

## Padua 2017 Abstract Submission

### I want to submit an abstract for:

Conference Presentation

### Corresponding Author

Magali Delmas

### E-Mail

[delmas@ucla.edu](mailto:delmas@ucla.edu)

### Affiliation

University of California, Los Angeles

### Co-Author/s

Name	E-Mail	Affiliation
Olivier Gergaud	<a href="mailto:olivier.gergaud@kedgebs.com">olivier.gergaud@kedgebs.com</a>	KEDGE Business School, Bordeaux

### Keywords

eco-labels, credence goods, information disclosure policy, asymmetric information, product quality.

### Research Question

What is impact of third party eco-certification on wine quality as compared to self-proclaimed sustainable practices as well as conventional practices?

### Methods

We use French data on 141,747 wine quality ratings with information on eco-certified and non-eco certified wine practices from Gault et Millau, Bettane Desseauve and Gilbert Gaillard.

### Results

Preliminary findings indicate a significant difference between the quality of eco-certified practices as compared to conventional practices, but also as compared to sustainable practices that are not certified.

### Abstract

Sustainable Practices and Wine Quality: Is there value in Certification?

Magali Delmas, UCLA  
[delmas@ucla.edu](mailto:delmas@ucla.edu)

Olivier Gergaud, KEDGE  
[olivier.gergaud@kedgebs.com](mailto:olivier.gergaud@kedgebs.com)

The growing demand for ecologically and environmentally sustainable products has created a boom in the field of green marketing, with businesses competing to successfully advertise the benefits of their eco-friendly products. The wine industry is no exception. Numerous wineries are now using the organic and biodynamic third-party certification to communicate about their sustainable practices. At the same time many wineries are adopting sustainable practices without third-party certification. In France for example, some wineries self-proclaim themselves "Lutte Raisonnée" (the reasoned fight), which is a pragmatic and flexible approach to sustainability devoid of the rigidity of a standard with third party certification.

The presence of these different sustainable practices raises the question of their comparative value. While previous research (Delmas, Gergaud & Lim, 2016) estimates that third party eco-certification, such as organic and biodynamic certifications, leads to increased quality as evaluated by experts, it is unknown whether non-certified sustainable practices are also associated with quality improvements. Evaluating the effectiveness of non-certified

sustainability practices is challenging due to the difficulty of identifying the self-proclaimed adopters. In this paper, we evaluate the value of third party eco-certification on wine quality as compared to non-certified sustainable practices and as conventional practices. To do so, we use French data on quality ratings with information on eco-certified and non-eco certified wine practices. The wine market is especially suited to an investigation of the connection between eco-certification and quality; unlike many products of agriculture, wine is a highly differentiated good for which quality ratings are published monthly. This allows us to control for a broad range of characteristics such as vintage, varietal, and price in order to isolate the effect of eco-certification on quality.

Sustainable practices have the potential to impact quality in several ways. For example, wine maker John Williams, owner of Frog's Leap Winery in Napa Valley, pursues certification to produce better wines. He elaborates: "Organic growing is the only path of grape growing that leads to optimum quality and expression of the land in wine. And that's for the same reason that a healthy diet and lifestyle make for healthy people. When the soil is healthy, then the vines are healthy. The analogy is almost totally complete."

One possible reason is that sustainable practices preserve soil microbes, which are useful for wine quality. Recent research found that the same species of microbes in the soil and the grapevine, suggesting that the soil serves as a reservoir for the microbes in the grapevine, and that these microbes might play a role in the terroir of the wine (Zarraonaindia et al., 2015). A second possible reason, found with biodynamic practices, is that biodynamic preparations may affect winegrape canopy and chemistry (Reeve et al., 2005). A third possible reason, is that organic and biodynamic practices are associated with a reduction in yield through pruning and thinning, which could explain a rise in quality. This is because an individual vine can better ripen a smaller volume of fruit (Jackson and Lombard, 1993).

If sustainable practices could potentially lead to better quality wine, why should wine makers go through a costly third party certification process to reap the benefits of these practices? Eco-certification is categorized as validation that management practices are meeting minimum codified standards and certification of adherence. To be eco-certified, an organization needs to adopt codified environmental management practices and obtain third-party verification. Certification provides a compilation and codification of available best practices and reduce the costs associated with searching for these practices and their associated benefits. So eco-certification provides two potential benefits. The first one is ease of access to standard practices. The second one is the assurance by a third party that the practice is indeed in place. This reduces potential greenwashing from wineries who would proclaim the adoption of sustainable practices they don't have. In other words, eco-certified wineries should have more rigorous sustainable practices in place than wineries that haven't been through third party certification.

In this paper, we measure the impact of the sustainable practice called Lutte Raisonnée alongside organic and biodynamic certification. We use data from three major sources of information about the quality of French wines. The first one is the French edition of the Gault Millau Wine Guide which contains detailed information about some 42,203 wines produced in all regions of France. This data contains four different wine practices: conventional (37 %), Raisonnée (46 %), organic (10 %) and biodynamic (7 %). Our second source of information is Gilbert Gaillard, another influential wine guide with information on about 20,154 wines. Like Gault Millau, Gilbert Gaillard clearly informs the reader about the philosophy adopted by each producer to produce the wine. Our last source of data is Bettane Desseauve with 79,390 wines reviewed available. However, Bettane Desseauve does not provide information on different sustainable practices. However, we can detect certified organic wines in this list using the contact details available from BD with the full list of certified producers (6,058 producers) available on the Agence Bio website ([agence-bio.fr](http://agence-bio.fr)). We also checked the accuracy of the information provided by Gault Millau using the same matching technique based on the winery name, email, website and phone number available for most of these. We proceeded the same way with the list of wineries certified by Demeter France ([demeter.fr](http://demeter.fr)).

A total of 141,747 wines has been analyzed. Preliminary findings indicate a significant difference between the quality of eco-certified practices as compared to conventional practices, but also as compared to sustainable practices that are not certified.

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Magali Delmas, UCLA

[delmas@ucla.edu](mailto:delmas@ucla.edu)

Olivier Gergaud, KEDGE

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