Title
How specific should CSR certifications on wine labels be? Insights from an online experiment

I want to submit an abstract for:
Conference Presentation

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<td>Florine Livat</td>
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Keywords
Willingness to pay
CSR Certifications
Certified Wines
Socially responsible behavior

Research Question
How specific should CSR certifications on wine labels be, industry-wise and regarding socially responsible behavior, to attract higher willingness to pay from French consumers?

Methods
We developed an online experiment and collected data from 518 French respondents to examine the effects of 6 different CSR labels on their WTP (contingent valuation) for a Bordeaux wine.

Results
There seems to be a higher willingness to pay of about 1.7 euros for two certifications that are not industry-specific, and both concern all CSR aspects, not just the environment.
Abstract
In recent years we have witnessed a substantial increase in the volume of Corporate Social Responsibility (CSR) third-party certification labels in the wine industry. They can be focused on the environment, or on sustainability in general, including a social and economic component. They can also be specific to the wine industry, to agri-food, or be for general goods and services. According to signaling theory, two chief characteristics of efficacious signals are: signal observability and signal cost. The signal has to be visible to have strength. The higher the cost, the more credible, or valid, the signal is, and the more likely receivers are to attend to it. All in all, good signals are observable and costly to imitate (Connelly et al., 2011). Drawing on signaling theory, depending on the Third-Party Certification Label (TPCL) chosen, the observability and cost are metrics that can change. Today, the high cost of the organic certification gives it credibility. However, as more and more brands convert and adopt it, the signal might be losing in strength, and consumers will potentially look for other clues. Labels perceived as going further than the organic certification could be of interest for producers.

We developed an online experiment and collected data from a sample of French respondents to examine the effects of 6 different CSR labels on their willingness to pay (contingent valuation) for a Bordeaux red wine. Each respondent was assigned randomly to one of the 7 conditions. The final sample is formed by 518 French respondents with a distribution among experimental conditions that ranges from 13.51% to 15.64% (Table 1). The sample closely resembles the population of drinking-age in France. To analyze the effect of the CSR certification on the consumer’s willingness to pay, we estimate a series of regressions where the declared willingness to pay is a function of the characteristics of the wine presented as well as of socio-demographic and wine-related characteristics and opinions of respondents. Given that Willingness top pay (WTP) is here a left-censored variable (respondents declare 0 euro if they are not willing to pay for the bottle of wine), we estimate a Tobit model.

Our main results indicate the presence of a higher WTP of about 1.7 euros for B-Corp and Fair for life, two certification labels that are not industry-specific, and both concern all CSR aspects, not just the environment. The certifications Fair for life and B-Corp are not focused on the environment alone but shed light on the firm’s practices regarding their social and societal ethics as well. Seeing that they get significantly higher willingness to pay, when the widely known and studied organic certification does not is intriguing. Therefore, our results first suggest that there could be a positive relationship between signals of socially responsible behavior, and consumers’ willingness to pay. This would be in line with the current observations that transparency about ethical practices have a positive effect on consumers’ trust and attitudes.

Another aspect to consider is that both Fair for life and B-Corp are not specific to the wine industry. These last few years, there has been a proliferation of wine-specific certifications, with some wine regions even launching their own initiatives. None of the industry-specific certifications got any significant results, even though neither are environmentally focused. This suggests that industry-specific initiatives could be in some cases less efficient at motivating higher willingness to pay from consumers. Several potential explanations can be envisioned for these results, among them we can consider consumers’ trust in these appellations, their credibility, the perception of their small size, the independence of their certification. This could be the object of further research.
How specific should CSR certifications on wine labels be? Insights from an online experiment

Alicia Gallais¹, Florine Livat², Riccardo Vecchio³

Abstract

In recent years we have witnessed a substantial increase in the volume of Corporate Social Responsibility (CSR) third-party certification labels in the wine industry. They can be focused on the environment, or on sustainability in general, including a social and economic component. They can also be specific to the wine industry, to agri-food, or be for general goods and services. We developed an online experiment and collected data from 518 French respondents to examine the effects of 6 different CSR labels on their willingness to pay (contingent valuation) for a Bordeaux red wine. Our main results indicate the presence of a higher willingness to pay (WTP) of about 1.7 euros for two certification labels that are not industry-specific, and both concern all CSR aspects, not just the environment. This allows us to consider two main possibilities. First, there could be a positive relationship between signals of socially responsible behavior, and consumers’ willingness to pay. Second, industry-specific initiatives could be in some cases less efficient at motivating higher WTP from consumers.

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Introduction

For the first time ever, in 2021 organic agri-food products sales in France are decreasing (Frédéric, 2022). Though this trend has not yet been observed for wine, this can push producers to consider alternatives to the organic certification to differentiate their wines and highlight credence attributes related to environmental but also other social outcomes. Moreover, some CSR certifications are driven by industry associations that set private standards, and apply to industry members only (e.g. wood and paper, cut flowers, textile, diamonds), some others can be managed by NGOs while public authorities also offer some kinds of CSR certifications (Marx, 2011). This proliferation of CSR certifications provides complementarity as well as redundancy in signaling credence characteristics. Our article aims at analyzing how consumers value wines when they are provided a CSR certification, in particular when some of them are general ones and others are industry-specific.

More and more wine producers choose alternative certifications, sometimes not focused exclusively on the environment. Producers have a wide variety of third-party certification labels (TPCL) to choose from in order to signal their CSR practices to consumers. Some are focused on the environment, others on all pillars of sustainable development. They can be industry or agri-food-specific, or be for general goods and services. Research has been mostly focused on the perception of environmental certifications (Bazoche et al., 2008; Bonn et al., 2016; Morone et al., 2021) and of fair-trade labels (Niklas et al., 2017; Overton et al., 2019). While consumers can value highly social and ethical information on products (Auger et al., 2003), literature is scarce regarding that aspect of CSR (Mueller-Loose & Remaud, 2013; Stanco & Lerro, 2020; Tait et al., 2019). De Magistris et al. (2015) get that if consumers are willing to pay more for CSR-certified food than for food without any CSR certification, there isn’t any significant difference among CSR certifications, considering an environmental certification vs. a certification related to workers’ rights and more social attributes in the tuna fish industry. Studying the same industry, Del Giudice et al. (2018) find that products with environmental certifications are priced higher than regular noncertified products, while those with social certifications are priced similarly to regular products. Cultural differences can explain that consumers do not value the same CSR dimensions (Miller et al., 2017). Overall, more research considering attitudes with regards to social aspects of sustainability is needed (Schäufele & Hamm, 2017).
In this study, we designed a single factor between-subject online experiment in which about 500 French respondents were randomly assigned one of 7 conditions, including a control one (i.e. a neutral bottle), a condition being a realistic bottle of wine with a specific certification (including no certification). The 6 certifications chosen for the study were purposefully diverse, some focusing on the environment only, some being agriculture-specific, some others wine-specific, and others for all goods and services, on general CSR (see Table 1 for a description of the CSR certifications) Building on signaling theory (Connelly et al., 2011; Erdem & Swait, 1998), we will address the possibility that, while highly costly and observable, the organic certification may not be the most interesting one for all wine producers.

Background

Corporate Social Responsibility (CSR) corresponds to a firm level response to a global need for action, addressing issues of ecological, social, and economic sustainability. Firms address these issues to varying degrees. However, many engage in mere cosmetic efforts that can be considered as greenwashing, sticking to their original business goals, and relabeling them as CSR initiatives (Brach et al., 2018).

To differentiate themselves and avoid the accusation of greenwashing, businesses can demonstrate their sustainable commitments through different CSR TPCL and standards, submitting their products for certification by independent organizations (Brach et al., 2018). The agri-food industry is no exception, and while it was traditionally the government agencies’ responsibility to monitor food safety standards and quality attributes, the globalization of the agrifood system and rise of private retailers’ standards all over the world have shifted the responsibility onto third-party certifiers (Hatanaka et al., 2005). Companies can choose among a wide array of labels and standards. Labels are generally linked to products (e.g. Fair Trade, Organic, etc.), while standards are put in place by national regulatory groups or non-governmental organizations (NGOs) providing certificates claiming compliance with international norms (e.g. ISO, CERES, etc.) (Fombrun, 2005).

These TPCL allow firms to transmit an information to the consumer about their practices, reducing the asymmetry of information between the firm and its customers. When this asymmetry is too high, customers tend to associate a higher risk to their purchase, therefore have more difficulty deciding. Firms therefore have interest in reducing this
information asymmetry by bringing signals to the attention of customers (Connelly et al., 2011).

According to signaling theory, two chief characteristics of efficacious signals are: signal observability and signal cost. The signal has to be visible to have strength. The higher the cost, the more credible, or valid, the signal is, and the more likely receivers are to attend to it. All in all, good signals are observable and costly to imitate (Connelly et al., 2011). Drawing on signaling theory, depending on the TPCL chosen, the observability and cost are metrics that can change. Today, the high cost of the organic certification gives it credibility. However, as more and more brands convert and adopt it, the signal might be losing in strength, and consumers will potentially look for other clues.

Methodology

We developed an online experiment to collect data on consumers’ willingness to pay (WTP) for a bottle of Bordeaux wines under different information conditions. The fictitious and realistic labels used for the experiment all contain the exact same information (winery’s name, appellation of origin, vintage and other mandatory information) with the exception of the CSR certification. Each label (except the control, i.e. no certification) appears with one sentence stating what CSR attributes are associated with the certification.

The online survey took place from July 7, 2021 to July 12, 2021, under almost normal circumstances (i.e. no strict lockdown due to the Covid-19 pandemic in France). Respondents have been randomly drawn from a panel of consumers selected by the company Respondi, a professional panelist that sends out survey links by email. Respondents are rewarded, only if they fully complete the survey, with points that are transformed into gift cards usable in several stores. The average time for completion of the survey was 9 minutes, with no extreme value. A screening question allow to select respondents that have consumed wine over the last 3 months. Each respondent was assigned randomly to one of the 7 conditions. The final sample is formed by 518 French respondents with a distribution among experimental conditions that ranges from 13.51% to 15.64% (Table 1). The sample closely resembles the population of drinking-age in France.

The survey starts with the randomized experiment. Lusk et al. (2004) proposes to add “cheap talk” to alleviate the hypothetical bias associated with stated willingness to pay: a short text warns individuals about the hypothetical bias phenomenon prior to asking the valuation
question. Empirical evidence suggests that cheap talk can be effective in mitigating the bias (Murphy et al., 2005; Silva et al., 2011). This is the strategy we adopt for our online experiment: after three sentences drawing respondents’ attention to their true willingness to pay in the absence of actual payment, an open-ended question invites them to state their willingness to pay for the bottle of wine and to indicate ‘zero’ if they are not willing to purchase the wine. Respondents were also evaluated using the Ethically Minded Consumer Behavior (EMCB) scale from Sudbury-Riley and Kohlbacher (2016), asking a series of questions about their real-life behavior related to sustainability. This allowed us to mitigate the effect of the well-researched attitude-behavior gap observed when asking people to self-report their potential decisions (Carrington et al., 2014). Socio-demographics as well as wine-related characteristics and opinions of respondents are asked in a final section of the questionnaire. We know their subjective wine knowledge, wine consumption frequency, if they are used to consuming wine as well as the usual amount of money they spend for a bottle of wine. We also measure objective wine knowledge with a score over 5 points obtained from a set of questions inspired from Velikova et al. (2015)’s scale.
<table>
<thead>
<tr>
<th>Certification name</th>
<th>Condition 1</th>
<th>Condition 2</th>
<th>Condition 3</th>
<th>Condition 4</th>
<th>Condition 5</th>
<th>Condition 6</th>
<th>Condition 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>No certification: control</td>
<td>Organic</td>
<td>Fair for life</td>
<td>Vignerons engagés</td>
<td>B-Corp</td>
<td>Vegan</td>
<td>Agri-ethique</td>
<td></td>
</tr>
<tr>
<td>Type of certification</td>
<td>Agri-food</td>
<td>All goods and services</td>
<td>Wine industry</td>
<td>All goods and services</td>
<td>Agri-food</td>
<td>Agri-food</td>
<td></td>
</tr>
<tr>
<td>CSR dimensions/attributes</td>
<td>Produced from grapes cultivated without using any synthetical products as pesticides.</td>
<td>Its production follows the principles of fair trade including: - Respect of man’s rights and dignified working conditions. - Respect of ecosystems, promotion of biodiversity, and sustainable agricultural practices. - Contribution to local economic development.</td>
<td>Winegrower takes actions for the environment, a guarantee of the wine’s quality, support for the local heritage, and offering the right price for both the consumer and the producer.</td>
<td>The company meets different requirements: social (employees well-being and satisfaction), societal (diversity, inclusivity, impact on the community), and environmental, as well as requirements of ethical management and transparency. It reconciles profitability and collective interests.</td>
<td>Containing no animal ingredients or by-products, using no animal ingredients or by-products in the manufacturing process and no testing on animals by any company or independent contractor.</td>
<td>The winegrower commits to offering the consumer products allowing the fair remuneration of producers and a sustainability of the local wine sector while respecting the environment.</td>
<td></td>
</tr>
<tr>
<td>Number of respondents (%)</td>
<td>70 (13.51)</td>
<td>73 (14.09)</td>
<td>70 (13.51)</td>
<td>81 (15.64)</td>
<td>73 (14.09)</td>
<td>79 (15.25)</td>
<td>72 (13.9)</td>
</tr>
<tr>
<td>Mean WTP € (SD)</td>
<td>8.24 (6.07)</td>
<td>9.37 (5.51)</td>
<td>8.91 (6.05)</td>
<td>9.04 (6.69)</td>
<td>9.12 (5.06)</td>
<td>7.85 (6.45)</td>
<td>7.58 (4.57)</td>
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</tbody>
</table>
To analyze the effect of the CSR certification on the consumer’s willingness to pay, we estimate a series of regressions where the declared willingness to pay is a function of the characteristics of the wine presented as well as of socio-demographic and wine-related characteristics and opinions of respondents. Given that WTP is here a left-censored variable (respondents declare 0 euro if they are not willing to pay for the bottle of wine), we estimate a Tobit model. Estimation results for several empirical specifications are presented in Table 2.

Results

We adopt here a parsimonious presentation of the estimation results, focusing on the effect of CSR certifications. The full results, including control variables (socio-demographics and wine-related behavior) are available from the authors upon request. As suggested by previous research, we get a significant and negative coefficient for age of respondents.

We estimate a series of 4 empirical models. Model 1 includes a series of binary variables related to the CSR certifications, the neutral label being the reference. The three other models include an interaction of the binary variable associated with each certification, in model 2 with the awareness of the certification (‘before today, did you know this certification?’, yes=1), in model 3 with the consumption frequency of environmental-friendly wines and in model 4 with the average score on the Ethically Minded Consumer Behavior (EMCB) scale.

We get interesting results for both certifications Fair for life and B-Corp, that are general CSR certifications, not industry-specific ones, and not focused on the environmental aspects only. Both obtain a price premium of about 1.7 euros compared with the neutral label, while there isn’t any significant difference in the case of other certifications. Model 2 suggests that the premium associated with the B-Corp certification is driven by the certification awareness. As expected, models 3 and 4 show that as consumers are more engaged in sustainable behavior, they are also willing to pay more for wines benefiting from a certification. Notably, the Fair for life and B-Corp certifications also get the biggest coefficients in models 3 and 4, suggesting that these consumers are willing to pay even more for these generalist certifications, while the value attached with the Vegan certification is lower.
Table 2: Tobit estimation results for WTP equations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
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</thead>
<tbody>
<tr>
<td>Neutral label</td>
<td>ref.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic</td>
<td>1.268 (0.881)</td>
<td></td>
<td>1.715* (0.893)</td>
<td></td>
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<tr>
<td>Fair for life</td>
<td>1.380 (0.857)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Vignerons engagés</td>
<td>0.328 (0.884)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>B-Corp</td>
<td>0.194 (0.349)</td>
<td></td>
<td>0.586 (0.358)</td>
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<tr>
<td>Vegan</td>
<td></td>
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<td></td>
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<tr>
<td>Agri-Ethique</td>
<td>1.266*** (0.367)</td>
<td></td>
<td>1.776*** (0.372)</td>
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<tr>
<td>Neutral label x consumption of environmental-friendly wines</td>
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<tr>
<td>Organic x consumption of environmental-friendly wines</td>
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<td>B-Corp x consumption of environmental-friendly wines</td>
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<tr>
<td>Vegan x consumption of environmental-friendly wines</td>
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<tr>
<td>Agri-Ethique x consumption of environmental-friendly wines</td>
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Discussion and conclusion

The certifications Fair for life and B-Corp are not focused on the environment alone but shed light on the firm’s practices regarding their social and societal ethics as well. Seeing that they get significantly higher willingness to pay, when the widely known and studied organic certification does not is intriguing. Therefore, our results first suggest that there could be a positive relationship between signals of socially responsible behavior, and consumers’ willingness to pay. This would be in line with the current observations that transparency about
ethical practices have a positive effect on consumers’ trust and attitudes (Joo et al., 2019; Kang & Hustvedt, 2014).

Another aspect to consider is that both Fair for life and B-Corp are not specific to the wine industry. These last few years, there has been a proliferation of wine-specific certifications, with some wine regions even launching their own initiatives\(^4\). None of the industry-specific certifications got any significant results, even though neither are environmentally focused. This suggests that industry-specific initiatives could be in some cases less efficient at motivating higher willingness to pay from consumers. Several potential explanations can be envisioned for these results, among them we can consider consumers’ trust in these appellations, their credibility, the perception of their small size, the independence of their certification. This could be the object of further research.

These results suggest that there is a significant value for producers in considering certifications that are not industry-specific, and not focused on the environment alone. They are not much represented on the shelves in France and are still unknown to both the public and the wine industry actors. While that means less observability of the signal, it also means that it could be an axis of differentiation from the many environmental-only certifications available. The certifications mentioned are less costly to put in place than other more specific ones if ethical practices are already in place, and could become a more powerful signal in the future. It would be interesting to evaluate the cost and benefits of each CSR certification for producers in the future to make precise recommendations.

In this study we used stated preference data, where both payment of the good as well as its provision are hypothetical, likely to overestimate WTP. Further research should strive to generate revealed preference data, following a model of experimental auctions – like the Vickrey auction (e.g. Vecchio (2013) for an application to wine) and the Becker-DeGroot-Marschak mechanism (see Bazoche et al. (2008) for an application to wine). It could include several rounds, revealing additional information in each round, to see the motivations behind the different willingness to pay results.

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\(^4\) [Viticulture Durable en Champagne](https://www.viticulturedurablechampagne.com), last consulted on March 29th, 2022

\(^5\) [Trophées Bordeaux Vignoble Engagé](https://www.trophees-bordeaux.com), last consulted on March 29th, 2022


