Effect of Normative and Affective Aspects on Willingness to Pay For Domestic Food Products—A Multiple Price List Experiment

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Abstract: There is limited knowledge about which factors underlie consumers' preferences for domestic food products. We used a non-hypothetical multiple-price list experiment to investigate the effect of affective (product-related emotions) and normative (consumer ethnocentrism and subjective norms) factors on consumer willingness to pay for domestic food products. A total of 166 Croatian consumers were given a choice between domestic and foreign food products with different price premiums for domestic food. The results indicate that consumers are willing to pay a premium for both low- and high-involvement domestic food products. Consumer willingness to pay for domestic products is influenced by ethnocentrism, product-related emotions, and sociodemographic variables, but not by social norms.

Keywords: consumer ethnocentrism; experiment; involvement; subjective norms; willingness to pay

Introduction

Ethnocentrism, subjective norms and product-related emotions can be psychological trade barriers. Previous research has shown that consumers prefer and are willing to pay a premium for locally and domestically produced food products (Ahmed et al., 2004; Evanschitzky et al., 2008; Chung et al., 2009; Johnecheck et al., 2010; Martínez-Carrasco et al., 2015; Schjøll, 2016). In this paper, we investigate how willingness to pay (WTP) a premium for domestic food products depends on normative factors (consumer ethnocentrism and subjective norms), affective aspects of origin (product-related emotions), and sociodemographic factors (gender, age, education, and income). We elicited WTP for both high- and low-involvement products using a multiple price list (MPL) experiment with real economic incentives outside a Croatian supermarket.

Alfnes (2009) shows that experimental valuation markets can be used to elicit WTP price premiums for products with close substitutes in the outside market. The WTP is defined as the maximum quantity of money that a consumer is willing to pay for a certain quantity of a product. The WTP price premium is the difference between the WTP for a product that has an attractive feature and one that does not (Alfnes & Rickertsen, 2011). The average WTP price premium for one product over another is an estimate of the average price premium that would make consumers indifferent between the two products.

Croatia became a member of the European Union (EU) in 2013. In all EU countries, imported products are found side by side with domestically produced products in almost all food categories. Under the EU's open-door policy, consumers must make several choices between domestic and imported products on each shopping trip, and domestic producers risk losing out to major international food producers.

According to Obermiller and Spangenberg (1989), there are cognitive, affective, and normative aspects of consumer decision-making with respect to country of origin. The cognitive aspect relates to the expected quality of the product, the affective aspect is the

symbolic and emotional value that consumers attach to country of origin, while the normative aspect is the consumers' social and personal norms related to country of origin (Verlegh & Steenkamp, 1999). An example of the latter is consumer ethnocentrism, which is "the beliefs held by consumers about the appropriateness, indeed morality, of purchasing foreign goods" (Shimp & Sharma, 1987, p. 280), and is related to preference for purchasing domestic products (Mangnale et al., 2011; Nik-Mat et al., 2015). Consumer awareness about the relationship between their purchases and the preservation of the domestic economy has made consumer ethnocentrism an important factor when domestic companies face global competition (Wanninayake & Chovancová, 2012).

As Bertoli and Resciniti (2013) point out, it is likely that consumers with high levels of consumer ethnocentrism are willing to pay a premium for domestic products, while those with lower levels are not. Furthermore, food products are commodities that are particularly sensitive to consumers' ethnocentric tendencies, as they are so closely linked to cultural identity (Vabø et al., 2016).

Another normative aspect of consumer choice between domestic and imported products is their subjective norms about purchasing domestic products. Ajzen and Fishbein (1980) defined subjective norms as perceived social pressure from family and friends to perform or not to perform a behavior. Therefore, consumers who believe that their family and friends support their intention to buy domestic food products are more likely to do so than those whose family and friends do not send such signals (Ajzen, 1988). Surveys find that subjective norms are positively related to consumer intention to buy domestic food products (Che Wel et al., 2015; Vabø & Hansen, 2016).

Sharma et al. (1995) and Liu et al. (2007) found that the effect of consumer ethnocentrism on buying intentions is greater for high-involvement products than for low-involvement products. Product involvement is defined as a consumer's enduring perceptions

of the importance of the product category based on the consumer's inherent needs, values, and interests (Zaichkowsky, 1985; De Wulf et al., 2001; Bian & Luiz, 2011). Food has been traditionally viewed as a low-involvement product (Garcia et al., 2010), but previous research has shown that food products can trigger moderate to high levels of involvement (Beharrell & Denison, 1995; Kuenzel & Musters, 2007). Because consumers have higher consumer ethnocentrism in relation to high-involvement products, which increases WTP for domestic products, it can be assumed that higher involvement means greater WTP.

A relationship between consumer ethnocentrism and sociodemographic characteristics has been observed in several studies. Age has not shown a consistent influence on consumer ethnocentrism (Hashim & Razak, 2004), but when present, the influence is usually positive (Good & Huddleston, 1995; Caruana & Magri, 1996). Female consumers have been found to be more ethnocentric than male consumers (Chambers et al., 2007; Chung et al., 2009). However, there is some research where gender does not appear to affect consumer ethnocentrism (Caruana & Magri, 1996). Education and income have been found to have a negative relationship with consumer ethnocentrism. The higher the level of education and income, the lower is consumer ethnocentricity (Balabanis et al., 2002; Javalgi et al., 2005).

Previous research has also found a connection between sociodemographic factors and WTP for local and domestic products. For example, Alfnes (2004) found that older consumers were willing to pay a higher premium for domestic beef. Vandermersch and Mathijs (2004) found a negative relationship between education and WTP a higher price for domestic milk. Jekanowski et al. (2000) and Rihn and Yue (2016) found a positive relationship between income and WTP for local products. Brown (2003) and Rihn and Yue (2016) found that women are willing to pay more for local products.

For this study, we chose two products with different levels of product involvement: wine and potato chips. Croatia has a long and rich tradition of grape cultivation and wine

production, and wine production is still a very important part of Croatian agriculture.

Altogether, there were 41,188 wine producers in Croatia in 2015 (Croatian Bureau of Statistics, 2015). However, there are only two Croatian potato chip producers. One domestic brand (Franck) is the most popular chip brand on the Croatian market. According to Ipsos (2016), 61% of consumers in Croatia consume Franck chips each month.

Using experimental research methods with real economic incentives reduces the problems of social desirability and hypothetical bias often found in consumer studies of food products (Alfnes & Rickertsen, 2011). As far as we know, no studies have used experiments with real economic incentives to investigate the effect of consumer ethnocentrism or social norms on consumers' WTP for domestic products in general, or agricultural products in particular. The primary objective of this study is to investigate the influence of normative aspects (consumer ethnocentrism and subjective norms) of origin on WTP for food products using a research design with real economic incentives. We control for level of involvement, affective aspects (product-related emotions), and sociodemographic variables in our analysis.

Materials and methods

Product selection

We selected two products based on (1) availability of both domestic and imported products in ordinary stores, (2) products bought by a large share of the population on a regular basis, and (3) degree of product involvement.

Both domestic and imported wines as well as potato chips are available in most Croatian grocery stores, and a large share of the population consumes both wine and potato chips. Seventy-two percent of consumers in Croatia aged 15–64 years old consume chips at least sometimes (Ipsos, 2016), and the annual per-capita wine consumption stands at 28 liters (USDA, 2015).

Wine was selected as a product with relatively high involvement as supported by Markovina et al. (2004), who used a 24-item involvement scale and found that wine is a food product with medium to high involvement among Croatian consumers. For the low-involvement product, we considered five products that fulfilled the availability and consumption requirements. The five products were potato chips, tomato concentrate, apple juice, olives, and tea. To determine which low-involvement products to include, we chose one item from each of the five involvement factors identified in the factor analysis in Markovina et al. (2004) (see Table 1 for the five items). An online survey of 33 respondents confirmed that the five products we considered scored low on involvement, and potato chips were found to be the product with the lowest level of involvement.

Table 1. Involvement items chips

Items
Chips is essential food product.
Chips is special product.
Buying chips is a big risk.
All chips offered on the market are the
same.
Choosing chips takes a lot of careful
thought.

We selected domestic and imported wines with the same package size, grape variety, and color. The wine bottles were wrapped in white paper to cover any information about the producer. Similarly, we selected domestic and imported potato chip products with the same package size and taste, and covered them in white paper to hide the name of the producer. Because the products were packed in white paper, participants had no information about the products other than size and origin (domestic and foreign).

Questionnaire and measurement scale

Construct measures for consumer ethnocentrism and subjective norms were taken from previous research. Shimp and Sharma (1987) developed a scale of 17 items to evaluate ethnocentric tendencies in consumers, which was called the Consumer Ethnocentrism Tendencies Scale (CETSCALE). CETSCALE has been widely used to measure consumer ethnocentrism in subsequent studies in other countries (Good & Huddleston, 1995; Javalgi et al., 2005; Vida et al., 2008; Josiassen et al., 2011; Qing et al., 2012). We used the shortened 10-item scale, which was validated by Supphellen and Rittenburg (2001). Higher scores indicated greater consumer ethnocentrism.

Subjective norms were measured using a six-item scale taken from Ajzen (2013) and adapted to our two products. Higher values indicated stronger perceived pressure of family members, friends, and colleagues to purchase domestic chips and domestic wine.

A third psychological scale measuring affective aspects related to product emotions was also included. The instrument had three items corresponding to the three product-related emotions most commonly mentioned by two focus groups. High values indicate positive emotions towards purchase and consumption of domestic chips and wine.

The instruments were constructed using items with a five-point Likert scale, with response categories ranging from strongly disagree (1) to strongly agree (5). We present the items with a descriptive analysis at the beginning of the Results section.

Experimental design

The experiment followed the MPL design by Klain et al. (2014), where the participants were endowed with an imported product and asked to make choices where they had the opportunity to pay to change to a domestic product. The price lists had six levels from zero to HRK 25 for wine and HRK 6 for chips. The highest price premiums were higher than the typical price of these products in a store. Table 2 shows the MPL question for wine.

Table 2. Multiple price list question for wine.

Do you prefer option A or	r option B?			
Section 1	A (Foreign wine)	B (Domestic wine)		
	HRK* 0	HRK 0		
Section 2	A (Foreign wine)	B (Domestic wine)		
	HRK 0	HRK 5		
Section 3	A (Foreign wine)	B (Domestic wine)		
	HRK 0	HRK 10		
Section 4	A (Foreign wine)	B (Domestic wine)		
	HRK 0	HRK 15		
Section 5	A (Foreign wine)	B (Domestic wine)		
	HRK 0	HRK 20		
Section 6	A (Foreign wine)	B (Domestic wine)		
	HRK 0	HRK 25		

^{*} HRK1 = € 0.13

The wine participants were offered a free bottle (0.75 liters) of foreign wine and HRK 20 ($\ensuremath{\in} 2.60$) to take part in the experiment, while the chips participants were offered a free package of foreign potato chips (100 g) and HRK 5 ($\ensuremath{\in} 0.65$) to take part.

Participants were told that they would make a series of choices between products, and that they would have to pay for any purchases made. The researchers explained the mechanism and payment procedure to them. We explained that the cash they received at the start of the experiment could be used as payment in the experiment, or would otherwise be theirs to keep. In cases where the prices exceeded the endowed cash amount, participants were informed that they would be required to pay the additional amount out of pocket.

After they had made their choices on the price list, each participant threw a die to indicate which of the six prices on the price list should be the binding price. If they threw a four for the wine experiment, HRK 15 would be the price to change to the domestic wine. If

they stated that they did not want to change to the domestic wine at that price, they would keep the imported wine and pay nothing. If they had indicated that they would change to domestic wine at that price, they would exchange their imported wine for the domestic wine and pay HRK 15.

Including the random price draw and conducting the transaction makes the MPL experiment an incentive-compatible method for eliciting WTP. It is in the participants own best interest to reveal their preferences and only report that they would like to change at prices where they would truly prefer to do so (Alfnes & Rickertsen, 2011).

Data collection

The face-to-face survey and experiment were conducted at the entrance of two supermarkets—one foreign chain and one domestic—in Zagreb from September to October 2015. We attempted to recruit every third customer for the survey and every fourth survey respondent was asked to take part in the experiment. Because the objective was to determine the influence of ethnocentrism and subjective norms on chip and wine purchases, only wine and chip buyers were asked to complete the questionnaire. We recruited for both groups (chip and wine buyers) in front of both supermarkets. Participation in the survey and experiment was voluntary and respondents could give up at any time. The survey and experiment took about 15 minutes to complete.

Data analysis

The survey data were analyzed using SPSS software (v. 21; IBM, Armonk, NY). We used univariate analysis of frequencies for the sample description and chi-square tests to ascertain whether there were significant differences in the sociodemographic characteristics between the two samples (chip and wine buyers).

A descriptive analysis was conducted to investigate consumers' ethnocentrism, subjective norms, and product-related emotions. Analyses of variance (ANOVA) were used to

determine whether there were statistically significant differences between the two samples regarding consumer ethnocentrism, product-related emotions, and subjective norms.

The WTP data collected through the experiment were analyzed using STATA software (v. 14; Stata Corp, College Station, TX). The analysis follows the common practice used in MPL studies of using an interval regression model (e.g., Andersen et al., 2006; Klain et al., 2014; Alphonce & Alfnes, 2017). Integral regression is used because the exact WTP is not known, but only an interval around the WTP. We estimate three interval regression models for each of the two products where we investigate how the WTP for domestic origin depends on sociodemographic variables (gender, age, education, and income), normative (social norm and consumer ethnocentrism), and affective aspects of origin effect (product-related emotions). The general model is specified as follows:

$$WTP_{ij} = \alpha_i' X_i + \beta_i' Z_{ij} + \varepsilon_{ij}$$
 (1)

where WTP is a latent variable for WTP identified by an upper and lower limit; the subscripts i and j are for individuals and product, respectively; α and β are coefficient vectors; X is the vector of the four sociodemographic variables; Z is the vector of the three normative and affective variables, and ε is the error term.

Sample description

The survey and experiment were completed by a sample of 166 Croatian shoppers aged over 18 (Table 3). Although the total sample was heterogeneous according to sociodemographic characteristics, it is not fully nationally representative. The sample was biased toward younger respondents (< 45 years) with higher education. A chi-square test of sociodemographic characteristics showed no statistically significant difference between the two samples (p > 0.05).

Table 3. Sample description.

Sociodemographic characteristics		Chips	(N=81)	Wine (N=85)		
		N	%	N	%	
Gender	Male	41	50.6	43	50.6	
	Female	40	49.4	42	49.4	
	18-29 years	24	29.6	26	30.6	
Ago	30-45 years	22	27.2	24	28.2	
Age	46-60 years	25	30.9	22	25.9	
	60+ years	10	12.3	13	15.3	
	Without school					
	Elementary	6	7.4	3	3.5	
Education	school					
	High school	36	44.4	32	37.6	
	University	35	43.2	42	49.4	
	Master and/or	4	4.9	8	9.4	
	PhD					
Tu o o uno	Very low	7	8.6	4	4.7	
Income (self-reported income situation)	Low	10	12.3	8	9.4	
	Medium	52	64.2	59	69.4	
	High	11	13.6	12	14.1	
	Very high	1	1.2	2	2.4	

Results

Descriptive analysis

The ethnocentrism scale is presented in Table 4. As can be seen from the table, the scale items are not product-specific, but concern purchasing domestic product in general. The average consumer ethnocentrism scores of the chip and wine samples were 3.31 and 3.29 (out of 5), respectively, indicating moderate ethnocentric tendencies in both samples. An ANOVA test showed no statistical difference between the consumer ethnocentrism scores of the two

sample groups (p > 0.05). Furthermore, we found a high level of internal consistency in the consumer ethnocentrism scale in both samples (Cronbach's alpha values were 0.89 and 0.91, respectively).

Table 4. Descriptive statistics consumer ethnocentrism scale.

	Chips			Wine			
	Mean	St. dev.	α	Mean	St. dev.	α	
Consumer ethnocentrism							
Croatian people should always buy							
Croatian-made products instead of	4.07	1.15		3.78	1.19		
imports.							
Croatian products first, last, and	3.85	1.18		3.80	1.24		
foremost.	3.03	1.10	-	3.00	1.21		
Purchasing foreign made products is	2.67	1.55		2.58	1.33		
un-Croatian.	2.07	1.55		2.30	1.55		
It is not right to purchase foreign							
products, because it put Croatian	3.16	1.44		3.12	1.35		
people out of jobs.							
Real Croatian people should always	3.05	1.45		3.06	1.28		
buy Croatian products.	3.03	1.15		3.00	1.20		
We should purchase products			.89			.91	
manufactured in Croatia instead of	3.40	1.33		3.47	1.20		
letting other countries get rich off	3.10	1.00		3.17	1.20		
us.							
It is always best to purchase	3.93	1.17		3.93	1.08		
Croatian products.	3.75	1117		3.75	1.00		
There should be very little trading or							
purchasing of products from other	3.79	1.17		3.61	1.22		
countries unless out of necessity.							
It may cost me in the long run, but I	3.65	1.26		3.70	1.06		
prefer to support Croatian products.			2.70	1.00			
Foreigners should not be allowed to	1.58	1.12		1.89	1.17		
put their products on our markets.	1.50	2		1.07			

The product-related emotion scales are presented in Table 5. The chip sample was asked about emotions related to buying chips, while the wine sample was asked about emotions related to buying wine. Respondents had positive product-related emotions toward both domestic chips and wine. An ANOVA test showed no statistical differences in consumer product-related emotions between the two sample groups (p > 0.05). We found a high level of internal consistency in the product-related emotion scale in both samples (Cronbach's alpha values were 0.80 and 0.91).

The scales for subjective norms are also presented in Table 5. The chip group was asked about subjective norms related to buying chips, while the wine group was asked about subjective norms related to buying wine. An ANOVA test showed a significant difference in subjective norms between the two sample groups (p < 0.05). We can see that those who answered the wine questions reported higher perceived pressure to buy domestic products, more approval of their domestic purchases, and more domestic purchases among family and friends. We found a high level of internal consistency in the subjective norms for both samples (Cronbach's alpha scores were 0.79 and 0.87).

Table 5. Descriptive statistics product related emotions and subjective norm.

	Chips			Wine		
	Mean	St.dev	α	Mean	St.dev	α
Product related emotions						
Regular buying of Croatian						
chips/wine evokes in me positive	3.57	1.29		3.81	1.12	
emotions.						
Regular buying of Croatian	3.54	1.20	.91	3.30	1.28	.80
chips/wine is pleasure.	3.34	1.20		3.30	1.20	
Regular buying of Croatian	3.23	1.22		3.69	1.14	
chips/wine is funny.	3.23	1.22		3.09	1.14	
Subjective norms						
My family members approve my						
regular buying of Croatian	3.62	1.33		3.93	1.08	
chips/wine.						
My closest friends approve my						
regular buying of Croatian	3.44	1.17		3.99	.91	
chips/wine.						
My colleagues approve my						
regular buying of Croatian	3.15	1.22	.79	3.89	.98	.87
chips/wine.						
My family members buy Croatian	3.10	1.34		3.87	.10	
chips/wine regularly.	3.10	1.54		3.07	.10	
My closest friends buy Croatian	3.11	1.02		3.85	.87	
chips/wine regularly.	3.11	1.02		5.05	.67	
My colleagues buy Croatian	2.93	1.06		3.75	.83	1
chips/wine regularly.	2.93	1.00		3.13	.03	

WTP for domestic chips

Figure 1 showed that respondents prefer domestic chips. In our experiment, over 90% of respondents chose domestic chips over the imported variety when the price of changing from imported to domestic was HRK 0. With price premiums of HRK 1 and 2 for domestic wine, the majority still preferred domestic wine. However, at the four highest price points of HRK 3, 4, 5 and 6, a majority of the respondents chose to keep the imported chips.

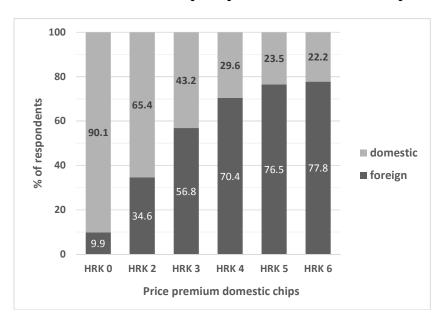


Figure 1. Consumer choice at different price premiums for domestic chips

WTP for domestic wine

Almost 99% of the respondents chose Croatian wine when the price for a change from imported to domestic wine was HRK 0. However, increasing the price for changing to domestic wine decreased the willingness to buy domestic wine. At price premiums of HRK 5 and 10 for domestic wine, the majority still preferred domestic wine. At the three highest price points, HRK 15, 20 and 25, the majority of respondents wanted to keep the foreign wine (Figure 2).



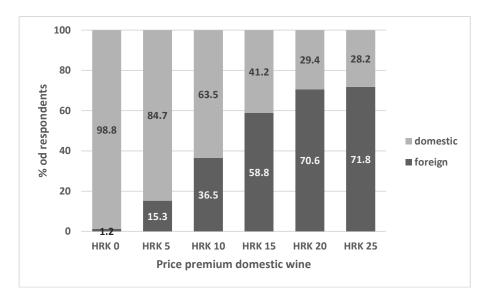


Table 6 shows the results of the interval regression estimations. For each of the two products, we estimate one model with only sociodemographic independent variables (Model 1), a second model with only normative and affective variables (Model 2), and a third model with sociodemographic, normative, and affective variables (Model 3).

Table 6. Interval censored regression estimates

	Chips			Wine			
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	
	Coefficient				Coefficient		
	(Standard error)			(Standard error)			
Female	0.64		0.79	5.50**		4.54*	
	(0.61)		(0.56)	(2.52)		(2.47)	
Age	0.90***		0.11	-0.87		-1.68	
	(0.31)		(0.36)	(1.22)		(1.19)	
Education	-1.13**		-1.13***	-3.77*		-3.70*	
	(0.45)		(0.42)	(2.11)		(2.00)	
Income	0.25		0.00	4.40**		3.90**	
	(0.39)		(0.36)	(1.97)		(1.93)	
Consumer		1.19***	1.06***		1.76	2.14	
ethnocentrism		(0.37)	(0.39)		(1.51)	(1.49)	
Subjective		0.31	0.47		0.58	-0.26	
norm		(0.41)	(0.41)		(1.78)	(1.82)	
Product		0.46	0.39		2.64*	2.23	
related		(0.32)	(0.35)		(1.45)	(1.43)	
emotions							
Constant	4.03***	-3.38**	-0.95	15.64***	-1.60	3.75	
	(1.36)	(1.45)	(1.72)	(5.36)	(7.41)	(8.09)	

From the models with only sociodemographic variables, we can see that the parameters differ in both sign and significance between the two products. The dependent variable is measured in HRK, so the parameters represent marginal changes in WTP measured in HRK. First, we notice the constant terms of 4.03 and 15.64 for Model 1 Chips and Model 1 Wine, which represent the estimated premium in HRK that young males with low education and income are willing to pay for domestic products. All changes are relative to this group.

For the chips, we find that age and education affect WTP for domestic origin. Older and less-educated consumers are more willing to pay for domestic origin than are younger and more highly educated people. For wine, the picture is different: gender, education, and income affect WTP for domestic origin. Women, less-educated consumers, and those with higher incomes are willing to pay more for wine of domestic origin.

In Model 2 with only the psychographic variables, all the parameters have the expected positive sign. However, only consumer ethnocentrism is significant for chips and product-related emotions are significant at the 10% level for wine. The other parameters are nonsignificant. Interestingly, the WTP for chips, a low-involvement product, seems to be more strongly affected by consumer ethnocentrism than WTP for wine, a high-involvement product.

When both the sociodemographic and psychological variables are included in Model 3, there are two points to notice. First, there is a relatively large change in the effect of age on WTP for domestic products when ethnocentrism is included in the models. For chips, the age parameter goes from 0.90 and significant at the 0.01 level to an insignificant 0.11. The changes for wine go in the same direction, but both values are insignificant. There are minor changes in the other parameters, but female and product-related emotions for wine become less significant. It is likely that the relatively large change in the effect of age when the

psychological variables are introduced is attributable to the positive correlation between age and all the psychographic variables.

Conclusions

The current study shows that most Croatian consumers prefer domestic food products when the price of domestic and foreign products is the same. Furthermore, Croatian consumers are willing to pay a premium for products of domestic origin, but they are quite price sensitive and the premium should not be set too high. This indicates that it can be difficult to obtain a high price premium for a domestic product, but that it is possible to secure a large market share if prices for domestic products are in the same price range as an imported product.

Education has a negative effect on WTP for domestic products for both wine and chips. Income has a positive effect on WTP for both domestic products, but the effect is significant only for wine. Potato chips are a less-expensive product than wine, and this may explain the insignificant impact of income on WTP a premium for domestic chips. Age has a positive and significant effect on WTP for chips and a negative and nonsignificant effect on that for wine. Our results indicate that using origin as a selling point will work on most Croatian consumers. However, origin seems to be most effective for targeting people with lower education, high-income wine consumers, and older consumers of chips.

Croatian consumers show moderate levels of ethnocentrism and positive emotions for both domestic wine and chips. The social pressure to buy domestic products is higher for wine than for chips. A possible reason for the higher social pressure to buy domestic wine is that Croatia has a long tradition of wine production, dating back to the Roman Empire. Croatia has many small wine producers for whom winemaking is the main source of income and who grow more than 130 autochthonous grape varieties. The wine sector is also an important part of the tourism experience in Croatia, and tourism's share of Croatia's total Gross Domestic Product is 18%, the highest in Europe.

All three normative and affective aspects included in our study have the expected positive effect on WTP for domestic products. However, consumer ethnocentrism was significant only for chips, and product-related emotions were significant only for wine. Consumer ethnocentrism and social norms have lower effects in our study than would be expected based on the results of previous studies. This may be due to the use of WTP instead of intention to buy as a dependent variable or the use of real sales instead of a survey with no economic consequences.

Producers of domestic food products can use these findings for positioning and targeting consumers with domestic food products. They should place great emphasis on domestic origin in their advertising messages for both low- and high-involvement products. To strengthen consumer ethnocentrism and subjective norms for purchasing domestic products, the producers can promote the idea that purchasing domestic products helps domestic producers, supports traditional production, and strengthens economic conditions in the country.

As with most WTP studies, one should interpret the WTP estimates with some caution, because design features of the experiment can affect them, such as the respondents being paid to participate. The sign of the effects is more likely to be transferable to the real market setting than the exact WTP numbers.

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