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Abstract. While the determinants of wine consumption have been analysed both in terms of socio-demographic segmentation, ratings, and prices, very little is known about the social influences that may affect wine consumption and purchases. To address this, we conduct an empirical investigation using a hypothetical survey among the Generation Z (born between 1995-2010) to understand which characteristics of wine are likely to signal positive traits of the person making the purchase. We find that the type of wine, the country and exterior characteristics of the product such as packaging and closure have a strong signalling value regarding the socioeconomic status, the competence and personality traits of the buyer. The region where the wine is produced has also a significant but less pronounced effect on the inference people make about the buyer.

JEL codes: D12, D91, L66,

Keywords: wine economics, survey, social image

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1. Introduction

The consumption of wine is an intrinsically social activity. Because rarely a bottle of wine is consumed by a single individual, most of its consumption is inherently social. Moreover, a large part of wine purchases have a gift purpose. While the literature on wine economics has so far investigated many different determinants on the purchasing decisions for wine, the evidence on the social influences for wine demand is quite scant. To fill this gap, in this paper, we conduct an investigation on the social signalling value of wine purchases and consumption. Despite not being as evident as the consumption of clothing or cars which can be visible every time one wears or drives them, respectively, also a bottle of wine can have an important signalling value precisely because its consumption is typically social. In this sense, wine consumption can be thought of as a form of conspicuous consumption (Veblen, 1899), that is, on top of its consumption value it may carry some signal about the social status of the buyer.

To analyse which type of characteristics of the wine have an influence on the signalling value, in this paper we conduct a survey among the generation Z consumers asking to indicate which traits they associate with certain wines. We expose participants to several different scenarios in which they hypothetically observe a person buying a bottle of wine and subsequently are asked a guess about the socioeconomic status, the competence on wines, and some traits of the personality of the buyer. In particular, we report results on narcissism which is a trait that can be naturally associated with conspicuous consumption.

Across scenarios, we vary characteristics of the wine to understand which of these characteristics has a stronger signalling value. The characteristics we analyse are wine type (red/white/sparkling/rosé), country of production, region of production, packaging, and closure. Our results can be summarized in the following findings: (i) red wines signal higher socioeconomic status, more competence and higher degree of narcissism compared to white, sparkling and rosé wines; (ii) French and Italian wines are associated with higher socioeconomic status, higher competence and narcissism compared to Spanish and Australian wines with French wines being ahead of Italian wines for some of the traits; (iii) regarding the regions, Champagne elicits the highest level of socioeconomic status and narcissism, but Bordeaux elicits highest competence; (iv) the starkest differences are found for packaging and closure whereby we find bottled wine to send a much stronger signal for all the three traits compared to canned and boxed wine and cork wines to send a stronger signal on all three traits compared to screw cap wines.

Overall, our results confirm that different characteristics of wine can have an important impact on the social image of the buyer and hence part of the wine purchasing decisions are likely affected by considerations which are not only based on the taste and the private value of the wine but are influenced by its public signalling value.

The remainder of the paper is structured as follows. In the next section we examine the literature on the determinants of wine consumption. Sections 3 and 4 describe our survey design and results, respectively. Section 5 concludes.

2. Literature review

When it comes to purchasing and consuming a bottle of wine, customers are influenced by three main factors: their knowledge of the product, its characteristics and ratings. It can be therefore noted that a duality exists between what the wine really is and what it is made to be by extrinsic agents. While one's awareness about different wine attributes, producers and styles might vary, the judgment of an expert is almost universally recognized as a symbol of quality and reliability (Dubois and Nuages, 2010).

Some authors go as far as stating that buyers deem chemical and sensory wine characteristics as irrelevant (Lecocq and Visser, 2006), thus highlighting even more the experts' role in wine decision-making and marketing. Over time, however, the individual level of knowledge may increase and consequently make objective variables more and more important to consumers.

Consumer motivation behind wine choice is also influenced by socio-demographic variables such as age, education, gender and income (Di Vita et al., 2019)². Age positively influences the consumption of lower quality wines, such as bulk wine; the results highlight the elderly consume common wines more frequently. By the same token, elders appear to consume *Protected Designation of Origin* (henceforth, PDO) wines less frequently, probably because of their simpler and more straightforward conception of wine. On the contrary, individuals with a higher level of education tend to prefer PDO wines to basic ones, similarly to those with a higher income who gravitate towards both PDO and PGI (*Protected Geographical Indication*). This all comes down to the more widespread awareness of the upper middle class.

Di Vita et al. (2019) basically confirms the dichotomy between basic and premium wines, such as PGI and PDO. Furthermore, by comparing the consumer motivations towards these common

² The survey was conducted on more than 1200 Italian wine consumers.

designations, it also highlights for the first time the difference between the two: age and education seem to be crucial factors only when PDO wines are involved. Interestingly, white wines are the most appreciated among the consumers of certified wines, while rosé is a truly significant attribute only for basic wines. Red wines show fairly common dynamics in all segments of consumption.

2.1 In price lays the truth: price-related attributes and hedonic coefficients

Naturally, the more a wine is desirable, the more its price rises. Because of this, market prices are jointly determined by a buyer's willingness to pay (WTP) and a seller's willingness to supply (WTS), both of which depend on the perceived quality of the wine (Faye and Le Fur, 2019).

Even if it often ends up being overlooked, the concept of willingness to supply is a major component in the price determination process. Two types of variables can be distinguished: time-variant and time-invariant ones. While they both strongly affect yields and production, soil composition, exposure and altitude cannot be changed over the course of time, whereas cultivation and vinification techniques can be improved and adapted to the needs of a given winery. Also, age-related variables must be kept into account, since many wines need to be kept for many years before drinking and continuously gain value until a peak is reached, after which the quality tends to decrease.

On the other hand, WTS is determined by opinion, whether it be from an internal or external source. Knowledge, sensory profile and ratings are not only all intertwined, but their actual degree of influence is an ever-changing phenomenon.

Wine preferences and trends are all subject to hedonic functions and, most notably, to hedonic coefficients, i.e., the relation between wine prices and their characteristics.

Through their study, Faye and Le Fur investigated the constancy of these hedonic coefficients over time analysing a sample consisting of 50 Bordeaux wines that were included in the Liv-ex Bordeaux Legends 50 Index³. They then studied the stability of these attributes over time, with particular attention to structural or cyclical changes related to price fluctuations. The results showed that coefficients such as availability, expert ratings and maturity are variable and exhibit significant differences over time, shedding doubt on the relevance of both short and long-run hedonic estimations.

While it is worth analysing the impact of wine characteristics on price, it must be said that the price of a bottle is a major hedonic component itself. Past research clearly shows that the knowledge

³ The Liv-ex Bordeaux Legends 50 Index presents the price movement of 50 leading vintages from the Bordeaux region. The sample included vintages from the years 1982 to 2000

of this piece of information effectively influences the consumer's choice and subjective experience (Boyle and Lathrop, 2009). Through their paper, Werner et al. (2021) brought further evidence on the topic, demonstrating that the prices can be manipulated to change the taster opinions and perspectives, even in a realistic wine tasting setting. After having 140 participants taste three differently priced wines with open, deceptive or no price information, they found out that more expensive wines were evaluated as more intense in taste. Most interestingly, deceptive up-pricing positively influenced ratings for pleasantness, whereas down-pricing had no effect on this value. These findings may therefore suggest that it is possible to enhance the perceived quality of a lower tier wine thanks to a price increase.

2.2 A different approach to customer preferences: blind tasting

As previous research has clearly assessed, information plays a leading role in affecting consumers' choices. The more precise and thorough the information is, the more the buyer is eager to purchase a product and pay for it: this is clearly shown in a paper by Vecchio et al. (2019) which focuses on the effect of denomination on wine. The results showed a sharp difference in WTP for Chianti Classico DOCG (+€2.28) and Chianti Classico DOCG *Riserva* (+€4.18), which highlights the importance of just one added word, whose actual meaning might even be unclear to some consumers.

Because of this, it is necessary to also investigate unbiased preference trends through blind tasting, a practice that also has the ability to greatly increase one's accuracy and knowledge about wine (Wang and Prešern, 2019). As for the main hedonic characteristics, age, acidity, sweetness and colour (red is normally preferred to white) are the most important overall. It was also demonstrated that a higher price is positively correlated to preference, even when the price is not actually stated: consequently, further assessment could demonstrate that more expensive wines may have sensorial properties which make them appealing.

Over the course of the 18 tasting sessions organized for this study, the researchers also observed a shift in preference towards older wines and a decrease in importance of its colour as a predictor of quality. The subjects also showed a growing appreciation for acidity and alcohol and a decreased enjoyment of oak flavours. This has important implications for developing wine markets with and increasingly educated population, as it suggests how their preferences may change over time.

2.3 Ratings and reliability

Expert ratings play an important role when it comes to both willingness to buy and willingness to pay. As influential as they may be, Bartoshuk et al. (2004) sum up the inherent problem of such

evaluations by stating “We cannot share experiences, so we cannot compare perceived sensations directly”. Being a private sensation, taste is different from a person to person and any way of describing and grading it is inevitably imprecise since evaluation includes personal enjoyment.

Wine’s rich historic heritage differentiates it from other foods and beverages. This is also evident in the way ratings are structured, which is more free and more personal than the one used for other products. However, broadly defined, winemaking is food processing; in this category experts often use a method called psychophysical scaling (PS). PS quantifies mental events responses, especially sensations and perceptions such as liking/disliking and intensity of sensation, after which it is possible to determine how these quantitative measures are related to quantitative measures of the physical stimuli signals (Marks and Gescheider, 2002).

Marks (2020) compared a psychophysical (in this case hedonic) and a classic scale in order to shed light on the subjective nature of the latter. As shown in Table 1, not only the psychophysical scale is more precise and has more degrees of description, but also uses a more objective set of words based on like/dislike. However, even this more structured system is often labelled as inherently ambiguous, due to sentimental influences and measurement issues. Furthermore, the ratio of these numbers even becomes meaningless when is considered that there is no *common zero*: a five-star wine surpasses a four-star one, but not necessarily by 20%.

Table 1. Comparison between hedonic scale and Parker wine ratings (Source: Marks, 2020)

<i>9-Point Hedonic</i>		<i>Wine Ratings (Parker)</i>	
9	Like extremely	96–100	Extraordinary
8	Like very much	90–95	Outstanding
7	Like moderately	80–89	Very good to barely > average
6	Like slightly		
5	Neither like nor dislike	70–79	Average, soundly made, little distinction
4	Dislike slightly		
3	Dislike moderately	60–69	Below average, notable deficiencies
2	Dislike very much		
1	Dislike extremely	50–59	Unacceptable

Following this model, it is also possible to suggest a way to rate the raters themselves (Bodington, 2020). Considering that ratings assigned by the same judges to the same wines in the same sequence can be expressed as a matrix, Bodington analysed the data coming from the California State Commercial Wine Competition⁴. By comparing assignments by each judge to each wine, he observed

⁴ In this competition, wines are professionally judged in order to recognize the best ones produced in the state. Dating back to 1854, the State Fair Commercial Wine Competition is America’s oldest wine judging.

that there is a strong and positive correlation between the ratings assigned by most judges to most wines. However, those correlations also show that the wine ratings assigned by approximately 10% of the judges are indistinguishable from random assignments.

Using correlations to prove the validity of wine judges makes their ratings more significant, especially since the work of each judge has to be statistically comparable with that of others. Although this method brings appealing advantages to the value and interpretation of ratings, this application is not yet developed enough and could end up becoming a simple generalization. Testing on the same judges over time seems worthwhile in hopes of finding a more objective grading system that can encompass the differences among each expert.

2.4 Conspicuous consumption

It is often argued by economists and sociologists that the consumption of goods is driven by social status. This phenomenon is called conspicuous consumption, a term coined by Thorstein Veblen that specifically refers to the spending of money on or the acquiring of luxury goods and services in order to publicly (i.e., conspicuously) display the economic power of one's income or accumulated wealth. This is especially true when it comes to products that are visibly shown while made use of. This type of activity can be connected to the cognitive processes of lumping and splitting (Zerubavel, 1996): through one's actions, consumers can be identified by others as part of a given social group, regardless of their actual wealth and status.

Due to the influence of social media, however, the distinct separation between what is used publicly and privately is getting more and more meaningless, as places and objects that were exclusively personal in the past are now posted all over the internet. Furthermore, this is particularly true for luxury goods, both when it comes to fashion and lifestyle. Based on several factors such as age, gender, materialism, education and narcissism it is possible to predict the likelihood of an individual to buy to impress (Lee & Kim, 2020).

It is important to highlight the fact that making consumption choices visible leads to a large increase in demand when income is linked to status, but not otherwise (Clingsmith & Sheremeta, 2018). Several attempts have been made over the years to develop Veblen's ideas within a more formal microeconomic framework. Because of this, some authors have mistakenly attempted to capture his argument with the notion that price is directly a part of utility. Veblen's analysis implies instead that the determinants of utility are consumption and social status in the eyes of others.

Through its rules and ideals, society plays a big role in determining what type of consumption is not only desirable, but worth showing to others. This consideration makes it very difficult to

generalise the influence of status in purchasing of goods. Chocolate, for example, has a notably unbalanced connotation: studies suggest that women may be more discouraged from consuming it publicly than men, especially when it is a rich and highly caloric product (Clingsmith & Sheremeta, 2018).

Nevertheless, not only it is universally recognized that wine has a deep-rooted social and cultural connotation, but also the purchasing of this product represents an experience. Bronner and de Hoog (2018) assessed through empirical research that in experiential purchases, namely holiday choices, two main factors must be considered: (a) status and wealth and (b) identity demonstration. The first one plays little to no role in holiday choice. The second is found to be relevant and is characterized by items such as having unique experiences.

Yet regarding wine consumption, little to no research has been conducted so far about the link between consumer preferences (i.e., willingness to pay and perceived value) and social influences. Wine is perfectly suited for conspicuous consumption, as it can be shown in many different ways, has a powerful symbolic value and, albeit perishable, it is relatively inexpensive compared to other luxury goods. In the next section, we introduce the survey design we have adopted to shed some light on the social image that wine purchasing may have.

3. Survey design and procedures

To investigate whether people associate certain traits to individuals depending on their wine purchasing decisions, we conduct a survey using Prolific Academic targeting the Z generation. In particular, we collected a large sample ($n = 798$) of respondents between 18 and 26 years in all EU countries plus UK, Norway and Switzerland.⁵ The survey presents several scenarios to participants. In all scenarios, participants are asked to imagine a situation in which they observe a person buying wine. Across scenarios, we vary the characteristics of the purchased wine along several dimensions. We summarize all the dimensions and the possible characteristics in Table 2.

⁵ The choice of adding these three countries to the EU market is related to the fact that the UK has been in the EU market until recently and Norway and Switzerland are typically associated with the Scandinavian and the German markets in terms of tastes and market trends.

Table 2. Dimensions and characteristics

Type	Country	Region	Packaging	Closure
Red	France	Champagne	Bottle	Cork
White	Italy	Burgundy	Can	Screw cap
Rosé	Spain	Bordeaux	Box	
Sparkling	Australia	Piedmont		
		Tuscany		
		Sicily		

Each scenario contains only one of the characteristics above. Each subject sees in random order all the characteristics reported in Table 2. In a first part of the survey, for each characteristic, we ask the following question: “Assume you see a person you don’t know buying a [*characteristic*] wine. What would be your guess on the socioeconomic status (income, education, job prestige) of this person compared to the average socioeconomic status in your country?”. Participants are asked to answer on a scale from 1 to 6 where 1 means “Much lower than average”, 2 “Lower than average”, 3 “A little lower than average”, 4 “A little higher than average”, 5 “Higher than average”, and 6 “Much higher than average”. Only for the questions regarding the production region, participants have the additional option “I don’t know this region”.

In the second part of the survey, for each characteristic, respondents are asked about additional traits the person who buys the wine may have. In particular, they are asked to evaluate on a scale from 1 to 7 where 1 means “Not at all” and 7 means “Totally” how much a particular trait applies to this person. The traits we include are expertise on wine, the Big 5 personality traits and narcissism. Along with each psychological trait (Big 5 and narcissism) we also provide three adjectives explaining and characterizing each trait. We have included narcissism on top of the Big 5 as narcissism can be particularly linked to image seeking and hence to conspicuous consumption. Finally, in the last part of the survey, subjects are asked some sociodemographic questions and questions about wine consumption habits.

Participants were recruited from Prolific Academic and had to provide their Prolific ID to participate. Upon accepting the invitation, they were redirected to the survey which was programmed using LimeSurvey. Once completed the survey, they were invited to click a link which redirected them to the Prolific Academic platform and automatically filled the completion code. Only

participants clicking on the link were paid. We paid £2.10 for an average completion time of 15 minutes which amounts to an hourly wage of £8.40. In one of the questions, we included an attention check to ensure that survey participants were carefully completing the survey. In the scenario where people would evaluate traits on red wine, one of the options was “It's important that you pay attention to this study. Please tick 'Totally' ”. Participants who fail to click 7 in this question are excluded from the analysis. This leaves us with $n = 730$ observations.

4. Results

In our results section, we mainly focus on three questions which are the most important in the realm of status goods and conspicuous consumption, i.e., socioeconomic status, expertise on wine and narcissism. Socioeconomic status reflects Veblen’s original formulation on conspicuous consumption whereby buying a certain good may have on top of its consumption value a signalling value related to income and status. Yet, an additional trait people may want to signal when buying wine is competence and wine expertise which may be a value per se independently from income and socioeconomic status. Finally, we analyse narcissism, a personality trait intimately linked to social image and conspicuous consumption.

4.1 Socioeconomic status

Figure 1 reports bar charts for each dimension and characteristic. The figure reveals several interesting descriptive findings. The type of wine seems not to send a very strong signal regarding socio-economic status even if a person buying red wines is considered to have higher socioeconomic status than the other categories. Surprisingly sparkling wines seems to send the lowest signal in terms of socioeconomic status despite Champagne actually sends the strongest signal in the Region category. One reason may be that generic sparkling wines are not associated with high class sparkling wines like Champagne. Moving to the countries, the figure reveals that France and Italy sends the strongest signal in terms of socioeconomic status, with France being at the top. Regarding the regions, we observe in general higher ratings compared to the other two figures indicating that simply communicating the region may have an effect in raising the signal that the wine conveys in terms of socioeconomic status. Bordeaux and Champagne seem to have the highest signalling value. Finally, packaging and closure seem to highlight the strongest differences, with canned, boxed, and screw cap wines signalling below average socioeconomic status compared to bottled wine and cork closure, respectively.

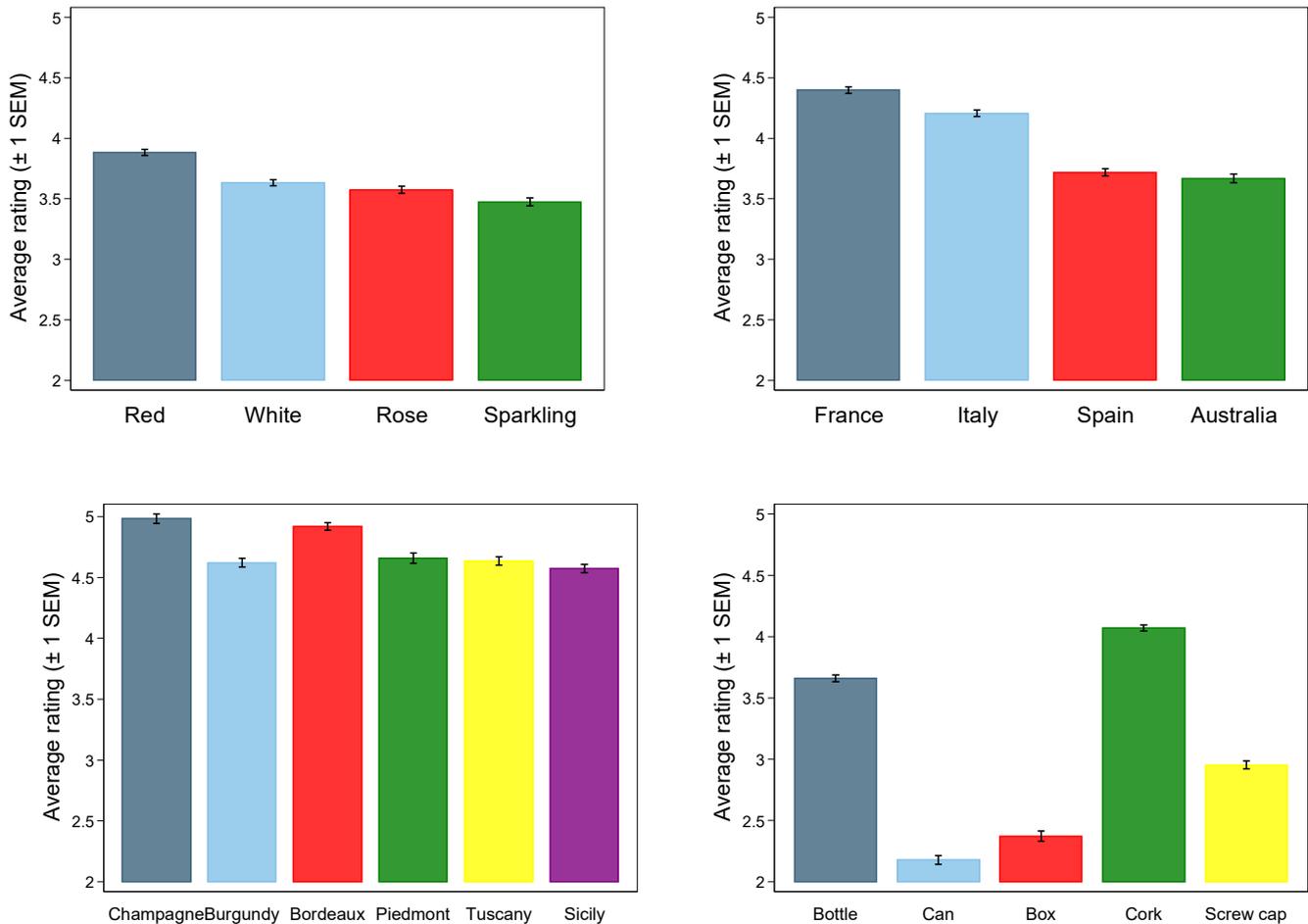


Figure 1. Average response (plus/minus 1 standard error of the mean) to the questions “Assume you see a person you don’t know buying a [characteristic] wine. What would be your guess on the socioeconomic status (income, education, job prestige) of this person compared to the average socioeconomic status in your country?”. The top-left panel reports statistics for the type of wine. The top-right panel for the country. The bottom-left panel for the region. Finally, the bottom-right panel reports statistics on the packaging and closure.

One additional interesting finding regards the knowledge of the different wine regions. We find that the least known region is Piedmont with 31% of respondents declaring they do not know the region, followed by Burgundy with 17% and Tuscany with 10%. Only 6% do not know Champagne and Bordeaux, while 4% do not know Sicily.

To test the statistical significance of these results we run a series of ordered probit models in which we use as dependent variable the rating expressed by participants and as independent variables the characteristics and cluster standard errors at the individual level.

Table 3. The influence of wine characteristics on perception of socioeconomic status.

	(1) Type	(2) Country	(3) Region	(4) Packaging	(5) Closure
Red	0.566*** (0.058)				
White	0.188*** (0.052)				
Rosé	0.124** (0.054)				
France		0.967*** (0.061)			
Italy		0.693*** (0.057)			
Spain		0.033 (0.051)			
Burgundy			-0.482*** (0.059)		
Bordeaux			-0.118*** (0.053)		
Piedmont			-0.433*** (0.063)		
Tuscany			-0.468*** (0.060)		
Sicily			-0.544*** (0.060)		
Bottled				1.534*** (0.063)	
Boxed				0.213*** (0.049)	
Cork					1.541*** (0.077)
<i>N</i>	2920	2920	3829	2190	1460
<i>Pseudo R</i> ²	0.016	0.055	0.015	0.114	0.148

Note: Ordered probit regressions. Dependent variable: responses to the question on socioeconomic status. Model (1): Sparkling omitted category Model (2): Australia omitted category; Model (3): Champagne omitted category; Model (4): Canned omitted category; Model (5): Screw cap omitted category. Robust standard errors clustered on the individual level are in parentheses, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The number of clusters is constant across the models and equal to 730.

The results confirm the visual impression from Figure 1. Regarding the type of wine, a person buying a red wine is perceived of higher socioeconomic status than a person buying a sparkling wine. This is also true for rosé and white. All other binary comparisons are significantly different from zero (Wald test, $p < 0.016$). With respect to the countries, compared to the omitted category (Australia) a person buying a French or an Italian wine is considered of a higher socioeconomic status, while this is not the case for a person buying a Spanish wine. Wald tests reveal that a person buying a French

wine receives a score significantly higher than buyers from all other countries. The same is true for Italy compared to Australia and Spain (Wald tests, all $p < 0.001$).

Moving to the regions, Champagne elicits the highest response. As the coefficients in the regression show, the difference between Champagne and other regions is significantly different from zero. Among the binary comparison the only significant ones are the comparisons between Bordeaux and the other regions (Wald test, $p < 0.001$) and the comparison between Sicily and Piedmont (Wald test, $p = 0.031$). Regarding packaging, both bottled and boxed wines signal significantly higher socioeconomic status compared to canned wine and at the same time bottled wine signals higher socioeconomic status compared to boxed wine (Wald test, $p < 0.001$). Finally, cork wine signals significantly higher socioeconomic status compared to screw cap wines.

4.2 Wine expertise

Next, we ask which of the characteristics sends a stronger signal on the expertise of the buyer. Figure 2 depicts the bar chart for the questions on wine competence. Interestingly, there is a stronger ranking in the type of wine with red wines being the ones signalling stronger competence, followed in order by white, rosé and sparkling. Like the case of socioeconomic status, French and Italian wines signal more competence than Spanish and Australian wines. Regarding the region, in contrast with the case of socioeconomic status, we find that Bordeaux wines signal stronger competence while all the others are at similar levels. Finally, the responses on packaging and closure mirror the case of socioeconomic status with people buying bottled wines considered more expert than the ones buying canned or boxed wines and people choosing cork wines considered more expert than the ones choosing screw cap wines.

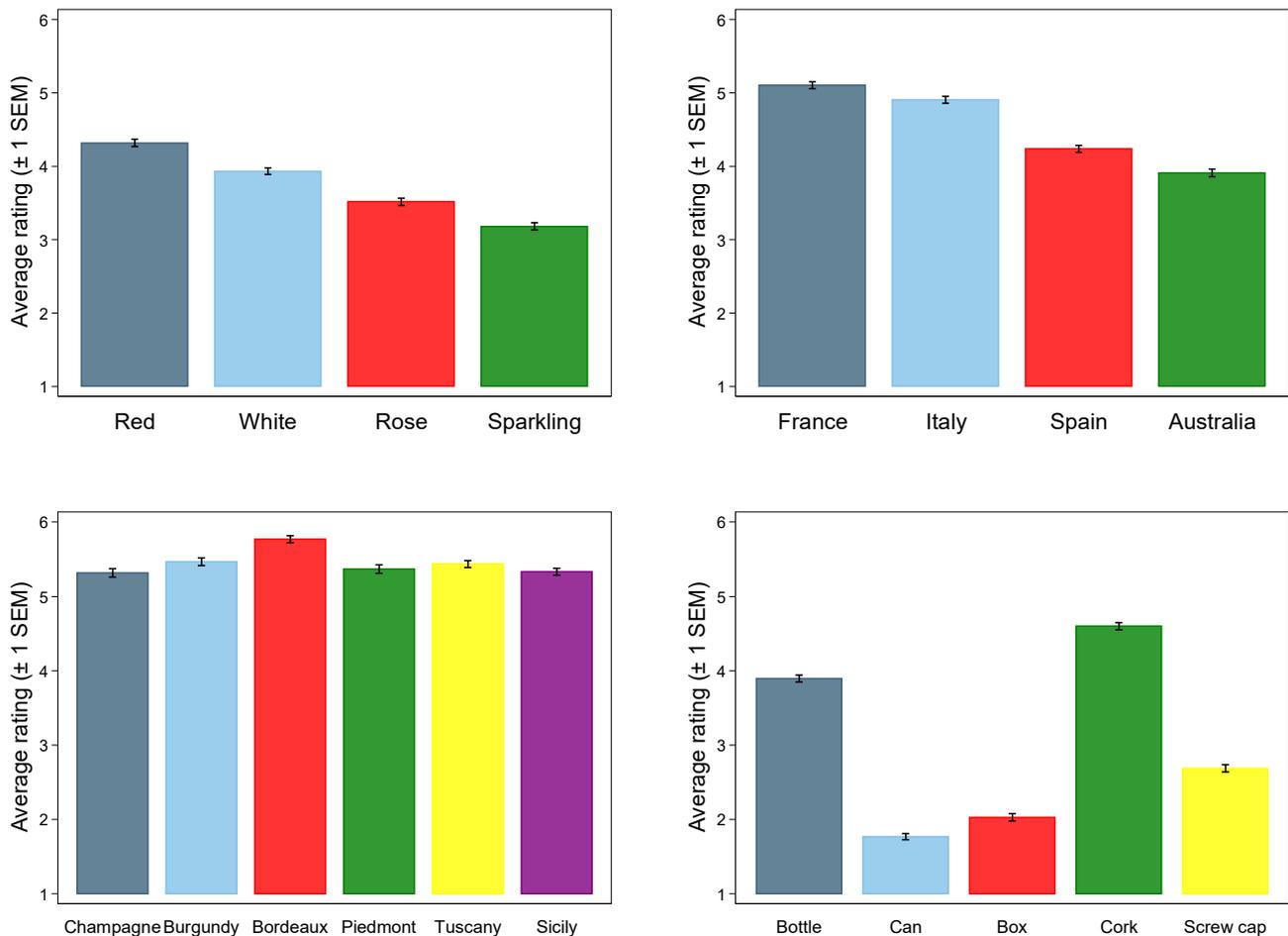


Figure 2. Average response (plus/minus 1 standard error of the mean) to the questions “Assume you see a person you don’t know buying a [characteristic] wine. On a scale from 1 to 7 where 1 means "not at all" and 7 means "totally", how much do you think this person is: a wine expert”. The top-left panel reports statistics for the type of wine. The top-right panel for the country. The bottom-left panel for the region. Finally, the bottom-right panel reports statistics on the packaging and closure.

As in the previous section, we perform a series of ordered probit regressions to evaluate the statistical significance of these results. The regression analysis reveals that people buying red wines are perceived as significantly more competent than people who buy any other type of wine. All other comparisons are also significantly different from zero supporting the ranking highlighted in Figure 2 (Wald test, all $p < 0.001$). Also regarding the country of production, the regression confirms the visual impression from Figure 2, people buying French, Italian or Spanish wines are considered more competent than people buying Australian wines. All the other binary comparisons are significantly different from zero (Wald test, all $p < 0.001$).

A stark difference compared to socioeconomic status is found regarding the region of production, i.e., people buying Champagne are not perceived as more competent than people buying any other wine and are perceived less competent than people buying Bordeaux. Wald tests reveal that people buying Bordeaux are perceived as more competent than any other buyer and reveal further a

significant difference between Tuscany and Sicily (Wald test, $p = 0.029$) and Burgundy and Sicily (Wald test, $p = 0.014$). The results on packaging mirror the ones found for socioeconomic status with bottled wines signalling higher competence compared to bottled and canned wines, and boxed wines signalling higher competence than canned wines. Likewise, results on closure mirror the ones found in the previous section indicating that people buying cork wines are perceived as more competent than people buying screw cap wines.

Table 4. The influence of wine characteristics on perception of wine expertise.

	(1) Type	(2) Country	(3) Region	(4) Packaging	(5) Closure
Red	0.883*** (0.056)				
White	0.584*** (0.049)				
Rosé	0.264** (0.044)				
France		0.948*** (0.054)			
Italy		0.784*** (0.053)			
Spain		0.243*** (0.045)			
Burgundy			0.089 (0.053)		
Bordeaux			0.382*** (0.049)		
Piedmont			0.001 (0.058)		
Tuscany			0.052 (0.052)		
Sicily			-0.032 (0.053)		
Bottled				1.673*** (0.062)	
Boxed				0.244*** (0.047)	
Cork					1.419*** (0.060)
<i>N</i>	2920	2920	3523	2190	1460
<i>Pseudo R</i> ²	0.028	0.039	0.006	0.124	0.106

Note: Ordered probit regressions. Dependent variable: responses to the question on wine competence. Model (1): Sparkling omitted category Model (2): Australia omitted category; Model (3): Champagne omitted category; Model (4): Canned omitted category; Model (5): Screw cap omitted category. Robust standard errors clustered on the individual level are in parentheses, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The number of clusters is constant across the models and equal to 730.

4.3 Narcissism

As last step, we look at narcissism as a potential trait associated to image and conspicuous consumption. Figure 3 reports the average perception on how narcissistic a person is given their wine purchase. In general, we notice that compared to the competence case, the average perceptions are lower indicating that perhaps people find it more difficult to make hypothesis on a personality trait from a purchase decision compared to a more “objective” aspect such as competence. Regarding the type of wine, we observe that people buying red wines are perceived as slightly more narcissistic than others. People who buy French wines are perceived as more narcissistic than people who buy Italian wines, whose score is nevertheless higher than Spain and Australia. Moving to regions, we find people buying Champagne to be perceived more narcissistic than all the other buyers. Finally, regarding the packaging and closure, cork seems to elicit higher perception of narcissism.

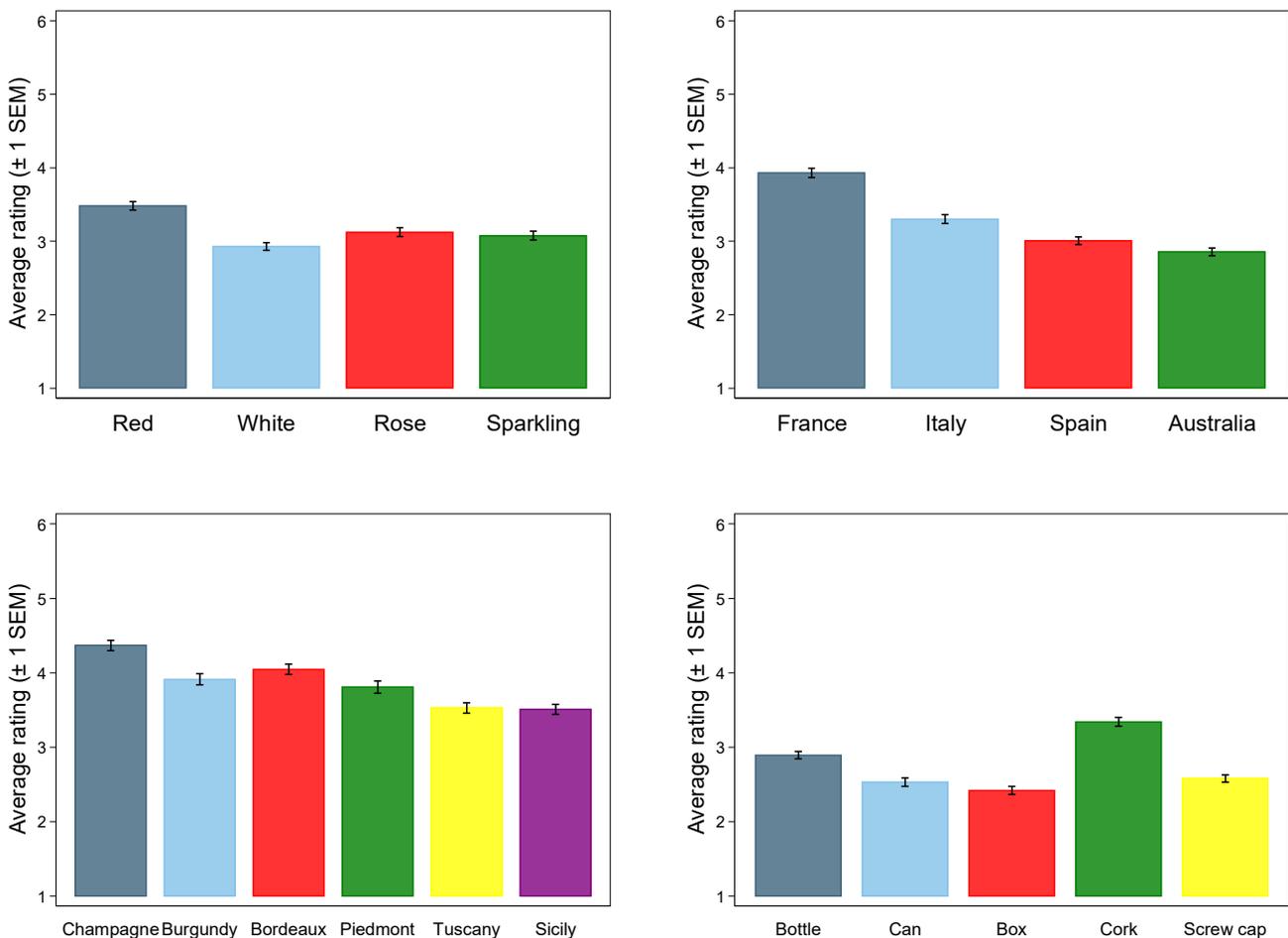


Figure 3. Average response (plus/minus 1 standard error of the mean) to the questions “Assume you see a person you don’t know buying a [characteristic] wine. On a scale from 1 to 7 where 1 means “not at all” and 7 means “totally”, how much do you think this person is: narcissistic (strong self-regard, need to be admired)”. The top-left panel reports statistics for the type of wine. The top-right panel for the country. The bottom-left panel for the region. Finally, the bottom-right panel reports statistics on the packaging and closure.

Once again, we evaluate the statistical significance of the results from the regression analyses reported in Table 5. Results show that red wine buyers are perceived significantly more narcissistic than sparkling wine buyers, while white wine buyers are perceived less narcissistic than sparkling wines buyers. We find no difference between sparkling and rosé wines.

Table 5. The influence of wine characteristics on perception of narcissism.

	(1) Type	(2) Country	(3) Region	(4) Packaging	(5) Closure
Red	0.260*** (0.046)				
White	-0.093** (0.041)				
Rosé	0.032 (0.041)				
France		0.701*** (0.045)			
Italy		0.292*** (0.040)			
Spain		0.112*** (0.040)			
Burgundy			-0.276*** (0.046)		
Bordeaux			-0.194*** (0.043)		
Piedmont			-0.335*** (0.051)		
Tuscany			-0.495*** (0.048)		
Sicily			-0.507*** (0.047)		
Bottled				0.281*** (0.045)	
Boxed				-0.097** (0.042)	
Cork					0.518*** (0.045)
<i>N</i>	2920	2920	3530	2190	1460
<i>Pseudo R</i> ²	0.004	0.018	0.008	0.007	0.017

Note: Ordered probit regressions. Dependent variable: responses to the question on wine competence. Model (1): Sparkling omitted category Model (2): Australia omitted category; Model (3): Champagne omitted category; Model (4): Canned omitted category; Model (5): Screw cap omitted category. Robust standard errors clustered on the individual level are in parentheses, * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. The number of clusters is constant across the models and equal to 730.

Regarding the country where the wine is produced, a person buying a wine from France, Italy or Spain is perceived as more narcissistic than one buying from Australia. Furthermore, a wine from France elicits significantly more narcissism than a wine from Italy or Spain (Wald test, $p < 0.001$), and a wine from Italy significantly more than one from Spain (Wald test, $p < 0.001$). Moving to the region, we find people buying Champagne to be perceived significantly more narcissistic than people who buy wines from other regions. All binary comparisons are significant except Tuscany vs. Sicily (Wald test, $p = 0.753$) and Burgundy vs. Piedmont (Wald test, $p = 0.219$). Further, we find that people who buy bottled wine are perceived to be significantly more narcissistic both compared to people who buy canned and boxed wine. In contrast to the patterns found in previous sections, people buying canned wine are perceived as significantly more narcissistic than people buying boxed wine (Wald test, $p < 0.001$). Finally, people buying cork wines are perceived as more narcissistic than people who buy screw cap wine.

5. Conclusions

In this paper, we have investigated through the use of a survey which characteristics of wine convey a stronger social image regarding status, competence and personality of the person buying the wine. The data confirms that the act of buying wine for European Gen Z conveys indeed strong social messages. Consistent with the average prices observed in the market, red wines from France and Italy signal higher socioeconomic status and competence compared to the other categories. The evidence on sparkling wines is mixed: if we consider the category, people choosing red wines are perceived as more narcissistic and higher in socioeconomic ranking than sparkling wine consumers, but if regions are taken into account Champagne leads the way on both socioeconomic status and narcissism, while Bordeaux with respect to competence.

Communicating the region may also have an effect in raising the signal that the wine conveys in terms of socioeconomic status. On a policy and communication level, it's interesting to notice that regions that are extremely well-known among industry professionals are not so popular among our panel of young consumers. As a matter of fact, we find that the least known region is Piedmont with 31% of respondents declaring they do not know the region, followed by Burgundy with 17% and Tuscany with 10%. Only 6% do not know Champagne and Bordeaux, while 4% do not know Sicily. Much work can be done to raise consumer awareness of these regions.

Exterior characteristics of the product such as packaging and closure have a strong signalling value regarding the socioeconomic status, the competence and personality traits of the buyer. Notwithstanding the technical superiority of other type of closures and packaging, the data suggests that glass and cork are still dominant because of the strong social messages they deliver.

Further research can be conducted to assess whether consumers are aware of these social messages. If so, consumption choices may be partly explained by the occasion for which wines are bought, i.e. for private consumption, social contexts or gifting.

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