis on the time the tourist spends in the hinterland, is also considered in the research. In a study of the port of Curacao, Miriela and Lennie (2010) have shown that the number of hours spent in the hinterland has a positive impact on the future behaviour of tourists. In fact, the more time tourists spend in the hinterland and more upfront information they can obtain,

more likely it is they will repeat the visit. In line with that we aim to test the following hypotheses:

H6: *The time spent in the hinterland is statistically significantly associated with the cruise passengers' expenditures.*

3.4. Psychological characteristics

Certain authors (Crompton, 1979; Schneider and Sönmez, 1999) consider experience and satisfaction as related psychological factors. Satisfaction is closely related to destination and derives from experience with the destination. The experience of tourists with the destination determines, if tourists will return as regular tourists and if they will spread word of mouth. The repeated visit of a tourist and a visit of a tourist convinced by the experience of others brings additional positive economic effects on the local economy, as highlighted in various studies of Andriotis and Agiomirgianakis (2010) and the study of Gabe et al., (2006). Studies have also shown the existence of empirical evidence that the tourist satisfaction (deriving from positive experiences), has a significant effect on tourist consumption, their decision to return and on a word of mouth (Silvestre et al., 2008). Few studies have explored the impact of satisfaction on consumption in the hinterland (Andriotis and Agiomirgianakis, 2010; Li and Petrick, 2010). Study by Brida and Scuderi (2013) rejected the positive impact of satisfaction on the tourist consumption, although empirical evidence remains very limited. Therefore, the research of experiences in connection to cruise passengers' expenditures would represent some interesting insights as stated in hypothesis 7, exploring the impact of passengers' experiences with shopping and entertainment possibilities in hinterland:

H7: *Experience is statistically significantly associated with the cruise passengers' expenditures.*

4. METHODOLOGY AND DATA

The random sample consists of 357 cruise passengers. Sample data were obtained based on the questionnaire survey carried out on seven various cruise ships that sailed to the city of Koper in September 2013. A random sampling procedure was conducted among passengers and crew, after their visit to the city centre and immediately after returning. This led to the very short time between consuming and reporting of expenditures, thus providing the highest accuracy of the data. The focus of research is on the consumption of cruise passengers in the time of their visit and relates mainly to the consumption of

food and drink, tourist attractions, souvenirs, shopping, sports and other activities.

Variables used were defined as follows. *Dependent variable* passengers' expenditures is defined as dichotomous variable, having value 1 if the passenger expenditures were higher than 50 EUR and 0 otherwise.

Independent variables:

- Gender is a dichotomous variable with 1 for female and 0 for male respondents.
- Age: according to the age distribution of passengers, we defined age as dichotomous variable with value 1 for individuals older than 70 years and 0 otherwise.
- Nationality – since the majority (62 %) of passengers were English, we formed a dichotomous variable having value 1 for English passenger and 0 otherwise.
- Time spent in the hinterland – is a numerical variable, measured in hours.
- Frequency of cruise is defined as a dichotomous variable, having value 1 if a passenger has been on a cruise before and 0 otherwise.
- Frequency of visits to the destination is defined as a dichotomous variable, having value 1 if this was the first passenger's visit to the destination and 0 otherwise.
- Experience with shopping and entertainment possibilities is also defined as a dichotomous variable, having value 1 if passengers experience is positive and 0 otherwise.

In order to test hypotheses H1 – H7, we use the binomial logistic regression model. The binomial logistic regression estimates the probability of an event happening, which, in the case of our research, is the presence of passengers' expenditures that are more than 50 EUR, when visiting the hinterland. The analysis does not assess the overall adequacy of the model, but it emphasizes the impact of selected factors on the passengers' expenditures when visiting hinterland. In order to test the significance of the partial regression coefficients, the Wald test with $p < 0.10$ significance level is used. Also the $\text{Exp}(\beta)$ (odds ratio) is reported, which represents the exponent of the regression coefficient. For binary variables, it approximates how much more likely or unlikely it is for an outcome to be present (i.e. expenditures higher than 50 EUR) among those respondents with a predictor value equal to 1 as compared to those who have a predictor value of 0.

5. RESULTS

Results of testing hypotheses H1 to H7 obtained with the logistic regression are presented in Table 1.

Table 1: Hypotheses testing results - H1 – H7, logistic regression

Variables	Model Coeff.	Wald	Exp(β)
Nationality	-0.913*	3.387	0.401
Gender	0.946*	3.690	2.575
Age	-0.737	1.366	0.478
Frequency of cruising	1.420*	3.020	4.137
Frequency of visits to the destination	1.911*	3.145	6.761
Experiences	0.270	0.251	1.310
Time spent in the hinterland	0.100	0.363	1.105
Model			
Constant	-3.878*	5.191	0.021
χ^2	16.220*		
% correct classifications	81.3		
R ² (Nagelkerke)	0.184		

Notes: *p < 0.10

Source: Authors.

Research results show the support for H1, H3, H4 and H5, which means that statistically significant association between passengers' expenditures and four hypothesized factors was found: gender, nationality, frequency of cruising and frequency of visits to the destination ($p < 0.10$). The significant association of age, experiences and time spent in the hinterland with passengers' expenditures could not be confirmed; hypotheses H2, H6 and H7 are rejected.

Research results show that women are on average 2.5 times as likely to spend higher amounts of money as compared to men. The probability that a passenger from Great Britain spends more than 50 EUR when visiting the hinterland equals only 40% of the probability, associated with passengers of other nationalities. Also, those who are frequently cruising are almost 4.2 times as likely and those who are visiting the destination for the first time are almost 6.8 times as likely to spend more than 50 EUR, as compared to others.

The hypothesis H2 regarding the age was not confirmed. It cannot be concluded that those who are up to 70 years old significantly differ regarding the probability to spend more than 50 EUR when visiting the hinterland from those who are older. But when analysing the segmentation of expenditures, we can confirm, that those who are older than 70 years are more than 2.2 times as likely to spend their money in the hinterland for souvenirs as compared to those who are up to 70 years old. When analysing other segments of expenditures (food and drinks, tourist attractions, shopping, sports and others (electronic devices), no differences regarding the age of tourists were found.

Also the hypothesis regarding the impact of time spent in the hinterland on the passengers' expenditures (hypothesis H6), was not confirmed. But this factor is significant when analysing the segmentation of expenditures. Namely, those who stay longer in the hinterland are on average more likely to spend their money on food and drinks, as compared to those who stay for a shorter period of time ($p < 0.10$). The associations between the time spent in the hinterland and other segments of expenditures are not significant.

6. DISCUSSION AND CONCLUSION

Presently, the individual cruise passenger consumption in the city is still very difficult to measure. Recent attempts focused on integrating the new technologies such as GPS to monitor cruise passenger behaviour (De Cantisa et al., 2016). While it was successful in monitoring which attractions they visit on the site and how long they spend at each attraction, it was still necessary to evaluate expenditures through ad-hoc survey. It may be concluded that the main tool for measuring the level of individual passenger expenditures is still surveying, which is sensitive to customer misperception about expenditures amount or unwillingness to report the (correct) amount.

Based on the ad-hoc survey of 357 cruise passengers disembarking in the port of Koper, our research identifies several variables that are statistically significantly related to the cruise passenger expenditures, such as gender, nationality, frequency of cruising and frequency of visits to the hinterland destination. Great part of cruise passengers (men and women) spent in Port of Koper up to 50 EUR, while women are in general more likely to spend more than 50 EUR. Insights into women's spending patterns revealed that most women spend on food and drinks, followed by souvenirs, shopping and tourist attractions. Although the logistic regression was not able to provide any statistically significant relations between women and expenditures for food and drinks, the overall women-spending pattern can be provided. This

represents important information for cruise stakeholders to adjust the quality of products and services, which could lead to higher (women) consumption.

Also nationality is significantly associated with the level of expenditures. Although the majority of tourists come from Great Britain, tourists of other nationalities are more likely to spend higher amount of money. For development of efficient Slovenian marketing strategies in the field of cruise tourism, it is not only necessary to recognize the most important target groups considering different nationalities and demographic characteristic, but also beneficial to recognize their average spending. In particular, that would mean that the marketing policies should target those nationalities that tend to spend higher amounts (besides English, also Americans and Finnish tourists). Accordingly, the local and national government tourist's offices should focus on developing new services and products in line with their characteristics (language, customs, culture...) and expectations.

Besides variables mentioned, frequency of cruising and visits to the hinterland are significantly associated with the level of expenditures as well. Frequent cruising tourists are more likely to spend more as compared to tourists who cruise for the first time. The opposite association is shown among tourists visiting the hinterland (Slovenia) for the first time. They are more likely to spend more as repeated visitors. Therefore, we agree with conclusions of the Opperman study (1996), which, among other issues, revealed also that repeated visitors more frequently stay in specific selected location when visiting hinterland, but on the other hand the first time visitor usually visits several sightseeing spots. This leads to the conclusion that the repeated tourists would be more interested in services and products that are not connected only to sightseeing, but to a greater extent to a new experience in line with their interest such as historical and cultural entertainment and active vacations.

Although significant association of age and time spent in the hinterland with cruise passengers' expenditures could not be confirmed, several interesting insights could be provided within the research. It was revealed that those tourists who were older than 70 years were much more likely to spend their money in the hinterland on souvenirs as compared to those who are up to 70 years old. Also, the tourists who tend to stay longer in the hinterland were much more likely to spend their money on food and drinks, as compared to those, who stayed for a shorter period of time.

The suggested model, presented in this paper, can be further developed by the introduction of new relevant variables such as monetary, external

determinants and personal values. The survey carried out in different seasons of the year and with potentially additional variables could bring interesting new insights. In addition, if a survey would have been carried out in all ports included in the same itinerary, it could have exposed existing similarities or differences among ports and their hinterland. It could enable implementation of best practices in the field of tourist services and it could be a challenge for development of common (individual itinerary based) marketing strategies.

Cruise passengers' expenditures generate positive economic effects for destinations, from increasing the incomes and employment to tax incomes, duties (Dwyer and Forsyth, 1998). Therefore, the ports and local economy have to recognize factors that influence cruise passengers' expenditures. They have to adjust and strategically adequately plan the supporting facilities and entertainment activities. Only by recognizing the factors, which affect the volume of passenger consumption, the destinations are able to design the supportive policies framework and build appropriate quality of products and services, which would stimulate higher consumption and lead to cruise passengers' satisfaction.

REFERENCES

1. Agarwal, V. B., and Yochum, G. R. (2000). Determinants of tourist spending. *Consumer psychology of tourism, hospitality and leisure*, 1.
2. Alegre, J., Mateo, S., and Pou, L. (2013). Tourism participation and expenditure by Spanish households: the effects of the economic crisis and unemployment. *Tourism Management*, 39, December 2013, 37-49.
3. Andriotis, K. and Agiomirgianakis, G. (2010). Cruise visitors' experience in a Mediterranean port of call. *International Journal of Tourism Research*, 12 (4), July/August, 390-404.
4. Antonides, G. and van Raaij, F. (1998). *Consumer Behaviour: A European Perspective*. Wiley, Chichester.
5. Barsky, J. and Nash, L. (2003). Customer satisfaction: applying concepts to industry-wide measures. *Cornell Hotel and Restaurant Administration Quarterly*, 44 (5-6), October- December, 173-183.
6. Bilgic, A., Florkowski, W. J., Yoder, J., and Schreiner, D. F. (2008). Estimating fishing and hunting leisure spending shares in the United States. *Tourism Management*, 29 (4), August, 771 - 782.
7. Block, C. E. and Roering, K. (1979). *Essentials of Consumer Behaviour*. The Dryden Press, Hinsdale, Illinois.

8. Brida, J. G., Disegna, M., and Scuderi, R. (2013). Visitors of two types of museums: do expenditure patterns differ?, *Tourism Economics*, 19 (5), October, 1027 - 1047.
9. Brida, J. G., Fasone, V., Scuderi, R., and Zapata-Aguirre, S. (2014). Exploring the determinants of cruise passengers' expenditure while at ports of call in Uruguay. *Tourism Economics*, 20 (5), October, pp 1133-1143.
10. Brida, J. G., and Scuderi, R. (2013). Determinants of tourist expenditure: a review of microeconomic models. *Tourism Management Perspectives*, 6, April, 28-40.
11. Brida, J. G. and Risso, W. A. (2010). Cruise Passengers Expenditure Analysis and Probability of Repeat Visit to Costa Rica: A Cross-Section data analysis. *Tourism Analysis*, 15 (4), 425-434.
12. Cai, L. A. (1998). Analyzing household food expenditure patterns on trips and vacations: A Tobit model. *Journal of Hospitality and Tourism Research*, 22 (4), November, 338 - 358.
13. Cai, L. A., Hong, G., and Morrison, A. M. (1995). Household Expenditure Patterns for Tourism Products and Services. *Journal of Travel and Tourism Marketing*, 4 (4), 15 - 40.
14. Cessford, G. R. and Dingwall, P. R. (1994). Tourism on New Zealand's sub-Antarctic islands. *Annals of Tourism Research*, 21 (2): 318-332.
15. CLIA (2010). *CLIA Cruise Market Overview: Executive summary*. Retrieved from <http://www.cruising.org/>
16. Craggs, R. and Schofield, P. (2009). Expenditure-based segmentation and visitor profiling at the quays in Salford. UK, *Tourism Economics*, 15 (1), 243-260.
17. Crompton, J. L. (1979). Motivations for pleasure vacation. *Annals of Tourism Research*, 6 (4), October- December, 408-424.
18. Dardis, R., Derrick, F., Lehfeld, A., and Wolfe, K. E. (1981). Cross-Section Studies of Recreation Expenditures in the United States. *Journal of Leisure Research*, 13 (3), January, 181-194.
19. De Cantisa, S. , Ferranteb, M, Alon Kahanic, A and Noam Shovald. (2016). Cruise passengers' behavior at the destination: Investigation using GPS technology. *Tourism Management*, 52, February, 133-150.
20. Duman T. and Mattila, A. S. (2005). The role of affective factors on perceived cruise vacation value. *Tourism Management*. 26 (3), June, 311-323.
21. Dwyer L. and Forsyth P. (1998). Economic significance of cruise tourism. *Annals of Tourism Research*, 25 (2)April, 393-415.
22. Eugenio-Martin, J. L., and Campos-Soria, J. A. (2011). Income and the substitution pattern between domestic and international tourism demand. *Applied Economics*, 43 (20), 2519-2531.

23. Friedman, P. (2008). Determinants of visitor expenditure in mountain tourism. *Tourism Economics*, 14, No 2, June 2008, 14.
24. FUTUREMED project. (2015). <http://www.futuremedproject.eu/>
25. Gabe, T. M., Colleen, L., and McConnon, J. (2006). Likelihood of cruise ship passenger return to a visited port: The case of Bar harbour Maine. *Journal of Travel Research*, 44, February, 281–287.
26. Gyte, D. M., and Phelps, A. (1989). Patterns of Destination Repeat Business: British Tourist in Mallorca, Spain. *Journal of Travel Research*, 28 (1), June, 24-28.
27. Hall, J. A., and Braithwaite, R. (1990). Caribbean cruise tourism: a business of transnational partnerships. *Tourism Management*, 11 (4), December, 339-47.
28. Henthorne, T. L. (2000). An analysis of expenditures by cruise ship passengers in Jamaica. *Journal of Travel Research*, 38 (3), February, 246-250.
29. Hung, W., and Wang, J. (2011). Another look at the determinants of tourism expenditures. *Annals of Tourism Research*, 39 (1), October, 495-498.
30. Jang, S. C. S., 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*, 25, (3), June, 331-341.
31. Jang, S. C. S., Ham, S., and Hong, G. S. (2007). Food-away-from-home expenditure of senior household in the United States: a double-hurdle approach. *Journal of Hospitality and Tourism Research*, 31 (2), May, 147-167.
32. Jang, S. C. S., and Ham, S. (2009). A double-hurdle analysis of travel expenditure: baby boomer seniors versus older seniors. *Tourism Management*, 30 (3), June, 372-380.
33. Jang, S., Yu, L., and Pearson, T. E. (2003). Chinese Travellers to the United States Comparison of Business and Travel and Visiting Friends and Relatives. *Tourism Geographies*, 5 (1), 87-108.
34. Jankomin, L., Jankomin, I., Pučko and M., Maver, M. (2001). *Možnosti razvoja pomorskega potniškega terminala v Luki Koper*, (In Slovene). Portorož, Prinz inštitut, 270.
35. Kastenholtz, E. (2005). Analysing determinants of visitor spending for the rural tourist market in North Portugal. *Tourism Economics*, 11 (4), December, 555-569.
36. Koc, E. and Altinay, G. (2007). An analysis of seasonality in monthly per person tourist spending in Turkish inbound tourism from a market

- segmentation perspective. *Tourism Management*, 28 (1), February, 227–237.
37. Koenker, R. and Hallock, K. (2001). Quantile regression. *Journal of Economic Perspectives*, 15 (4), 143-156.
 38. Kotler, P., Bowen, J. T. and Makens, J. C. (2010). *Marketing for hospitality and tourism*. Pearson, Boston.
 39. Laesser, C. and Crouch, G.I. (2006). Segmenting markets by travel expenditure patterns: the case of international visitors to Australia. *Journal of Travel Research*, 44 (4), 397-406.
 40. Larsen, S., Wolff, K, Marnburg, E., and Øgaard, T. (2013). Belly full, purse closed, Cruise line passengers' expenditures. *Tourism Management Perspective*, 6, 142-148.
 41. Lee, C. (2001). Determinants of recreational boater expenditures on trips. *Tourism Management*, 22 (6), December, 659 - 667.
 42. Lew, A. A., and Ng, P. T. (2012). Using quantile regression to understand visitor spending. *Journal of Travel Research*, 51 (3), May, 278-288.
 43. Li, X. R., and Petrick, J. F. (2010). Revisiting the commitment–loyalty distinction in a cruising context. *Journal of Leisure Research*, 42 (1), 67–90.
 44. Lois, P., Wang, J., Wall, A., and Ruxton, T. (2001). Fundamental Considerations of Competition at Sea and the Application of Cost-Benefit Analysis. *Tourism Today*, 1, 89-102.
 45. Luka Koper (2016). *Potniški terminal*. (In Slovene). Retrieved from <http://www.luka-kp.si/slo/terminali-in-tovor/potniski-terminal>
 46. Marti, B. (1992). Passenger perceptions of cruise itineraries. *Marine Policy*, 16 (5), September, 360–370.
 47. Mazursky, D. (1989). Past Experience and Future Tourism Decisions. *Annals of Tourism Research*, 16, 333-344.
 48. McGehee, N. G., Loker-Murphy, L., and Uysal, M. (1996). The Australian international pleasure travel market: motivation from a gendered perspective. *Journal of Tourism Studies*, 7 (1), 1996, 45-57.
 49. Miriela, C. G. L., and Lennie, P. (2010). *Cruise tourists returning to Curacao for a land-based vacation: A logit model*. Research Department of the Central Bank of the Netherlands Antilles, BNA.WP/10/1.
 50. Moscardo, G., Morrison, A., Cai, L., Nadkarni, N. and Leary, O. (1996). Tourist Perspectives on Cruising: Multidimensional Scaling Analyses of Cruising and Other Holiday Types. *Journal of Tourism Studies*, 7 (2), December, 54-63.
 51. Nicolau, J. L., and Más, F. J. (2005). Heckit modelling of tourist expenditure: evidence from Spain. *International Journal of Service Industry Management*, 16 (3), 271 - 293.

52. Oppermann, M. (1996). Visitation of Tourism Attractions and Tourist Expenditure Patterns; Repeat Versus First-time Visitors. *Asia Pacific Journal of Tourism Research*, 1 (1), 61- 68.
53. Oppermann, M. (1997). First-Time and Repeat Visitors to New Zealand. *Tourism Management*, 18 (3), May, 177-181.
54. Papathanassis, A., Markkanen, S. and Pieszek, L. (2012). Determinants of Onboard Spending. *Cruise Management*, Gabler Verlag, 173-184.
55. Perez, E. A. and Sampol, C. S. (2000). Tourist expenditure of mass tourism markets. *Annals of Tourism Research*, 27 (3), July, 624-637.
56. Petrick, J. F. (2005). Segmenting cruise passengers with price sensitivity. *Tourism Management*, 26, October, 753–762.
57. Petrick, J. F. and Sirakaya, E. (2004). Segmenting Cruisers by Loyalty. *Annals of Tourism Research*, 31 (2), April, 472-475.
58. Polydoropolou, A. and Litinas, N. (2007). Demand Models for Greek Passenger Shipping. *Research in Transportation Economics*, 21: 297-322.
59. Prais, S. J., and Houthakker, H. S. (1971). *The Analysis of Family Budgets*. Cambridge: Cambridge University Press.
60. Qu, H. and Ping, E. W. Y. (1999). A service performance model of Hong Kong cruise travellers' motivation factors and satisfaction. *Tourism Management*, 20 (2), April, 237–244.
61. Roehl, W. (1993). Highway accessibility and regional tourist expenditures. *Journal of Travel Research*, 31 (3), January, 58-63.
62. Schneider I, Sonmez, S. (1999). Exploring the touristic image of Jordan. *Tourism Management*, 20, 539–542.
63. Seidl, A., Guiliano, F., and Pratt, L. (2006). Cruise tourism and community economic development in Central America and the Caribbean: The case of Costa Rica. *Pasos*, 4 (2), 213–224.
64. Shani, A., Wang, Y., Hutchinson, J. and F. Lai. (2010). Applying expenditure-based segmentation on special-interest tourist: the case of golf travellers. *Journal of Travel Research*, 49 (3), August, 337-350.
65. Sheldon, P. J. and Mak, J. (1987). The Demand for Package Tours: A Mode Choice Model. *Journal of Travel Research*, 25 (3), January, 13-17.
66. Silvestre, L. A., Santos, C.M., and Ramalho, C. (2008). Satisfaction and behavioural intentions of cruise passengers visiting the Azores. *Tourism Economics*, 14 (1), March, 169–184.
67. STO (2007). Strategija razvoja in trženja slovenske turistične ponudbe za ladje za križarjenje 2008-2012. Ljubljana.
68. Suh, Y. K. and McAvoy, L. (2005). Preferences and trip expenditures — a conjoint analysis of visitors to Seoul, Korea. *Tourism Management*, 26 (3), June, 325–333.

69. Teye, V. B. and Leclerc, D. (1998). Product and Service Delivery Satisfaction Among North American Cruise Passengers. *Tourism Management*, 19 (2), April, 153-160.
70. Thrane, C. and Teye Farstad, E. (2011). Domestic tourism expenditures: the non-linear effects of length of stay and travel party size. *Tourism Management*, 31 (1), February, 46-52.
71. Thrane, C. (2002). Jazz festival visitors and their expenditures: Linking spending patterns to musical interest. *Journal of Travel Research*, 40 (3), February, 281-286.
72. Wang, Y., and Davidson, M. C. G. (2010). Chinese holiday markers expenditure: Implications for marketing and management. *Journal of Hospitality Marketing and Management*, 19 (4), April, 373-396.
73. Watson, A., Roggenbuck, J. W. and Teye Williams, D. R. (1991). The Influence of past Experience on Wilderness Choice. *Journal of Leisure Research*, 23 (1), 21-36.
74. Weagley, R., in Huh, E. (2004). The impact of retirement on household leisure expenditures. *Journal of Consumer Affairs*, 38 (2), Winter, 262-281.
75. Wilkie William, L. (1994). *Consumer behaviour*. New York: John Wiley and Sons.

ČIMBENICI POTROŠNJE PUTNIKA NA KRSTARENJIMA U LUCI TICANJA

Sažetak

Kružna putovanja generiraju različite oblike potrošnje i povezanih indirektnih, direktnih i ostalih učinaka, u domaćim lukama, kao i u lukama ticanja. Potrošnja putnika na kružnim putovanjima stvara pozitivne ekonomske efekte za destinacije, od povećanja dohotka i zaposlenosti, pa do povećanja prihoda od poreza i carina, itd. Stoga, nema dileme da dionici kružnih putovanja i lokalno gospodarstvo mogu imati koristi od povećane potrošnje putnika. Da bi se ona povećala, kao i zadovoljstvo samih putnika, potrebno je utvrditi okvir politika za povećanje potrošnje te stvoriti odgovarajuću razinu proizvoda i usluga. Identifikacija čimbenika značajnih za potrošnju putnika na krstarenjima omogućava izradu primjerenih politika i mjera. U ovom se istraživanju, na temelju ankete 357 putnika na kružnom putovanju, utvrđuju varijable, uključene u novi teorijski model determinanti potrošnje, i to: spol, učestalost kružnih putovanja i posjeta destinaciji. Za njih se može kazati da su značajno statistički povezane s potrošnjom putnika. U radu se utvrđuju zaključci i prijedlozi za povećanje potrošnje, na temelju dobivenih rezultata istraživanja.

APPENDIX. CRUISE PASSENGERS AND CREW SATISFACTION SURVEY

The survey is performed within the "FUTUREMED project" which is a STRATEGIC project of the MED Programme. FUTUREMED aims to improve the competitiveness of the Mediterranean port system by enhancing accessibility through technology and procedural innovations. Main aim of the questionnaire is identification of bottlenecks in order to suggest appropriate measures for improvement.

1. Identification of interviewee:

- **Type:** *Passenger* or *Crew*
- **Name of the cruise ship:** _____
- **Gender:** *F* or *M*
- **Age:** _____
- **Nationality:** _____
- **How much time did you (are you planning to) spend ashore:**
_____ (in hours)

2. Cruise experience:

- **Is this your first**
 - cruise trip? *Yes* or *No* (if no – please specify nr.:)
 - visit to Slovenia? *Yes* or *No*

3. For what purpose have you disembarked today?

- a) Excursions offered and booked at the ship.
- b) Excursions booked on the internet (local providers) before the cruise trip.
- c) Sightseeing and exploring tourist attractions by myself (exploring).
- d) Food and drink
- e) Shopping
- f) Other:

if the answer to question 3 is not a) then please answer the following question...

4. 3. a What is the reason for not deciding for organized excursions offered at the ship?

- a) High price
- b) Uninteresting offer
- c) Poor information about tours/excursions
- d) Lower degree of flexibility
- e) Other (please specify):

If the answer to question 3 is a) or b) then please answer the following question...

3. b What kind of excursions did you decide to take:

- Please name them (and if b – who is the provider):
 - ...
 - ...

If the answer to question 3 is not a) and not b) then please answer following question.....

3. c Where did you spend your day?

- a) Koper
- b) Other cities on the coast (Piran, Portorož, Izola, Lucija, Ankaran)
- c) Hinterland – where?

5. How would you rate your experience with (rate only those you have experiences with):

- Excursions offered at the ship:
Poor/Fair/Average/Good/ Excellent
- Excursions offered by local providers:
Poor/Fair/Average/Good/ Excellent
- Tourist information centre in Koper:
Poor/Fair/Average/Good/ Excellent
- Public transport in KOPER and hinterland:
 - Taxi
Poor/Fair/Average/Good/ Excellent
 - Bus
Poor/Fair/Average/Good/ Excellent
 - Train
Poor/Fair/Average/Good/ Excellent
- Shopping possibilities in KOPER
Poor/Fair/Average/Good/ Excellent
- Offer of food and drink
Poor/Fair/Average/Good/ Excellent
- Port facilities (passenger terminal)
Poor/Fair/Average/Good/ Excellent

6. Compared to other countries on your tour, did you find Slovenia...?

- a) Expensive
- b) Reasonable
- c) Cheap

7. How much money did you spend today in Slovenia?

- a) 0-50 eur
- b) 50-100 eur
- c) 100 -250eur
- d) 250 – 500 eur
- e) +500 eur

8. What did you spend the money for?

- a) Tourist attractions
- b) Food and drinks
- c) Souvenirs
- d) Shopping
- e) Sports
- f) Other (please specify):

9. Where would you prefer to get the information about the possibilities /offer of the port you are stopping at?

- a) Before cruise trip on the internet (web page)
- b) On the cruise ship
- c) Smart phone application
- d) Info point at the port
- e) Other (please specify):

10. Would you be interested in:

- Mobile application (APP)–personal guide around Koper and its surroundings? Yes No
- Rent a bicycle? Yes No

11. Do you feel like Slovenia is a country that you may like to revisit?

- a) Yes
- b) No

YOUR OPINION, IMPRESSIONS, RECOMMENDATIONS (identified problems, bottlenecks, missing offer, ...):

