

The impact of typical products on the decision to (re)visit a tourist destination: market-expanding or business-stealing?*

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Abstract

This paper studies how typical products affect the attractiveness of tourist destinations, distinguishing between market-expanding and business-stealing effects. We surveyed 1,100 Italians at their home on their intention to visit or revisit three popular mountain destinations in Northern Italy (Valtellina, Valle d'Aosta, Trentino), and on their experience, knowledge, and appreciation of five well-known typical products of these places (Pizzoccheri pasta, Bresaola dried beef, Fontina cheese, Melinda apple, Speck smoked ham). We find that product experience positively affects the likelihood of (re)visiting both a product's place of origin and the other mountain destinations (market-expanding effect). Conversely, the correct identification of the product's place of origin may reduce the intention to (re)visit the other destinations (business-stealing effect). Finally, strong appreciation for a typical product has a positive effect only on the intention to (re)visit the place of origin.

JEL classification: L83, M31, M37, Q13

Keywords: Typical products; Mountain regions; Tourism; Market-expanding effect; Business-stealing effect; Multivariate probit model.

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1 Introduction

Tourism literature has broadly documented that typical products and local *cuisine* significantly affect the holiday destination choice (Hall and Mitchell, 2001; Hjalager and Richards, 2002; Long, 2004; Quan and Wang, 2004), and greatly influence the enjoyment of the stay (du Rand and Heath, 2006; Fox, 2007; Nield et al., 2000; Yuksel and Yuksel, 2002). The food literature has indeed widely emphasized the importance of typical products and gastronomy as a driving force of economic growth (Handszuh, 2000; Telfer and Wall, 1996). In mountain resorts, for example, agricultural activities help to preserve environmental equilibrium and soil conservation, which are necessary premises for tourism development. Having said this, agriculture, the food industry, and tourism are therefore complementary, and characterized by upstream and downstream linkages and strong inter-sectoral multiplier effects (Lorenzini, 2011).

In many mountain resorts, the development and the promotion of typical products have grown in parallel with the acknowledgement of the importance of food for customer fidelization (Sparks et al., 2003) and the attraction of new visitors (Sims, 2009). At the place of vacation, typical products help to convey a sense of authenticity and uniqueness (Sims, 2009), and to reinforce the external image of the area (Boyne and Hall, 2004). Outside the strict tourist locations, they play the role of an additional promotional channel. Because of the important role played by typical products in local tourism economies, in recent years, typical products have increasingly become marketing and branding tools for tourism promotion (du Rand and Heath, 2006; Fox, 2007; Frochot, 2003; Hashimoto and Telfer, 2006; Tellstrom et al., 2006). Since typical products evoke the identity, culture, and sustainability of the place of origin, many authors suggest that they should be considered explicitly and implicitly when the marketing strategies of local and regional destinations are designed. Moreover, protected designations of origin and quality labels are frequently recognized as capable of promoting tourism and conveying a feeling of quality and typicality (Bessièrè, 1998; Santagata et al., 2007).

Contrary to local *cuisine* that is not really marketable outside the charming restaurants of a tourist region, typical products are also sold outside the place of origin. The availability of these products in food stores near their homes allows prospective visitors to get some idea of local traditions, and to increase their perception of the authenticity and attractiveness of the supposed place of origin. Moreover, for those travelers who have already spent a vacation in a tourist destination, the consumption of its typical products (far from the place of origin) may help to keep an interest in that destination alive. In both cases, typical products should make it more likely for customers to visit (or revisit) a tourist location.

Although there are plenty of works highlighting the benefits of local food on tourism, less

attention has been devoted to verify the existence of a statistically significant effect of typical products on the intention to visit or revisit a tourist destination. Some exceptions are Barros and Assaf (2012), Kivela and Crofts (2006) and Sparks et al. (2003), who find a positive correlation between food quality perception and the intention to revisit. Moreover, to the best of our knowledge, the existing literature on the subject has not yet analyzed what effect typical products exert on competing tourist destinations.

This paper aims to fill this empirical gap by analyzing the impact of typical products on the decision to visit (and revisit) a destination, by means of an ad hoc survey. We select three popular mountain tourist areas in Northern Italy (Valtellina, Valle d'Aosta, Trentino), and five well-known typical products of these places sold in food stores all over the country (Pizzoccheri pasta, Bresaola dried beef, Fontina cheese, Melinda apple, Speck smoked ham). The need to have a sufficient number of respondents acquainted with these products suggested that we should limit our survey to Italians.

Using computer-assisted telephone interviews, we surveyed 1,100 people at their home. The interview contains questions on the experience, appreciation, and presumed place of origin for a selection of typical products; the interviewee's intention to visit or revisit the three mountain destinations; the satisfaction with the visited places and the interviewee's sociodemographics. The peculiar structure of the collected data allows us to investigate the different roles played by typical products and their market-expanding and/or business-stealing impact. A Multivariate Probit methodology is employed to exploit the features of the data structure.

We find that the experience of a typical product positively and significantly affects the likelihood of (re)visiting both the place of origin and the other mountain destinations, suggesting that typical products have a market-expanding effect. Moreover, it also emerges that the correct identification of the product's place of origin only in some cases reduces the intention to (re)visit the other competing mountain destinations, suggesting the existence of a business-stealing effect. Finally, strong appreciation for a typical product has a positive effect only on the intention to (re)visit the place of origin.

The paper is organized as follows. Section 2 explores the literature background for the study of the market-expanding and business-stealing effects of typical products on tourist destinations. Section 3 sets out the hypotheses to be tested. Section 4 describes the data and the econometric model employed in the analysis. Section 5 discusses the results. The main implications for tourism policies and practices are outlined in the concluding section of the paper.

2 Typical products and their promotional role

In this section we introduce our background analysis concerning the market-expanding and business-stealing effects of advertising. Marshall (1919) was the first to identify two broad types of advertising: ‘constructive’ as opposed to ‘combative’ advertising. The former type corresponds to the case in which advertising has positive effects on the whole industry, i.e. a firm’s advertising campaign attracts new customers into the market, increasing all firms’ sales, revenues and profits. The latter type corresponds to the case where an advertising campaign generates a positive effect for the promoting firm, but a negative one for the others, i.e. the number of market consumers does not grow, and there is a reallocation of sales towards the advertising firm. In accordance with this explanation, ‘constructive’ advertising has therefore a market-expanding effect, while ‘combative’ advertising is business-stealing.¹

Although the classifications described above are widely employed in theoretical and empirical studies (Bagwell, 2007), there is no consensus on which effect prevails. Indeed the results reported in the literature differ according to the industry analyzed and the methodology used, as the following few examples clearly show.

Garthwaite (2014), in his study of the economic effects of endorsement in the publishing sector, finds that endorsement is a business-stealing form of advertising that raises printed work sales without expanding the overall market. Seldon and Doroodian (1989), instead, in their work on cigarette advertising, examine the response of aggregate cigarette demand to advertising, and the reaction of consumers and the tobacco industry to government health warnings and media policy during the period 1952-84. Their results indicate that advertising is market-expanding. Similarly, in their study on the frozen meal industry, Dubé and Manchanda (2005) notice that advertising has a market-expanding impact especially in larger markets. In their analysis of the drug sector, Narayanan et al. (2004) and Arcidiacono et al. (2013) find both a market-expanding and a business-stealing impact of advertising. On the contrary, Liu and Gupta’s (2011) results mainly show a market-expanding effect.

As far as typical products and the choice of tourism destinations are concerned, it is worth mentioning the following considerations. On the one hand, it may be argued that typical products, by strengthening the destination image and its perceived quality, increase the attractiveness of the place of origin, and simultaneously reduce that of competing destinations (business-stealing effect). On the other hand, it can also be argued that typical products, by evoking an association between a given food consumption ambience and places with corresponding characteristics, increase the attractiveness of all mountain tourist destinations in a

¹These two effects are also called ‘category-building effect’ and ‘share-stealing effect’, respectively (Dubé and Manchanda, 2005).

given area (market-expanding effect).

Although the literature on tourism does not explicitly deal with these effects, the prevailing interpretation assigns a business-stealing role to typical products. Okumus et al. (2007), for instance, state that: “Food can play an important role in differentiating destinations in a meaningful way”. Similarly, other authors highlight the role of food and local *cuisine* for the “differentiation and promotion of a specific tourist destination” (Horng and Tsai, 2010) “in an increasingly competitive global marketplace” (Lee and Arcordia, 2011). The emphasis on the terms ‘differentiation’ and ‘specific’ in many papers (see also Boyne and Hall, 2004 and Lin et al., 2011, to cite but two of them) can be interpreted as a tendency for tourists to attribute typical products a combative nature in tourists’ perception. Nevertheless, this interpretation is not supported by any empirical quantitative analysis.

As already anticipated, only a few empirical studies (Barros and Assaf, 2012; Kivela and Crofts, 2006; and Sparks et al., 2003) have statistically analyzed the effects of typical products on the intention to (re)visit a tourist destination. However, a thorough understanding of the existence and nature of these effects is of paramount importance, for example, in devising appropriate destination and promotional tourist strategies. Hence in the following sections we propose a method to address this issue.

3 The hypotheses

A first preliminary hypothesis to be tested concerns the effect of typical product experience on the intention to visit or revisit a destination (Barros and Assaf, 2012; Kivela and Crofts, 2006; and Sparks et al., 2003). Contrary to local *cuisine* that is an almost exclusive experience at the tourist location, typical products can be easily found in any food store or supermarket and, therefore, can also be consumed outside the place of origin. This implies that typical products may also influence the food image and reputation of a tourist place and the desire of newcomers to visit (Ryu and Jang, 2006). In addition, especially for this category of potential visitors, typical product experience may contribute to increase their familiarity with local *cuisine* and their evaluation of the tourist destination (Mak et al., 2012).

Hypothesis 1 *Previous experience with typical products is positively related to the intention to visit or revisit their place of origin.*

In order to test Hypothesis 1, we consider the following model:

$$V_{id} = \alpha + \sum_{p \in P^d} \beta_p E_{ip} + \zeta Z_{id} + \varepsilon_{id}, \quad (1)$$

where i refers to the interviewee, p to the product, and d to the destination; V_{id} is a dummy variable equal to 1 if the interviewee intends to visit the destination; P^d is the basket of typical products belonging to destination d ; and E_{ip} is a dummy variable equal to 1 when the interviewee has actually experienced product p . Moreover, Z_{id} is a vector of control variables including whether the interviewee has already visited destination d ; her/his lifestyle customs (habit of buying typical products when shopping, type of vacation chosen in the last two years, presence of children), and her/his sociodemographic features (gender, age, education, distance from the tourist destination). Positive and significant values of β_p support the stated hypothesis, while null and non-significant values imply no promotional role of typical products.

The rest of the analysis is devoted to identify whether typical products have a market-expanding or a business-stealing effect.

Hypothesis 2 *Previous experience of typical products from other (similar) locations is positively/negatively related to the intention to visit or revisit the place of origin of a typical product.*

In order to test Hypothesis 2, we consider the following model:

$$V_{id} = \alpha + \sum_{p \in P^s} \beta_p E_{ip} + \zeta Z_{id} + \varepsilon_{id}, \quad (2)$$

where P^s is the basket of typical products belonging to the tourist destination d and other similar destinations, $d' \neq d$. If $\beta_p > 0$ for $p \notin P^d$, we have a market-expanding effect of typical product p on destination d . Otherwise, if $\beta_p < 0$ for $p \notin P^d$, there is a business-stealing effect.

The literature offers different arguments for interpreting the market-expanding and business-stealing effects of typical products. A market-expanding effect of typical products may be due to confusion (Mitchell et al., 2005).² According to Loken et al. (1986), physical similarities between products (or places) may induce a wrong assignment of a typical product to its place of origin (p.196). Thus, a traveler assigns a positive food image (and evaluation) to a tourist location which is not the place of origin of a typical product and is more interested to visit or revisit the place because she/he wrongly assigns that product to that place. Thus, in this case, information on the place of origin plays a role. Lack of correct identification of the place of origin generates a market expanding effect, while the correct identification of the place of origin may have a business-stealing effect on other competing destinations. Indeed, a correct identification of the place of origin reinforces the intention of visiting that place and because

²Confusion may be defined as a state of mind which affects information processing and decision making (Mitchell and Papavassiliou, 1999, p.327).

of substitutability of destinations, should have a negative effect on the intention to visit the others.

According to Becker and Murphy (1993), a market-expanding effect can also emerge when there is a complementarity in consumption between a typical product and a tourist resort (not necessarily the place of origin) which is evoked by the product. Under complementarity theory, information about the actual place of origin of a typical product, per se, does not play any role, and therefore it is neither market expanding nor business stealing. Vice versa, a market-expanding effect emerges because there is a positive interdependence in consumption between the typical product and the visit of a tourist destination.

Hypothesis 3 *The correct identification of the place of origin of a typical product:*

- a) *has no effect on/strengthens the intention to visit or revisit the place of origin;*
- b) *has no effect on/weakens/nullifies the intention to visit or revisit other similar competing places.*

In order to test Hypotheses 3a and 3b, we consider the following model:

$$V_{id} = \alpha + \sum_{p \in P^s} \beta_p E_{ip} + \sum_{p \in P^s} \gamma_p A_{ip} + \zeta Z_{id} + \varepsilon_{id}, \quad (3)$$

where A_{ip} is a dummy variable equal to 1 if the interviewee has already experienced the product, and correctly assigned the product p to its place of origin, i.e. $A_{ip} = 1$ if $E_{ip} = 1$, $p \in P^d$, and the interviewee has correctly answered d .

The results should be interpreted in the following way. Our line of reasoning is developed under the assumption that $\beta_p > 0$ for $p \in P^s$ (the experience of typical products is market expanding). For $p \in P^d$, if $\gamma_p > 0$, a correct identification of the product's place of origin reinforces the intention to visit that particular destination, while if $\gamma_p = 0$, a correct attribution does not influence the result. For $p \notin P^d$, if $-\beta_p < \gamma_p < 0$, a correct assignment of the product to another place of origin reduces the intention to visit that destination, while, if $\gamma_p = 0$, a correct assignment to another place does not influence the result. Moreover, if $\gamma_p = -\beta_p$, the intention to visit d is not affected by the product $p \notin P^d$ when interviewees are informed about the place of origin of typical products. Thus, when $\gamma_p \neq 0$, in addition to the market-expanding effect of typical product experience, there is a business-stealing effect when experience helps to unveil information on the origin of the typical product, i.e. there is an informative role of typical products. On the contrary, when $\gamma_p = 0$, typical products play a complementary role with respect to the intention to visit similar destinations.

Finally, if we assume that typical products have an informative role on the image, reputation, and local *cuisine* appeal of a tourist destination, we expect that those interviewees who

are both informed about the place of origin of typical products and strongly appreciate them will be more interested in visiting that location.³ Thus, food appreciation may play an additional role in the intention to visit the place of origin. Moreover, we expect that it also plays a business-stealing effect on (similar) alternative destinations because consumer preferences are strongly channeled in the direction of that specific product and its territorial area. In the case where a typical product plays a complementary effect, we expect no additional impact on the destination choice.

Hypothesis 4 *The strong appreciation of a product and the correct identification of its place of origin:*

- a) has no effect on/strengthens the intention to visit or revisit a place of origin;*
- b) has no effect on/weakens/nullifies the intention to visit or revisit other similar competing places.*

In order to test Hypotheses 4a and 4b, we consider the following model:

$$V_{id} = \alpha + \sum_{p \in P^s} \beta_p E_{ip} + \sum_{p \in P^s} \gamma_p A_{ip} + \sum_{p \in P^s} \delta_p L_{ip} + \zeta Z_{id} + \varepsilon_{id}, \quad (4)$$

where L_{ip} is a dummy variable equal to 1 if the interviewee appreciates (strongly likes) a typical product and she/he correctly identifies its place of origin. Test results can be interpreted as in the previous case. When $p \in P^d$, if $\delta_p > 0$, typical product appreciation reinforces the intention to visit the destination; while, if $\delta_p = 0$, product appreciation does not influence the choice. When $p \notin P^d$, if $\delta_p < 0$, product appreciation induces a business-stealing effect, while, if $\gamma_p = 0$, product appreciation does not affect the result. Thus, when $\delta \neq 0$, we observe an informative role of typical products that has a reinforcement effect when $p \in P^d$, and a business-stealing effect when $p \notin P^d$. On the contrary, when $\delta = 0$, typical products play a complementary role in the choice to visit similar tourist destinations.

4 Data and research methodology

Three homogeneous mountain regions have been chosen as the territorial focus of the analysis: Valtellina, Valle d'Aosta, and Trentino Alto Adige (from here on Trentino). All the three destinations are located in the Italian Alps. Valle d'Aosta is the westernmost of the three, and is bordered to the West by France and to the North by Switzerland. Valtellina is part

³Food appreciation or liking refers to 'the palatability or pleasure obtained from tasting a given food' (Giesen et al., 2010, p.966).

of the Lombardy Region, is located in the central part of the Alps, and is bordered to the North by Switzerland. Trentino is the most easterly of the three, and is bordered to the West by Switzerland and to the North by Austria. Apart from their topographic affinity, the three locations share significant similarities in their economic structure. In the three cases, tourism is a major source of income and employment for the local population. Moreover, their typical products are widely diffused and well-known all over the country.

4.1 The data

The data employed in the analysis come from a private survey carried out by means of a Computer-Assisted Telephone Interviewing (CATI) distribution method over a random sample of 1,100 Italian citizens stratified by age, gender and place of residence. The choice of selecting only Italian people is made in order to satisfy the requirement that interviewees predominantly share the same food culture and the same opportunity to buy typical products in a supermarket in their place of residence.

4.2 The dependent variable

The intention to visit or revisit a tourist destination is the dependent variable of our estimates. Table 1 summarizes the mean values for the three destinations, as well as the Spearman correlation index. The number of respondents wishing to visit or revisit the three destinations ranges between 60.45% and 66.82%. The highest value corresponds to Trentino, which is the more extensive and popular destination of the three. Note that, although Valtellina is located in the center of the Alps, and is therefore located between the other two mountain destinations, a higher correlation occurs between Valle d’Aosta and Trentino. This result probably depends on the fact that the two places share more similar Winter and Summer tourism offers.

Table 1: Intention to (re)visit a destination

	Yes (%)	Spearman correlation		
		Valtellina	Valle d’Aosta	Trentino
Valtellina	60.45	1.0000		
Valle d’Aosta	61.27	0.5250	1.0000	
Trentino	66.82	0.5436	0.6367	1.0000

4.3 The independent variables of theoretical interest

A set of questions investigates the respondents’ experience with a basket of 16 typical products belonging to the three destinations, i.e. the correct identification of the products’ place

of origin; whether they have tasted the products; and, if the answer is positive, their appreciation and willingness to pay for them. Hence, the variables of main theoretical interest are: experience of the products; correct identification of their place of origin; and strong appreciation of them.⁴ Although the collected answers concerned 16 typical products, the econometric analysis performed is based on a selection of only five items, using as a choice criterion the rule that at least 50% of interviewees had tried the product.

The use of this criterion is meant to reduce multicollinearity issues and to simultaneously focus on the most popular and diffused products, i.e. those which are more easily found in food stores all over the country.⁵

The selected products are Melinda apple and Speck smoked ham for Trentino, Pizzoccheri pasta and Bresaola dried meat for Valtellina, and Fontina cheese for Valle d'Aosta. Table 2 provides the descriptive statistics of the three variables of interest for each product.

Table 2: Experience, correct identification of the region of origin, and appreciation

	Experience	Identification	Appreciation (5=strong)				
	(%)	(%)	1	2	3	4	5
Speck smoked ham	78.6	61.9	10	13	81	239	520
Bresaola dried beef	76.6	42.5	15	31	104	254	438
Melinda apple	76.0	60.9	3	11	91	272	457
Fontina cheese	71.2	30.9	9	31	165	247	329
Pizzoccheri pasta	51.4	41.9	10	18	81	175	278

4.4 The control variables

In order to take into account some factors that can possibly affect the intention to (re)visit a destination, the four models include a set of control variables belonging to two main groups.

First, a set of lifestyle variables including: customary purchase of typical products (*Love of typical products*); mountain resorts chosen as a place of vacation in the last two years (*Love*

⁴The correct identification of the place of origin has been computed by comparing the answers to an open question about the supposed place of origin of the products with the true one.

⁵The excluded goods are: Bitto cheese, Arnad lard, Casera cheese, Fumin wine, Melavì apple, Arnad Montjovet wine, Mocetta dried beef meat, Teroldego wine, Grumello wine, Sforzato wine, Müller-Thurgau wine. Asiago cheese has been excluded because the territory of production belongs to both the Trentino and the Veneto Region. Moreover, we do not use a principal component analysis or a principal coordinate analysis (Jolliffe, 2002) to reduce the variable dimensionality, because in the case of binary variables the interpretation of the resulting variables is strongly limited, and because of the poor results of these methods when applied to these specific data.

of mountains), presence of children of 10 years old or less in the family (*Having children*); the interviewees' past traveling experience to the three destinations, e.g. whether they have already visited the places (*Previous visit*). Second, a set of sociodemographic variables, including: the distance between the place of residence and the tourist destination, age, and gender. Tables 3 and 4 provide the descriptive statistics of the selected sociodemographic and lifestyle variables. Other variables have been excluded from the analysis because they are either statistically insignificant (frequency of internet use, type of job), or highly correlated with other variables already included in the estimates (overall satisfaction with the holiday, and satisfaction with their hotel and restaurants), or because of poor data quality (income).

Table 3: Descriptive statistics of sociodemographic and lifestyle variables

	Frequency (%)
Lifestyle variables	
Love of mountains	25.0
Love of typical products	59.4
Previous visit to Trentino	41.8
Previous visit to Valle d'Aosta	28.7
Previous visit to Valtellina	25.4
Sociodemographic variables	
Age 18-25	14.9
Age 26-39	22.2
Age 40-49	20.4
Age 50-65	20.4
Age > 65	22.2
Primary education	9.5
Secondary education	26.6
High school education	42.5
University education	12.0
Male gender	50.0
Having children	34.5
Living in Northern Italy	60.0
Living in Central/Southern Italy	40.0

Table 4: Distance from tourist destination

Variable	Mean	Std. Dev.	Min	Max
Valtellina	440.6664	340.261	139	1291
Valle d'Aosta	481.8591	347.9677	0	1335
Trentino	389.2182	310.5433	0	1177

4.5 The econometric methodology

The four models described by equations (1)-(4) in Section 3 have been estimated using a Multivariate Probit (MP) model, a generalization of the probit model which allows the simultaneous estimation of more than one equation with correlated disturbances (Greene, 2003, pp. 710-19). The general specification for a D -equation MP model is as follows:

$$\begin{aligned} V_{id}^* &= \Sigma_d' X_{id} + \varepsilon_{id} \\ V_{id} &= \begin{cases} 1 & \text{if } V_{id}^* > 0 \\ 0 & \text{otherwise,} \end{cases} \end{aligned} \quad (5)$$

where $d = 1, \dots, D$, V_{id}^* is a latent variable; V_{id} is the observed binary choice of the respondent; X_{id} and Σ_d are, respectively, the set of independent regressors and the unknown parameters; ε_{id} is the error term distributed as a zero-mean multivariate normal, with variance covariance matrix Ω having 1 on the leading diagonal, and $\rho_{jk} = \rho_{kj}$ off the principal diagonal.⁶

In our case, $D = 3$ and $V_{id} = 1$ if the interviewee i intends to visit or revisit the destination d , and zero otherwise; and X_{id} is the set of regressors varying in accordance with the selected model presented in equations (1)-(4), the set including: the constant term, the variables of interest; and the controls.

This method allows the unique nature of our data set to be exploited and provides many advantages in terms of econometric estimation. First, it is very flexible. No restriction on the tourist vacation decision is imposed. Interviewees may declare their intention to visit from zero to three of the suggested destinations. Second, the MP model has the same cross-equation correlation matrix of the seemingly unrelated regression (SUR) model, i.e. the residuals of the various equations may be correlated.⁷ Thus, with respect to the case of the zero off-diagonal correlation assumption of the standard Probit models, the simultaneous estimation of our equations leads to more efficient estimates (provided that some regression variables differ across estimates). Third, and relatedly, the joint estimation of the parameters allows us to evaluate the strength of the cross-equation correlations of the alternatives. In particular, therefore, it helps to control for unobserved factors that simultaneously affect the decision to visit the three destinations. Finally, when cross-equation correlations are statistically significant, the separate estimation of the three equations leads to biased estimates of the coefficients of interest, while the use of the MP model produces unbiased results.

⁶The analysis has been performed using the *mvprobit* procedure for Stata 13.1, which implements the Geweke-Hajivassiliou-Keane (GHK) algorithm to estimate the multivariate probit model (see Cappellari and Jenkins, 2003).

⁷Differently from the MP model, in the SUR model the dependent variable is continuous.

5 Results

This section presents the estimated results of the four models introduced in Section 3 to test Hypotheses 1-4.

In Hypothesis 1, we claim that typical products experience is positively related to the intention to (re)visit the place of origin. Table 5 (Model 1) shows that Hypothesis 1 is verified for each product and destination. In fact, experience with Bresaola and Pizzoccheri is found to have a positive and strongly significant correlation with the intention to (re)visit Valtellina; experience with Fontina is positively and significantly correlated with the intention to (re)visit Valle d'Aosta, and the same result holds for experience with Melinda and Speck with respect to Trentino.

Once the existence of a positive link between typical products experience and the intention to (re)visit their place of origin has been established, the analysis moves on to test Hypothesis 2, i.e. whether previous experience with typical products from other similar places of origin is positively or negatively related to the intention to (re)visit the place of origin of a typical product. The results are shown in Table 5 (Model 2). Generally, the estimates confirm that typical products have a market-expanding effect. In fact, Fontina and Melinda are positively correlated with the decision to (re)visit Valtellina even though they originate from competing tourist locations. The same result holds for Bresaola, Pizzoccheri and Speck with respect to the decision to (re)visit Valle d'Aosta and for Bresaola with respect to the intention to (re)visit Trentino.

The market-expanding effect of typical products may have two different explanations. On the one hand, there is complementarity between a typical product and all destinations which have similar characteristics to the place of origin (mountain areas). On the other hand, there is complementarity between a typical product and only its place of origin, but there is confusion, i.e. similarities between mountain products may induce the wrong assignment of a product to a place of origin different from its own. In order to verify which explanation is more plausible, we move on to test Hypothesis 3.

In particular, we extend our previous analysis by introducing a dummy variable indicating whether the respondents correctly assigned a product to its place of origin. The results are shown in Table 6 (Model 3). Since the coefficients for almost all products and destinations are not significantly different from zero, we can conclude that typical products and similar tourist destinations are complementary, and confusion does not play any significant role. The only exceptions are Pizzoccheri for Trentino and Speck for Valtellina, for which we observe negative coefficients, meaning that a correct identification of a product's place of origin weakens the intention to (re)visit other competing destinations (business-stealing effect).

Table 5: Multivariate probit. Decision to (re)visit a tourist destination

	Model 1			Model 2		
	Valtellina	Valle d'Aosta	Trentino	Valtellina	Valle d'Aosta	Trentino
Bresaola experience	0.210** (0.082)			0.383*** (0.130)	0.527*** (0.136)	0.460*** (0.140)
Pizzoccheri experience	0.178** (0.078)			0.234*** (0.089)	0.242*** (0.089)	0.084 (0.088)
Fontina experience		0.445*** (0.073)		0.217** (0.100)	0.230* (0.140)	-0.001 (0.148)
Melinda experience			0.368*** (0.107)	0.373*** (0.113)	0.102 (0.122)	0.467*** (0.122)
Speck experience			0.268*** (0.100)	-0.233 (0.158)	0.361*** (0.128)	0.257* (0.155)
Love of mountains	0.434*** (0.089)	0.406*** (0.071)	0.371*** (0.113)	0.440*** (0.089)	0.398*** (0.075)	0.372*** (0.117)
Love of typical products	0.479*** (0.125)	0.338*** (0.109)	0.398*** (0.134)	0.358*** (0.111)	0.107 (0.097)	0.237** (0.114)
Previous visit to Valtellina	0.897*** (0.151)	0.031 (0.087)	-0.057 (0.106)	0.893*** (0.165)	-0.060 (0.101)	-0.090 (0.123)
Previous visit to Valle d'Aosta	0.102 (0.102)	0.958*** (0.148)	0.417*** (0.102)	0.062 (0.102)	0.963*** (0.145)	0.386*** (0.102)
Previous visit to Trentino	0.243*** (0.076)	0.082 (0.094)	0.867*** (0.153)	0.207** (0.082)	0.023 (0.080)	0.851*** (0.147)
Distance from Valtellina	0.014 (0.057)			0.025 (0.054)		
Distance from Valle d'Aosta		-0.053 (0.059)			0.004 (0.058)	
Distance from Trentino			-0.172*** (0.056)			-0.145*** (0.055)
Age 18-25	0.126 (0.152)	0.130 (0.137)	0.168 (0.140)	0.123 (0.150)	0.088 (0.148)	0.164 (0.143)
Age 26-39	0.229* (0.133)	0.169 (0.175)	0.130 (0.193)	0.251* (0.133)	0.141 (0.166)	0.137 (0.191)
Age 50-65	-0.062 (0.124)	-0.004 (0.112)	0.164 (0.141)	-0.075 (0.118)	0.004 (0.117)	0.164 (0.141)
Age > 65	-0.251** (0.109)	0.002 (0.150)	-0.017 (0.136)	-0.263** (0.106)	0.017 (0.162)	-0.006 (0.137)

<i>cont'd</i>	Model 1			Model 2		
	Valtellina	Valle d'Aosta	Trentino	Valtellina	Valle d'Aosta	Trentino
Secondary education	0.002 (0.103)	0.286*** (0.094)	0.133 (0.095)	-0.077 (0.104)	0.202** (0.097)	0.055 (0.099)
High school education	-0.109 (0.135)	0.130 (0.169)	-0.046 (0.191)	-0.214 (0.140)	0.035 (0.165)	-0.141 (0.187)
Male gender	-0.129 (0.100)	-0.010 (0.082)	0.006 (0.073)	-0.108 (0.096)	0.040 (0.081)	0.026 (0.071)
Having children	0.273*** (0.095)	0.238** (0.101)	0.466*** (0.106)	0.260*** (0.097)	0.185* (0.101)	0.439*** (0.107)
Cross-equation corr.						
Valtellina	1.000			1.000		
Valle d'Aosta	0.633	1.000		0.643	1.000	
Trentino	0.676	0.792	1.000	0.675	0.791	1.000
Log pseudolikelihood		-1,409.439			-1,369.815	
LL ratio test χ^2		464.111			465.029	
LL ratio test χ^2 (p-value)		0.000			0.000	
N		1,100			1,100	

Robust standard errors in parentheses, clustered by 89 Italian Provinces. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

In addition to this, we test whether a strong appreciation for a typical product plays an additional role in the intention to (re)visit its place of origin (Hypothesis 4). Table 6 (Model 4) shows that appreciation for typical products reinforces the decision to (re)visit the tourist destination for four out of five products. The only exception is Speck whose coefficient is not statistically different from zero.

With regard to the control variables, lifestyle features such as *Love of mountains*, *Love of typical products* and *Previous visit* have the expected sign, and are strongly significant for all tourist destinations. The variable *Distance from* the destination place is only significant in the case of Trentino. Sociodemographic variables are generally insignificant, apart from *Having children*, which is strongly and positively correlated with the intention to (re)visit the three destinations in all four estimates.

As far as the use of the MP model is concerned, cross-equation correlation and the Likelihood ratio test ($H_0: \rho_{12} = \rho_{13} = \rho_{23} = 0$) in the four estimates show that the residuals of the three equations are strongly correlated, so that the use of a simultaneous estimation procedure is preferable to single-equation estimates. As a robustness check, however, we performed single-equation estimates, which generally confirmed our previous findings.

Finally, as an additional robustness check, we estimated the effect of typical product experience, identification and appreciation on a different binary dependent variable *Visiting a*

Table 6: Multivariate probit. Decision to (re)visit a tourist destination

	Model 3			Model 4		
	Valtellina	Valle d'Aosta	Trentino	Valtellina	Valle d'Aosta	Trentino
Pizzoccheri experience	0.234** (0.110)	0.295* (0.157)	0.251** (0.125)	0.227** (0.108)	0.273* (0.162)	0.256** (0.125)
Bresaola experience	0.376*** (0.144)	0.507*** (0.129)	0.532*** (0.161)	0.381*** (0.146)	0.513*** (0.133)	0.524*** (0.165)
Fontina experience	0.213* (0.109)	0.188 (0.151)	-0.043 (0.147)	0.186* (0.110)	0.178 (0.155)	-0.071 (0.147)
Melinda experience	0.289** (0.136)	-0.013 (0.147)	0.473*** (0.117)	0.314** (0.132)	-0.019 (0.145)	0.498*** (0.114)
Speck experience	-0.074 (0.178)	0.430*** (0.162)	0.304* (0.161)	-0.090 (0.175)	0.452*** (0.164)	0.315** (0.159)
Pizzoccheri identification	0.015 (0.156)	-0.105 (0.184)	-0.231* (0.133)	-0.107 (0.151)	-0.090 (0.232)	-0.401** (0.157)
Bresaola identification	0.017 (0.143)	0.005 (0.110)	-0.138 (0.126)	-0.170 (0.170)	0.040 (0.144)	-0.187 (0.135)
Fontina identification	0.067 (0.110)	0.137 (0.111)	0.129 (0.107)	0.030 (0.143)	-0.013 (0.168)	0.149 (0.147)
Melinda identification	0.121 (0.103)	0.174 (0.116)	-0.013 (0.109)	0.055 (0.129)	0.116 (0.119)	-0.132 (0.121)
Speck identification	-0.278** (0.137)	-0.117 (0.111)	-0.091 (0.117)	-0.264* (0.150)	-0.134 (0.122)	-0.050 (0.128)
Pizzoccheri appreciation				0.249** (0.120)	0.019 (0.155)	0.375** (0.151)
Bresaola appreciation				0.327** (0.151)	-0.134 (0.144)	0.046 (0.137)
Fontina appreciation				0.078 (0.181)	0.316* (0.163)	0.038 (0.141)
Melinda appreciation				0.145 (0.124)	0.103 (0.120)	0.205* (0.114)
Speck appreciation				-0.021 (0.162)	0.043 (0.102)	-0.077 (0.118)
Love of mountains	0.448*** (0.089)	0.410*** (0.079)	0.375*** (0.108)	0.435*** (0.090)	0.414*** (0.079)	0.356*** (0.102)
Love of typical products	0.361*** (0.114)	0.108 (0.100)	0.256** (0.115)	0.331*** (0.110)	0.096 (0.102)	0.229** (0.110)

<i>cont'd</i>	Model 3			Model 4		
	Valtellina	Valle d'Aosta	Trentino	Valtellina	Valle d'Aosta	Trentino
Previous visit to Valtellina	0.913*** (0.169)	-0.029 (0.089)	-0.007 (0.124)	0.901*** (0.174)	-0.016 (0.090)	-0.039 (0.124)
Previous visit to Valle d'Aosta	0.058 (0.111)	0.958*** (0.150)	0.355*** (0.107)	0.038 (0.106)	0.966*** (0.151)	0.357*** (0.106)
Previous visit to Trentino	0.239*** (0.080)	0.013 (0.085)	0.871*** (0.157)	0.242*** (0.087)	0.001 (0.083)	0.884*** (0.162)
Distance from Valtellina	0.032 (0.056)			0.029 (0.055)		
Distance from Valle d'Aosta		0.009 (0.056)			0.003 (0.055)	
Distance from Trentino			-0.153*** (0.053)			-0.155*** (0.053)
Age 18-25	0.095 (0.144)	0.085 (0.151)	0.167 (0.145)	0.100 (0.149)	0.121 (0.149)	0.200 (0.150)
Age 26-39	0.242* (0.134)	0.146 (0.167)	0.149 (0.191)	0.236* (0.132)	0.165 (0.163)	0.149 (0.191)
Age 50-65	-0.082 (0.122)	0.006 (0.117)	0.203 (0.139)	-0.086 (0.126)	0.013 (0.115)	0.219 (0.139)
Age > 65	-0.275*** (0.104)	0.017 (0.162)	0.019 (0.134)	-0.286*** (0.107)	0.025 (0.161)	0.027 (0.136)
Secondary education	-0.074 (0.105)	0.205** (0.094)	0.058 (0.101)	-0.045 (0.107)	0.205** (0.098)	0.071 (0.101)
High school education	-0.216 (0.139)	0.029 (0.164)	-0.120 (0.191)	-0.179 (0.140)	0.046 (0.161)	-0.099 (0.190)
Male gender	-0.101 (0.098)	0.040 (0.081)	0.035 (0.075)	-0.077 (0.100)	0.056 (0.079)	0.059 (0.077)
Having children	0.275*** (0.100)	0.183* (0.100)	0.461*** (0.112)	0.267*** (0.098)	0.198** (0.100)	0.475*** (0.117)
Cross-equation corr.						
Valtellina	1.000			1.000		
Valle d'Aosta	0.640	1.000		0.645	1.000	
Trentino	0.676	0.796	1.000	0.666	0.805	1.000
Log pseudolikelihood		-1,361.559			-1,348.037	
LL ratio test χ^2		465.312			460.880	
LL ratio test χ^2 (p-value)		0.000			0.000	
N		1,100			1,100	

Robust standard errors in parentheses, clustered by 89 Italian Provinces. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

seaside destination. This variable is 1 if a seaside resort has been chosen by the interviewee as place of vacation in the last two years, and zero otherwise. As expected, this test showed that the variables of interest were not statistically significant in explaining the decision to visit, thus confirming the validity of our main results.

6 Conclusions

Our analysis offers two important contributions to the literature on the promotional role of typical products for a tourist destination. First, it confirms the existence of a strong and statistically significant link between typical products and the intention to (re)visit a destination. Second, it clarifies whether typical products have a market-expanding and/or a business-stealing effect. Our results indicate that experience of typical products plays a significant role in promoting both the places of origin and other similar tourist destinations. Thus, typical products are market-expanding. These results do not significantly change if we control for the knowledge of the place of origin, with the exception of some cases where the correct identification of a product's place of origin has a business-stealing effect. Instead, the strong appreciation for a typical product combined with the correct identification of its place of origin, in most cases has a positive effect on the intention to (re)visit only the product's place of origin.

Our results have straightforward policy implications. First, since experience of typical products has a market-expanding effect, mountain destinations may take advantage from engaging in joint promotional actions, using their typical products as promotional tools. Some possible joint territorial actions to be undertaken are the strengthening of the distribution channels of typical products in the whole national territory. Other sale channels such as product-specific e-marketplaces could be enhanced. Moreover, product packaging could be designed in order to contain images capable of evoking the link between food and mountain resorts. Second, in order to exploit the business-stealing effect of typical products, strong appreciation and correct identification of the place of origin are required. To this end, some possible measures can be activated at the various stages of the supply chain. From the producers' side, attention should be paid to improve the quality and palatability of products, for goods sold both at their place of origin and elsewhere. Producers should guarantee the quality content of their products, and their recognizability as well. A campaign could be launched with the aim of raising the awareness about the use of typical products among local operators, such as restaurants, inns and wine bars. Finally, attention should be paid to reinforcing territorial brands and quality labels.

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