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# Is Participation in Tourism Market an Opportunity For Everyone? Some Evidence from Italy

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## Abstract

Exploring the main determinants of tourism participation at national and international level, the paper investigates if there are differences in tourism consumption behaviour among Italian families which reflect disparities in their standard of living. To achieve this a Heckman model has been used on a huge sample of Italian households over the period 1997-2007. Results show that participation in the tourism market is strongly affected by the personal characteristics of individuals and that tourism consumption is an income sensitive good. The analysis reveals that tourism is generally a luxury good reflecting the disparities in the standard of living among Italian families. We have found that participation in the tourism market is affected not only by economic constraints, but also by cultural and territorial factors.

**Keywords:** Tourism consumption, Income elasticity, Household characteristics, Domestic and international travels, standard of living.

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## INTRODUCTION

The idea of a new age of tourism (Fayos-Solá,1996; Poon,1993), in the second millennium and the image of a 'world on the move', linked to economic development has meant an increase in tourist flows and consequently in tourism consumption at worldwide level. In developed economies, travel expenditure has become part of the budget of most households. It affects their feeling of well-being, and thus is a suitable measure of standard of living or well-being (see Costa 1997, 1999; Zheng and Zhang 2013).

Cracolici et al. (2013) investigating the main determinants of the subjective economic well-being of four typologies of Italian households found that "if a household can get away on holiday - not an essential need - there is a positive and strongly significant effect on SEW (i.e. Subjective Economic Well-being) for all typologies of households. In other words, having an annual week's holiday has become part of the budget of Italian families, a basic need." (p.10).

Chesworth (2003) states "Of all the factors that affect the life of a family, the manner of handling family vacation finances may have the greatest impact on the well-being of the family as a unit." (p.346).

Early Costa (1997) argued "income spent on recreation rather than on necessities such as food, may well make consumers feel better off" (p.3). Later, she stated "real income is an imperfect measure of trends in living standards" as "Real income does not account for such goods as health that are not purchased in the marketplace, for quality changes, for revolutionary technological change, and for increases in leisure"(Costa 1999; p.3). According to Costa (1999), increasing income would likely imply an increasing in non-basic needs such as tourism, so that differences in standards of living could be better seen by focussing on consumer expenditures. On the basis of this assumption, she used recreational budget shares to explore differences in standard living among US households and also to investigate inequality in expenditure on recreation.

Based on the aforementioned literature, the study analyses tourism expenditure in Italy to investigate whether tourism has become a basic need for Italian households or whether it is still a luxury good accessible only to few people.

The paper not only explores the effects of economic constraints and socio-demographic determinants in tourism participation and consumption, but also investigates if differences in tourism consumption patterns exist among Italian families as a mirror of differences in standards of living.

The analysis covers the period 1997-2007, that is the decade before the worldwide economic crisis of 21st century. The Italian context is particularly appropriate in a study on the standard of living of families by means of tourism expenditure because over the pre-crisis period even if their average monthly expenditure had increased, and the monthly share of expenditure for non-basic

needs over the total monthly expenditure had increased by 25.0% (Istat 2011), the widespread perception among Italian families was of economic insecurity and a decreasing standard of living (see e.g. Massari et al. 2009). Furthermore, Italy has significant disparities in income distribution. In 1998 and 2008, the 10.0% of families with the lowest income had 2.0% and 2.5% respectively of the national income; while the 10.0% of families with the highest income had 27.5% and 26.3%, respectively.

In order to investigate the presence of inequality in the standard of living of Italian households, different income elasticities relative to different personal and household characteristics have been estimated. Furthermore, two different analyses on the decision to travel domestically or abroad, have been developed. This allows us to discover if there are similarities in the consumption behaviour of individuals who decide to travel abroad with those who take a domestic holiday. These two destinations are different in terms of individual preferences and budget constraints.

The analysis was performed on a time series of cross-sections for the period 1997-2007 and involved a huge sample of 253,858 households drawn from the Italian Household Budget Survey designed by the Italian Statistical Office. Hurdle models (Heckman and Tobin specifications) have been used to control for selection bias and to simultaneously analyse the determinants of participation and consumption decisions. Finally, the choice between the Tobit or the Heckman model specification is not assumed a-priori but a-posterior by a statistical modelling selection.

## LITERARY REVIEW

The microeconomic analysis on tourism participation hypothesizes that the tourist is a rational consumer who wants to maximize his/her utility (or satisfaction) from his/her vacation experience. According to the demand theory, the decision to travel is affected by income, a budget constraint which consequently determines the spending capacity of individuals and their utility (see Crawford, Jackson & Godbey 1991; Dardis, Derrick, Lehfeld & Wolfe 1981).

A large part of tourism literature has focused on the effect of income on tourism participation. Empirical studies show that income positively affects the decision to go on holiday (Alegre et al., 2009; Eugenio-Martin & Campos-Soria 2011; Fleisher & Rivlin 2009; Mergoupis & Steuer 2003), and its effect is higher for individuals with a medium or high level of income (Fish & Waggle 1996; Hay & McConnell 1979; Nicolau & Más 2005). Generally, the income elasticity is below the unit value (Alegre & Pou 2004; Melenberg & van Soest 1996), and is a value greater than one for the

decision to travel abroad or to spend (Eugenio-Martin & Campos-Soria 2011; van Soest & Kooreman 1987). The empirical literature also includes as economic determinants variables related to the tenure status of the house as a proxy for credit constraints (Alegre, Mateo & Pou 2010; Jang & Ham 2009).

Even though economic constraints are the most important determinants of tourism participation and tourism spending, the literature has also underlined the relevance of household characteristics and personal socio-demographic aspects of the householder.

As far as the household characteristics variables are concerned, as with other goods, changes in household composition and size could be accompanied by variations in consumption participation and spending behaviour. Due to economic and physical constraints, a greater number of children may negatively affect the tourism participation decision (Alegre et al. 2010; Nicholau & Más 2005).

Looking at personal socio-demographic aspects, the literature has highlighted the role of the level of education, occupation, gender and age of the householder to explain the tourism participation process.

As regards the level of education, empirical studies show that it positively affects the decision to participate in tourism and to consume (Alegre & Pou 2004; Nicholau & Más 2005; van Soest & Kooreman 1987) as it reflects economic constraints and easier access to information and knowledge.

As far as occupation status is concerned, it is used as a proxy of time and economic constraints. Being a student positively affects the probability of going on holiday while unemployed people are less inclined to travel than people with a stable job like managers or the self-employed (Alegre et al. 2010; Eugenio-Martin & Campos-Soria 2011).

Gender and age are used as proxies of individual preferences and tastes. With respect to the former, even if the literature on tourism participation emphasizes the role played by gender there is no clear evidence of its significance and effect (Eugenio-Martin & Campos-Soria 2011; McGehee, Loker-Murphy & Uysal 1996).

Recently, the literature on tourism participation has highlighted the relevance of the attributes of the residence place of the tourist to explain tourism participation behaviour. People living in urban areas or less attractive tourist region are more inclined to go on holiday to explore new destinations and to have new experiences than people who live in rural or more attractive tourist destinations (Eugenio-Martin & Campos-Soria 2011; Mergoupis & Steuer 2003).

## STUDY METHOD

### DATA

The empirical analysis has been carried out on data from the Households Budget Survey (BF), carried out quarterly by the Italian Office of Statistics (ISTAT). A sample of 265,028 households was collected over the period 1997 to 2007. With regards to tourism, BF observes the total amount of expenditure of the household on tourism and holidays during the previous month, distinguishing between holidays in Italy and abroad. This data on expenditure is supplemented by a rich set of economic, demographic, and sociological variables on Italian households. The BF survey is published every year and involves a random sample of population; enabling a pool of time series of cross sectional observations to be set up and analyzed.

The descriptive statistics reported in Table 1 show that total expenditure of tourists (used as a proxy for disposable income) is always higher than the average expenditure of Italian households as a whole . This finding suggests the presence of a budget constraint in the decision to take a vacation. The analysis also reveals a significant presence of non-tourism consumption (8.0% of all Italian households have a positive expenditure). The percentage of consuming households decreases over time: in 1997 the percentage of households with a positive tourism expenditure was 8.2% reducing to 7.5% in 2007. With respect to the tourism destination, on average Italian households spend a greater amount of money for travelling abroad, being 1.6 times the expenditure on a domestic vacation.

<<Table 1 about here>>

### METHODOLOGY

Following the general consumption theory, the tourism expenditure function is specified by using a double-log specification,<sup>1</sup> where the total household expenditure (used as a proxy for income) has been introduced by a linear and quadratic term to better reflect the shape of the Engel:

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<sup>1</sup> The double-log function has often been used in empirical studies on tourism demand due to its flexibility and better suitability (see Alston et al. 2002).

$$\begin{aligned}
 \text{LnTourExp}_{it} = & \alpha + \beta_1 \text{LnTotExp}_{it} + \beta_2 \text{LnTotExp}_{it}^2 + \sum_{k=1998}^{2007} \partial_k \text{year}_{kt} + \sum_{m=1}^3 \lambda_m \text{Ln age}_{it}^m \\
 & + \sum_{q=1}^4 \mu_q \text{Quarter}_{qt} + \varepsilon_{it}
 \end{aligned} \tag{1}$$

where *LnTourExp* is the natural logarithm of tourism expenditure for the *i*-household in the *t*-time period; *LnTotExp* and *LnTotExp*<sup>2</sup> is the natural logarithm and the square of the natural logarithm of monthly total expenditure. Age is modelled as the sum of a polynomial in the third degree of age (Ln\_age, Ln\_age squared, Ln\_age cube) to identify differences in tourism consumption behaviour over the life cycle of a household. Finally, in order to control for seasonality three seasonal dummy variables (Quarter1, Quarter3, Quarter4) have been inserted in the model, as have the time effects by means of dummy variables (1998-2007).

The demand model in Equation (1) allows tourism elasticity to be constructed easily with respect to income. Actually, in the tourism participation literature the concept of income elasticity is used in a wider sense than the economic one. Income elasticity is used to refer not only to the effect of the relative change of income on tourism expenditure (i.e. in a strict sense), but also to the impact of income change on the probability of taking a holiday. Several studies have investigated the participation behaviour in tourism by means of a logit model, using the estimated marginal effects as measures of the households reactivity in tourism demand (see e.g. Alegre, Mateo & Pou 2013). Conversely, in the literature there are few examples of studies on tourism expenditure reporting income elasticity in a strict sense (Melenberg & Van Soest 1996; van Soest & Kooreman 1987).

To fill this gap, we follow Blundell et al. (1993) and calculate the income elasticity as

$$\text{Elast}_i = \beta_1 + 2\beta_2 \text{LnTotExp}_i \tag{2}$$

The availability of micro-data means individual tourism elasticity can be calculated, for both the different households' socio-demographic characteristics and domestic holidays and holidays abroad, separately. As we will see below, there is a substantial variation in elasticity between households because it depends on the level of the budget and the characteristics of individuals. As underlined by Blundell et al. (1993), this variation of elasticities across the sample is a distinct advantage of using individual household-level data across time rather than aggregate time series, where often only a single elasticity estimate for all households in any period is given.

Since tourism, like other goods, may be not consumed by everyone, the model in Equation (1) should be revised to account for a large proportion of observations with a value of tourism

expenditure equal to zero. Different issues may cause zero expenditure. When the market price for goods exceeds the individual's reserve price, the individual would be at a corner solution and the expenditure distribution would be censored at the point of non-consumption. The Tobit model (Tobin, 1958) allows censored expenditure to be handle as follows;

$$y_i^* = \beta' x_i + \varepsilon_i \text{ with } \varepsilon_i \rightarrow N(0, \sigma^2) \text{ and } i:1, \dots, N \quad (3a)$$

$$y_i = \begin{cases} y_i^* & \text{if } y_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad (3b)$$

where  $y_i^*$  is the latent endogenous variable representing individual  $i$ 's desired level of consumption, and  $y_i$  is the corresponding actual observed expenditure.  $x_i$  is a set of individual characteristics that explain both participation and level of expenditure;  $\beta$  is a corresponding vector of parameters to be estimated. In this model,  $\varepsilon_i$  is assumed to be homoskedastic and normally distributed error term. From Equation (3b) tourism expenditure assumes positive continuous values if the household desires to take a holiday, while zero is due to an individual being censored by economic factors.

Zero expenditure, may also reflect self selection by individuals or by researchers operating in much the same fashion as self selection. Heckman (1979) shows this bias may be treated as a specification error and overcome by undertaking a two-step estimation procedure, i.e. the decision to purchase goods and the decision on how much to spend. This assumes that there will be no zero observations in the second stage once the first-stage selection is passed ( the Heckman model (HM) is called the 'First hurdle dominance model').

Defining  $d_i^*$  as the latent participation variable and  $y_i^*$  as the latent consumption variable, the participation and consumption decision can be respectively defined in the following way:

$$\text{participation decision: } d_i^* = \alpha' z_i + v_i \quad v_i \rightarrow N(0, 1) \quad (4a)$$

$$d_i = \begin{cases} 1 & \text{if } d_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad (4b)$$

$$\text{consumption decision: } y_i^* = \beta' x_i + u_i \quad u_i \rightarrow N(0, \sigma^2) \quad (5a)$$

$$y_i = \begin{cases} y_i^* & \text{if } d_i = 1 \\ 0 & \text{otherwise} \end{cases} \quad (5b)$$

where  $x$  and  $z$  are a different set of variables affecting the two decision stages, and both variables are also assumed to be uncorrelated with their respective error terms. While  $d_i^*$  is a latent variable that denotes binary censoring,  $d_i$  is the observed value representing the individual's participation decision (if  $d_i = 1$  respondent reports a positive tourism expenditure, else 0). The observed tourism expenditure  $y_i$  equals the unobserved latent value  $y_i^*$  only when a positive tourism expenditure is reported; otherwise, it takes the value 0.

The Heckman model also assumes that

$$(v_i, u_i) \rightarrow BVN(0, \Gamma), \quad \Gamma = \begin{bmatrix} 1 & \rho\sigma \\ \rho\sigma & \sigma^2 \end{bmatrix} \quad (6)$$

where  $BVN(0, \Gamma)$  denotes the bivariate normal distribution with mean zero and standard deviation  $\Gamma$ ,  $\rho$  is the correlation coefficient of the  $v_i$  and  $u_i$  terms, and  $\sigma$  is the standard error. In the first stage of the Heckman model, all observations are used to estimate a probit model of  $d_i$  on  $z_i$  to obtain estimates of  $\hat{\alpha}$  from which we are able to compute the inverse Mills ratio,  $\hat{\lambda}_i = \lambda_i \left( \frac{\hat{\alpha}' z_i}{\sigma} \right)$ . The  $\hat{\lambda}_i$  is added as an instrument in the second-stage model, approximating a variable representing the unobservable influences on the participation decision to correct for sample selection bias. Furthermore, if the error terms in (4a) and (5a) are assumed to be independent ( $\rho = 0$ ), the above specification can be further simplified, leading to the so called 'Full dominance hurdle model'.

Heckman's model generalizes the Tobit model allowing the decision-making process to be divided into two stages, and to use different sets of explanatory variables in each stage. The last feature is particularly relevant for modelling tourism consumption, since the decision to travel can be assumed to be mainly related to social factors, and the decision about how much to spend on a holiday depends on the individual's budget constraints.

In the paper, the choice between the Tobit or Heckman model specification was not assumed a-priori but a-posterior by a statistical modelling selection based on the Likelihood ratio (LR) and Vuong tests (Vuong, 1989).<sup>2</sup>

Following the empirical literature, the participation decision is expected to be influenced by some characteristics of the household's head, such as gender (Male), level of education (Higher, Secondary and Primary school education), the status of occupation (Unemployed, Working at home, Student, Retired), and the job position (Manager, Managerial staff, Office worker, Manual worker, Self employed). As mentioned above, age (modelled as the sum of a polynomial in the third degree of age), year and seasonality dummies have also been introduced in the participation equation.

Moreover, following Heckman's (1979) suggestions and indications from the literature (see e.g. Alegre et al. 2013; Eugenio-Martin & Campos-Soria 2011), we hypothesize that decision to travel is influenced by the socio-demographic characteristics of the household, such as the size of the family (Size\_fam), the region of residence (North, South), and the ownership of the house (Owned home). To allow us to interpret and compare the effect of socio-demographic characteristics on domestic and international tourism participation, marginal effects have been calculated from the estimated results. The marginal effects on the participation equation may be interpreted as percentage point increments in the participation equation due to a unit variation of continuous explanatory variables or to a change in the explanatory variables with respect to the reference group in the case of binary or categorical variables. Finally, the estimated parameters of the consumption equation were used to calculate income elasticities as in Equation (2).

## RESULTS

### MARGINAL EFFECTS ON TOURISM PARTICIPATION

As regards model selection, the Vuong test strongly rejects the Tobit specification, so the presence of separate individual choice structures for participation and consumption decisions for both the tourism destination choices is confirmed (Vuong test =124.33 p-value=0.00 and Vuong test =124.39 p-value=0.00, for domestic and international vacation respectively). Moreover, the LR test for nested models leads us to conclude that it is better to use the first-hurdle dominance HM specification for both the tourism destination models (LR =32.36 p-value=0.00 and LR test =39.20 p-value=0.00, for domestic and international vacations respectively).

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<sup>2</sup> The Vuong test is used for non-nested models, so that the first-hurdle dominance model can be statistically compared with the Tobit model. The LR test is appropriate for nested models, so that the first-hurdle dominance can be contrasted with the full dominance HM specification.

Table 2 reports the marginal effects on the predicted probability of being observed in the decision to travel domestically and abroad, respectively. These marginal effects have the same signs in both models, although the domestic travel model has a higher intensity. Since this is the case we focus mainly on the decision to travel domestically, though the considerations below can also be extended to the international tourism market.

<<Table 2 about here>>

The results show that participation in the tourism market is strongly related to the personal characteristics of the householder. The decision to participate in tourism activities appears to be strongly affected by the age of the householder. The signs and the intensity of the marginal effects of the polynomial in age reflect the fact that the probability of having a holiday has an inverted-U shape profile. As the householder gets older, tourism participation increases, but the propensity to travel start decreasing after a person reaches a certain age (35-39 for domestic travel and 50-54 for international travel).

As shown in Table 2, there is a negative effect on the decision to travel if someone is a student. In fact a student is 2.26% less likely to travel compared with someone who is not a student and being unemployed reduces the likelihood of participating in the national tourism market by 1.96 percentage points. If the householder has a good job, the family is more inclined to travel domestically than a family where the householder earns a low income or does not work. Managers and Managerial Staff are respectively 1.20% and 1.72% more likely to travel domestically. The sign and the intensity of the marginal effects of the work status variables on the probability of travelling domestically clearly reflect economic constraints; i.e. families where the householder has a adequate job are more incline to travel domestically and the probability of taking a holiday rises as the level of job prestige goes up.

Similar considerations can be made regarding the level of education which mirrors cultural and economic constraints. All education level variables have significant and positive marginal effects on the probability of going on holiday, and the intensity of the marginal effect rises as of the level of education increases. If the household has a householder who has a higher level of education the probability of travelling increases by 3.38 percentage points compared to a householder without this advantage. The level of education is a highly relevant determinant of tourism participation at international and national level.

As far as the household characteristics are concerned, in contrast to the empirical literature (see e.g. Alegre et al. 2010; Nicholau & Más 2005; Eugenio-Martin and Campos-Soria 2011) the analysis

shows that an increase in the number of family members increases the probability that the family will take a domestic holiday, while it acts weakly on the decision to travel abroad.

As regards household characteristics that reflect economic constraints, families that own their house are 0.82% more likely to participate in tourism activities, this probability being higher for domestic holidays than holidays abroad. The tenure state of the house on the probability to take a holiday is higher for the domestic market respect to the decision of travelling abroad.

Finally, the region where the family lives has a great effect on the decision to participate in tourism at national and international level and the sign of its effect is different in the North and the South, indirectly showing that amenity and economic differences among the Italian regions could support or discourage participation in the tourism market. The probability of taking a holiday decreases for those families living in the South of Italy and its effect is higher for the domestic market (2.76%) than the foreign one (1.66%); while families living in the North are more likely to travel than families living in the other regions of Italy, and in this case too the effect is stronger for the national market (1.66%). This may be due to better economic conditions in the North – an area with a higher level of income per capita and a lower rate of unemployment than the South. Furthermore, it is simpler for people living in the North of Italy to travel because they have easy access to a transport system that is likely more efficient than in the South. On the other hand, the low propensity to travel of people living in the regions of the South may be connected to the high stock of ‘natural’ capital of these regions like sun, sea, cultural heritage, etc. All these natural ‘goods’ are territorial amenities that have a positive effect on people’s quality of life and act against the desire to travel. So, the different signs of the marginal effects related to the geographical variables highlight the fact that Italian families behave differently when it comes to tourism and this indirectly reflects economic and amenity disparities among the Italian regions.

As regards tourist consumption behaviour,<sup>3</sup> the estimated value of the conditional marginal effects of income proxied by the total expenditure was used to calculate income elasticities by means of Equation 2 (see below). It is worth noting that also in the case of the consumption decision, the householder’s age plays a role. Unlike the participation step, the polynomial in age in the outcome equation (i.e. consumption equation) has a U-shape profile. This effect will be discussed in greater depth in the following section.

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<sup>3</sup> Parameter estimates of the consumption function are not reported to save space, but are available on request from the Authors.

## TOURISM DEMAND ELASTICITY

In order to investigate in greater depth the presence of heterogeneity in tourism consumption behaviour as a mirror of the disparities in standards of living, we have calculated income elasticity (Blundell et al. 1993) with respect to different income levels, the characteristics of the householder as well as the household.

The average income elasticity for Italian households over the analysed period of time equals 0.83 and 0.99 for domestic and international holidays, respectively. An average value of income elasticity less than 1 for the national demand would indicate that a domestic holiday was a necessary good; while for an international holiday the elasticity is almost equal to 1 (i.e. there is a proportional increase in tourism consumption when income increases), indicating that having a holiday abroad is not yet a basic need, but still a luxury.

Looking at the relationship between income elasticity and income distribution (Figure 1), the analysis highlights that the tourism elasticity decreases as the level of income increases. For those families in the first percentiles of income distribution, the consumption of tourism is a luxury good. For higher levels of income, however, tourism progressively becomes a normal good. Income elasticity is slightly different between the decision to participate in national and international tourism. It is always higher for the spending decision to travel abroad, but the difference almost disappears for the lowest levels of income; viz. the poorest households are indifferent as to the choice of destinations, because tourism expenditure likely is not a necessity like food, clothing, education etc. As regards domestic tourism, it is a 'normal' good for those families with a monthly level of income higher than 1,850 euros; while a foreign holiday is within easy reach of those families with a level of income greater than 3,200 euros a month.

<<Figure 1 about here>>

As noted above, participation in tourism activity is strongly related to the personal characteristics of the householder. So, in order to better explore how the propensity to travel changes as these characteristics vary, income elasticity by age, gender, education and work status has been calculated and plotted in Figure 2. The first chart of Figure 2 reports the mean income elasticity value for the age of the householder, clearly showing the effect of age on the consumption of tourist goods and services. Income elasticity has a non-linear relationship with the age distribution of householders, with a U-shaped life cycle profile, which is different for the national and the international market. As regards international travellers, income elasticity for age has - with the exception of the middle age classes - values greater than 1 indicating that tourism expenditure is a luxury good for the majority of the age groups. In contrast, for domestic tourists,

at any age, tourism is a normal or better, a basic good, the value of income elasticity being less than 1.

Generally, the youngest and oldest people show higher values of elasticity than the middle age classes, suggesting that they have a greater propensity to respond to variations in their income. That is, their demand elasticity is more sensitive to income changes than those people in the middle age group. This could be due to economic constraints and changing needs over the life cycle of the householder.

The elasticity to spend on tourism is closely related to the level of education and occupation. Tourism is a luxury good for those householders with primary or no education, irrespective of the destination (third chart of Figure 2), but it progressively becomes a necessary good as the level of education rises: householders with a PhD exhibit the lowest elasticity of 0.66 and 0.86 respectively for domestic and international travel. Similarly, a positive relationship between occupation and reactivity of tourism expenditure to income has been detected (fourth and fifth chart of Figure 2). People outside the labour market show the highest values of elasticity, confirming that budget constraints strongly affect the consumption of tourism. Among householders with a job, only manual or office workers show an elasticity higher than 1 only for international tourism.

To Sum up, an analysis of income elasticity by the socio-demographic characteristics of the householder shows that differences exist in participation in the tourism market, which reflect disparities in the standard of living of Italian people. In households where the head is socially vulnerable – like the unemployed, the retired, the youngest and the oldest and individuals with a low level of education – there is a tourism demand which is sensitive to income changes (i.e. an income elasticity greater than 1); viz. for these families tourism is a luxury good and being unable to afford a holiday may reduce their feeling of well-being (Costa 1997, 1999; Cracolici et. al. 2013).

<<Figure 2 about here>>

Comparing income elasticity profiles with some characteristics of households (Figure 3), we find some further interesting evidence. For both domestic and foreign demand, income elasticity decreases as the household's size increases (first chart of Figure 3), that is larger families exhibit a lower elasticity to tourism. This behaviour could mean that families with children feel the need to get away on holiday in order to satisfy the needs of the young; but it also reflects the fact that a larger family could have less economic constraints due to the fact that the family could have two or more adult wage-earners.

Finally, tourism consumption behaviour has a different territorial pattern, consistent with the traditional geography of socio-economic development in Italy; viz. developed regions (North) and less developed regions (South). For both destination choices (i.e. travelling domestically and abroad), people living in the North of Italy show, on average, the lowest values of income elasticity, while families living in the South of Italy have values of income elasticity greater than 1. For these families tourism is a luxury good, which is consistent with the poorer economic conditions of the Southern regions. Finally, home ownership is associated with a lower value of elasticity (independent of the tourism destination), likely reflecting a higher income level of households.

<<Figure 3 about here>>

## CONCLUSIONS

By means of a Heckman model specification, the paper investigates the standard of living of people analyzing the expenditure pattern of a non-basic good, in this case tourism. The research idea is that spending on leisure rather than essential goods like food or clothing may increase the quality of life or the feeling of well-being of individuals, who then consider that they have a higher standard of living. By examining the pattern of tourism expenditure we can explore whether individuals have the same opportunity to have a holiday as an expression of disparities in living standards.

Adopting the Engel relationship, the study also explores the main economic and socio-demographic aspects that act on participation in tourism activity and tourism consumption. The analysis has been carried out on a large dataset on Italian households and it has compared the decision to travel domestically and abroad in order to explore if holiday destination makes a difference to their decision.

Empirical findings show that tourism is generally a good which is not accessible to everyone. The main determinants of participation in tourism are related to the personal characteristics of individuals; above all it depends on the level of education and the occupation of the householder, which indirectly reflect income disparities among families.

The analysis of income elasticity by the characteristics of the household and the householder shows that there is a strong heterogeneity in the sensitivity of tourism expenditure. Tourism has been confirmed to be a luxury good for the poorest families, but as the income increases it becomes a 'normal' good. Tourism, whether domestic or abroad, is a necessary good only for those families

which have a high level of monthly income. Whilst, for those families with a middle level of monthly income only travelling domestically is a basic need as travelling abroad is income sensitive.

Income elasticity by the characteristics of the householder (i.e. age, gender, occupation status and education status) shows interesting differences in tourism consumption, reflecting socio-economic disparities among Italian households. Households whose head is socially vulnerable (e.g. the unemployed, the retired, the youngest and the oldest and individuals with a low level of education) have a tourism demand which is sensitive to income changes (i.e. an income elasticity greater than 1). For such families tourism is a luxury good and being unable to afford a holiday may reduce their feeling of well-being.

Finally, the analysis shows that there are territorial differences in tourism consumption patterns; more specifically the propensity to spend on tourism is higher in the North of Italy than in the South reflecting differences in economic development among the regions, but also cultural and amenity differences within the country.

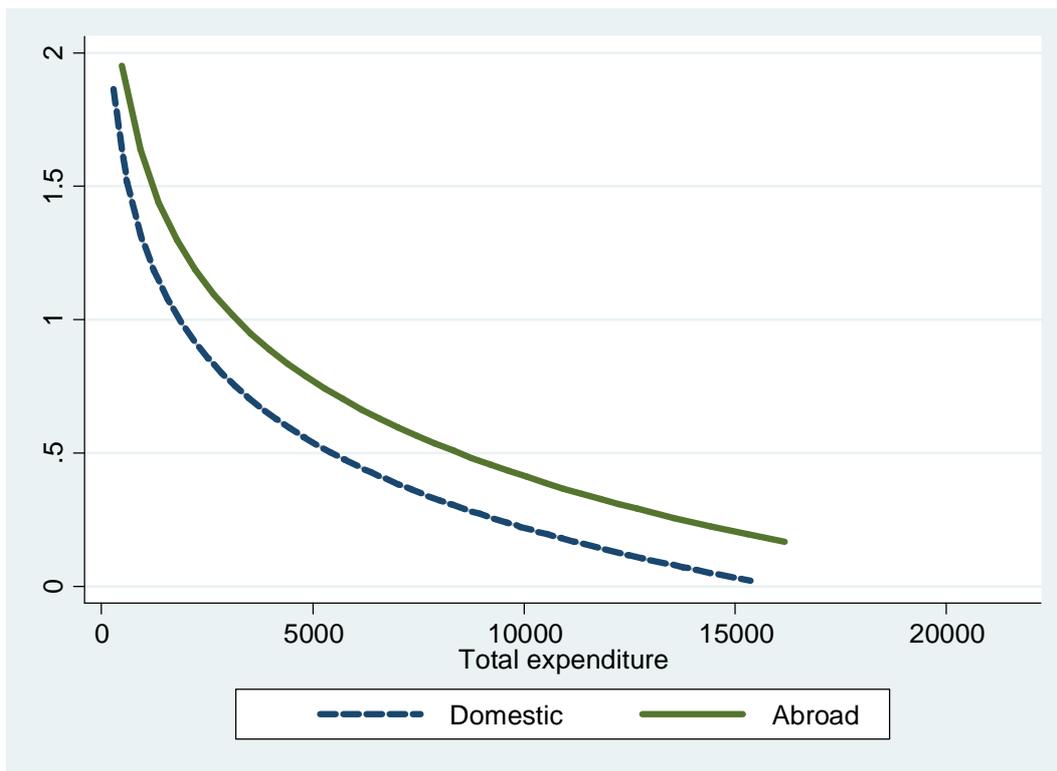
To sum up, participation in the tourism market is not an opportunity which is open to everyone but only for those households having a satisfactory level of income and where the householder has a higher level of education and a prestigious job. Therefore, disparities in the standard of living exist among Italian people. This means that although we may live in a world 'on the move' for many it is still difficult to 'get on board'.

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Figure 1. Elasticity by Total Expenditure



**Figure 2. Elasticity by socio-demographic characteristics of the householder**

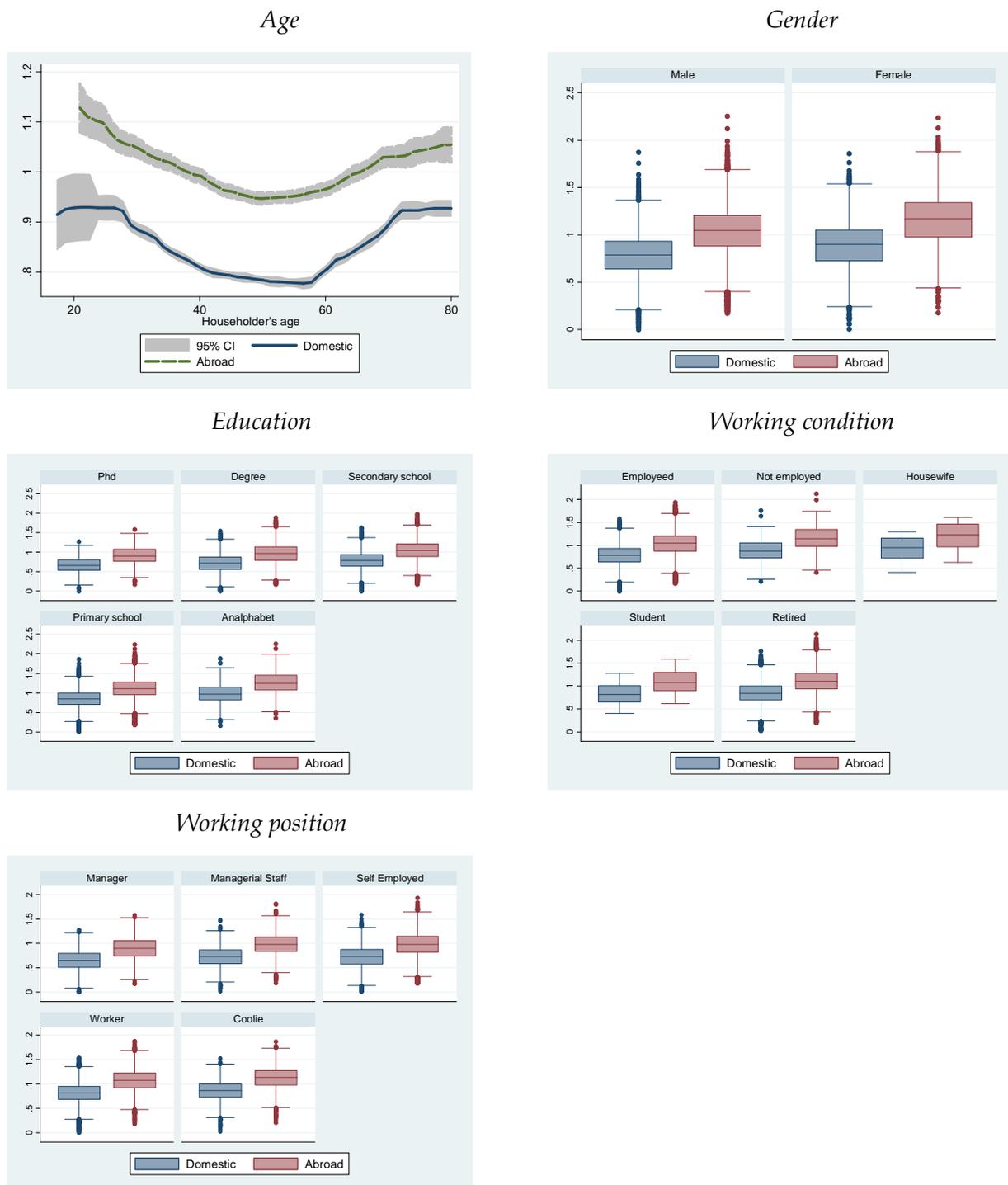
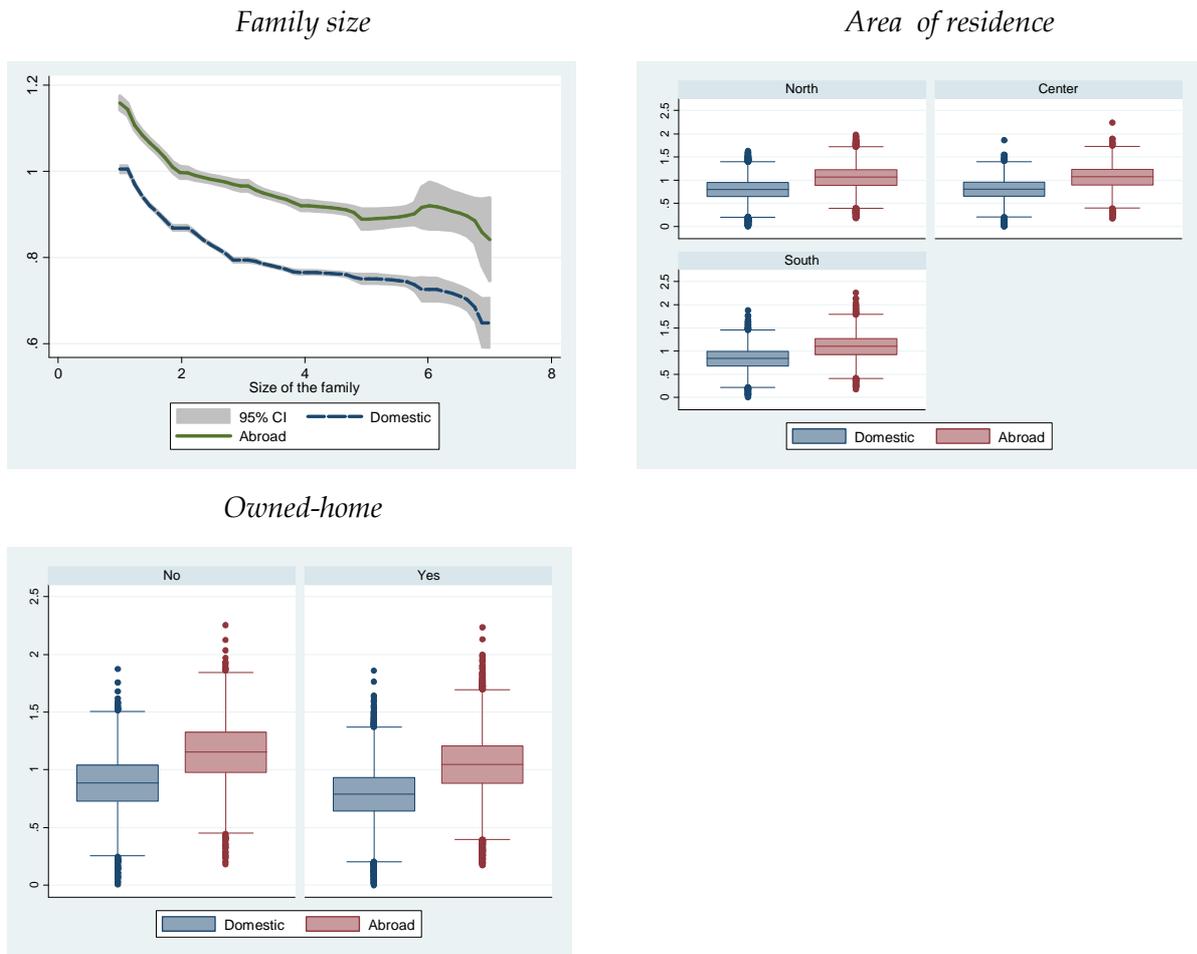


Figure 3. Elasticity by household's characteristics



**Table 1. Average Monthly Total and Tourism Expenditure over time (1997 - 2007)**

| Year                   | Average monthly expenditure | Average monthly expenditure for households with tourism expenditure | Average monthly tourism expenditure in Italy | Average monthly tourism expenditure abroad | % of households with a positive tourism expenditure |
|------------------------|-----------------------------|---|--|--|---|
| 1997                   | 1850                        | 3054  | 429  | 707  | 8.21%   |
| 1998                   | 1851                        | 3103  | 441  | 765  | 8.29%   |
| 1999                   | 1830                        | 3096  | 419  | 750  | 8.39%   |
| 2000                   | 1864                        | 3159  | 510  | 867  | 8.30%   |
| 2001                   | 1818                        | 3120  | 547  | 831  | 8.07%   |
| 2002                   | 1847                        | 3177  | 542  | 821  | 7.29%   |
| 2003                   | 1896                        | 3202  | 525  | 746  | 7.41%   |
| 2004                   | 1909                        | 3191  | 506  | 739  | 7.23%   |
| 2005                   | 1886                        | 3185  | 513  | 802  | 7.44%   |
| 2006                   | 1896                        | 3210  | 485  | 852  | 7.45%   |
| 2007                   | 1876                        | 3208  | 467  | 753  | 7.50%   |
| Total                  | 1866                        | 3154  | 488  | 786  | 7.75%   |
| Nr households per year | 22,463,636                  | 1,795,284   | 1,329,890                                    | 507,406                                    |   |

**Table 2. Estimated Marginal Effects on Tourism Participation**

| Variable                   | Domestic                          |           |                                  | Abroad                            |           |                                  |
|----------------------------|-----------------------------------|-----------|----------------------------------|-----------------------------------|-----------|----------------------------------|
|                            | Marginal Effects on Participation | Std. Err. | Percentage Change in Probability | Marginal Effects on Participation | Std. Err. | Percentage Change in Probability |
| Ln_age                     | -2.5247*                          | 0.4713    | -                                | -3.8666*                          | 0.2449    | -                                |
| Ln_age squared             | 0.7231*                           | 0.1229    | -                                | 1.0412*                           | 0.0644    | -                                |
| Ln_age cube                | -0.0686*                          | 0.0106    | -                                | -0.0930*                          | 0.0056    | -                                |
| 1998                       | -0.0024                           | 0.0018    | -0.24%                           | 0.0029*                           | 0.0011    | 0.29%                            |
| 1999                       | -0.0008                           | 0.0018    | -0.08%                           | 0.0021**                          | 0.0011    | 0.21%                            |
| 2000                       | -0.0021                           | 0.0017    | -0.21%                           | 0.0030*                           | 0.0010    | 0.30%                            |
| 2001                       | -0.0027                           | 0.0017    | -0.27%                           | 0.0011                            | 0.0010    | 0.11%                            |
| 2002                       | -0.0064*                          | 0.0017    | -0.64%                           | 0.0003                            | 0.0010    | 0.03%                            |
| 2003                       | -0.0053*                          | 0.0017    | -0.53%                           | 0.0005                            | 0.0010    | 0.05%                            |
| 2004                       | -0.0073*                          | 0.0018    | -0.73%                           | 0.0018***                         | 0.0010    | 0.18%                            |
| 2005                       | -0.0072*                          | 0.0018    | -0.72%                           | 0.0016                            | 0.0010    | 0.16%                            |
| 2006                       | -0.0060*                          | 0.0018    | -0.60%                           | 0.0018***                         | 0.0011    | 0.18%                            |
| 2007                       | -0.0074*                          | 0.0018    | -0.74%                           | 0.0032*                           | 0.0010    | 0.32%                            |
| Quarter1                   | -0.0633*                          | 0.0010    | -6.13%                           | -0.0156*                          | 0.0006    | -1.55%                           |
| Quarter2                   | -0.0427*                          | 0.0010    | -4.18%                           | -0.0107*                          | 0.0006    | -1.06%                           |
| Quarter4                   | -0.0713*                          | 0.0011    | -6.88%                           | -0.0165*                          | 0.0006    | -1.64%                           |
| Size_fam                   | 0.0071*                           | 0.0003    | -                                | 0.0017*                           | 0.0002    | -                                |
| Unemployed                 | -0.0198*                          | 0.0032    | -1.96%                           | -0.0051*                          | 0.0020    | -0.51%                           |
| Working at Home            | 0.0010                            | 0.0086    | 0.10%                            | -0.0103**                         | 0.0052    | -1.02%                           |
| Student                    | -0.0228*                          | 0.0068    | -2.26%                           | -0.0010                           | 0.0035    | -0.10%                           |
| Retired                    | 0.0083*                           | 0.0016    | 0.84%                            | 0.0027*                           | 0.0009    | 0.27%                            |
| Manager                    | 0.0119*                           | 0.0026    | 1.20%                            | 0.0114*                           | 0.0014    | 1.14%                            |
| Managerial Staff           | 0.0170*                           | 0.0022    | 1.72%                            | 0.0089*                           | 0.0012    | 0.89%                            |
| Office Worker              | 0.0075*                           | 0.0016    | 0.75%                            | 0.0049*                           | 0.0009    | 0.49%                            |
| Manual Worker              | -0.0051*                          | 0.0016    | -0.51%                           | -0.0006                           | 0.0010    | -0.06%                           |
| Self Employed              | 0.0035**                          | 0.0016    | 0.35%                            | 0.0067*                           | 0.0009    | 0.67%                            |
| Male                       | -0.0003                           | 0.0010    | -0.03%                           | -0.0017*                          | 0.0006    | -0.17%                           |
| High education             | 0.0332*                           | 0.0015    | 3.38%                            | 0.0146*                           | 0.0008    | 1.47%                            |
| Secondary-school Education | 0.0236*                           | 0.0012    | 2.38%                            | 0.0086*                           | 0.0007    | 0.87%                            |
| Primary-school Education   | 0.0112*                           | 0.0011    | 1.13%                            | 0.0022*                           | 0.0007    | 0.22%                            |
| North                      | 0.0115*                           | 0.0009    | 1.16%                            | 0.0067*                           | 0.0005    | 0.67%                            |
| South                      | -0.0280*                          | 0.0010    | -2.76%                           | -0.0167*                          | 0.0006    | -1.66%                           |
| Owned Home                 | 0.0081*                           | 0.0009    | 0.82%                            | 0.0035*                           | 0.0005    | 0.35%                            |

(\*), (\*\*) and (\*\*\*) denotes statistical significance at a 1%, 5% and 10% level.