Factors Affecting Tourist Expenditure Coming To Mugla Region

Muğla Bölgesine Gelen Turistlerin Harcamalarını Etkileyen Faktörler

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Abstract

Increasing tourist expenditure is a means to increase tourism income, which is extremely important for local economies. The purpose of this study is to understand the expending pattern of tourists coming to Mugla Region and provide empirical background for the policies to increase per tourist expenditure. The survey conducted at Dalaman International Airport and the data has been analyzed using OLS method. Nationality, age, accommodation type, pension type, credit card usage, availability of shopping facilities, standard of night life and entertainment, quality of food and beverage, length of holiday and group size has been found as significant factors affecting tourist expenditure.

Key Words: Tourist expenditure, travel expenditure, spending pattern of tourist

Özet

Turist harcamalarının artırılması, yerel ekonomiler için son derece önemli olan turizm gelirlerini artırmanın yoludur. Bu çalışmanın amacı, Muğla bölgesine gelen turistlerin harcamalarını etkileyen faktörleri ortaya koyarak, turist harcamalarını artırmaya yönelik politikalara alt yapı oluşturmaktır. Dalaman Uluslararası Havalimanı'nda yapılan anket çalışmasında elde edilen veri EKK yöntemi ile analiz edilmiştir. Milliyet, yaş, konaklama tipi, pansiyon tipi, kredi kartı kullanımı, alışveriş olanakları, gece hayatı ve eğlencenin standartı, yiyecek içecek kalitesi, tatil süresi ve grup büyüklüğü anlamlı bulunan değişkenlerdir.

1. Introduction

Tourism has been one of the fastest growing industries in the world after 1950, emergence of commercial airline industry and the invention of the jet planes. International tourist arrivals have reached from 25 million in 1950 to 278 million in 1980 and 880 million in 2009 (UNWTO, 2006; UNWTO, 2011:1). Tourism also has been accepted an important growth engine for local economies (Bimonte, 2007: 2). With direct, indirect and induced impacts, tourism is an important source of

income for many countries and also tourism contributes to decrease the unemployment by providing employment for unqualified labor.

Beginning with 1980, tourism has been accepted as a driving force for Turkish economy and economic resources has been devoted for development of tourism. After those efforts, Turkey has been a popular tourism attraction centre in the world and tourism has become an important income source for the Turkish economy. Tourist arrivals have reached 28,511,000 in 2010 from 1,288,000 in 1980. International tourism income has reached USD 15,577 millions in 2010 from USD 326 millions in 1980. In 2011 it is expected that tourism income generates 4.1 % of GNP. While share of tourism income has been %11.2 in 1980, it reached 20.8% in 2009. In 2009 %54 of foreign trade deficit has been closed by tourism income (tursab.org.tr). It expected that total contribution of tourism to employment will be 8.1 % in 2011 (WTTC, 2010: 6). According to UNWTO data, in 2010 Turkey has been ranked number seven in the world in terms of tourist arrivals. However, per person tourist expenditure is in a decreasing trend after 2000. Per person tourist expenditure increased to USD 736 in 1998 from USD 252 in 1980 and realized as USD 546 as a result of a decreasing trend after 2000 (tuik.gov.tr).

Increase in tourist arrivals with a decrease in daily expenditure could be an alarming sign since assuming a fixed per capita cost of tourism, an increase in the number of tourists could result in degradation of the environment and natural resources (Pongsirirushakun and Naewmalee, 2003: 9). At this point, understanding spending behavior of tourist can help to create policies in order to increase per person tourist expenditure.

On the other hand, increasing tourist expenditure is a means to increase tourism income, which is extremely important for local economies. In order to propose tourism plans and policies to increase tourist expenditure, expenditure pattern of travelers should be understood. By understanding the spending behavior of tourist and categorization, it will be possible to optimize resources and maximize the benefits of international tourism. From this point of view, the purpose of this study is by determining the factors affecting the tourist expenditure coming to Mugla region, to find out the tourist profiles contributing the local economy most and guide tourism planning and promoting efforts.

In the second part tourist expenditure literature is summarized in respect to the factors affecting tourist expenditure. In the third part conceptual framework of the study and the model is introduced. The datacollection and survey is introduced. In the fourth section study results are presented. And lastly in the fifth section the findings and conclusions are summarized.

2. Literature Review

As long as importance of tourism in the economies of the countries has increased, numerous studies have been made to estimate the determinants of tourist expenditure (Divisekera, 2010; Jang et al., 2004; Kim et al, 2008; Kozak et.al,

2008; Lee, 2001; Nicolau and Más, 2005; Odunga, 2005; Peerapatdit, 2004; Perez and Shampol, 2000; Shuib and Bulan, 1996). According to those studies socio-economic factors such as household income, education and occupation; demographic factors such as age, marital status and sex; travel related factors such as accommodation type, number of people travelling, first time or repeat visits, length of holiday are influential on travel expenditure.

Jang et al. (2004), Lee (2001), Nicolau and Más (2005), Shuib and Bulan (1996) found a positive relationship between household income and travel expenditure. It is expected that the tourists spends more where head of the family is white-collard. According to the study of Jang et al. (2004), Japanese tourists at management positions spend more than the other while their visits to United States. Perez and Sampol (2000) reached similar results in their study about Balearic Islands. It is a fact that well educated people can find high salary jobs and have higher holiday budgets. Well educated people also prefer holidays abroad more than the people less educated (Nicolau and Más, 2005: 277). Jang et al. (2004) stated that well educated Japanese tourists visiting United Stated has a tendency to spend more than less educated counterparts. On the other hand Nicolau and Más (2005) could not find a significant effect of education on tourist spending. Kim at al. (2008) found a negative relationship between education and entertainment spending, but a positive relationship between education and food and beverage spending at their research on festival visitors.

Nicolau and Más (2005) revealed a non-linear U shaped relationship between age and tourist expenditure. Within the tourist visiting Spain, the age group 26-45 and 46-65 spends more than the other age groups. The second group has smaller coefficient than the former since the tourists are in a tendency to spend less after the age 46 and reached the minimum spending at the age group 65 and more. On the other hand, Jang et al. (2009) found that the age group 65 and more spends more than the age group 45-65 while the second group has more tendencies to travel in their analysis of travel expenditures of baby boomer and older seniors. Jang et al. (2004) stated that Japanese tourists visiting United States has more tendencies to spend as they are getting older. Perez and Sampol (2000) found that the age group younger than 30 spends less in their study about Balearic Islands. Similarly, Kim et al. (2008) stated that festival visitors older that 30 has more tendency to spend for accommodation than the ones at their 20s.

Although women and men has different spending patterns, in the tourism literature sex has not been found as a significant factor on tourist spending since tourism behavior has been examined in group (family) base, not individually (Peerapatdit, 2004: 19). Exceptionally, Shuib and Bulan (1996) found that male tourists eat outside the hotel more than the female tourists. However, there are substantial amount of studies in tourism literature that found a relation between marital status and tourist expenditure (Nicolau and Más 2005: 277; Peerapatdit,

2004: 20). Kim et al. (2008) stated that married festival visitors spend more for souvenirs than the single ones. Although Jang et al. (2009) found no significant relationship between marital status and travel expenditure of baby boomers; they found a significant effect of marriage for the older senior.

Nationality is one of the important factors effecting travel expenditure since economic status and cultural factors also affect expenditure patterns. Perez and Sampol (2000) reported that German tourists visiting Balearic Islands spends more than their British counterparts, while Italian tourists spend the most. While Divisekera (2010) found positive coefficient for accommodation expenditure of Japanese and American tourists, he found negative coefficient for accommodation expenditure of tourists coming from Britain and New Zealand. In the same study, he found positive coefficients for food expenditure of British and New Zealander tourist and for entertainment expenditure of Japanese and New Zealander tourists.

Empirical studies also show that travel related factors such as accommodation type, number of people travelling, first time or repeat visits; length of holiday has been significant on determining level of tourist expenditure. Nicolau and Más (2005) found that tourists staying at hotels spend more than the ones staying at their own, rental villa or relatives or friends house. Jang et al. (2004) stated that, tourists traveling in group have more tendencies to spend than the ones travelling individually. According to the study of Nicolau and Más (2005) household size has a positive effect on travel expenditure. Jang et al. (2004) found an insignificant relationship between number of children and expenditures. In the same study, it is stated that first time visitors spend more than the repeat visitors. On the other hand Kim at al. (2008) found that repeat festival visitors spend more that the first time for food and beverage. Jang et al. (2004) revealed a positive effect of length of holiday on travel expenditures. Nicolau and Más (2005) stated that, short term travelers spend more in day basis than the long term travelers.

3. Data Set and the Model
3.1 Conceptual Framework

The basic behavioral hypothesis of the economic theory of consumer demand is that households choose a basket of goods that is preferred to all the other baskets that they can afford (Betti, 2000:3). Households will choose the best bundle among all possible bundles that will maximize their satisfaction. The consumer takes his/her budget constraint, comparative prices and tastes into consideration during this selection process. In this way, it is possible to express per capita expenditure on any good as a function of a series of variables including per capita income, prices, time, tastes, preferences, etc (Agüero ve Silva, 2009:3.

Basically Engel curves describe how household expenditure on particular goods and services relates to income and other factors such as demographic variables and consumer characteristics holding the prices fixed (Houthakker, 1987: 142; Chai and Monata, 2010:225; Varian, 2006:97). So it is possible to express an

Engel Curve as $x_i = f_i(y,z)$, where x_i is the quantity consumed of good i, y is income, wealth or total expenditures on goods and services and z is a vector of variables effecting consumption like characteristics of consumer such as age, education, race and ethnicity and household composition, seasonal effects, etc. As soon as the law of one price holds, the empirical dependence of x_i on y and z in a population sampled in one time and place is also called an Engel curve (Lewbell, 2006:1-2).

The analysis of tourism expenditure depends on separability feature of the utility function. According to the consumer behavior of neoclassical economic theory, utility function is 'separable', which means that commodities can be grouped as each have sub utility functions and values of these sub utilities combine to give total utility (Deaton and Muellbauer, 1980: 122). In this way, consumer's utility maximization problem can be represented by a multistage budgeting process. At the first stage, consumer budged is allocated budget across all goods and services including tourism. In the second stage consumer tourism budget allocated across all tourism products (destinations) and at the third stage consumer's budget for a destination is allocated among various goods and services at the destination (Divisekera, 2010: 2).

The model used in the study is an Engel function as below. The model is in logarithmic form. Logarithmic models have been used often in analyzing expenditure relationships since logarithmic forms results better statistical outcomes (Shuib and Bulan, 1996: 168).

$$LogExp_i = \beta_0 + \beta_1 LnPer_i + \beta_2 LnDays_i + \sum_j (\beta_j X_{ij}) + u_i$$

$LogExp_i$ implies logarithm of total expenditure of *i*th tourist group. $LnPer_i$ stands for the logarithm of number of persons travelling together. $LnDays_i$ is the logarithm of length of travel in days of the *i*th travel group. X_{ij} are other variables pertain to the head of the tourist group and the vacation including age, gender, nationality, occupation, income, vacation type, accommodation type, value for money, standard of the services and facilities.

3.2. Data Collection and the Survey
The data for estimating tourist spending is collected through three different ways: asking the respondents to keep a diary, distributing surveys prior only to departure for home and sending surveys to respondent's address after the vacation. In order to get accurate information from the respondent and have a high response rate (Kozak et al., 2008: 5), delivering surveys at the airport is chosen as data collection method.

Being inspired from the prominent research of Kozak at al. (2008), the survey constructed as three parts. In the first part based supply side evaluation of the tourists such as quality of services, sea and beaches, level of hospitality, standard of health services, facilities for children, suitability of nightlife and entertainment, availability of shopping facilities, etc. At the second part respondents are asked their future intentions like their satisfaction with the current holiday or if they will either come again or recommend Turkey. The third part consists of socio-demographic, economic and holiday related questions such as nationality, gender, age, yearly income, type of holiday, accommodation type, number of people travelling, channel of reservation. Lastly length of holiday, name of the holiday destination, the amount paid for package tour and money spent in Turkey, credit card usage and breakdown of holiday expenses as food and beverage, souvenir and gifts, visiting attractions, clothes, local transportation, daily tours and excursions and rent a car are asked.

The questionnaire has been carried out at Dalaman airport, which is one of the two airports of Mugla region. The sample has been specified by the country of origin of the subject. The survey has been carried out to the tourists coming from United Kingdom, Holland, Germany, Russian Federation and Poland as they are ranked in the top six of tourist coming to Mugla region. The survey is prepared in English, German and Russian languages in order to reach more respondents and served out to the tourists ready to leave the country at the gate. After a pilot application yielding 130 surveys in September 2009, the survey has been conducted 3 days in September 2010, Mondays of each week. The survey yielded 640 valuable questionnaires after the elimination of invalid ones.

4. Study Results

The data has been analyzed using OLS method. OLS method is the best method to estimate the relation between dependent and independent variables in case specific assumptions have been ensured (Tari, 2002:22).. Stata software program is used to calculate OLS estimates and make specific tests. The OLS estimates of the total expenditure of tourists are summarized in Table 1.

Heteroscedasticity, which is the result of uneven distribution of random variable, causes inconsistency of variance and covariance of estimated independent variables and makes the hypothesis tests invalid (Ramanathan, 1992: 337–339). The heteroscedasticity problem detected using Breusch-Pagan test is corrected by Stata program. Validity of the model is tested using Ramsey-Rest test and it is concluded that there is no modeling error. F test implies that the independent variables have an overall influence on dependent variable at %1 significance level. Calculated R^2 value shows that the %52 of changes of total tourist expenditures can be explained by independent variables used in the model. According to the estimation results nationality, age group 14-24, pension type, accommodation type, credit card usage, evaluation of food and beverage quality, shopping availability and standard of night

life and entertainment have significant effect on total expenditure of tourists. On the other hand the effects of sex, annual income, education, occupation, purpose of visit have been found insignificant.

Table 1: Estimate Results of Total Tourist Expenditure[*]

Independent Variable	Coefficient	Standard Error[**]	Effect[***]
Constant	3.222939 (5.46)***	0.5904436	
British Tourists	0.416009 (3.18)***	0.1308826	49.02
Russian Tourists	0.322136 (1.35)	0.2393486	30.32
Polish Tourists	0.264611 (1.73)*	0.1532261	27.27
Belgian Tourists	0.439998 (2.05)**	0.2145721	48.28
Dutch and Danish Tourists	0.66902 (1.86)*	0.3595515	71.56
Age 1: 15-24	-0.23357 (-1.64)*	0.1423049	-22.42
Age 2: 25-34	-0.11356 (-0.98)	0.1157884	-11.92
Age 3: 45-54	-0.12115 (-1.11)	0.1087173	-12.45
Age 4: 55-64	-0.19806 (-1.5)	0.1323057	-19.39
Age 5: 65 and above	-0.16866 (-0.88)	0.1926759	-18.60
Sex	-0.05228 (-0.82)	0.0638487	-5.48
Education level high school and below	-0.28576 (-0.65)	0.4393187	-38.04
Education level university	0.017093 (0.21)	0.0812809	1.05
Education level post graduate and	0.12505	0.1274379	11.49

[*] * Number in parenthesis are the t-values; *, ** and *** indicate significance at the 10%, 5% and 1% respectively.
[**] Heteroscedasticity consistent standart errors.
[***] Percentage effect of dummy variables on dependent variable comparing with the control group.

higher

Independent Variable	Coefficient	Standard Error	Effect
	(0.98)		
Married	0.010146	0.0879688	0.24
	(0.12)		
Living with partner	0.059089	0.0977151	5.08
	(0.6)		
Retired	-0.2575	0.1667499	-24.82
	(-1.54)		
Other Occupation	-0.19708	0.1597821	-19.96
	(-1.23)		
Manager, professional	-0.19909	0.1355545	-19.54
	(-1.47)		
Self Employed, Craftsman/Tradesman	-0.03337	0.1553015	-5.59
	(-0.21)		
Housewife, student	-0.13917	0.1737498	-15.58
	(-0.8)		
Annual income € 9.999 and below	-0.14206	0.1131034	-14.35
	(-1.26)		
Annual income € 10.000- € 20.000	0.000916	0.1143995	-1.21
	(0.01)		
Annual income € 30.000 and above	0.089193	0.0796178	8.64
	(1.12)		
All inclusive	-0.34745	0.1041033	-30.11
	(-3.34)***		
Half board	-0.1004	0.2838855	-16.56
	(-0.35)		
Bed and breakfast	0.337785	0.0973941	38.86
	(3.47)***		
Self- catering or only flight	0.354678	0.1152209	40.69
	(3.08)***		
Main purpose of holiday: sea and sun	0.200602	0.4064884	3.60
	(0.49)		
Main purpose of holiday: history and culture	0.031899	0.4127701	-12.93
	(0.08)		
Main purpose of holiday: sports	0.183812	0.4520142	-2.03
	(0.41)		
Main purpose of holiday: business	0.509567	0.494664	30.33
	(1.03)		
Independent Variable	**Coefficient**	**Standard**	**Effect**

		Error	
Main purpose of holiday: wedding	0.055443 (0.12)	0.460343	-14.48
Main purpose of holiday: sea, sun, history and culture	-0.01361 (-0.03)	0.4253952	-17.68
Main purpose of holiday: sea, sun and entertainment	0.268078 (0.65)	0.4135566	10.19
Main purpose of holiday: sea, sun and sports	0.251887 (0.58)	0.4334611	6.61
Main purpose of holiday: other	0.841239 (1.35)	0.6227663	57.37
Number of person travelling	0.623691 (7.68)***	0.081246	
Reservation has been made 1 week prior	-0.15381 (-1.29)	0.1194336	-15.47
Reservation has been made 1-4 weeks prior	-0.01151 (-0.13)	0.0914674	-1.97
Reservation has been made 4-6 months prior	-0.07075 (-0.66)	0.1075445	-7.90
Reservation has been made prior 7 months or more	-0.04945 (-0.56)	0.0888968	-5.57
Accommodation: Holiday village	-0.26904 (-1.63)*	0.1651723	-25.64
Accommodation: Yacht	-0.01803 (-0.06)	0.2894189	-9.68
Accommodation: own-friends house	-0.33285 (-1.84)*	0.1806646	-30.61
Accommodation: Resort hotel	0.017136 (0.15)	0.1141528	0.41
Accommodation: Villa	0.052479 (0.3)	0.1730934	2.28
Accommodation: Apart, pension	-0.00664 (-0.04)	0.1743403	-3.64

Independent Variable	Coefficient	Standard Error	Effect
Accommodation: Other	0.068639	0.2504386	0.59

Independent Variable	Coefficient	Standard Error	Effect
	(0.27)		
Length of holiday	0.858385 (8.68)***	0.0988955	
Credit card usage	0.247819 (3.31)***	0.0749391	27.41
Good service quality	0.199499 (1.6)	0.1245312	20.20
Poor service quality	0.509425 (2.37)**	0.2146411	58.94
Good hospitality	-0.04323 (-0.42)	0.1030062	-5.24
Poor hospitality	-0.00216 (-0.01)	0.1965438	-4.00
Good value for money	0.017242 (0.24)	0.071715	1.22
Poor value for money	0.01697 (0.11)	0.1524723	-0.63
Good food and beverage quality	-0.03531 (-0.82)	0.043098	-3.65
Poor food and beverage quality	-0.26616 (-1.83)*	0.145798	-24.98
Good night life and entertainment standard	0.163689 (2.21)**	0.0741293	17.14
Poor night life and entertainment standard	0.075864 (0.58)	0.1311101	6.04
Good attractiveness of natural environment	0.050551 (0.58)	0.0876674	4.38
Poor attractiveness of natural environment	0.315106 (1.55)	0.2039339	31.46
Good attractiveness of historical attractions	0.104593 (1.42)	0.0734746	10.43
Poor attractiveness of historical attractions	0.423531 (2.89)***	0.1464591	49.49
Good availability of shopping facilities	0.232299 (2.75)***	0.0844331	25.25
Independent Variable	**Coefficient**	**Standard Error**	**Effect**
Poor availability of shopping facilities	0.140724	0.1828473	11.33

	(0.77)		
Good quality of local transportation	0.014294	0.0783581	0.82
	(0.18)		
Poor quality of local transportation	-0.23253	0.2257049	-24.68
	(-1.03)		
Overall attractiveness of Turkey good	-0.06106	0.0995625	-6.85
	(-0.61)		
Overall attractiveness of Turkey poor	-0.08818	0.2346397	-13.34
	(-0.38)		
Effectiveness of promotion and publicity good	-0.1302	0.0796254	-12.76
	(-1.64)*		
Effectiveness of promotion and publicity good	0.042979	0.1957153	0.47
	(0.22)		
Overall satisfaction good	0.081745	0.1557347	5.92
	(0.52)		
Overall satisfaction poor	0.41616	0.2199999	44.45
	(1.89)*		
High probability to come back	0.005471	0.137647	-1.4
	(0.04)		
Low probability to come back	0.230176	0.206229	20.64
	(1.12)		
Recommend others	-0.17336	0.2049815	-19.38
	(-0.85)		
Doesn't recommend others	-0.32176	0.2168361	-30.84
	(-1.48)		
F test (79,473)	8.54***		
R²	0.5170		
Ramsey-Reset test F(3,470)	1.93		
Prob>F	0.1234		

The coefficients of quantitative variables such as length of holiday, number of person travelling show the percentage effect of one percentage change in independent variable on total expenditure. Dummy variables are used to estimate the effect of qualitative variables such as nationality, age, marital status, accommodation type. Since the dependent variable is also in logarithmic form, the effect of dummy variables is calculated differently. In order to calculate the percentage change between two categories, the difference between estimated

coefficient and half of its variance is exponentiated and subtracted 1 from it, and then the result is multiplied by 100 (Ramanathan, 2002: 305). The effects of the dummy variables are presented at effect column of Table 1 and 2.

The significant variables effecting total tourist expenditure are summarized at Table 2. According to the study results, British tourists spends 49%, Polish tourists 27%, Belgian tourists 48%, Dutch or Danish tourists spends %72 more than German tourists keeping all other variables constant. In accordance with the studies of Nicolau and Más (2005), Perez and Sampol (2000), Kim et al. (2008), age group 15-24 spends 22% less than the age group 35-44. Effects of the other age groups are found insignificant.

Table 2: Summary of significant research findings

Dependent Variable	Effect (%)
Positive Effects (+)	
British	49
Polish	27
Belgian	48
Dutch or Danish	72
Bed and breakfast	39
Self catering	41
Good standard of nightlife and entertainment	17
Good availability of shopping facilities	25
1% increase on the group size	0.62
1% increase on the length of holiday	0.86
Credit card usage	27
Negative Effects (-)	
Age 14-24	22
All inclusive	26
Staying own-friends house	31
Poor food and beverage quality	25

Pension type is also a significant determinant of tourist expenditure. The study results show that, all inclusive tourists spend 30% less that the control group half board tourists. On the other hand bad and breakfast tourists spend 39 %, self catering (room only, apart, villa, only flight) tourists spend 41% more than half board tourists. Thus, it is possible to say, all inclusive tourism has the least contribution to the local economy. On the other hand, self catering tourism types allow the tourist to use local markets, restaurants and contribute most to the local economy.

The effect of accommodation type is compatible with the effect of pension type. The tourists staying at holiday villages spend 26%, staying at friend's-own house %31 less than the ones staying at city hotels. Holiday villages are generally

established at a distance from city enters and aimed to satisfy all the needs of tourist within the hotel. Besides, most of the holiday villages are all inclusive facilities. Therefore the tourists do not have any motivation or need for shopping or eating outside the hotel. The study results also show that real estates sales abroad and holiday lettings contribute local economy least comparing with the other accommodation types.

The assessment of tourists about their holiday and Turkey is analyzed in 3 groups: the tourist has negative, positive and neutral consideration. The assessments normalized around neutral consideration. The study results reveals that, the tourist who find the food and beverage quality low, spend 25% less than the neutral ones. All the other variables constant, the tourists who find the standard of night life and entertainment good spends 17% more than the neutrals. Similarly, the tourists find the availability of shopping facilities satisfactory spends 25% more than the neutrals. These results show that of unsatisfied tourists make less while satisfied tourists spend more. From this point of view, it is possible to say increasing service standards and quality will contribute to local economy by increasing tourist expenditure.

The variables group size and length of holiday are used in logarithmic form. The models, where both dependent and independent variables are in logarithmic form are called double logarithmic formulation (Ramanathan, 1992:123). Keeping all the other variables constant %1 increase on the group size increase total expenditure by 0.62%. Although the group size has a positive effect on total expenditure, the increase on expenditure is smaller than the increase on the group size because of the economies of scale. On the other hand, a 1% increase on the length of holiday increases the total expenditures by 0.86% keeping all other variables constant.

The tourists using credit card spends 27% more than the ones who does not use keeping all the other variables constant. As a facilitating factor, credit card usage increase tourist expenditure. Therefore it is possible to say that motivating the tourism establishments to accept credit card could increase tourism income.

5. Summary and Conclusion
In this study, it is aimed to estimate the determinants of tourist spending in Mugla region. Effects of socio-economic, demographic and travel specific variables are analyzed using OLS method. Although aware of its limits due to data collecting, this study contributes to understand the expenditure behavior of tourists coming to Mugla region and could form a ground for tourism policies to increase the tourism income.

The results show that country of origin, accommodation type and pension type are significant determinants of tourist expenditure coming to Mugla region.

The findings disclose that the tourists coming from UK, Poland, Belgium, Holland and Denmark spend much higher than their German counterparts. This result is consistent with the study of Kozak et. al (2008). Increasing the marketing activities for the tourist coming from high expenditure countries will contribute to increase tourism income of the region. Besides, analyzing the consumption behavior of German tourist and creating specific products accordingly could increase the expenditure of German tourists coming to Mugla region. The age group 15-24 spends 22% less than the age group 35-44. The age group 35-44 includes families with small children. Preparing holiday programs for those families that facilitate their holiday such as mini clubs, baby sitting service and targeting directly this age group could increase the tourism income.

Pension type is found to be another significant determinant of tourist expenditure. In line with the study of Kozak et. al (2008), all inclusive tourists spend 30% less than the half board tourists. On the other hand bad and breakfast tourists spend 39%, self catering tourists spend 41% more than half board tourists. This result could contribute as empirical evidence to the hot discussion topic all-inclusive tourism. Accommodation type is also a significant determinant of tourist spending. The tourists staying at holiday villages spend 26%, staying at friend's-own house %31 less than the ones staying at city hotels.

The study results show that tourists using credit card spends 27% more than the ones who does not. Thus, it is possible to say that the policies to increase the credit card usage in the tourism sector could increase tourism income. Policies could include shopping insurance, special credit card rates for POS machines for tourism sector and motivations for tourism establishments to use POS machines.

The primary limitation of the study is the annual income being asked in Likert scale due to the need to have high rate of return of valid surveys. Because of lack of annual income in number format, income elasticity could not be calculated. Another limitation of the study is the limited time span that the survey conducted. The survey is conducted in September 2010. A future study that spread all the year around will have the chance to determine seasonal effects on tourist expenditure.

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