Examining Spanish consumers’ proclivities towards premium foreign red wines

Tiziana de-Magistris*, Azucena Gracia*, Luis Miguel Albisu*

Abstract

This study investigates the factors that influence intention to purchase premium foreign red wines in Spain. A model of intention to purchase premium foreign red wines is developed based on the Theory of Planned Behaviour. This model is specified as an ordered bivariate probit model and estimated by using data from a survey conducted on 200 consumers in a medium-sized Spanish town, Zaragoza, during November and December 2009. The results suggest that intention to purchase is affected not only by self-reported wine knowledge, but also by attitudes towards the purchase of premium foreign red wines and perceived behavioural control. Moreover, gender influences self-reported wine knowledge, followed by social occasions and emotional benefits.

Keywords: Attitudes, intention to purchase, knowledge, multivariate probit, Theory of Planned Behaviour

Résumé

Cette étude se propose d’analyser les facteurs qui influent sur l’intention d’achat à l’égard des vins rouges de grande qualité étrangers en Espagne. A cet effet, nous avons développé un modèle d’intention d’achat des vins rouges de grande qualité étrangers en nous appuyant sur la théorie du comportement planifié. Le modèle mis au point est un probit bivarié ordonné, estimé en utilisant des données issues d’une enquête menée auprès de 200 consommateurs, entre novembre et décembre 2009, à Saragosse, une ville espagnole de taille moyenne. Les résultats indiquent que l’intention d’achat est influencée non seulement par la connaissance évaluée des répondants dans le domaine des vins mais aussi par l’attitude à acheter des vins rouges de grande qualité étrangers et le contrôle comportemental perçu. En plus, parmi les déterminants de la connaissance évaluée des vins, il y a tout lieu de citer le genre, suivis des occasions sociales et des bienfaits émotionnels.

Mots-clés: Attitude, intention d’achat, connaissance, probit multivarié, théorie du comportement planifié

1. Introduction

Spain is a traditional viticulture country where wine has always been considered to be part of consumers’ diets. However, during the past decade, wine consumption has strongly declined and it reached 8.9 litres per capita in 2013 (MAGRAMA, 2013) with an average per capita spending of 19.4 Euros (MAGRAMA, 2013). In particular, the main decline was due to the decrease in table wine consumption, while premium wines showed the opposite trend (OIV, 2010). Nowadays, Spanish wine consumers have become more sophisticated and they are demanding wines with higher quality standards, such as designation of origin wines.

The increase in world wine trade can add extra pressure to the Spanish oversupplied and saturated marketplace, where national and foreign premium wines aim to penetrate the same market segments. To illustrate, the total value of Spanish imports amounted to 239 million Euros in 2008, 7.3% more than in 2007, whereas the sales of foreign wines with designation of origin increased by around 50% (OMEV, 2009). Wines from Italy and France are still the main wine imports into the Spanish market even though imports of premium wines from Chile and the U.S. increased by 4.1% and 44.1%, respectively, in 2008, confirming their progressive market penetration (OMEV, 2009). Actually, premium Spanish wines are sold in the Spanish market together with premium wines from other traditional wine-producing European countries, but also with wines from the so-called “New World” countries (Argentina, Australia, Chile, South Africa, U.S.).

Red wine is more representative than any other type of wine in the Spanish market. Premium red wines are consumed at special social events such as lunches and dinners (outside home) with friends. These are the wines of our interest and the ones analysed in this study. Spanish wineries producing premium red wines need to know whether consumers will accept premium foreign red wines, which could diminish the consumption of national ones. The response to this question depends on whether Spanish consumers would be willing to buy premium foreign red wines. Then, the aim of this study is to analyse Spanish consumers’ intention to purchase premium foreign red wines and the factors explaining this intention.

In general, research on wine purchase intention is well documented in the academic literature (Thompson and Vourvachis, 1995; Hall et al., 2001; Fotopoulos et al., 2003; Van Zanten, 2005; Johnson and Bastian, 2007; Marin and Durham, 2007; Barrena and Sanchez, 2009; Espejel and Fandos, 2009; McCutcheon et al., 2009; Mora and Moscarola, 2010). Some of these studies have analysed intention to purchase wine by using the Theory of Planned Behaviour (TPB; Ajzen, 1991) where intention is consid-

*Agro-Food Economics and Natural Resources Unit. Agri-Food Research and Technology Center of Aragon (CITA). Zaragoza (Spain).
erred to be the best predictor of behaviour. The findings have shown that consumers’ attitudes towards its purchase, social norms and perceived behavioural control are the most important factors that explain consumers’ wine purchase decisions (Thompson and Vourvachis, 1995; Van Zanten, 2005; Barber et al., 2009; Espejel and Fandos, 2009; Espejel et al., 2011; James and Christodoulidou, 2011; Ngamkroeckjoti et al., 2011; Barber, 2012). Our work follows this approach by analysing intention to purchase premium foreign red wines in Spain based on the TPB. To assess the determinants of intention to purchase, an ordered bivariate probit model is specified and estimated by using data for a survey conducted in Spain in 2009.

Our study contributes to the extant literature on wine consumer behaviour because it identifies the personal and psychological characteristics that influence consumers’ intention to buy premium foreign wine. To our knowledge, no studies have analysed in a traditional wine-producing country consumers’ acceptance of premium foreign wines. Moreover, our study uses an ordered bivariate probit model to estimate consumers’ purchase intention, which constitutes the second innovation of our research.

The rest of the paper is structured as follows. Section 2 establishes the theoretical framework based on a literature review of studies of consumer behaviour in general and wines in particular. Section 3 shows the data collection and defines the variables. The following section presents the main results and, finally, section 5 concludes with a discussion on the main findings and marketing implications.

2. Literature review: Theoretical Framework

Some studies have analysed intention to purchase food products by using the TPB (Ajzen, 1991), where intention is considered to be the best predictor of behaviour (Bredahl, 2001; Chen, 2007, 2008; Wang et al., 2008; Lu et al., 2010; Lopez-Galán et al., 2013). In accordance with the TPB, behavioural intention is basically determined by three factors: attitudes, subjective norms and perceived behavioural control. Attitudes are composed of behavioural beliefs and outcome evaluations of the consequences of beliefs. Subjective norms refer to perceived social pressure to perform or not the behaviour as perceived by the person. Finally, perceived behavioural control is the individual’s beliefs about the amount of control that he/she has to successfully complete his/her behaviour (Ajzen, 1991). Attitudes towards behaviour refer to the degree to which an individual has a favourable or unfavourable evaluation of the behaviour (Ajzen, 1991). According to Ajzen (1991), the more favourable attitudes are towards a behaviour, the stronger is the person’s intention to perform the behaviour under consideration.

The TPB model has been extensively used to analyse intention to purchase wine (Thompson and Vourvachis, 1995; Van Zanten, 2005; Barber et al., 2009; Espejel and Fandos, 2009; Espejel et al., 2011; James and Christodoulidou, 2011; Ngamkroeckjoti et al., 2011; Barber, 2012). Thompson and Vourvachis (1995) showed that the decision to drink wine is influenced mostly by the expectations of other people, whereas attitudes, specifically ‘taste’, are only secondary determinants of behaviour. Van Zanten (2005) investigated intention to purchase Australian wine and found that attitudes towards wine and subjective norms are more important than perceived social pressure. In the same line, Ngamkroeckjoti et al. (2011) found that attitudes and prestige are the most important factors that influence intention to buy imported wine in China. James and Christodoulidou (2011) found that attitudes are of greater influence on intention to drink than social norms in southern California. Finally, Barber (2012) investigated the influence of environmentally safe wines on attitudes towards purchasing. He found that attitudes predict willingness to purchase wine, particularly for a small segment of environmentally knowledgeable consumers.

However, other factors than those mentioned in the TPB might influence consumers’ intention to buy wine and these should be taken into account in the analysis. These factors, found to be important for explaining intention to purchase wine in previous empirical studies, are knowledge about wine, socio-demographic characteristics, social occasions and emotional benefits (Thompson and Vourvachis, 1995; Solomon, 1997; Hall et al., 2001; Fotopoulos et al., 2003; Orth et al., 2005; Barber et al., 2006; Johnson and Bastian, 2007; Barrena and Sanchez, 2009; Mora and Moscarola, 2010). These studies of wine consumers’ behaviour show that self-reported wine knowledge is linked to the frequency of buying wine. Solomon (1997) segmented wine consumers by level of wine expertise and found that level of knowledge is strongly linked to wine consumption frequency. Johnson and Bastian (2007) explored the relationship between Australian consumers’ wine expertise and self-reported wine knowledge related to wine purchasing and consumption. The authors pointed out a certain level of correlation between wine knowledge and wine consumption. Finally, Barber et al. (2006, 2009) found a strong relation between wine knowledge, attitudes and wine purchase intention.

Consumers’ socio-demographic and economic characteristics are also included in the model because empirical evidence shows that some socio-demographic variables are strongly related to wine consumption and knowledge. Burgolazas et al. (2005) applied a profile analysis of wine consumers in Spain by using characteristics such as gender, age, level of education and level of income. Their findings showed that men, higher educated persons and older people have higher levels of wine knowledge and wine consumption. In the same line, Barber et al. (2006) concluded that women and respondents aged between 31 and 40 years old are more concerned about their wine purchase decisions. Johnson and Bastian (2007) found some correlation between socio-demographic characteristics and the level of knowledge on wine in Australia. Their findings stated that
women show a lower level of wine knowledge than men and that men spend more on wine than women. Finally, Rodriguez et al. (2009) stated that men and older people are more likely to buy wine in Spain.

Finally, social occasions when consumers drink wine and the emotional benefits from drinking wine are also included in the model because previous studies demonstrate that consumers usually feel pleasure after consuming wine, especially during social events such as dining occasions (Thompson and Vourvachis, 1995; Hall et al., 2001; Fotopoulos et al., 2003; Orth et al., 2005; Barrena and Sanchez, 2009; Mora and Moscarola, 2010).

The model of intention to purchase premium foreign red wines is presented in Figure 1.

Figure 1 - Model of intention to purchase premium foreign red wines in Spain.

3. Methodology

3.1. Data collection

Data were collected from a survey conducted face-to-face in a medium-sized Spanish town, Zaragoza, during November and December 2009. Zaragoza was chosen because it is a town widely used by food marketers and consulting companies since the socio-demographic profile of people living in this town is representative of the entire Spanish population (see Table 1). The questionnaire included questions related to consumers’ premium foreign red wines purchase decisions such as intention to purchase, attitudes towards purchase, social norms and perceived behavioural control. The questionnaire also contained questions on self-reported knowledge on wine and consumers’ social occasions and emotional benefits from drinking wine. Finally, some questions on consumers’ socio-demographic and economic characteristics (i.e. gender, family size and composition, age, education level and income) were asked. Prior to the main survey, this questionnaire was validated by using a pilot survey of 20 consumers to test for understanding and interview length. Sample size was set at 200. As the population in Zaragoza can be considered to be infinite (700,000), this sample size results in a sampling error of ±6.93% assuming a confidence level of 95.5% (k=2) and p=q=0.5. The framing of the sample was a probabilistic proportional sampling stratified by age and sex and consumers were randomly selected across the city.

3.2. Variables definition

Intention to purchase premium foreign red wines was measured by asking respondents whether they intended to buy these wines on a scale from 1 (definitely no) to 5 (definitely yes) following Cook et al. (2002), Mahon et al. (2006) and Chen (2008) (Table 1). The level of premium red wine knowledge was measured by asking respondents their self-reported level of knowledge from 1 to 3, where 3 indicates the highest level of knowledge (Table 1).

Because measuring attributes or psychological aspects such as attitudes, subjective norms and perceived behavioural control is challenging (Lobb et al., 2007), the scales related to these aspects were defined based on previous empirical studies. Respondents were asked to indicate their agreement or disagreement with the statements provided by using a five-point Likert scale, where 1 indicates strong disagreement and 5 strong agreement. The sentences to be rated by respondents related to attitudes towards the purchase were i) “I believe that buying premium foreign red wines is pleasant” (PLEASANT) and ii) “I support buying premium foreign red wines” (SUPPORT) (Thompson and Vourvachis, 1995; Bredahl, 2001; Hall et al., 2001; Fotopoulos et al., 2003; Van Zanten, 2005; Johnson and Bastian, 2007; Chen, 2007; Marin and Durham, 2007; Chen, 2008; Barrena and Sanchez, 2009; McCutcheon et al., 2009).
Subjective norms were measured by rating the sentence “Most people who are important to me think that I should buy premium foreign red wines”) (SNORM) and perceived behavioural control by the sentence “If premium foreign red wines were available in the shops, I do not think I would ever be able to buy them” (DIFFICULTY) (Bredahl, 2001; Chen, 2007, 2008).

Regarding consumers’ social occasions and emotional benefits from drinking wine, respondents were asked to indicate their agreement or disagreement with several statements by using a five-point Likert scale, where 1 indicates strong disagreement and 5 strong agreement: “I used to search for information on red wine before buying it” (INFORMATION); “I like to try new food and beverages” (NEW); “I used to have dinner/lunch with friends/family” (DINNER); and “I feel good when I drink premium red wine” (FEELING) (Fotopoulos et al., 2003; Barrena and Sanchez, 2009; Mora and Moscarola, 2010).

### 3.3. Model specification: Bivariate ordered probit

In our model of intention to buy premium red wine (Figure 1), the two endogenous variables, intention to buy (INTENTION) and knowledge (KNOWLEDGE), are discrete (Table 1). Hence, we specified a bivariate ordered probit model to take into account the possible correlation between the equation’s error terms, because it is likely that intention to purchase and knowledge are correlated.

The first equation in our model is the level of knowledge on premium red wine (K), specified as

\[ K_i^* = \beta y_i + \xi_i \]  \[ 1 \]

where \( y_i \) represents all the exogenous variables such as socio-demographic characteristics (FEMALE, YOUNGER, UNIVERSITY, HSIZE, HINCOME) and social occasions (INFORMATION, NEW, DINNER, FEELING) for each “i” respondent and \( \xi_i \) is the normally distributed error term \( N(0, \sigma^2) \). \( K_i^* \) is the unobserved knowledge about premium red wine but the knowledge (K) stated by respondents (K) is observed and is measured by three levels (Table 1) as follows:

\[ K_i = 1 \text{ if } K_i^* \leq \psi_1 \]
\[ K_i = 2 \text{ if } \psi_1 < K_i^* \leq \psi_2 \]
\[ K_i = 3 \text{ if } \psi_2 < K_i^* \]

The second question in the model is consumers’ intention to purchase premium foreign red wines (IP), specified as follows:

\[ IP_i^* = \lambda K_i^* + \beta x_i + u_i \]  \[ 3 \]

where \( K_i^* \) is the consumer’s wine knowledge defined above; \( x_i \) contains all exogenous variables such as socio-demographic characteristics (FEMALE, YOUNGER, UNIVERSITY, HSIZE, HINCOME), social occasions (INFORMATION, NEW, DINNER, FEELING), attitudes (PLEASANT, SUPPORT), social norms (SNORM) and perceived

### Table 1 - Sample characteristics (% unless stated) and definition of the variables.

<table>
<thead>
<tr>
<th>Name (Type)</th>
<th>Variable definition</th>
<th>Sample</th>
<th>Spanish Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTENTION</td>
<td>Intention to purchase premium foreign red wines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes (5)</td>
<td>13.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probably yes (4)</td>
<td>33.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indifferent (3)</td>
<td>21.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No (2)</td>
<td>19.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Probably no (1)</td>
<td>13.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KNOWLEDGE</td>
<td>Consumer’s premium red wine knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (3)</td>
<td>6.061.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium (2)</td>
<td>32.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXOGENOUS VARIABLES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEMALE (dummy)</td>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>45.0</td>
<td>47.3</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>55.0</td>
<td>52.7</td>
<td></td>
</tr>
<tr>
<td>YOUNGER (dummy)</td>
<td>Age of respondent (average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From 20 to 34 years</td>
<td>49</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>UNIVERSITY (dummy)</td>
<td>Education of respondent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>30.0</td>
<td>29.0</td>
<td></td>
</tr>
<tr>
<td>High School</td>
<td>47.0</td>
<td>44.0</td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>23.0</td>
<td>27.0</td>
<td></td>
</tr>
<tr>
<td>HSIZE (continuous)</td>
<td>Household size (average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HINCOME</td>
<td>Average household monthly net income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between 900 and 1,500 Euros</td>
<td>34.3</td>
<td>37.3</td>
<td></td>
</tr>
<tr>
<td>Between 1,501 and 3,500 Euros</td>
<td>28.2</td>
<td>N.A</td>
<td></td>
</tr>
<tr>
<td>More than 3,500 Euros</td>
<td>24.5</td>
<td>N.A</td>
<td></td>
</tr>
<tr>
<td>SNORM (Likert scale)</td>
<td>Subjective norms (average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most people who are important to me think that I should buy premium foreign red wines</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIFFICULTY (Likert scale)</td>
<td>Perceived behavioural control (average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If premium foreign red wines were not available in the shops, I think I would be unable to buy them</td>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INFORMATION (Likert scale)</td>
<td>Social occasions and emotional benefits from drinking wine (average)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually search for information on red wine before buying it</td>
<td>3.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW (Likert scale)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to try new food and beverages</td>
<td>3.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DINER (Likert scale)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I usually have dinner/lunch outside home with friends/family</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEELING (Likert scale)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel good when I drink premium red wine</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Source: IAEST (2010).
N.A: not available.
behave control (DIFFICULTY), while \( u_i \) is the error term normally distributed \( N(0, \sigma^2) \). \( \xi_i^* \) is an unobserved variable but the stated intention to purchase (IP) is measured by five levels, as follows:

\[
\begin{align*}
IP_i = 1 & \text{ if } \xi_i^* \leq \tau_1 \\
IP_i = 2 & \text{ if } \tau_1 < \xi_i^* \leq \tau_2 \\
IP_i = 3 & \text{ if } \tau_2 < \xi_i^* \leq \tau_3 \\
IP_i = 4 & \text{ if } \tau_3 < \xi_i^* \leq \tau_4 \\
IP_i = 5 & \text{ if } \tau_4 < \xi_i^* \\
\end{align*}
\]

As mentioned before, to estimate equations [4] and [6], we assumed that the error terms \( (u_i, \xi_i^*) \) may be correlated and follow a normal distribution \( N(0, \Sigma) \). Hence, the bivariate ordered probit was estimated by using the STATA 11 statistical software package (see Sajaia, 2008 for an explanation of the estimation procedure).

### 4. Results

Summary statistics for the socio-demographic characteristics of the sample are presented in Table 1. Over half of the participants were women (55%) and, on average, participants lived in households of three members. In addition, the average age was about 50 years, although almost a quarter were 35 years old or less. Moreover, around 28% of consumers stated that they have a high income and about 23% of subjects had university degrees. Almost half of respondents stated that they would probably or definitely purchase premium foreign red wines (46.5%).

The estimated parameters for the model defined by equations [1] and [4], using the variables defined in Table 1, are presented in Table 2.

Only exogenous variables statistically different from zero at 5% significance level were finally included. The \( \rho \) value was statistically significant at 5%, implying that the errors for the two equations are indeed correlated. Therefore, we can conclude that the equations are not independent and that the simultaneous estimation of both is the appropriate approach to obtain consistent parameter estimates.

Only five variables were found to be statistically significant at 5% level in the wine knowledge equation: FEMALE, INFORMATION, NEW, DINNER and FEELING. In accordance with previous studies, FEMALE had a negative and significant effect on wine knowledge, meaning that women were more likely to have lower knowledge of premium red wine (Brugarolas et al., 2005; Johnson and Bastian, 2007; Rodriguez et al., 2009). The positive and statistically significant estimated coefficient for the variable INFORMATION indicated that if consumers sought information about premium red wine before buying it, they were more likely to have higher knowledge. As expected, NEW was positive and statistically significant, meaning that those consumers more prone to trying new food and beverages were more likely to have higher knowledge about premium red wine.

However, the negative coefficient associated with the DINNER variable indicated that consumers who usually have dinner/lunch outside their homes were more likely to report lower wine knowledge. Finally, as expected, the variable FEELING was positive and statistically significant, indicating that consumers who feel better when drinking premium red wine were more likely to be more knowledgeable about premium foreign red wine (Fotopoulos et al., 2003; Barrena and Sanchez, 2009; Mora and Moscarola, 2010). Self-reported consumer knowledge (KNOWLEDGE) was statistically significant for the intention to purchase equation. The positive estimated coefficient associated with the KNOWLEDGE variable indicated that consumers more knowledgeable on premium foreign wine were more likely to be willing to buy it (Solomon, 1997; Frost and Noble, 2002; Perrouy et al., 2006; Johnson and Bastian, 2007; Veale, 2008).

As Ajzen (1991) and other studies of wine purchase have stated (Thompson and Vourvachis, 1995; Hall et al., 2001; Fotopoulos et al., 2003; Van Zanten, 2005; Johnson and Bastian, 2007; Marin and Durham, 2007; Barrena and Sanchez, 2009; Espejel and Fandos, 2009; McCutcheon et al., 2009; Mora and Moscarola, 2010), there was a significant relation between intention to purchase premium foreign red wines (INTENTION) and attitudes towards their purchase (SUPPORT). This finding suggested that consumers who support buying these wines were more likely to be willing to purchase them. Moreover, the variable DIFFICULTY, which indicates the perceived ability to purchase the product, was positive and statistically significant, implying that those consumers who believe that they have more difficulties buying the product were more likely to buy it. This result means that even consumers that perceived that buying these wines could be more challenging for them would be willing to purchase them. Nevertheless, subjective norms (SNORM) were not statistically different from zero, meaning that Spanish consumers were not influenced by other people when shopping for these wines. Finally, regarding the socio-demographic variables, as expected, the estimated coefficient for the variable INCOME was positive, meaning that consumers who had a high income were more likely to buy foreign premium red wine.

We next calculated the marginal effects to assess the effects of the exogenous variables on the KNOWLEDGE and INTENTION variables (ordinal variables). In this specific case, and for the continuous exogenous variables, the effects were calculated by means of the partial derivatives of the probabilities with respect to a given exogenous variable. In the case of the dummy variables, the marginal effects were calculated by taking the difference between the pre-

---

2 First, we estimated the model with all the explanatory variables reported in Table 1. Those variables individually and/or jointly insignificant were dropped one-by-one in the subsequent estimations until we obtained the final model presented in Table 2.
dicted probabilities of the respective variables of interest, changing from 0 to 1 and holding the rest constant. The change in predicted probabilities gives a more accurate description of the marginal effect of a dummy variable on event probability than predicting the probability at the mean level of the dummy variable. The marginal effects for the continuous variables and dummy variables are shown in Tables 3 and 4.

With respect to self-reported knowledge on premium red wine, the results indicated that female consumers had a higher probability of reporting a lower level of knowledge on premium red wine. The marginal effects of the social occasions and emotional benefits from drinking wine variables on the probabilities were as expected. Those consumers who strongly agree with searching for information about premium red wines (INFORMATION), try new food and beverages (NEW), and feel good when drinking premium red wine (FEELING) were more likely to state a medium or higher level of knowledge on premium red wines. By contrast, having lunch or dinner in restaurants with friends or family (DINNER) showed the opposite trend.

Regarding intention to purchase premium foreign red wines, the results indicated that consumers with a higher income and self-reported wine knowledge (KNOWLEDGE) were more likely to buy premium foreign red wines (Table 5). As consumers present more positive attitudes towards the purchase (SUPPORT), they were more likely to buy premium foreign red wines. Finally, the results reported that those consumers who believe that premium foreign red wines are not available in the shops were less likely to buy them.

**Conclusions and final remarks**

In Spain, during the past decade, wine consumption has declined mainly due to the decrease in table wine consumption, while premium wines have shown the opposite trend. On the other hand, the increase in world wine trade has aggravated the domestic market situation due to an oversupply, with competition among premium Spanish wines and premium foreign wines. Actually, premium Spanish wines are sold in the Spanish market together with premium wines from other traditional wine-producing European countries as well as with wines from “New World” countries (Argentina, Australia, Chile, South Africa and U.S.). The presented results provide evidence of consumers’ intention to purchase premium foreign red wines because almost half of respondents indicated that they probably or definitely would buy them. Thus, it is important for Spanish wine producers and for wineries in Spain and other exporting countries to know to what extent Spanish consumers are likely to purchase premium foreign red wines in order to design appropriate marketing strategies.

As expected based on previous studies, one of the most important factors influencing intention to purchase premium foreign red wines was consumers’ self-reported knowledge on these wines. Moreover, consumers who showed a high level of knowledge of premium foreign red wines were men who usually searched for information about them and were more prone to trying new food and beverages. Nevertheless, consumers who usually had dinner/lunch outside their homes were more likely to report lower wine knowledge.

The analysis also proves that as the TPB states, other factors explaining intention to purchase premium foreign red wines were attitudes towards purchase and perceived behavioural control. Consumers with positive attitudes towards the purchase were more likely to buy wines. In particular, consumers who support buying premium foreign red wines were more likely to purchase them. However, although consumers perceived that purchasing these wines was difficult or more challenging for them even if they are...
available in stores, they would be willing to purchase them. Moreover, gender and income were also found to be the most important demographic characteristics that influenced self-reported knowledge and intention to buy premium foreign red wine in Spain, respectively. Nevertheless, Spanish consumers were not influenced by other people when shopping for these wines.

The marketing implications of these findings are several. Increasing knowledge on premium red wine is of paramount importance to increase intention to purchase and therefore consumption in Spain. Because more knowledgeable consumers are more prone to buying premium foreign red wine, and probably also to buying any premium red wine, information campaigns on premium red wines should be implemented to increase demand for these red wines in Spain. These campaigns should target mainly consumers with lower levels of knowledge, particularly women and consumers who drink wines out of home because they were found to be less knowledgeable. On the other hand, searching for information about premium red wines and willingness to try new food and beverages were two distinctive characteristics for knowledgeable consumers, while, at the same time, those consumers feel good when drinking those wines. Those characteristics are not easy to find in an average Spanish consumer (probably in more adventurous consumers).

Hence, our findings support that media advertising campaigns providing clear information about premium foreign red wines could be a good strategy for foreign wine companies to ensure that their wines become known in the Spanish market, targeting men and people with higher incomes.

Further, our findings also showed that consumers who usually have dinner/lunch outside their homes are more likely to report lower wine knowledge. Hence, in order to provide more information about their wines, foreign wine enterprises could sponsor and organise dinner events as an excellent communication strategy where Spanish consumers have the opportunity to find out about their wines. Then, they would be more prone to paying a premium price for them.

Finally, because trying the product for the first time is the precursor to liking and re-buying, advertisement on TV and tasting promotions at point-of-sale could be good strategies for foreign wine companies to penetrate the Spanish wine market first and to increase their sales second. In particular, foreign wine companies could target the segment of consumers who are more prone to trying new food and beverages.

The main limitation of the analysis is that it was only conducted in Spain, an example of an “Old World” country. Further research extending the analysis to other countries, especially “New World” countries, could aim to find out whether marketing strategies should differ when selling wines in “Old World” and “New World” regions. In addition, although intention to purchase is a good predictor of final behaviour, the analysis should also be extended to analyse not only intention to purchase these products but also their final purchase.

Acknowledgements

This research was part of the project, funded by the OIV, “Reaction of consumers from a traditional producer country to wines with geographic indicators and their reaction to new world wines”.

References


Instituto Aragonés de Estadística (IAEST), 2010. Available at http://www.aragon.es/iaest


