



Consumer Willingness to Pay for Environmental Characteristics of Australian Wine

Jeff Gow

University of Southern Queensland, Toowoomba, Australia Stellenbosch University, Stellenbosch, South Africa (gowj@usq.edu.au)

Daniel Moscovici

Stockton University, Atlantic City, USA (daniel.moscovici@stockton.edu)

Rezwanul Rana

University of Southern Queensland, Toowoomba, Australia (rezwanul.rana@usq.edu.au)

Adeline Alonso Ugaglia

Bordeaux Sciences Agro, Bordeaux, France (adeline.ugaglia@agro-bordeaux.fr)

Lionel Valenzuela

Universidad Tecnica Federico Santa Maria, Santiago, Chile (lionel.valenzuela@usm.cl)

Radu Mihailescu

Stenden University, Leeuwarden, Netherlands (radu.mihailescu@nhlstenden.com)

Key words: wine, sustainability, willingness to pay, eco-certification, environment, Australia

1. INTRODUCTION

In line with other developed nations Australia has seen an increasing trend towards greater health consciousness, both mental and physical health wellness. This trend has manifested in part by increased consumer purchases of food and drink with ecologically/environmentally friendly characteristics over the past few decades. This change in consumer preferences and attitudes has resulted in the development of a wide range of environmentally friendly consumer goods and an increase in certification of these goods. There are a wide range of ecocertifications covering production of goods more generally to more specific certifications of specific goods, like wine. These wine certifications have grown in recent times (Moscovici and Reed, 2018) but consumer awareness of them is low (Schaufele & Hamm, 2017). There are five identifiable eco-certifications in wine: biodynamic, Fairtrade, organic, natural, and sustainable.



2. PRELIMINARY LITERATURE REVIEW

The literature indicates that there is a market for eco-certified wines, with multiple studies finding that consumers are willing to pay price premiums for wines with: organic certification (D'Amico et al., 2016; Di Vita et al., 2019; Fanasch & Frick, 2020; Gustafson et al., 2016; Tait et al., 2019, Remaud et al., 2008; Gassler et al., 2019); with sustainable attributes (Pomarici et al., 2018; Tait et al., 2019); with no added sulphites (NAS)/natural wine (Amato et al., 2017; D'Amico et al., 2016, Costanigro et al., 2014); with Fair Trade certified wine (Niklas et al., 2017); and for wine with pro-environmental characteristics generally (Barber et al., 2016).

3. RESEARCH PROBLEM

The aim of this study was to survey wine consumers in Australia about their socio-economic characteristics, quantify their consumer knowledge of wine and discover their willingness to pay for wine with five different environmental wine certifications: biodynamic, Fairtrade, organic, natural, and sustainable.

4. METHODOLOGY

An online survey was developed to capture socio-economic, attitudinal and willingness to pay data from approximately 500 wine consumers in Australia. A total of 454 complete and useable responses were used for the analysis. Pearson's chi-square test and Kruskal-Wallis H test were used to examine whether the willingness to pay for different types of certified wines significantly differ based on demographic characteristics and past purchasing behaviour.

5. FINDINGS

Preliminary findings indicate that consumers often buy pro-environmental products. The majority have a positive (greater than zero) willingness to pay for biodynamic, fair trade, organic, natural and sustainable wines. The main factors influencing eco-certified wine purchase decisions by Australian consumers are age, gender, presence of eco-certification on the label, environmental attitudes, and past purchasing experience. Surprisingly, income, education, marital status and previous wine knowledge did not positively influence willingness to pay for eco-certified wines.

6. CONCLUSIONS AND IMPLICATIONS

The study results confirmed some a priori expectations that are supported by the literature whilst some other important factors in the purchasing decisions of consumers were not borne out by the data. It is clear that a wide variety of socio-economic factors, knowledge, information and motivational factors all affect the decision of Australian consumers to pay a premium for an eco-certified wine compared to a conventional one. It is also important to note that the main factors influencing wine purchase decisions are price, age, income, education, environmental attitudes, previous wine knowledge and past purchasing experience. Contrary to a priori expectations income, education, marital status and previous wine knowledge did not positively influence WTP for eco-certification is unlikely to be more important than the listed variables in their decision-making process.

REFERENCES

- Barber, N., Taylor C., Remar, D. (2016). Desirability bias and perceived effectiveness influence on willingness-to-pay for pro-environmental wine products. *International Journal of Wine Business Research*. 28(3), 206-227.
- Costanigro, M., Appleby, C. & Menke, S., (2014). The wine headache: consumer perceptions of sulfites and willingness to pay for non sulfited wines. *Food Quality and Preference*, 31, 81-89, 2014. https://dx.doi.org/10.1016/j.foodqual.2013.08.002.
- D'Amico, M., Di Vita, G., & Monaco, L. (2016). Exploring environmental consciousness and consumer preferences for organic wines without sulfites. *Journal of Cleaner Production*, 120, 64-71. doi:10.1016/j.jclepro.2016.02.014
- Di Vita, G., Pappalardo, G., Chinnici, G., La Via, G., & D'Amico, M. (2019). Not everything has been still explored: Further thoughts on additional price for the organic wine. *Journal of Cleaner Production*, 231, 520-528. doi:10.1016/j.jclepro.2019.05.268
- Fanasch, P., & Frick, B. (2019). The value of signals: Do self-declaration and certification generate price premiums for organic and biodynamic wines? *Journal of Cleaner Production, 249*, 119415. doi:10.1016/j.jclepro.2019.119415
- Gassler, B., Fronzeck, C. Spiller, A. (2019) Tasting organic: the influence of taste and quality perception on the willingness to pay for organic wine. *International Journal of Wine Business Research*, 31(2), 221-242.
- Gustafson, C. R., Lybbert, T. J., & Sumner, D. A. (2016). Consumer knowledge affects valuation of product attributes: Experimental results for wine. *Journal of Behavioral and Experimental Economics*, 65, 85-94. doi:10.1016/j.socec.2016.08.004
- Moscovici, D. & Reed, A. (2018). Comparing Wine Sustainability Certifications around the World: History, Status, and Opportunity. *Journal of Wine Research*, 29(1), 1-25. doi.org/10.1080/09571264.2018.1433138
- Niklas, B., Storchmann, K & Vink N. (2017). Fairtrade Wine Price Dispersion in the United Kingdom. *Journal of Wine Economics*. 12(4), pp. 446-456.
- Pomarici, E., Asioli, D., Vecchio, R., & Næs, T. (2018). Young consumers' preferences for water-saving wines: An experimental study. *Wine Economics and Policy*, 7(1), 65-76. doi:10.1016/j.wep.2018.02.002
- Remaud, H., S. Mueller, P. Chvyl & L. Lockshin. (2008). Do Australian Wine Consumers Value Organic Wine? *International Conference of the Academy of Wine Business Research*. Siena, Italy.
- Schäufele, I., & Hamm, U. (2017). Consumers' perceptions, preferences and willingness-topay for wine with sustainability characteristics: A review. *Journal of Cleaner Production*, 147, 379-394. doi:10.1016/j.jclepro.2017.01.118
- Tait, P., Saunders, C., Dalziel, P., Rutherford, P., Driver, T., & Guenther, M. (2019). Estimating wine consumer preferences for sustainability attributes: A discrete choice experiment of Californian Sauvignon blanc purchasers. *Journal of Cleaner Production, 233*, 412-420. doi:10.1016/j.jclepro.2019.06.076