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**Business and consumer choices in the wine sector**

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# TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....	i
ABSTRACT .....	iii
SOMMARIO.....	vii
LIST OF ARTICLES .....	xi
INTRODUCTION.....	2
ARTICLE 1: An exploratory qualitative analysis on the non-pecuniary benefits in wine entrepreneurship in Tuscany .....	12
1. Introduction.....	15
2. Literature review .....	18
3. Method .....	24
4. Results .....	27
5. Discussion and conclusions.....	34
ARTICLE 2: Reach for the stars: the impact of a new top-tier typology within a PDO wine on consumers' preferences .....	46
1. Introduction.....	49
2. Consumer behavior and wine attributes.....	52
3. Case study.....	53
4. Materials and methods.....	54
5. Results and discussion .....	61
6. Conclusions.....	66
ARTICLE 3: The impact of occasion in purchasing wine: personal consumption or gift-giving.....	76
1. Introduction.....	79
2. Literature review .....	81
3. Materials and methods.....	85
4. Results .....	92
5. Discussion and conclusions.....	98
CONCLUSIONS.....	108



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## **ABSTRACT**

In last years, the world wine market has undergone radical and rapid changes that have modified its productive structure, the type of supply, international trades' dynamics, the sale chains, and also consumers' demand and expectations. Starting from these considerations, this thesis aims to investigate the wine sector by both the producer and the consumer point of view, in order to show an overview of the two main actors of winemaking chain. Specifically, this thesis consists of three articles: the first is about entrepreneurial personal motivations for investing in the wine business; the second and the third investigate consumers' preferences in the act of purchase a bottle wine, paying close attention to product's attributes and consumption situations that influence wine choice. In order to reach the objective of each study, two different research methods are performed: a qualitative method and a quantitative method.

The first article has examined entrepreneurial motivations into the wine sector and, combining these with business strategies and personal behavior, has tried to define winemakers types. In particular, resorting to qualitative method, it was conducted an explorative study on wine businessmen whose companies are located in two Tuscan wine territories particularly suitable for viticulture. The investigation has concerned entrepreneurs hands-on involved in wine process who own a family business, and that complete all the wine operations inside the farm (from the grapes production to bottling). The finding has suggested that, among interviewed entrepreneurs, non-economic motivations such as the passion, the independence, the desire of living close to nature have a great importance compared with pecuniary motivations. Considering these entrepreneurial motivations in combination with business strategies, personal behaviors, family background and psychological attitudes, it was possible to identify two business styles, one called 'Business-Oriented' and one 'Lifestyle-Oriented'. This research has shown that 'Lifestyle-Oriented' entrepreneur is a type diffused in the small- and medium-sized Tuscan wine companies objects of

study, and this result may be useful for further analysis of the whole production process.

The second article has analysed, with a choice experiment, Italians consumers' preferences on five Tuscan bottles of wine with different designations of origin (DO). On 2013, Consorzio of Chianti Classico has approved a series of changes to production regulations in order to make a further qualitative differentiation. In particular, it was introduced a new typology of Chianti Classico DOCG, called 'Gran Selezione', posed at the top of the production pyramid, above vintage wine 'Chianti Classico DOCG' and the reserve category 'Chianti Classico Riserva DOCG'. The aim of this study was verified whether the introduction of a higher-tier certification within a PDO denomination may represent an effective strategy to leverage value of the brand and to strengthen the relationship between quality production and territory. The application of a Latent Class Model allowed us to identify three distinct classes of consumers, described by different preferences for prices and PDO wines.

The results have evidenced preferences' heterogeneity among consumers and have shown the existence of a segment that appreciates the introduction of the new typology of Chianti Classico and therefore validates this development strategy.

The third article tests, using a choice experiment, consumers' preference in purchase a bottle of red wine for two occasions: self-purchasing and gift-giving. The previous literature has underlined that the consumer, during the purchase act, has a different behaviour when bought something for himself or bought something to make a present. Price, geographical indication (presented as IGT, DOC and DOCG), organic claim and brand (presented as famous producer/not famous producer) are the attributes considered in this study. With the implementation of a Random Parameters Logit, it was evidenced that, for gift-giving scenario, statistically significant attributes were famous brand, organic claim and price. For the purchase of a bottle of red wine for personal consumption, the wine attributes to which consumer pays attention are famous brand, designation of origin (DOCG, DOC), organic claim and price. A further analysis with Latent Class Model allowed us to segment consumers

into three distinct classes for each of two considered scenarios. The results have led us to affirm that, for different occasions, consumers evaluated wine attributes in a different way. In high-involvement situations, like gift-giving, people choose wine with attributes whose qualitative value can be perceived by the recipient. In this perspective, the donor chooses wine with famous brand, not considering geographical indications.

Overall, this thesis provides a framework for the winemaking sector, paying attention both on wine producer, with his managerial motivations and his entrepreneurial “style”, and on wine consumer, with his purchasing preferences for different occasions. The results of this study led us to better understand some aspects of the present reality of the wine chain, with the aim of studying and implementing strategies that promote a further development.



## SOMMARIO

Il mercato mondiale del vino ha subito negli ultimi anni profondi e veloci cambiamenti che hanno modificato la struttura produttiva, la tipologia di offerta dei prodotti, le dinamiche degli scambi internazionali, i circuiti di commercializzazione, nonché la domanda e le aspettative dei consumatori. Partendo da queste considerazioni, la tesi si propone di indagare il settore sia dal punto di vista del produttore sia dal punto di vista del consumatore, in maniera tale da fornire una panoramica sui due dei principali attori della filiera vitivinicola. In particolare, questa tesi consiste in tre articoli scientifici: uno incentrato sulle motivazioni che spingono gli imprenditori ad entrare e a perseguire il loro business nel settore vitivinicolo; gli altri due sono inerenti le preferenze del consumatore nell'acquisto di una bottiglia di vino, investigando le caratteristiche del prodotto e le situazioni di consumo che influenzano questa scelta. Per studiare questi due soggetti della filiera vitivinicola, sono stati utilizzati due tipi diversi di analisi: il metodo qualitativo ed il metodo quantitativo.

Il primo articolo ha esaminato le motivazioni imprenditoriali nel settore vitivinicolo e, combinando queste con le strategie di business e le caratteristiche comportamentali dell'imprenditore, ha cercato di tracciare delle tipologie di businessman. In particolare, utilizzando il metodo dell'indagine qualitativa, è stato condotto uno studio esplorativo su imprenditori vitivinicoli le cui aziende ricadono in due territori toscani particolarmente vocati per la viticoltura. L'indagine ha riguardato gli imprenditori che partecipano direttamente ad almeno una delle fasi del processo vitivinicolo, che sono a capo di aziende familiari in cui si completa l'intero ciclo produttivo (dalla produzione all'imbottigliamento finale). La ricerca ci ha permesso di evidenziare che, per la maggior parte degli imprenditori intervistati, nel perseguimento del business le motivazioni non economiche quali passione, indipendenza, desiderio di vivere a contatto con la natura hanno una maggiore importanza rispetto a quelle economiche. Considerando queste motivazioni in

abbinamento alle strategie di manageriali intraprese, al background familiare ed alle caratteristiche personali dell'imprenditore, sono stati individuati due "stili" imprenditoriali: uno chiamato "Business-oriented" ed uno chiamato "Lifestyle-oriented". La ricerca ha illustrato che l'imprenditore del tipo "Lifestyle-oriented" è una figura diffusa nelle piccole e medie aziende familiari di due aree vitivinicole toscane, ed è necessario tenerne conto nell'analisi del sistema produttivo.

Il secondo articolo ha esaminato, per mezzo di un choice experiment, le preferenze dei consumatori italiani per cinque vini toscani a denominazione di origine (DO). Il Consorzio del Chianti Classico nel 2013 ha apportato delle modifiche all'interno del proprio Disciplinare in un'ottica di una nuova differenziazione qualitativa. In particolare, è stata introdotta una nuova tipologia di Chianti Classico DOCG, chiamata "Gran Selezione", collocata all'apice della piramide qualitativa della denominazione, sopra alla tipologia "Riserva" ed alla tipologia "Annata". Scopo di questo studio è stato quello di verificare se l'inserimento di questa certificazione di alto livello all'interno della denominazione può rappresentare una strategia effettiva per dare maggior valore al marchio e per rafforzare il rapporto tra produzione di qualità e il territorio. L'applicazione di un modello a classi latenti ci ha permesso di segmentare tre categorie distinte di consumatori, descritte dalle diverse preferenze dei prezzi e dei vini DOP. I risultati, che hanno mostrato preferenze eterogenee tra i consumatori, hanno evidenziato l'esistenza di un segmento che apprezza l'introduzione della nuova tipologia del Chianti Classico e che quindi convalida questa strategia di sviluppo.

Il terzo articolo ha esaminato, per mezzo di un discrete choice experiment, le preferenze dei consumatori nello scegliere una bottiglia di vino rosso per due diverse occasioni: una bottiglia per consumo personale ed una per fare un regalo. In letteratura scientifica è stato sottolineato che il consumatore, nell'atto dell'acquisto, si comporta in maniera differente quando compra qualcosa per sé stesso e quando per fare un regalo. Gli attributi del vino presi in considerazione sono il prezzo, l'indicazione geografica (presente come IGT, DOC e DOCG), la presenza della

certificazione biologica e il brand (presente sotto forma di scelta produttore famoso/produttore non famoso). Attraverso un modello Random Parameters Logit, è stato evidenziato che, nel caso dell'acquisto di una bottiglia da regalare, gli attributi più significativi sono il brand famoso, la certificazione biologica ed il prezzo. Nell'ipotesi dell'acquisto di una bottiglia di vino rosso per il proprio consumo, le caratteristiche a cui il consumatore dà importanza sono il brand, la denominazione di origine (DOC, DOCG), la certificazione biologica ed il prezzo. Una successiva analisi a classi latenti ci ha permesso di segmentare i consumatori in tre classi per ciascuno dei due trattamenti considerati. Questi risultati ci hanno permesso di affermare che, in situazioni diverse, il consumatore valuta gli attributi considerati in maniera differente. In situazioni di maggiore coinvolgimento dell'individuo, come nel fare un regalo, il consumatore sceglie attributi inerenti la qualità e il valore del prodotto che immagina siano più facilmente percepiti dalla persona a cui è destinato il regalo (brand famoso), ma non prende in considerazione, invece, la denominazione di origine.

Questo elaborato nel complesso fornisce un quadro sul settore vitivinicolo, ponendo l'attenzione sia sulla figura del produttore, con le sue motivazioni manageriali ed il suo "stile" imprenditoriale, sia sulla figura del consumatore, con le sue preferenze di acquisto nelle diverse occasioni di consumo. I risultati di questo studio ci permettono di comprendere alcuni aspetti della realtà attuale della filiera del vino, allo scopo di pensare ed implementare strategie che ne favoriscano un ulteriore sviluppo.



## LIST OF ARTICLES

This thesis is based on the following three articles:

1. **“An exploratory qualitative analysis on the non-pecuniary benefits in wine entrepreneurship in Tuscany.”**

Co-authored with Enrico Marone and Fabio Boncinelli. Manuscript to be submitted to *International Journal of Wine Business Research*.

2. **“Reach for the stars: the impact of a new top-tier typology within a PDO wine on consumers’ preferences.”**

Co-authored with Francesca Gerini, Gabriele Scozzafava, Caterina Contini and Leonardo Casini. Manuscript to be submitted to *Wine Economics and Policy*.

3. **“The impact of occasion in purchasing wine: personal consumption or gift-giving.”**

Co-authored with Francesca Gerini, Fabio Boncinelli and Enrico Marone. Manuscript to be submitted to *British Food Journal*.



## INTRODUCTION

In the last three decades, the international wine sector has faced with structural changes that have deeply modified its economic structure and organization (Bernetti et al., 2006). This transformation is the result of the globalization of the wine sector with an increasing competition from new producer countries against the traditional ones and the emerging of new consumers trends (Mora, 2016).

Literature has often explained the world wine productive scenario looking to the dichotomy between Old World and New World countries (Banks and Overton, 2010). Old World includes these states of Western and Southern Europe with a long wine tradition, such as Italy, France and Spain. Countries such as the United States, Argentina, Chile, South Africa, New Zealand and Australia are so-called New World producers. The comparison between these two series is not only in terms of geographical position and historical significance of the wine process. Old World viticulture is characterized by a fragmentation of family-owned companies, which draw their strength to factors included place of origin, Geographical Indications and all that is meant for “terroir” (Remaud and Couderc, 2006). Big companies that bet on grape varieties and powerful brand support the productive structure of New World countries (Bernetti et al., 2006). These last mentioned countries have gained during years market shares to the detriment of the traditional long-established winemakers (Cusmano et al., 2010). OIV (International Organisation of Vine and Wine) has estimated in 2015 a total of wine grapes land area of among 7,500 thousand hectares, evidencing a decreasing trend that has characterized the last fifteen previous years (OIV, 2016). This decrease of surfaces is due to the strong decrease of vineyards in Old World countries, partially compensated by the maintenance and expansion of planted land in the rest of the world. About wine production, the forecast for 2016 has talked about 259 thousands of hectolitres (OIV, 2016), in line with the results of last decade. Although Italy, France and Spain remain the larger wine producers, in Europe there is a general production drop, combined with an increasing production

in New World countries. A particular attention has to be addressed to China, with in few years was becoming in 2015 the seventh world wine producer with 11,5 thousand hectolitres (OIV, 2016), tailing Australia. Although a continuous increasing of the world population, the international consumption of wine was drastically decreased between half of 1980's and half of 1990's (Castriota, 2015), and then was risen again until 239 thousand hectolitres estimated for 2015 (OIV, 2016). This trend is a consequence of the change in consumption habit, with a downturn in traditional production countries (Italy, France and Spain) and a growth in USA, China, Australia, Canada, India and South Africa.

In this competitive and under continual changes global environment, the aim of this research was to investigate the two sides of the wine market in the Old World, respectively producers and consumers. A global analysis of the sector may help to understand the present features and to implement marketing strategies in order to support a further development.

In this perspective, the first study concerns entrepreneur personal motivations for investing in the wine business. Winery owners head a complex business, comprised of an agricultural phase (grape growing), a transformation process (winemaking) and the activity of marketing and distribution of the final good. Especially in small or medium wineries, the manager and the owner are entity not separated and he/she is the responsible for all these phases in winemaking. Therefore, the winery owner is not just a landlord, but he/she is an entrepreneur with his/her own managerial strategy and his/her own characteristics and motivations that mark his/her business's development. Past literature (Walker and Brown, 2004) has evidenced that entrepreneurs, in running their business, are driven by economic motivations, such as profit maximization, as well as by non-pecuniary motivations, like passion, desire for independence, personal satisfaction or need for achievement. This theme affects particularly agricultural sector (Austin et al., 1998; Willock et al., 1999; Howley, 2015), where great importance was attached to non-economic benefits (Howley et al., 2017; Pieralli et al., 2017) such as the importance of working outdoors, of living

in rural area, and of following a family tradition. Starting from these considerations, it was considered appropriate to investigate what motivations and with which importance have pushed Tuscan winery entrepreneurs in their business. Indeed, entrepreneurial studies have evidenced the figure of ‘Lifestyle’ entrepreneur (Getz and Carlsen, 2000; Walker and Brown, 2004; Peters et al., 2009; Presenza et al., 2016), namely an entrepreneur who has chosen a business model primarily focused on passion before profit, combining his way of life and his interest with the ability to sustain his business. Wineries are often located in attractive and rural environments, places where traditionally the lifestyle entrepreneur prospects of living and settles his business. Since the appeal of wine sector has get involved numerous entrepreneurs, often coming from previous careers and different work sectors, the analysis’s objective was that of evidencing the “Lifestyle” type in the winery entrepreneurship.

The exploration of entrepreneurial behavior has sought to offer a small contribution to further understanding this complex market. However, it is not sufficient analyzing productive structure and ownership. In this redrawn world wine map, consumers find themselves to choice bottles of wine coming from all several different countries. Instead of changing wine market in a standardized one as it happens for other sectors (Mora, 2016), this globalization has increased products’ heterogeneity, adding further difficulty in the purchase decision (Dodd et al., 2005). Many factors affect the consumer’s decision when making a wine purchase (Quester and Smart, 1998; Hall et al., 2001; McCutcheon et al., 2009), referred to the features of the product, to the characteristics of consumers and to the situation on which consumer acts in the moment of his purchasing. However, one of the most prominent factors influencing consumer’s wine choice is the perceived quality (Orth and Krška, 2001), and thus there was a redefining of the demand in favor of quality at the expense of quantity (Bernetti et al., 2006). The attributes used by consumers to judge wine quality can be classified as either “intrinsic” or “extrinsic” (Olson and Jacopy, 1972). Intrinsic attributes are directly related to the physical-chemical aspects of the product, such as

color, alcohol content, flavor, that are specific for each product and cannot be altered without changing the product itself (Lockshin & Hall, 2003). Extrinsic attributes are lower level cues that can be changed without changing the product and include brand, price, packaging, designation of origin (Sáenz-Navajas and al., 2013).

In purchasing a bottle of wine, consumers consider both intrinsic and extrinsic cues as indicators of products quality. However, often there is not the opportunity to taste the wine before buying it, and consumers cannot value the intrinsic qualitative characteristics of the product (Barber et al., 2006). In the classification of Nelson (1970, 1974), these attributes are considered experience properties for goods, namely features which can only be discerned after the purchase or during the consumption. Thus, consumers have to choose the bottle of wine using the available information they view on the bottle and on the label, particularly when people are not expert and have less knowledge of the wine sector.

Several scientific articles (Skuras and Vakrou, 2002; Mtimet and Albisu, 2006; Lai et al., 2006; Scarpa et al., 2006) have consistently demonstrated the importance of denomination of origin (PDO) as an extrinsic qualitative attribute that orients consumer wine purchase. PDO is also linked to the relationship wine/territory immediately perceivable as a sign of quality and typicality (Scozzafava et al., 2016). However, in the last years there was a debate about the system of PDO wine in Italy, particularly with regard the rapid proliferation of the number of denominations. Several wine appellations, with different standards, might confuse consumers and make the certification system useless (Castriota, 2015). Furthermore, an excessive use of this designation policy within the same territory could bring a ‘mark inflation’ in the marketplace and therefore a diminishing consumer’s cognizance (Adinolfi et al., 2011). On 2013, Consorzio of Chianti Classico (the authority that gathers most of the Chianti Classico DOCG producers) approved the introduction of the ‘Chianti Classico DOCG Gran Selezione’, posed at the top of the production pyramid, above vintage wine ‘Chianti Classico DOCG’ and the reserve category ‘Chianti Classico Riserva DOCG’. The aim of this internal differentiation is to further enhance the tie

between wine and territory, to diversify the market supply, and to increase consumer's awareness. In this regard, it was verified whether the introduction of a higher-tier certification within a PDO denomination might represent an effective strategy to leverage the value of the brand and to strengthen the relationship between quality production and territory.

In consumers' selection of product, the purchase and consumption occasion are relevant themes (Hall et al., 2001; Aqueveque, 2006). People can buy a bottle of wine for daily use, like a dinner at home, or for a special occasion, as a dinner with friends or a celebration. Depending on the type of occasion, the choosing bottle of wine will have specific characteristics. Among the variety of special occasion, the gift-giving situation is a particular example to take into account and wine is a product very suitable to be offered as a present. The study has investigated different qualitative attributes considered during the purchase of a bottle of wine comparing two type of occasions, a personal consumption and a gift-giving.

In these studies, the exploration of producer and consumer behavior was featured by the use of two different research strategies, depending on the purpose of studies themselves (Patton, 2002). The investigation of entrepreneurial motivations was dealt using a qualitative method, while consumers' preferences in purchasing a bottle of wine were studied with the instruments of quantitative research. The qualitative research used an inductive approach, with the aim of understanding a phenomenon objective of study and then developing a theory that will explain what was experienced (Newman and Benz, 1998). In the quantitative method, starting from an ex-ante hypothesis, with a deductive approach researchers test a theory for confirming or disconfirming that hypothesis. In the first case, concepts emerge out of the data, while using the second method the theoretical work precedes the collection of data (Bryman, 2015). Starting from these requirements, the two research methodologies are conducted in a different way and with some differences. The sample in qualitative research is orienting towards a statistical representativeness, achieved through a probabilistic sample with a prefixed number

of respondents, often on large-scale. On the contrary, in quantitative study representativeness is built on the typical feature of respondents, feature that requires to be explored. To reach this objective, not probabilistic techniques of sampling are used, choosing the number of respondents simultaneously with the development of the research, following the concept of theoretical saturation. The qualitative method is unstructured and more naturalistic, opposite of the structured and tiff quantitative. Clearly, the analysis and the elaboration of data follow different strategies. Each of two methods has its strengths and weaknesses, and researcher has to choose the 'right' method based on his study's objectives.

## References

- Aqueveque, C. (2006). Extrinsic cues and perceived risk: the influence of consumption situation. *Journal of Consumer Marketing*, 23(5), 237-247.
- Austin, E. J., Willock, J., Deary, I. J., Gibson, G. J., Dent, J. B., Edwards-Jones, G., Morgan, O., Grieve, R., & Sutherland, A. (1998). Empirical models of farmer behaviour using psychological, social and economic variables. Part I: linear modelling. *Agricultural Systems*, 58(2), 203-224.
- Banks, G., & Overton, J. (2010). Old world, new world, third world? Reconceptualising the worlds of wine. *Journal of Wine Research*, 21(1), 57-75.
- Barber, N., Almanza, B. A., & Donovan, J. R. (2006). Motivational factors of gender, income and age on selecting a bottle of wine. *International Journal of wine marketing*, 18(3), 218-232.
- Bernetti, I., Casini, L., & Marinelli, N. (2006). Wine and globalisation: changes in the international market structure and the position of Italy. *British Food Journal*, 108(4), 306-315.
- Bryman, A. (2015). *Social research methods*. Oxford university press.
- Castriota, S. (2015). *Economia del vino*. EGEA spa.
- Cusmano, L., Morrison, A., & Rabelotti, R. (2010). Catching up trajectories in the wine sector: A comparative study of Chile, Italy, and South Africa. *World Development*, 38(11), 1588-1602.
- Dodd, T. H., Laverie, D. A., Wilcox, J. F., & Duhan, D. F. (2005). Differential effects of experience, subjective knowledge, and objective knowledge on sources of information used in consumer wine purchasing. *Journal of Hospitality & Tourism Research*, 29(1), 3-19.
- Getz, D., & Carlsen, J. (2000). Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism management*, 21(6), 547-560.
- Hall, J., Lockshin, L., & Barry O'Mahony, G. (2001). Exploring the links between wine choice and dining occasions: Factors of influence. *International Journal of Wine Marketing*, 13(1), 36-53.
- Howley, P. (2015). The happy farmer: the effect of nonpecuniary benefits on behavior. *American Journal of Agricultural Economics*, 97(4), 1072-1086.

- Howley, P., Dillon, E., Heanue, K., & Meredith, D. (2017). Worth the Risk? The Behavioural Path to Well-Being. *Journal of Agricultural Economics*, 68(2), 534-552.
- Lockshin, L., & Hall, J. (2003). *Consumer purchasing behaviour for wine: what we know and where we are going* (Doctoral dissertation, University of South Australia, Wine Marketing Research Group).
- McCutcheon, E., Bruwer, J., & Li, E. (2009). Region of origin and its importance among choice factors in the wine-buying decision making of consumers. *International Journal of Wine Business Research*, 21(3), 212-234.
- Mora, P. (2016). *Wine Positioning*. Springer.
- Nelson, P. (1970). Information and consumer behavior. *Journal of political economy*, 78(2), 311-329.
- Nelson, P. (1974). Advertising as information. *Journal of political economy*, 82(4), 729-754.
- Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. SIU Press.
- O.I.V. (2016). Statistical Report on World Vitivinicultural. *International Organization of Vine and Wine, Paris, France*. available at: <http://www.oiv.int/public/medias/5029/world-vitiviniculture-situation-2016.pdf>. (Accessed 15/10/2017).
- Olson, J. C., & Jacoby, J. (1972). Cue utilization in the quality perception process. *ACR Special Volumes*.
- Orth, U. R., & Krška, P. (2001). Quality signals in wine marketing: the role of exhibition awards. *The International Food and Agribusiness Management Review*, 4(4), 385-397.
- Patton, M.Q. (2002). *Qualitative research and evaluation methods, third edition*. Sage, Thousand Oaks, CA.
- Peters, M., Frehse, J., & Buhalis, D. (2009). The importance of lifestyle entrepreneurship: A conceptual study of the tourism industry. *Pasos*, 7(2), 393-405.
- Pieralli, S., Hüttel, S., & Odening, M. (2017). Abandonment of milk production under uncertainty and inefficiency: the case of western German Farms. *European Review of Agricultural Economics*, 44(3), 425-454.

Prezenza, A., Yucelen, M., & Camillo, A. (2016). Passion before profit in hospitality ventures. Some thoughts on Lifestyle Entrepreneurs and Albergo Diffuso. *Sinergie*, 34(99), 221-239.

Quester, P. G., & Smart, J. (1998). The influence of consumption situation and product involvement over consumers' use of product attribute. *Journal of consumer marketing*, 15(3), 220-238.

Remaud, H., & Couderc, J. P. (2006). Wine business practices: a new versus old wine world perspective. *Agribusiness*, 22(3), 405-416.

Sáenz-Navajas, M. P., Campo, E., Sutan, A., Ballester, J., & Valentin, D. (2013). Perception of wine quality according to extrinsic cues: The case of Burgundy wine consumers. *Food Quality and Preference*, 27(1), 44-53.

Scozzafava, G., Boncinelli, F., Contini, C., Romano, C., Gerini, F., Casini, L., 2016. Typical vine or international taste: wine consumers' dilemma between beliefs and preferences. *Recent patents on food, nutrition & agriculture*, 8 (1), 31–38.

Walker, E., & Brown, A. (2004). What success factors are important to small business owners?. *International small business journal*, 22(6), 577-594.

Willock, J., Deary, I. J., McGregor, M. M., Sutherland, A., Edwards-Jones, G., Morgan, O., Dent, B., Grieve, R., Gibson, G., & Austin, E. (1999). Farmers' attitudes, objectives, behaviors, and personality traits: The Edinburgh study of decision making on farms. *Journal of Vocational Behavior*, 54(1), 5-36.



# **ARTICLE 1**



# **An exploratory qualitative analysis on the non-pecuniary benefits in wine entrepreneurship in Tuscany.**

## **Abstract**

Winery owners oversee a complex business, comprising grape growing, winemaking and the marketing and distribution of the final goods. In general, in small or medium-sized wineries one person is mainly responsible for all the phases of winemaking, and the roles of manager and owner are not separated. Past researches have shown that in running their business, entrepreneurs are not only driven by the maximisation of profit but non-pecuniary motivations also play a key role. Passion, a desire for independence, personal satisfaction or a need for achievement are all factors affecting entrepreneurs' managerial style, investment decisions or marketing strategies. This evidence on the importance of non-economic benefits is well-studied in the field of agriculture, where motivations such as the importance of working outdoors, living in a rural area and following a family tradition have a particular weight for farmers.

The aim of this study is to investigate the role and the relative importance of non-pecuniary benefits in influencing the entrepreneurship model in Tuscan wineries and, based on the role of these benefits, to identify business-model types. Indeed, entrepreneurial studies have identified the figure of the 'lifestyle entrepreneur', namely an entrepreneur who chooses a business model primarily focused on passion rather than profit and who combines his way of life and his interests with the ability to sustain his business. To answer the research question, we conducted a qualitative explorative study of wine businessmen whose firms are located in two famous Tuscan wine regions particularly suitable for viticulture. The study was concerned with entrepreneurs who have a hands-on involvement in the wine-making process,

who own a family business and who complete all the operations of a typical winery from the production of grapes to bottling. Among the entrepreneurs interviewed, non-economic motivations, such as passion, independence and a desire to live close to nature, have a great importance compared to pecuniary motivations. Considering these entrepreneurial motivations in combination with business strategies, personal behaviours, family background and psychological attitudes, we identified two business styles: 'business-oriented' and 'lifestyle-oriented'. The latter type is the prevalent one among the small and medium-sized Tuscan wineries. Further analysis to identify the impacts of this business style on business strategies would be beneficial.

*Keywords:* Qualitative method; Wine; Entrepreneurial motivations; Lifestyle entrepreneur

## **1. Introduction**

In recent years, winemaking and winegrowing have received particular attention from economists and sociologists. Although there is a great amount of literature on wine consumers' behaviour (for an extensive review, see Lockshin and Corsi (2012)), few studies have considered the winemakers' viewpoint (Chaudhury et al., 2014). Some authors have focused on management operations, investigating aspects such as cost accounting (Casini et al., 2014; Marone et al., 2017) or marketing strategies (Begalli et al., 2009; Bruwer and Johnson, 2010). Wine entrepreneurs' behaviour, however, along with their motivations and the goals that drive individuals to establish and run wine businesses, has not been studied in depth.

Winery owners oversee a complex business, consisting of an agricultural phase (growing the grapes), a transformation process (winemaking) and marketing and distribution of the final goods. In other words, winemaking includes primary, secondary and tertiary activities. Especially in small or medium-sized wineries, the roles of manager and owner are not separated, and one person is mainly responsible for all the phases of winemaking. The winery owner is not just a landlord but an

entrepreneur with his/her own managerial strategy and personal characteristics and motivations that drive his/her business's development. Therefore, if we complete an analysis of these features, it will be possible to identify entrepreneur types and to link them to a business model/style.

'Neoclassical' economic theory postulates that the main objective of a producer is profit maximisation. The main incentive provided by a sector for attracting new entrepreneurs and investments is therefore the potential for individuals to realize profits or extra-profits. In other words, as profit maximisation is one of the most fundamental assumptions of economic theory (De Scitovszky, 1943, p. 57), the underlying main intention of entrepreneurs running a business should be to realize increased earnings.

Many authors, however, have pointed out that this criterion cannot explain investment in agriculture, since this sector shows lower average margins than other fields (Scott Morton & Podolny, 2002; Howley et al., 2015). These authors agree that monetary earnings are not enough to explain why many persons are involved in primary production. In addition to the profit-seeking objective, farmers can also be driven by non-economic benefits or motivations (Walker and Brown, 2004), such as passion for their work, a desire for independence, personal satisfaction or a need for achievement. It is evident that these motivations are not only present in agricultural production but could be present in other sectors to differing degrees. Many studies (Austin et al., 1998; Willock et al., 1999a; Howley, 2015) have clearly demonstrated that farmers attach great importance especially to non-pecuniary benefits such as, in addition to the above-mentioned, the importance of working outdoors, living in a rural area or following a family tradition.

An entrepreneur who chooses a business model primarily focused on passion before profit, combining his/her way of life and interests with the ability to sustain a business, has been called a 'lifestyle entrepreneur' (Presenza et al., 2016). Many authors have already highlighted the presence of lifestyle entrepreneurs in the fields of tourism and hospitality (Ateljevic and Doorne, 2000; Andersson et al., 2002),

particularly in small-scale family companies located in rural and peripheral areas (Getz and Carlsen, 2000; Walker and Brown, 2004; Peters et al., 2009). Family firms are often strictly linked to tourism, since many farms are involved in diversification activities such as agritourisms and running restaurants, guided tours or tastings in their cellars. Considering the rural areas where agricultural companies are situated, this connection between country tourism and farms may be a sign of the presence of lifestyle entrepreneurs within the agricultural sector.

Although past studies have demonstrated well the importance of non-economic goals for farmers, only few authors have focused on the wine business. The main goal of this study is to shed new light on this topic for the wine sector.

As Charters and Menival, (2008, p. 4) have said, wine sector 'is somehow different from other business'. Moreover, winemaking plays a crucial role in many rural economies, especially in Italy. In 2015, the value of Italian wine production was estimated at 12.9 billion euros (Mediobanca, 2017). For many Italian rural areas, wine production, including all the other activities that revolve around the wine sector, represents the main economic activity and the main source of income for many agricultural households. The appeal of the wine sector has encouraged numerous entrepreneurs from different sectors, as well as industrialists and celebrities, to enter the business, attracted by various factors. For some entrepreneurs, it is a way of diversifying their investments; many of them want to do something that they enjoy; and others do it to create and brand their own lines of products.

Moreover, wineries are often located in attractive rural places where lifestyle entrepreneurs traditionally want to live and settle their business. The media and the internet overflow with themes that highlight wine entrepreneurs driven by their passion for wine, a sense of prestige, satisfaction gained from producing wine and the desire to live in an attractive location.

This framework above described was taken as a reference paradigm for the current study. The main aim of this paper is to investigate the weight of entrepreneurs' non-monetary motivations to explain investments in the wine sector. In other words, we

want to explore the presence of lifestyle entrepreneurs in the wine sector. We decided to study this phenomenon in the Tuscany region for two reasons: (i) Wine is one of the main products for the rural areas of this region; (ii) Tuscany's wine sector, with its numerous productions quality guarantees (PDO) and with its famous brand, is a profitable business.

The specific questions driving this study are: Why are Tuscan winery entrepreneurs involved in this business? What kind of motivations push Tuscan winery entrepreneurs to pursue their business? Considering the combination of personal goals, motivations and managerial strategies, it is possible to individuate a type of 'lifestyle entrepreneur' in this context?

In order to answer these questions, we conducted an exploratory qualitative study on 10 wine family companies located in two premium-quality wine areas of Tuscany. The following section presents a literature review of entrepreneurial motivations and the concept of the lifestyle entrepreneur. Section 3 illustrates the methodology used to answer the research questions. In the 'Results' section, we present and discuss the findings. The final section offers some considerations about the results and some concluding remarks.

## **2. Literature review**

### *2.1. Entrepreneurial motivations*

The notion of entrepreneurship is a broad and multidisciplinary concept that has changed over time and between contexts. Since Cantillon's ([1755] 2001) pioneering work, *Essai sur la nature du commerce en general*, the body of literature exploring entrepreneurship, investigating it through different approaches and ascribing to it numerous meanings, has seen considerable growth. If entrepreneurship has historically been related to economics and economic theory (Ogbor, 2000), in recent years the concept has been studied across various disciplines, including psychology, sociology, anthropology, history and political sciences (Martinelli, 1994; Low & MacMillan, 1988; Kalantaridis & Bika, 2006). This interdisciplinary view has

developed the concept of entrepreneurship, considering it ‘a plurality of sub-discourses, some of them in sharp contrast to others’ (Johansson, 2009, p. 1208). This broadened view has included a new approach, studying the personal goals and motivations that drive individuals toward entrepreneurship.

Traditionally, it was taken for granted that economic motives pushed entrepreneurs to go into business (Schumpeter, 1934). The neoclassical approach assumed that the main goal of entrepreneurs is profit maximisation (De Scitovszky, 1943; Barber, 1967). This postulation seems justifiable from an evolutionary point of view: a company that does not pursue profit maximisation is bound to fail in the long run, since this purpose implied great incentives to minimize costs (Scott Morton & Podolny, 2002). Luke et al. (2007) asserted that entrepreneurship was linked to economic factors such as increasing profits, wealth creation and economic growth. Thus, because it was associated with profit and financial rewards, growth was a desirable objective for business owners (Poutziouris, 2003). The growth of a business leads to an increase in the market share and a consequent increase in revenue.

In addition to economic motives, entrepreneurs might also be driven by non-economic reasons (Lumpkin & Erdogan, 1999; Segal et al., 2005; Carland et al., 2015). Non-pecuniary motives have competed strongly with economic ones as the reason for becoming an entrepreneur in the twenty-first century (Koster et al., 2010). Personal motivations, such as a need for achievement, risk taking, a desire for independence and passion, play a critical role in how people undertake the entrepreneurial process (Shane et al., 2003). McClelland (1961) has argued that individuals who have a high need for achievement are more predisposed to engage in entrepreneurial business. Lumpkin and Erdogan (1999) studied risk-taking propensity and identified it as a distinguishing trait between entrepreneurs and non-entrepreneurs. The data of Cromie (1987), examining motives that stimulate the creation of business enterprises, provided considerable support for the proposition

that a desire for independence, autonomy and the freedom to control one's own affairs were important motivators for both male and female entrepreneurs.

A rich literature related to agricultural entrepreneurship has investigated the motivations that drive farmers in their decision-making process (Gasson, 1973; Willock et al., 1999b; Bergevoet et al., 2004; Howley et al., 2015). While economic goals such as profit maximisation are important to farmers, they might not be the only motivation for farming (Howley, 2015). For example, Vandermersch and Mathijs (2002) in their analysis of 73 Belgian dairy farmers showed that 66% of farmers had priorities other than maximizing profit.

A large number of studies suggests that social, lifestyle and family motivations as well economic goals influence farmers' behaviour in their entrepreneurial roles (Howley et al., 2015). Scott Morton and Podonly (2002) have called companies that mainly pursue non-monetary goals and maximise total utility instead of simply profit as 'utility-maximizers', in contrast with 'profit-maximizers' who care solely about the companies' financial returns. Gasson (1973), investigating in Cambridgeshire farmers, noted that motivations, such as 'Doing the work you like', 'Independence' and 'Leading a healthy, open-air life', were scored higher than economic values such as 'Expanding the business' and 'Making as high an income as possible'. Willock et al. (1999b), who asked 252 Scottish farmers to evaluate some items regarding farming objectives, identified five types of factors relating to the farmers' goals, four of which point toward farmers not pursuing purely economic goals. These four factors pertain to goals regarding sustainability, the quality of life, the status of being a farmer and off-farm work. Bergevoet et al. (2004) found that for 257 Dutch dairy farmers, non-economic goals such as enjoying work, working with animals and making a good product were ranked higher than the economic motivation of achieving an increased income. Focussing on wine sector, Scott Morton and Podonly (2002) interviewed 184 Californian winery owners with the aim to explore their entrepreneurial motivations. Their results showed great variation in the attitudes of the entrepreneurs, with some driven by economic gain and others by non-financial

benefits. Howley et al. (2015), investigating the motivations of 799 Irish forestry farmers, evidenced that 37% of the respondents agreed with the statements 'Farming is a more rewarding job in terms of quality of life, independence, lifestyle, than it is in terms of money'. Entrepreneurs with marked non-pecuniary goals instead of pecuniary ones were identified as having a 'lifestyle' orientation.

## *2.2.Lifestyle entrepreneur*

The concept of the lifestyle entrepreneur has been highly debated in recent years and has strongly featured in the literature regarding business motivations and goals. From an economic-theory perspective, lifestyle companies are businesses 'set up primarily to undertake an activity that the owner-manager enjoys or gets some comfort from whilst also providing an adequate income' (Burns, 2010, p. 19). This definition immediately clarifies that lifestyle is firstly an entrepreneur, in search of remuneration, even if it is not his/her main goal. Henderson (2002), mentioning the Kauffman Center for Entrepreneurial Leadership, adds that lifestyle entrepreneurs typically seek independence and control over their own life priorities. Therefore, the idea of a lifestyle entrepreneur has been primarily associated not with economic rewards but with a different type of pay-off, such as enjoyment and improvement in life quality. This focus on different motivations distinguishes the lifestyle entrepreneur from the classical type of an entrepreneur.

The lifestyle entrepreneur chooses to work in a field which he/she has an interest in and passion for (Marcketti et al., 2006), often following the realisation of a dream (Lashley and Rowson, 2010), on some occasions with no previous experience or expertise in that area (Peters et al., 2009). Sometimes the entrepreneur finances a start-up with savings from previous careers or from family, migrating to an attractive and rural region to seek the desired lifestyle (Stone and Stubbs, 2007). Particularly in studies that focus on the wine and tourism industries in rural areas, the appeal of the environment is also influenced by factors such as a good climate or a pleasant landscape (Dawson, 2012). A lifestyle entrepreneur's business, built on personal

aspirations and beliefs, becomes an integral part of the life of the entrepreneur and his/her family (Presenza et al., 2015). The family is often involved in the ownership and management of the business, both through ‘copreneurship’ (where a couple shares ownership and management) and through the involvement of sons/daughters.

Even if the maximisation of economic gain is not the primary purpose, it is well-known that lifestyle entrepreneurs are driven by goals and motives which may indeed be economic (Carsrud and Brännback, 2011). Indeed, they need to acquire a sufficient income to sustain a profitable business (Getz and Carlsen, 2000) and to ensure their desired lifestyle (Rimington et al., 2009). Presenza et al. (2015) have summed up the concept of a lifestyle entrepreneur as someone who combines economic goals with doing something that he/she loves, pursuing a desired work-life balance.

Regarding the motivations that drive entrepreneurs in the running of their business, some past studies have classified entrepreneurs as converging on two dominant types: the lifestyle and the classical entrepreneur (Smith, 1967; Smith and Miner, 1983; Cooper and Dunkelberg, 1986; Woo et al., 1991). However, we cannot classify the lifestyle entrepreneur using only motivations as the driver of the categorisation. Indeed, Brodt et al. (2006, p. 91) have pointed out that entrepreneurs combine different strategies to achieve their goals, ‘depending partly on their available physical and human resources and partly on attitudes towards factors such as risk, family life, the future, and so on’. Entrepreneurial motivations therefore have to be combined with business strategies, personal behaviours, family background, and psychological attitudes to identify the lifestyle entrepreneur.

### *2.3. Lifestyle entrepreneur in the wine business*

In recent years, some authors have investigated the role of non-monetary benefits in the wine sector. A pioneering study by Scott Morton and Podonly (2002) found that a segment of Californian wine entrepreneurs derives non-monetary benefits from

owning a winery, and that this group of producers is more likely to create high-quality wine than others.

The evidence of non-economic goals in wine entrepreneurship was further explained and analysed by two recent exploratory studies. Dawson (2012), exploring the motivations and business practices of 42 winery entrepreneurs involved in tourism in New Zealand and the United States, individuated a type of winery owners called 'lifestyle-seeking'. This group, representing 38% of the respondents, cited non-economic factors as their primary motivation for being wine entrepreneurs.

The presence of lifestyle businessmen in the wine industry was further described by Sugand (2014), who interviewed 14 lifestyle entrepreneurs in New Zealand and purposefully selected winery owners who established their businesses for reasons associated with a passion for business and other non-economic motivations. Investigating their businesses, the author found that non-economic goals such as passion and work-life balance play a dominant role, even if economic motivations play an important part in sustaining the businesses and supporting their chosen lifestyle.

In conclusion, literature on this topic is scant and there is room for more evidence to better understand the role of non-pecuniary benefits in the ambit of entrepreneurship in winemaking. In addition, it is worth noting that the studies mentioned above were carried out in wine-producing areas in the New World, i.e., the vineyards and wineries located in Argentina, Australia, Chile, New Zealand, North America and South Africa (Banks and Overton, 2010). Entrepreneurs located in those parts of the world have a different approach to wine production and adopt various marketing strategies compared with to producers of traditional countries, i.e. France, Italy, Spain, also called the Old World (Bernetti et al., 2006). Such differences could also be present in managerial strategies and the business practices used by winery owners, as well as in the motivations and goals that drive them in the entrepreneurial process.

### **3. Method**

Since the aim of this research is to investigate the motivations that drive winery managers in running their business, we chose a qualitative approach. This exploratory study does not seek to test a specific hypothesis but wants to understand a phenomenon and the real experience of the participants from their own perspective (Bryman, 2015). Previous studies on lifestyle entrepreneurs in the wine industry have explored this topic using qualitative research.

The aim of this study is to investigate managerial motivations and the presence of lifestyle entrepreneurs in the Tuscan wine sector. The analysis included only small and medium-sized family-run companies. This choice is justified by the current of the Italian wine sector, with a production system characterised by an elevated number of small- to medium-size companies (Pomarici, 2005), in most cases family-run (Gallucci and Nave, 2012). This situation is also true for the Tuscany situation, a region with 26,120 wine companies with an average surface of 0.44 ha in 2010 (Regione Toscana, 2012).

Wine entrepreneurs were recruited by applying a purposeful sampling method, which allows to select information-rich cases that answer the research questions (Patton, 2002). The sample was therefore chosen according to predetermined criteria helpful for the research purpose (Guest et al., 2006). In this study, the participants were limited to wine entrepreneurs who are involved hands-on in the wine-making process, who own a family business and who complete all the wine-related operations at the farm (from the production of grapes to bottling). The choice of these criteria might represent a limitation of this study in terms of its representativeness (O'Leary, 2004), but the primary aim is to understand the management motivations of the selected sample instead of tracing generalised hypothesis statements (Mason, 2010).

Qualitative research has no specific rules or calculations regarding sample size (Patton, 2002), but there are general guidelines. Scholars are not in agreement concerning the minimum number of interviews to conduct (De Lillo, 2010).

Matilainen and Lähdesmäki (2014), in their exploratory study of entrepreneurs in nature-based tourism, considered 10 interviews an adequate number for such qualitative research. Ray Chaudhury et al. (2014) recruited six winemakers in New Mexico for their qualitative study of winemakers' entrepreneurial marketing efforts.

Generally, in qualitative research the data collection follows the concept of theoretical saturation (Glaser and Strauss, 1967), which is the point beyond which further interviews do not add clarifying themes to the study. Since the nature of this study is exploratory with a goal of examining and understanding a specific situation using a qualitative approach, we opted for 10 face-to-face in-depth interviews with wine entrepreneurs.

The first step for choosing entrepreneurs with suitable characteristics for this research was on-line investigation, especially consulting the websites of the many wine Consortiums of Protection existing in Tuscany. In order to produce a more detailed overview, we selected entrepreneurs located in two different wine regions, Chianti Classico and Cortona. Both areas are located in Tuscany, are premium-quality regions certified by designations and are dominated by red grape varieties. The two regions are, however, different in many ways. The Chianti Classico territory is a historical red-wine production area, shared between the cities of Florence and Siena. This area has a long tradition of the sangiovese grape variety, from which is produced a top-quality PDO wine, the Chianti Classico DOCG. Cortona is a territory located in south-eastern Tuscany and its success in wine production has been especially recent. Even though the area has a tradition in winemaking, 1999 was a qualitative turning point with the introduction of the appellation Cortona DOC, the first Italian PDO produced with the syrah grape variety. This certification includes both red and white wines, but the international variety of the grapes and in particular the syrah wine has received great attention and success.

After managers with the above-described features had been selected, initial contact with them occurred during wine fairs organised in Florence by the two Consortiums. These fairs are a good occasion for meetings because all the wine

companies located in the same wine region participate. Not all of the entrepreneurs selected were available to participate in this study. However, we conducted 10 interviews, allowing us to reach theoretical saturation.

The interviews were conducted in Tuscany between February and April, 2016. The type of qualitative interview chosen follows a semi-structured scheme to provide the respondent a great deal of flexibility and leeway to express his/her motivations, even though the interviewer follows a list of questions (Bryman, 2015). The interview consisted of several open-ended questions based on the research question and relevant literature. The first questions asked for general information on the entrepreneur and his/her business, family, the characteristics of the farm and more specific data on wine production. The second part of the interview covered topics such as the motivations for starting and running a wine business, goals and plans. As the questions were semi-structured, other issues that emerged during the interviews were developed when believed to be interesting for the aim of this study.

All interviews were carried out with the owners at the wineries. The group consisted of eight men and two women, ranging from 28 to 63 years old with an average age of 48. Five businesses are run by copreneurs and another five feature family involvement. The sizes of the companies range from 2.0 to 15.5 hectares planted with vineyards. Production varies from 6,000 to 80,000 bottles per annum. At every winery, business operations also include the direct sale of the wine in the cellars and the opportunity for customers to visit the farm and to test the products. In addition to wine, all of the entrepreneurs interviewed produce olive oil, and seven of them combine hospitality with agritourism.

With the permission of the participants, the interviews were digitally recorded and later transcribed. The statements reported in the main text of the current article were translated into English by a native editor.

The average duration of the interviews was 43 minutes, with a range from 25 to 98 minutes. In order to respect the anonymity of the respondents, respondent identity

does not appear in this paper and answers are referred to using an acronym, composed of the letter R followed by a number from 1 to 10.

We analysed the content of the interviews, codifying and constructing categories in order to conceptualise the data. With the help of software, we organised the codes in a hierarchical structure, helpfully allowing to individuate the relationships between different codes. By doing this, we obtained a clearer and more thorough division of the data into entrepreneurial types, supporting a critical and accurate understanding of the case study. The types, outlined based on the winery owners' answers, are a correct way to present the results of a qualitative study (Matilainen & Lähdesmäki, 2014).

#### **4. Results**

Analysing the answers of the respondents, it emerges that the emphasis among the motivations and goals that drive entrepreneurs to enter into and to carry on a wine business is mainly on non-economic objectives, despite economic motivations and goals playing a crucial role in the wine owners' business (Table 1).

Only one respondent (R9) listed making good money as the main objective, revealing his/her intention of maximising a financial profit. All the other respondents, however, underlined the importance of making an adequate income in order to continue their business. This income has to be enough to cover all costs during the production process and possibly to reinvest continuously in the wine firm. In other words, the winery owners highlighted the necessity of generating enough profit to be economically sustainable and to provide a comfortable living for themselves and their families. This point of view is summarised in the words of one entrepreneur:

*'Since we make this choice (to own a winery) as a life choice, we are willing to earn enough money to be able to lead an ordinary life.'* (R3)

Table 1  
Participants' motivations.

Acronym	Winery GI	Key motivations for running the business
R1	Cortona DOC	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Succeeding in making a high-quality product</li> <li>· Continuing a family tradition</li> <li>· Link with a territory</li> <li>· Gaining an adequate income</li> </ul>
R2	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Continuing a family tradition</li> <li>· Personal satisfaction</li> <li>· Gaining an adequate income</li> </ul>
R3	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Living close to nature</li> <li>· Independence</li> <li>· Desired lifestyle</li> <li>· Gaining an adequate income</li> </ul>
R4	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Personal satisfaction</li> <li>· Succeeding in making a high-quality product</li> <li>· Gaining an adequate income</li> </ul>
R5	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Living in a rural area</li> <li>· Succeeding in making a high-quality product</li> <li>· Personal satisfaction</li> <li>· Gaining an adequate income</li> </ul>
R6	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Living close to nature</li> <li>· Gaining an adequate income</li> </ul>
R7	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Link with a territory</li> <li>· Working outdoors</li> <li>· Acknowledgement by consumers</li> <li>· Gaining an adequate income</li> </ul>
R8	Cortona DOC	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Living close to nature</li> <li>· Personal satisfaction</li> <li>· Promoting relationships and interpersonal exchanges</li> <li>· Gaining an adequate income</li> </ul>
R9	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Passion for wine</li> <li>· Continuing a family tradition</li> <li>· Living close to nature</li> <li>· Personal satisfaction</li> <li>· Manifesting own creativity</li> <li>· Making a financial profit</li> </ul>
R10	Chianti Classico DOCG	<ul style="list-style-type: none"> <li>· Link with a territory</li> <li>· Versatility of work</li> <li>· Personal satisfaction</li> <li>· Gaining an adequate income</li> </ul>

Almost all of the entrepreneurs answered the question about goals and motivations for establishing and running a wine business by first mentioning non-monetary motives, listing them in detail with particular enthusiasm.

Nearly all of the respondents indicated passion as a key motivation for establishing and running a business in the wine sector.

*‘I have had a passion for winemaking since I was a child. A little bit of this farm’s soil has always stayed attached to my shoes, and it has always accompanied me’.*  
(R5)

Such great passion was an important incentive in deciding to become a wine producer and in continuing on also during difficult times. This passion is not only for winemaking but for the entire ‘world’ of food and wine, including knowledge of and tasting others wineries’ products. Being in business for the love of wine also means to succeed in making a high-quality product, creating a wine that not only has a good label, is well done and has a distinct taste but that is also appreciated by consumers. A sense of personal satisfaction was therefore mentioned as another non-economic motivation by the respondents. This fulfilment derived from the winemaking process, from seeing a product that the entrepreneur had created with his/her own hands put into a bottle with its own label. In addition, some respondents underlined a strong sense of accomplishment through the acknowledgment of their products by consumers, in Italy and abroad

Few respondents underlined the opportunity to pursue a desired lifestyle or a better quality of life as a significant factor. This goal is often linked to a desire to live close to nature and to work outdoors. Working connected to the environment and to nature also means following the product’s full life cycle from the appearance of buds on the grapevine to the harvest of grapes, followed by the phases of fermentation and ageing.

In the narratives, the entrepreneurs' desire to live in a rural area was also underlined:

*'I want to work in this region because when I worked in Florence with my father, it was a sort of hell. In the countryside, nature marks my work rhythm, dictating my priorities for every day. [...] I'm fond on this place, I love it like a son'. (R5)*

Several entrepreneurs pointed out a strong link with their territory in a dual sense. For some wine owners, who have continued or have revamped an earlier family wine business, this link has the meaning of continuing a family tradition, something that their ancestors created and they want to carry on. In another sense, a link with the territory refers to a link with an environment which the wine owner has to preserve and to improve:

*'I want to enhance the potentialities of this particular piece of Chianti Classico [...], in order to valorise and to safeguard it, to improve it or at least to leave it to the next generation in the same condition. I feel like a guardian of this reality'. (R10)*

A motivation presented in earlier literature on lifestyle entrepreneurship and confirmed by this research is a desire of independence. The opportunity for winery owners to choose their business practices and strategies without orders from superiors and to be a master of their own destiny emerged clearly as important feature from the words of some respondents.

Two entrepreneurs underlined versatility as the appeal of this type of work, whose range includes primary activity in the vineyards, the transformative activity of winemaking and, last but not least, marketing and sales. Particularly this last phase of the entrepreneurial process in the winemaking sector allows owners both to manifest their creativity and to promote relationships and interpersonal exchanges.

Having identified motivations, we tried to find common themes and factors among the responses, with the purpose of gathering them following their attitudes. After considering all of the wine owners' goals and strategies and how these were integrated, we identified two entrepreneurial types.

The first type identified is represented by two entrepreneurs, characterised by a venture with particular attention to economic elements and income. For this reason, these entrepreneurs are called 'business oriented'. They recognise that, driven by non-pecuniary motivations such as a passion for wine and its world, they have gained immaterial benefits while running producing wine. However, this utility is not enough to justify the pursuit of business for them: economic motivations play the main role in orienting their entrepreneurship. As one winery owner stated, the aim was to make good money.

In contrast to the others respondents, the way they started their careers as wine producers was driven particularly by economic opportunities that they encountered during a specific moment in their lives. One entrepreneur was a young graduate with precarious employment and with a few hectares of vineyards belonging to his grandparents. He/She decided to run a business as a wine producer, thanks to a subsidy from the European Union and the Tuscany region given to young farmers for starting work in the agricultural sector. In the other case, the incentive for the entrepreneur to establish his/her wine business was a complementary family activity, which concerned winemaking and represented the main source of income. Furthermore, the respondent stated that the idea of pursuing this new path was also conditioned by his sons also working in the business and the fact that the following generation would continue this type of entrepreneurship. In contrast with members of the other groups, these two entrepreneurs have thought about selling their firm in exchange for a suitable amount of money.

As managers, these winery owners pay close attention to production costs, adopting computer software to monitor costs accounting. From a production perspective, their choices are oriented toward selling their products instead of

creating something that represented their winemaking style. An example of this customers' orientation was the decision to use an organic method not out of a desire to use environmentally friendly techniques but as a marketing strategy.

The other eight winery owners could be identified as 'lifestyle-oriented' entrepreneurs because they stated they gain mostly non-pecuniary benefits beyond economic compensation from wine-producing, as evidenced by the motivations listed above. Through analysing both goals and business strategies, it was possible to identify two tendencies among this group.

The first tendency is represented by the interviews of four winery owners, where the owners underlined environmental motivations such as a desire to work close to nature in a rural area. There is an emphasis on the pleasure of living on a vineyard, carefully taking care of it all year around, acting as the custodians for their plants and also for the surrounding nature. This environmentalist orientation materialises as each of the winery owners following an organic production method and one respondent having adopted a biodynamic technique.

These entrepreneurs often have an educational and professional background far removed from the world of wine. They have a high level of education and have all graduated with degrees in subjects such as Economics and Management, Architecture or Political Science. In three cases, the entrepreneurs decided to establish or purchase their winery to start a new stage in their life, after a previous career in a different working environment and far away from their present location. Some of the respondents saw wine-making activity as a dream to fulfil, while others had a passion for wine but had never thought to work within the sector. Two respondents in this group purchased their wine company from a farmer in the form of a property composed of a country house and some vineyards. The other two respondents took over a farm owned by their parents or grandparents, taking over properties that had not been the main source of income for their family but had instead been a sort of hobby and frequently were in a dreadful state or abandoned. They all started to restore the farms, planting new vineyards and organising a

productive cellar. They therefore enlarged and implemented the wine production, with the help of consultants such as agronomists and oenologists because of their scarce or non-existent experience in the wine sector. Even if they supervise each phase of the productive process and take part in some of them, they employ full-time and part-time workers for the agricultural phase and the winemaking. Most of their time is spent on marketing and sales, managing relationships with customers and participating in wine fairs and exhibitions in Italy and abroad.

The second tendency of lifestyle entrepreneurs was identified in four winery owners and manifested as attention given especially to specific non-pecuniary goals that have driven their wine careers and are different from the motivations of the other type of lifestyle entrepreneur. Their interviews emphasise the importance of a sense of a relationship with the territory where their farm is located and a feeling of the farm as a place they have strong roots in. This specific connection is due to the way they started their wine business. All of the entrepreneurs of this group took control of a pre-existing family-run wine company that had belonged to their parents and a farm where they grew up or spent free time in. One of them affirmed this by saying 'I grew up with wine culture'. At the time of their parents' management, these realities produced grapes for others cellars or bulk wine. At the end of their studies, these respondents decided to take control of the wineries and to produce bottled wine, frequently together with their spouses, not as a fall-back choice but motivated by a great passion for wine.

At present, the respondents in this group handle each phase of the wine-making process, which consists of the vineyard's operations, cellar procedures and marketing and sales. They are supported by their spouses and a few part-time employees, especially during peak periods such as harvest time. These entrepreneurs have acquired a great amount of expertise and experience in winemaking, and they often turn to specialists only to get a third person's suggestion on a product. The act of making wine gives these respondents great personal satisfaction, which pushes them to continue in the wine business. They want to make a high-quality product, a wine

that represents their own style but at the same time is appreciated by consumers. This is emphasised by one entrepreneur:

*‘When someone tells you that a bottle of your wine, made in this personal, familiar, craftsman size but well done, brings them joy and sharing, this brings great satisfaction and makes you very proud of yourself’.*

## **5. Discussion and conclusions**

This study has investigated entrepreneurial motivations and 10 Tuscan winery owners’ ‘style’ for establishing and running their business. Farmers in general are a heterogeneous group, with different entrepreneurial behaviours, goals and objectives. As mentioned above, some scholars have proven that farmers are not only affected by economic motivations but also by non-pecuniary gains that, in some cases, assume a crucial relevance. The current explanatory research has revealed that also among wine entrepreneurs, non-financial benefits play an important role in explaining the entrepreneurs’ behaviours. All respondents described a strong passion for wine and winemaking. In addition to this, the desire to live in a rural area close to nature and to pursue a desired lifestyle recurred time and again in the interviews. Common elements across narratives also include wanting to be independent, seeking personal satisfaction, a sense of accomplishment and in some cases continuing a family tradition.

Based on the emphasis placed by respondents on their motivations and goals in pursuing their business, and combining these with the winery owners’ characteristics and their managerial practices, it was possible to describe two entrepreneurial styles: business oriented and lifestyle oriented.

The first type, only represented by two respondents, is a business-oriented style with particular attention given to economic motivations but nevertheless recognizing the non-pecuniary benefits gained from running a wine-production business. How these entrepreneurs started their wine business and the strategies they follow in

running it form the criteria for belonging to this group. Business-oriented winery owners show characteristics that resemble other types identified in the literature on agricultural economics, such as ‘dedicated producers’ (Fairweather and Keating, 1994), ‘economic’ (Maybery et al., 2005), ‘production maximizers’ (Brodt et al., 2006) and ‘business-oriented’ (Karali et al., 2013).

The second type identified in the current study includes the majority of the respondents, characterised by their lifestyle-oriented style. The entrepreneurs in this group underline the preponderance of non-pecuniary motivations in establishing and running their business, even though maintaining an economically sound business is necessary for supporting improvements in their lifestyle. Taking into account both business motivations and the strategies implemented, we have identified two tendencies among the lifestyle-oriented group. The first is reflected among entrepreneurs who started their wine business as novices and run it with particular attention paid to environmental sustainability. The second tendency is manifest among winery owners who, driven by motivations such as passion and a bond to their land, decide to take over the family business to lead their desired lifestyle.

The characteristics of the lifestyle-oriented entrepreneurs described in this study have something in common with those defined in literature on farm management. Brodt et al. (2006) have described ‘environmental stewards’, entrepreneurs who prioritise the preservation of nature over making the highest possible profits. This aspect of environmental sustainability is shared by a part of the lifestyle-oriented entrepreneurs of our study. In addition, this environmental sensibility is the predominant feature of the ‘lifestyler’ farmers identified by Karali et al. (2013). A certain affinity with our lifestyle-oriented entrepreneurs could be found among the group of ‘lifestyle-seeking’ wine entrepreneurs, described by Dawson (2012) while investigating the wine sector. Dawson’s entrepreneurs’ motivations for owning a winery were dominated by non-economic factors that they primarily tried to achieve even while acquiring a sufficient income to sustain a profitable business. These entrepreneurs established or purchased a winery during a new stage of their life, often

after a previous career in a different sector and without previous experience in winemaking. Despite the similarities between this group and the lifestyle-oriented group identified in our study, it is possible to point out a difference as well. The desire of the 'lifestyle-seeking' group to establish a business in a rural and pleasant area entails searching for a place without disturbances or noise. Some entrepreneurs are therefore reluctant to host visitors and tourists, while others partake in hospitality as long as it will not interfere with their lifestyle. Our lifestyle-oriented entrepreneurs do not manifest this hesitation toward tourists. On the contrary, all of our respondents have an organized system for hosting guided tours and wine tastings, and the activity of agritourism is present in nearly all wineries.

The two entrepreneurial types evidenced in our study, business-oriented and lifestyle-oriented, diverge from each other with regards to some of the features described, particularly with regard to the kinds of entrepreneurial motivations that drive their business. If we imagine the two managerial types positioned on a continuum, we can consider them to be on opposite sides but not at opposite ends. Business-oriented winery owners primarily seek profit maximisation, but passion and other non-pecuniary motivations play a crucial role. Among the other group of lifestyle-oriented entrepreneurs, immaterial profits override economic ones, but with a style of management that is profitable and that does not mean financial suicide.

One of the challenges that lifestyle-oriented entrepreneurs encounter in their business development is balancing their goals. They want to pursue their chosen lifestyle and all the non-pecuniary benefits that have been described, but at the same time they feel a real need to be economically viable to survive. In order to pursue this objective, the lifestyle-oriented entrepreneur has to implement thoughtful strategies, avoiding potential risks caused by irrational choices that could expose the business to adverse economic cycles or to external market changes.

This study has shown a strong presence of lifestyle-oriented entrepreneurs within the sector of family-run small- to medium-sized wineries, and many new businessmen enter the industry from different fields, having decided to make a new

venture into winemaking. This ‘biodiversity’ of backgrounds could bring a breath of fresh air into the wine-making sector in terms of new production ideas and marketing strategies that add competitiveness to this agricultural industry.

Lifestyle-oriented entrepreneurs, with the strategies they implement and their characteristic features, could represent a message of a guarantee for consumers, both in terms of intrinsic and extrinsic qualities. In this sense, it is to underline the particular attention to the entire wine-making process, the creation of a tasty product linked to the territory it comes from and expressive of a terroir, a sensibility towards the environment and nature. It is no coincidence that all of the entrepreneurs classified as lifestyle-oriented in this study implemented organic agricultural methods.

The heterogeneity of the objectives described in this paper could have implications for the analysis of the entire wine-making sector. The strong presence of lifestyle-oriented entrepreneurs within small- to medium-sized companies means that the investigation of management should take into account non-economic profits in order to avoid restricting the economic analysis. With regards to cost accounting, the lifestyle-oriented entrepreneur might decide to sustain greater costs during the productive process to support his non-monetary benefits and his desired lifestyle, thus obtaining lower economic profits. In this case, the lifestyle-oriented entrepreneur considers the utility derived from immaterial profits greater than the disutility of lower economic profits. Paradoxically, this type of manager could choose to produce wine while obtaining only normal profits just enough to cover production costs in order to maximise his non-monetary benefits. In this way, all the economic profits correspond to immaterial and non-pecuniary profits. The success of these companies can be measured not only in economic terms but also through considering personal success and the achievement of personal non-monetary goals. This could enable a new interpretation of the contribution of small- to medium-sized family businesses to the economic landscape.

Furthermore, the establishment of these entrepreneurs' businesses represents an economic contribution to rural areas, particularly those characterised by depopulation and backward agricultural systems. As evidenced by this study, lifestyle-oriented businessmen establish businesses *ex novo* or take over pre-existing wine farms, often owned by their family but not the main source of the family's income.

It should be remembered that this study is qualitative, with the purpose of understanding the phenomenon in question. The farmers, whose behaviour was classified into types based on business motivations and managerial strategies, is context- and case-specific. The choice to investigate entrepreneurship in two specific wine territories has led us to outline an overview of the Tuscan wine sector as a whole. To make generalisations regarding the wine-making sector in other territories, further studies are needed. Starting with the constructs here identified, future studies could investigate a larger sample using the instruments of quantitative research.

With the help of quantitative methods, future studies can estimate non-pecuniary motivations among lifestyle-oriented entrepreneurs from an economic point of view. In other words, the seeming economic inefficiency arising from the strategies implemented by lifestyle-oriented entrepreneurs could be estimated in economic terms in order to better understand this phenomenon within the wine sector.

## References

- Andersson, T., Carlsen, J., & Getz, D. (2002). Family business goals in the tourism and hospitality sector: Case studies and cross-case analysis from Australia, Canada, and Sweden. *Family Business Review*, 15(2), 89-106.
- Ateljevic, I., & Doorne, S. (2000). 'Staying within the fence': Lifestyle entrepreneurship in tourism. *Journal of sustainable tourism*, 8(5), 378-392.
- Austin, E. J., Willock, J., Deary, I. J., Gibson, G. J., Dent, J. B., Edwards-Jones, G., Morgan, O., Grieve, R., & Sutherland, A. (1998). Empirical models of farmer behaviour using psychological, social and economic variables. Part I: linear modelling. *Agricultural Systems*, 58(2), 203-224.
- Banks, G., & Overton, J. (2010). Old world, new world, third world? Reconceptualising the worlds of wine. *Journal of Wine Research*, 21(1), 57-75.
- Barber, W. J. (1967). *A history of economic thought*. Wesleyan University Press.
- Begalli, D., Codurri, S., & Gaeta, D. (2009). Wine and web marketing strategies: The case study of Italian speciality wineries. *British Food Journal*, 111(6), 598-619.
- Bergevoet, R. H., Ondersteijn, C. J. M., Saatkamp, H. W., Van Woerkum, C. M. J., & Huirne, R. B. M. (2004). Entrepreneurial behaviour of Dutch dairy farmers under a milk quota system: goals, objectives and attitudes. *Agricultural Systems*, 80(1), 1-21.
- Bernetti, I., Casini, L., & Marinelli, N. (2006). Wine and globalisation: changes in the international market structure and the position of Italy. *British Food Journal*, 108(4), 306-315.
- Brodt, S., Klonsky, K., & Tourte, L. (2006). Farmer goals and management styles: implications for advancing biologically based agriculture. *Agricultural systems*, 89(1), 90-105.
- Bruwer, J., & Johnson, R. (2010). Place-based marketing and regional branding strategy perspectives in the California wine industry. *Journal of Consumer Marketing*, 27(1), 5-16.
- Bryman, A. (2015). *Social research methods*. Oxford university press.
- Burns, P. (2010). *Entrepreneurship and small business*. Palgrave Macmillan.
- Cantillon, R. (2001). *Essays on the nature of commerce in general*. Transaction Publishers.

- Carland, J. C., Carland, J. W., & Stewart, W. H. (2015). Seeing what's not there: The enigma of entrepreneurship. *Journal of Small Business Strategy*, 7(1), 1-20.
- Carsrud, A., & Brännback, M. (2011). Entrepreneurial motivations: what do we still need to know?. *Journal of Small Business Management*, 49(1), 9-26.
- Casini, L., Marone, E., & Scozzafava, G. (2014). Management accounting in the winegrowing sector: Proposal and development of an " Ad Hoc" control system. *Calitatea*, 15(138), 70.
- Charters, S., & Menival, D. (2008, July). A typology of small producers in the champagne industry. In *4th International Wine Business Research Conference, Siena*.
- Cooper, A. C., & Dunkelberg, W. C. (1986). Entrepreneurship and paths to business ownership. *Strategic management journal*, 7(1), 53-68.
- Cromie, S. (1987). Motivations of aspiring male and female entrepreneurs. *Journal of Organizational Behavior*, 8(3), 251-261.
- Dawson, D. (2012). *Winery entrepreneurs rooted in "Their Place": how lifestyle decisions, business motivations and perceptions of place influence business practices and regional initiatives in the wine and tourism industries* (Doctoral dissertation, Lincoln University).
- De Lillo, A. (Ed.). (2010). *Il mondo della ricerca qualitativa*. UTET università.
- De Scitovszky, T. (1943). A note on profit maximisation and its implications. *The Review of Economic Studies*, 11(1), 57-60.
- Fairweather, J. R., & Keating, N. C. (1994). Goals and management styles of New Zealand farmers. *Agricultural systems*, 44(2), 181-200.
- Gallucci, C., & Nave, G. (2012). Family vs non-family: un'analisi sulle performance nel wine business. *Esperienze d'Impresa: Dipartimento di Studi e Ricerche Aziendali, Università di Salerno*, 2(1), 49-67.
- Gasson, R. (1973). Goals and values of farmers. *Journal of agricultural economics*, 24(3), 521-542.
- Getz, D., & Carlsen, J. (2000). Characteristics and goals of family and owner-operated businesses in the rural tourism and hospitality sectors. *Tourism management*, 21(6), 547-560.

- Glaser, B., & Strauss, A. (1967). Grounded theory: The discovery of grounded theory. *Sociology The Journal Of The British Sociological Association*, 12, 27-49.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82.
- Heelas, P., Morris, P., & Morris, P. M. (Eds.). (1992). *The values of the enterprise culture: The moral debate*. Taylor & Francis.
- Henderson, J. (2002). Building the rural economy with high-growth entrepreneurs. *Economic Review-Federal Reserve Bank of Kansas City*, 87(3), 45.
- Howley, P. (2015). The happy farmer: the effect of nonpecuniary benefits on behavior. *American Journal of Agricultural Economics*, 97(4), 1072-1086.
- Howley, P., Buckley, C., Donoghue, C. O., & Ryan, M. (2015). Explaining the economic 'irrationality' of farmers' land use behaviour: The role of productivist attitudes and non-pecuniary benefits. *Ecological Economics*, 109, 186-193.
- Johansson, A. W. (2009). Regional development by means of broadened entrepreneurship. *European Planning Studies*, 17(8), 1205-1222.
- Kalantaridis, C., & Bika, Z. (2006). Local embeddedness and rural entrepreneurship: case-study evidence from Cumbria, England. *Environment and Planning A*, 38(8), 1561-1579.
- Karali, E., Brunner, B., Doherty, R., Hersperger, A. M., & Rounsevell, M. D. (2013). The effect of farmer attitudes and objectives on the heterogeneity of farm attributes and management in Switzerland. *Human ecology*, 41(6), 915-926.
- Koster, S., Markantoni, M., & Strijker, D. (2010). Side activity entrepreneur: Lifestyle or economic oriented. *Johansson, Karlsson & Stough (eds.). Agglomeration, Clusters and Entrepreneurship: Studies in regional economic development Groningen/Niederlande*.
- Lashley, C., & Rowson, B. (2010). Lifestyle businesses: Insights into Blackpool's hotel sector. *International Journal of Hospitality Management*, 29(3), 511-519.
- Lockshin, L., & Corsi, A. M. (2012). Consumer behaviour for wine 2.0: A review since 2003 and future directions. *Wine Economics and Policy*, 1(1), 2-23.
- Low, M. B., & MacMillan, I. C. (1988). Entrepreneurship: Past research and future challenges. *Journal of management*, 14(2), 139-161.

- Luke, B., Verreynne, M. L., & Kearins, K. (2007). Measuring the benefits of entrepreneurship at different levels of analysis. *Journal of Management & Organization*, 13(04), 312-330.
- Lumpkin, G. T., & Erdogan, B. (1999, January). If not entrepreneurship, can psychological characteristics predict entrepreneurial orientation? A pilot study. In *Proceedings of the USASBE/SBIDA Annual National Conference-Sailing the Entrepreneurial Wave Into, San Diego, California* (Vol. 21).
- Marchant, B., & Mottiar, Z. (2011). Understanding lifestyle entrepreneurs and digging beneath the issue of profits: Profiling surf tourism lifestyle entrepreneurs in Ireland. *Tourism Planning & Development*, 8(2), 171-183.
- Marcketti, S. B., Niehm, L. S., & Fuloria, R. (2006). An exploratory study of lifestyle entrepreneurship and its relationship to life quality. *Family and Consumer Sciences Research Journal*, 34(3), 241-259.
- Marone, E., Bertocci, M., Boncinelli, F., & Marinelli, N. (2017). The cost of making wine: A Tuscan case study based on a full cost approach. *Wine Economics and Policy*. (In press)
- Martinelli, A. (1994). Entrepreneurship and management. *The handbook of economic sociology*, 476-503.
- Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In *Forum qualitative Sozialforschung/Forum: qualitative social research* (Vol. 11, No. 3).
- Matilainen, A., & Lähdesmäki, M. (2014). Nature-based tourism in private forests: Stakeholder management balancing the interests of entrepreneurs and forest owners?. *Journal of rural studies*, 35, 70-79.
- Maybery, D., Crase, L., & Gullifer, C. (2005). Categorising farming values as economic, conservation and lifestyle. *Journal of Economic Psychology*, 26(1), 59-72.
- McClelland, D. C. (1961). *The Achieving Society*, Van Nostrand, Princeton, NY
- Mediobanca (2017). Indagine sul settore vinicolo. *Area Studi di Mediobanca, Italy*. Available at: [http://www.mbres.it/sites/default/files/resources/download\\_it/Indagine\\_vini\\_2017.pdf](http://www.mbres.it/sites/default/files/resources/download_it/Indagine_vini_2017.pdf). (Accessed 03/09/2017).

Ogbor, J. O. (2000). Mythicizing and reification in entrepreneurial discourse: Ideology-critique of entrepreneurial studies. *Journal of management studies*, 37(5), 605-635.

O'Leary, Z. (2004). *The essential guide to doing research*. Sage, London.

Patton, M.Q. (2002). *Qualitative research and evaluation methods, third edition*. Sage, Thousand Oaks, CA.

Peters, M., Frehse, J., & Buhalis, D. (2009). The importance of lifestyle entrepreneurship: A conceptual study of the tourism industry. *Pasos*, 7(2), 393-405.

Pomarici, E. (2005). Il mercato mondiale del vino: tendenze, scenario competitivo e dualismo tra vecchio e nuovo mondo. Centro per la Formazione in Economia e Politica dello Sviluppo Rurale, working paper, (7), 5.

Poutziouris, P. (2003). The strategic orientation of owner-managers of small ventures: evidence from the UK small business economy. *International Journal of Entrepreneurial Behavior & Research*, 9(5), 185-214.

Presenza, A., Yucelen, M., & Camillo, A. (2016). Passion before profit in hospitality ventures. Some thoughts on Lifestyle Entrepreneurs and Albergo Diffuso. *Sinergie*, 34(99), 221-239.

Ray Chaudhury, S., A. Albinsson, P., David Shows, G., & Moench, V. (2014). The winemaker as entrepreneurial marketer: an exploratory study. *International Journal of Wine Business Research*, 26(4), 259-278.

Rimington, M., Williams, C., & Morrison, A. (2009). *Entrepreneurship in the hospitality, tourism and leisure industries*. Routledge.

Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (Vol. 55). Transaction publishers.

Scott Morton, F. M., & Podolny, J. M. (2002). Love or money? The effects of owner motivation in the California wine industry. *The Journal of Industrial Economics*, 50(4), 431-456.

Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International journal of Entrepreneurial Behavior & research*, 11(1), 42-57.

Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human resource management review*, 13(2), 257-279.

- Shaw, G., & Williams, A. M. (1998). Entrepreneurship, small business culture and tourism development. *The economic geography of the tourism industry*, 235-55.
- Smith, N. R. (1967). The entrepreneur and his firm: The relationship between type of man and type of company. *Occasional Papers, Bureau of Business and Economic Research, Michigan State University*, 109.
- Smith, N. R., & Miner, J. B. (1983). Type of entrepreneur, type of firm, and managerial motivation: Implications for organizational life cycle theory. *Strategic management journal*, 4(4), 325-340.
- Stone, I., & Stubbs, C. (2007). Enterprising expatriates: lifestyle migration and entrepreneurship in rural southern Europe. *Entrepreneurship and regional development*, 19(5), 433-450.
- Sugand, J. N. (2014). Generating Profits out of Passion: A Study of New Zealand Wineries. Master thesis submitted to Victoria University of Wellington.
- Vandermersch, M., & Mathijs, E. (2002). Do management profiles matter? An analysis of Belgian dairy farmers. Contributed paper. Proceedings of the 10th EAAE Congress, August 28-31, Zaragoza, Spain.
- Walker, E., & Brown, A. (2004). What success factors are important to small business owners?. *International small business journal*, 22(6), 577-594.
- Willock, J., Deary, I. J., McGregor, M. M., Sutherland, A., Edwards-Jones, G., Morgan, O., Dent, B., Grieve, R., Gibson, G., & Austin, E. (1999a). Farmers' attitudes, objectives, behaviors, and personality traits: The Edinburgh study of decision making on farms. *Journal of Vocational Behavior*, 54(1), 5-36.
- Willock, J., Deary, I. J., Edwards-Jones, G., Gibson, G. J., McGregor, M. J., Sutherland, A., Dent, B., Morgan, O., & Grieve, R. (1999b). The role of attitudes and objectives in farmer decision making: business and environmentally-oriented behaviour in Scotland. *Journal of Agricultural Economics*, 50(2), 286-303.
- Woo, C. Y., Cooper, A. C., & Dunkelberg, W. C. (1991). The development and interpretation of entrepreneurial typologies. *Journal of business venturing*, 6(2), 93-114.



## **ARTICLE 2**



# **Reach for the stars: the impact of a new top-tier typology within a PDO wine on consumers' preferences.**

## **Abstract**

In a world characterized by a significant evolution in wine consumption, with a redefinition of the demand in favor of quality, PDO wines constituted a valid strategy of marketing and competitiveness for producers. However, an excessive use of this designation policy could reduce consumer's cognizance and make the certification system useless. In order to valorize the positive quality reputation of the product, on 2014 the Consortium of Chianti Classico introduced 'Chianti Classico DOCG Gran Selezione', a new typology of Chianti Classico posed at the top of the quality production pyramid. The aim of this study is to verify whether the introduction of a higher-tier certification within a PDO denomination may represent an effective strategy to leverage the value of the brand and to strengthen the relationship between quality production and territory. With this purpose, we performed a choice experiment on Italian wine consumers. The application of a Latent Class Model allowed us to identify three distinct classes of consumers described by different preferences for prices and PDO wines. Moreover, a Principal Component Analysis was implemented for evaluating the importance of a series of attributes orientating the wine purchase of the three classes. Our results, detecting preferences heterogeneity among consumers, show the existence of a segment that appreciates the introduction of the new typology of Chianti Classico and therefore validates this development strategy.

*Keywords:* Latent class analysis model; Choice experiment; Segmentation; Wine; Chianti Classico.

## 1. Introduction

During the last decade, the world wine sector encountered quick and radical changes that led to a significant evolution in the structure of wine market. This is reflected in changing volumes of production and habits of wine consumptions, where there was a redefining of the supply and of the demand in favor of quality at the expense of quantity (Bernetti et al., 2006). The tendency to a daily wine consumption has increasingly lost importance to the advantage of occasional consumption, characterized by wines with high quality and with certification (Di Vita et al., 2014).

In this scenario, quality may represent a key element of marketing and competitiveness for wine producers (Rubini et al., 2013). One way to communicate to consumers the concept of quality of the wine is linking quality to the territory, in order to create a relationship wine/territory immediately perceivable as a sign of typicality and excellence (Scozzafava et al., 2016). The European Union guarantees and supports qualitative attributes through a legislative framework, which includes instruments such as Protected Designations of Origin (PDO). PDO is defined as ‘the name of a region, a specific place or, in exceptional cases, a country used to describe a product that complies with the following requirements:(i) its quality and characteristics are essentially or exclusively due to a particular geographical environment with its inherent natural and human factors;(ii) the grapes from which it is produced come exclusively from this geographical area; (iii) its production takes place in this geographical area’ (Council Regulation (EC), No. 479/2008, p.17). In accordance with European classification, the Italian wine classification system (Legislative Decree, No. 61/2010) recognizes, inside PDO certification, designation of controlled origin (*Denominazione di Origine Controllata*, DOC) and designation of controlled and protected origin (*Denominazione di Origine Controllata e Garantita*, DOCG). The DOCG wines, placed on the top of the wine qualitative pyramid, are subject to stricter requirements compared to DOC.

In Italy, PDO wine production has been growing constantly in the last years, increasing from 13,062,450 hl in 2005 to 19,828,964 hl in 2015 (FEDERDOC,

2016). This trend is due to both the increment of PDO wines, which reached the number of 407 designations (FEDERDOC, 2016), and the growing PDO wines demand by consumers. The total consumption of wine in Italy is shifted from an average of 59.1 liters per capita in 2003 to 43.2 liters per capita in 2012 (OIV, 2012). This reduction of consumed volumes has been accompanied by an increase of PDO wine consumption (ISMEA, 2013) and a growth in their quota of sales, greater than wines without certification (Contini et al., 2015a).

However, in the last years there was a debate about the system of PDO wine in Italy, particularly with regard the rapid proliferation of the number of denominations. Several wine appellations, with different standards, might confuse consumers and make the certification system useless (Castriota, 2015). Furthermore, an excessive use of this designation policy within the same territory could bring a ‘mark inflation’ in the marketplace and therefore a diminishing consumer’s cognizance (Adinolfi et al., 2011). In order to overcome these criticisms and to valorize the positive quality reputation of their product, on 2010 Consorzio of Barolo DOCG introduced a system of sub-zoning inside the denomination. This strategy consists in adding ‘menzioni geografiche aggiuntive’, that is the name of distinctive areas or municipalities in which grapes are produced. Furthermore, it is also possible to indicate the name of a particular vineyard (‘vigna’) which requires stricter production rules (Consorzio Barolo, 2017). The aim of this internal differentiation is to further enhance the tie between wine and territory, to diversify the market supply, and to increase consumer’s awareness. However, this sub-zoning system does not correspond to ‘cru’ French classification, characterized by a pyramidal qualitative diversification. For example, Burgundy Appellation d’Origine Contrôlée (AOC) wines are classified according to their own unique four-levels classification wherein ‘Grands Cru’ wines are at the top of the pyramid, followed by ‘Premier Cru’, ‘Communal wines’, and ‘Regional wines’ that are the lowest level of classification. Therefore, the Burgundy classification system is based on a qualitative vertical differentiation, whereas the Barolo sub-zoning classification reflects a geographical horizontal differentiation.

With the purpose of reinforcing its brand awareness and of improving the qualitative vertical differentiation, on 2013 Consortium of Chianti Classico (the authority that gathers most of Chianti Classico DOCG producers) approved a series of changes to production regulations introducing ‘Chianti Classico DOCG Gran Selezione’. Gran Selezione is a new premium typology of Chianti Classico produced with grapes harvested only from the winery’s own vineyards, aged for a minimum of 30 months, and identified by certain chemical-physical and organoleptic characteristics (MiPAAF, 2014). The Consortium posed ‘Gran Selezione’ at the top of the production pyramid, above vintage wine ‘Chianti Classico DOCG’ and the reserve category ‘Chianti Classico Riserva DOCG’.

The introduction of a higher-tier certification inside a pre-existent PDO is a novelty in Italian wine sector and is a way for firms both to leverage value of their brands and to strengthen the relationship between quality production and territory. This marketing strategy of introducing an upward line extension may increase the overall demand and market share for the Chianti Classico (Caldieraro et al., 2015), intercepting new segment of consumers who are seeking for premium quality products, especially for a special occasion. However, this horizontal extension may create potential confusion among consumers, with some risks in terms of cannibalization (Desai, 2001) or may hinder the perceived quality of the other products in the line (Costanigro et al., 2017).

Starting from Chianti Classico DOCG as case of study, the principal research question of our paper is to verify whether the introduction of a qualitative diversification of production within a PDO denomination may represent an effective strategy to promote wines of a premium winegrowing region. Hence, this research will test the following hypotheses:

Hypothesis 1: The introduction of a higher-tier typology of premium wine within a PDO is appreciated by consumers.

Hypothesis 2: The preferences for PDO wines to consume depend on socio-demographic characteristics and on personal involvement in terms of wine.

In order to answer these questions, we have investigated the preference of Italian wine consumers with a discrete choice experiment (DCE). In particular, we have followed the approach used by Mueller et al. (2010) who performed a Latent Class choice Model (LCM) for detecting preference heterogeneity among wine consumers. After this introduction, the following section describes ‘Consumer behavior and wine attributes’. After a presentation of the Case study in section 3, in section ‘Materials and methods’ we illustrate the theoretical framework and the choice experiment. In section ‘Result and discussion’, we present and debate the results. In the final section, we provide some considerations about the results as well as the implications that follow.

## **2. Consumer behavior and wine attributes**

The action of choosing a bottle of wine is difficult and confusing for many consumers, due principally to the high number of cues that are associated with wine (Lockshin et al, 2006). Numerous studies have analyzed attributes that affect wine selection process, which can be divided into intrinsic and extrinsic (Jover et al., 2004). Intrinsic attributes are directly related to the physical-chemical aspects of the product, such as color, alcohol content, flavor, that cannot be altered without changing the product itself (Lockshin & Hall, 2003). Extrinsic attributes are lower level cues that can be modified without changing the product and include brand, price, packaging, and denomination of origin (Sáenz-Navajas and al., 2013).

Several scientific articles have consistently demonstrated the importance of denomination of origin as an extrinsic attribute that orients consumer wine purchase. Carsana et al. (2017) observed that for French consumers, AOC label (the French wine denomination system) is the most important attribute for choosing wine. Skuras and Vakrou (2002) estimated a greater willingness to pay for a certified wine than one without certification. The value of PDO wine was recognized by consumers of Northern Ireland (Keown & Casey, 1995), of Greece (Tzimitra-Kalogianni et al., 1999), of Spain (Mtimet and Albisu, 2006), of Italy (Lai et al., 2006; Scarpa et al.,

2006). The importance of PDO was also measured on Millennial generation: De Magistris et al. (2011), in an analysis on Millennial of USA and Spain, stressed that Spanish Millennials ascribed more importance to the designation of origin, unlike the American. Furthermore, consumers' preferences are influenced by the purchase place: Martínez et al. (2006) evidenced that PDO was the attribute with the largest relative importance when the wine is purchased in restaurants, whereas in shops.

As PDO certification, the price has always been considered one of the most important attributes for consumers' choice, and wine is no exception (Corsi et al., 2012). Jenster and Jenster (1993) estimated that price was one of the overriding criteria in making the wine purchase decision among European wine consumers. Similarly, Batt and Dean (2000) found that price was the most important factor that influences the consumer's decision to purchase wine from retail liquor stores in Australia. Bruwer and Buller (2012) showed that Japanese consumers consider price one of the five significant cues that influence the wine buying decision.

Consumers consider price as an indicator of the level of quality (Dodds et al., 1991), for the educated as well as neophyte wine buyer (Quester & Smart, 1998), especially to reduce the perceived risk of a purchase (Mitchell & Greatorex, 1989).

### **3. Case study**

An interesting winemaking reality in Italy is Chianti Classico DOCG, a historical denomination with one of the most popular geographical names in the world (Brunori & Rossi, 2007). In 2016, vineyards registered as Chianti Classico were 7,200 Ha (Consorzio Chianti Classico, 2017) and the certificated wine output amounted at 294,233 hectolitres (FEDERDOC, 2016). Currently, Consorzio of Chianti Classico counts 580 members, equal to 96% of Chianti Classico DOCG wine producers (Consorzio Chianti Classico, 2017).

The first notarial document in which the Chianti refers to the wine produced in this area dates back to 1398 (Rubini et al., 2013). In 1716 Cosimo III de' Medici, the Grand Duke of Tuscany, for the first time in history decided to issue a notice to

define the boundaries of some particularly well-suited areas to the production of fine quality wines, including the Chianti zone. The success of Chianti wine grew so much that in 1924 was instituted the Consortium of Protection and in 1932 a specific ministerial decree was issued to delimit officially boundaries of Chianti. Furthermore, that decree distinguished the original production zone, by adding the adjective “Classico” (represented by the famous black rooster), from the rest of Chianti territory. In 1984, Chianti obtained the DOCG status, within which Chianti Classico was simply considered a typology with more selective characteristics, and only in 1996 Chianti Classico became an independent DOCG (Consorzio Chianti Classico, 2017).

In 2013 Consorzio of Chianti Classico introduced in the procedural guideline ‘Chianti Classico DOCG Gran Selezione’, a high-tier wine typology with strict territorial and production characteristics. The objective of this novelty is an upwards stratification of the Chianti Classico supply, for reaching consumers interested in premium quality wines.

## **4. Materials and methods**

### *4.1 Theoretical framework*

Consumers’ preferences were studied through a discrete choice experiment. This method for analysing the value of attributes has been used in consumers research about food in general (Loureiro & Umberger, 2007; Alfnes et al., 2006; Contini et al., 2015b; Gerini et al., 2016) and wine specifically (Lockshin et al., 2006; Mueller et al., 2010; Williamson et al., 2016).

The Choice Experiment method derives from the theory of Lancaster (1966), according which the utility of a good is derived from the sum of the value of all its attributes, rather than the good per se. This is combined with McFadden’s random utility theory (1974), which postulates that the  $i$ -th consumers’ utility of choosing a product, in our case a label of wine  $j$ , is represented by:

$$U_{ij} = V_{ij} + \varepsilon_{ij} \quad (1)$$

where  $V_{ij}$  is the systematic component expressed as a function of the attributes presented (wine attributes in our study) and  $\varepsilon_{ij}$  is the unobservable random error term. Individual  $i$  will choose the alternative with greater utility, so he will choose alternative  $j$  rather than alternative  $k$ , in the choice set  $C$ , if:

$$U_{ij} > U_{ik} \quad (2)$$

which, in probabilistic terms, leads to:

$$P_{ij} = \Pr(V_{ij} + \varepsilon_{ij} \geq V_{ik} + \varepsilon_{ik}; j \neq k, \forall k \in C) \quad (3)$$

The choice experiment is based on this assumption (Carlsson et al., 2007; Lusk and Schroeder, 2004).

To investigate the possible heterogeneity caused by individual differences, we performed a *post hoc* market segmentation. Since for wine consumers is more usual to find individuals' groups with similar preferences instead consumer with unique preferences (Mueller et al., 2010), a LCM was chosen, which allowed grouping consumers with similar preferences and behavior (Swait, 1994; Hagenaars & McCutcheon, 2002). The LCM assumes that the population consists of a number of latent classes  $S$  that differ in their utility between the classes but are similar within. Class  $s$  ( $s=1, \dots, S$ ) is latent because the belonging of an individual to a class is not assigned by researchers but detected by the model (Boncinelli et al., 2017). LCM simultaneously approximated parameters for each class and individual class membership probabilities. The indirect utility function for member  $i$  of a class  $s$  is:

$$U_{ij|s} = \beta_s' x_{ij} + \varepsilon_{ij|s} \quad (4)$$

where  $x_{ij}$  is a vector of attributes (price in our case) and dummy for labels,  $\beta_s$  is the class-specific utility parameter vector, and  $\varepsilon_{ij|s}$  is the error term that is assumed to be independently distributed with an extreme value distribution.

A complete mathematical derivation of the LCM can be found in Boxall and Adamowicz (2002), Louviere et al. (2000), and Swait (1994).

#### *4.2 Experimental design*

Basing on previous literature, in order to analyze the impacts on consumers after the introduction of a higher-tier certification inside a well-established PDO such as Chianti Classico DOCG, we opted for a labeled discrete choice experiment inherent PDO wine labels with different price levels each.

In the DCE, consumers were asked to select a bottle of wine they would choose to buy among five bottles of wine and a no-choice option, both for a special occasion and everyday consumption. The chosen five labels include three types of Chianti Classico DOCG (Chianti Classico, Chianti Classico Riserva, Chianti Classico Gran Selezione), a Chianti DOCG and a Brunello di Montalcino DOCG. This choice intends to investigate the possible consequences of introducing the new typology of Chianti Classico, both in terms of internal cannibalization and of comparison with one of the main competitors, namely Brunello di Montalcino. In fact, all the labels chosen are red wines from Tuscany, with a prevalent content of ‘Sangiovese’ grape variety and are strongly oriented towards quality. In particular, Chianti DOCG is produced with at least of 70% of ‘Sangiovese’ and requires minimum 3 months of ageing before purchase. In Chianti Classico DOCG, there is a presence of Sangiovese at least of 80% and minimum ageing varies among typologies: 10 months for the Chianti Classico, 24 months for Riserva type and 30 months for Gran Selezione type. Brunello di Montalcino DOCG is produced only with ‘Sangiovese’ and his minimum ageing period is of 60 months. The no-choice option was offered because consumers, under forced-choice, may often produce biased or incomplete findings that lead to incorrect conclusions (Dhar & Simonson, 2003).

For each label, we proposed four specific levels of price: starting from the median market price (from IRI-Infoscan data of 2015), they were identified incrementing or reducing these values by 10% and 30% (Table 1).

Table 1

Price levels for each wine label.

<b>Chianti D.O.C.G.</b>	<b>Chianti Classico D.O.C.G.</b>	<b>Chianti Classico Riserva D.O.C.G.</b>	<b>Chianti Classico Gran Selezione D.O.C.G.</b>	<b>Brunello di Montalcino D.O.C.G.</b>
€ 4.20	€ 9.10	€ 14.00	€ 17.50	€ 21.00
€ 5.40	€ 11.70	€ 18.00	€ 22.50	€ 27.00
€ 6.60	€ 14.30	€ 22.00	€ 27.50	€ 33.00
€ 7.80	€ 16.90	€ 26.00	€ 32.50	€ 39.00

Taking into consideration labels and prices, the result is a factorial design of  $4^5 = 1024$  possible choice situations. With an orthogonal fractional factorial design, we reduced the number of choice sets using Ngene© (Choice-Metrics, [www.choice-metrics.com](http://www.choice-metrics.com)). The selection of the orthogonal design instead of presenting all possible product combinations limits the information only to the main effects of the attributes. This method ignores interactions between attributes, but obtains advantages in terms of simplicity and efficiency (Louviere et al., 2000; Kirk, 2012). The orthogonal design produced, for each respondent, 12 choice situations with five profiles each plus the no-choice alternative. For each choice set (see Fig. 1) respondents were asked to choose carefully one wine from five alternatives or the no choice option.

Before participating to the experiment, consumers viewed an information sheet with the definition of DOCG certification, the meaning and use of terms ‘Riserva’ and ‘Gran Selezione’ in Chianti Classico wine and a brief description of each label appearing in the DCE.

The DCE was introduced to participants by this following instruction: ‘Imagine to buy a bottle (750ml) of red Tuscan wine for a special occasion. Wines are characterized by a PDO certification and price. Please choose your favorite bottle. If you would not buy any of these, you can select the no-choice option.’

	<b>Chianti Classico Riserva D.O.C.G.</b>	<b>Brunello di Montalcino D.O.C.G.</b>	<b>Chianti Classico D.O.C.G.</b>	<b>Chianti D.O.C.G.</b>	<b>Chianti Classico Gran Selezione D.O.C.G.</b>	
	€ 18.00	€ 39.00	€ 9.10	€ 6.60	€ 22.50	None
Daily consumption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consumption for a special occasion (anniversary, gift, birthday, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fig. 1. Example of choice set

### 4.3 Estimation methods

Starting from equation (4), in this study the utility takes form:

$$\begin{aligned}
 U_{ijs} = & \beta_{0s} (NONE)_j + \beta_{02s} ChiantiClassico_j + \beta_{03s} ChiantiClassicoRiserva_j \\
 & + \beta_{04s} ChiantiClassicoGranSelezione_j + \beta_{05s} BrunellodiMontalcino_j \\
 & + \beta_{1s} PRICEA_j + \beta_{2s} PRICEB_j + \varepsilon_{ijs}
 \end{aligned} \tag{5}$$

where  $\beta_0$  is the ‘out-put’ alternative (Costanigro et al., 2017),  $\beta_{0j}$  are alternative specific constants between a reference label, Chianti DOCG, and the others wine bottles, and PriceA<sub>j</sub> and PriceB<sub>j</sub> are two variables so defined:

$$PRICEA_j = PRICE_j \times [Chianti_j + ChiantiClassico_j] \tag{6}$$

$$PRICEB_j = PRICE_j \times \left[ \begin{array}{l} ChiantiClassicoRiserva_j + \\ ChiantiClassicoGranSelezione_j + \\ BrunellodiMontalcino_j \end{array} \right] \tag{7}$$

where  $\beta_j$  is the coefficient for the lower-priced wines and  $\beta_j$  is the coefficient for higher-priced wine. The choice probability that an individual  $i$ , conditional to belonging to class  $s$ , chooses alternative  $j$  from a particular set  $C$  is expressed as:

$$P_{ij|s} = \frac{\exp(\beta_s x_{ij})}{\sum_{k=1}^C \exp(\beta_s x_{ik})} \quad (8)$$

The classes obtained by LCM were further analyzed with Chi-squared Automatic Interaction Detection (CHAID) method, in order to investigate relationships between socio-demographics variables and attitudinal characteristics. At last, to explore the attitudes of the respondents, we performed a Principal Component Factor Analysis (PCA) on 14 wine attributes. Then, the factors detected with PCA allowed us to evaluate the importance of these attributes for the classes identified by means of LCM.

#### 4.4 The sample

The questionnaires were administered on line in summer 2014 to a sample of 250 individuals (Table 2). The sample was limited to Italian consumers responsible for wine purchase and who drunk red wine at least one time per month.

After initial screening questions about consumption behaviors, each respondent replayed to the stated choice part of the questionnaire. A further part of questionnaire inspected consumer's familiarity with wines presented in the experiment, a self-assessment of wine expertise from 0 (low) to 10 (high) and the influence of a list of wine attributes in purchase action. The last section concerned socio-demographic information, family income and food expenditure.

Table 2  
Sample composition.

	Number of respondents	Percentage
<i>Gender</i>		
Female	121	48.4
Male	129	51.6
<i>Age</i>		
18-24	20	8.0
25-34	35	14.0
35-44	64	25.6
45-54	57	22.8
Over 55	74	29.6
<i>Marital status</i>		
Single/Separated/Divorced	82	32.8
Married/ Cohabiting	163	65.2
Widowed	5	2.0
<i>Location of residence</i>		
North-West Italy	70	28.0
North-East Italy	41	16.4
Central Italy	58	23.2
South and Insular Italy	81	32.4
<i>Education</i>		
Primary School degree	1	0.4
Middle School degree	27	10.8
High School degree	126	50.4
Bachelors and Master degree	96	38.4
<i>Household income per month</i>		
Less than € 500	13	5.2
€ 501-1000	22	8.8
€ 1001-1500	50	20
€ 1501-2000	51	20.4
€ 2001-3000	65	26
€ 3001-4000	25	10
€ 4001-5000	16	6.4
More than € 5001	8	3.2
<i>Frequency of red wine consumption</i>		
Everyday	88	35.2
At least 2 times a week	85	34
At least 1 time a week	65	26
1 time per month	12	4.8
Rarely or never	0	0.0
Total	250	100.0

All respondents were over 18 years of age. About 64% of the interviewees declared to have a higher than average competence in the wine sector.

## 5. Results and discussion

### 5.1 Latent Class Analysis

In order to examine preference differences between respondent choice patterns, we applied a LCM analysis by using Latent Gold 5.1 software. In the analysis of the results of the choice experiment on the wines for everyday consumption, as expected, the impact of the top quality wines is not significant, we therefore consider only the special occasion case in this study.

Even though there are not conventional rules, the choice of the number of classes should be driven by simplicity and judgment (Boxall & Adamowicz, 2002). As many authors suggest, we used BIC (Bayesian Information Criterion) as a good statistical indicator for class enumeration over the rest (Hagenaars & McCutcheon, 2002; Magidson & Vermunt, 2004; Nylund et al., 2007). Since it was not possible to detect a minimum BIC value, considering the significance and signs of the parameter estimate, the best fit was found with the 3-class model (Table 3).

Table 3  
Statistics for determining the optimal number of consumers' segments for a special occasion.

Model	LL	BIC(LL)	Npar
1-Cluster model	-4364.3722	8767.3947	7
2-Cluster model	-3662.867	7408.5558	15
3-Cluster model	-3409.6545	6946.3025	23
4-Cluster model	-3256.3146	6683.7946	31
5-Cluster model	-3177.0639	6569.4648	39
6-Cluster model	-3106.067	6471.6427	47
7-Cluster model	-3050.1003	6403.881	55
8-Cluster model	-3000.8148	6349.4816	63

*Note:* LL = Log-Likelihood; BIC(LL) = Bayesian Information Criterion based on Log-Likelihood; Npar = number of estimated parameters.

About special occasion consumption, Class 1 is the largest group with respondents (42% of the sample) (Table 4).

Table 4  
Estimates of parameters of the latent class model with three segments for a special occasion.

Attributes	Brunello Lovers	Gran Selezione Inclination	Price Sensitive
	Class1	Class2	Class3
<i>Label</i>			
Chianti DOCG	0	0	0
Chianti Classico DOCG	0.19	1.07*	1.00***
Chianti Classico Riserva DOCG	-0.34	4.80***	1.47***
Chianti Classico Gran Selezione DOCG	0.80	5.45***	1.16**
Brunello di Montalcino DOCG	2.04**	5.18***	1.57***
<i>Price</i>			
PriceA	-0.02	0.09	-0.04
PriceB	0.10***	-0.04***	-0.10***
Choice	0	0	0
No choice	-2.58**	-2.93***	-1.56***
Class size	42%	38%	20%

$R^2 = 0,2484$ ;  $LL = -3409,6545$ ,  $BIC(LL) = 6683,7946$ ,  $npar = 23$

Note: \*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% level, respectively

They have a preference for Brunello di Montalcino, thus recognizing it as a quality wine with a great reputation that lends itself to consumption on a special occasion. Because of this preference for this wine, we call Class 1 *Brunello Lovers*. The coefficient for PriceB shows a significant positive value, connoting that, for this class, the price may be an effective cue for the quality perception of wine. In particular, price is an important quality cue when the product cannot evaluate before purchase, when few other cues are available or when the perceived risk of making a wrong choice is high (Zeithaml, 1988; Mitchell & Greatorex, 1989; Dodds et al., 1991; Mueller et al., 2010). Class 2, representing 38% of the sample, includes consumers which prefer Chianti Classico Gran Selezione over Brunello di Montalcino, Chianti Classico Riserva and, to a lesser extent, Chianti Classico

respectively. This positive inclination for Grand Selezione brand (from which the class name *Gran Selezione Inclination*) not only recognizes its role of top premium wine inside Chianti Classico denomination, but also shows how this typology can compete with and, in some cases, may be preferred to Brunello di Montalcino. The negative value of Price B means that increments on the price variable decrease the associated utility level provided by the choice. This effect is even more evident in Class 3, where this price coefficient has a higher value, much more than double that coefficient of Class 2.

Therefore, Class 3 (20% of the sample) includes *Price Sensitive* consumers, which, nevertheless, choose in order Brunello di Montalcino, Chianti Classico Riserva, Chianti Classico Gran Selezione and Chianti Classico. This behavior can be explained by the fact that for many consumers wine is a difficult and confusing product to choose, especially for non-expert consumers, and its purchase is filled with uncertainty and risk (Gluckman, 1986). In order to reduce the perceived risk, marketing literature suggests some different strategies, for instance using brand reputation (Jiuan Tan, 1999).

Therefore, these consumers perceive 'Montalcino' as a brand, that is a well-known territorial brand (Charters et al., 2011), to be considered for a special occasion. The negative coefficient of the no choice option for all classes indicates the higher utility for consumers in choosing one of the labels proposed.

## 5.2 CHAID Analysis

The three classes of consumers obtained by applying the LC model was further analyzed with the technique of Chi-squared Automatic Interaction Detection (CHAID), using the software SI-CHAID, which is integrated with Latent Gold. The CHAID analysis (Kass, 1980) is a segmentation approach for obtaining a quick but meaningful segmentation, where segments are defined in terms of demographic or other variables that are predictive of a single categorical criterion variable (Magidson & Vermunt, 2005).

Among the socio-demographic characteristics, family income (LR chi-square = 15.80;  $df = 2$ ;  $p = 0.0026$ ) proves to be a significant predictor of class membership. Nearly 55% of consumers belonging to *Brunello Lovers* class have a high family income, differently from *Price Sensitive* class, where 78% of respondents have a low income. In Class 2, half of the consumers have a low income (52%), while the second half (48%) are characterized by high income.

Moving on to consider information about wine involvement, self-assessment of wine expertise is a significant variable (LR chi-square = 16.36;  $df = 2$ ;  $p = 0.0028$ ). In Class 1, 56% of consumers declare a high degree of knowledge in the wine sector, while in Class 3 78% of members have a low or sufficient level. Class 2 holds an intermediate position between other classes, in which there is a little superiority of consumers with low or sufficient knowledge (54%).

### 5.3 Principal Component Factor Analysis

Attitude and beliefs that affect consumption of wine can influence consumers' choice. Thus, in order to better describe classes' members, we asked participants to evaluate a list of 14 attributes, chosen among those recurrent in literature. The respondents were asked to indicate on a 5-point scale, with end poles labeled "not at all" and "a lot", how some product attributes orient their decision to buy red wine. A Principal Component Factor Analysis (PCA) on these attributes (by using STATA 14.2 software), with Varimax rotation, allowed us to test the underlying preferences. Two attributes, 'Food and Wine Pairing' and 'Alcohol Content', were not included in this analysis because they did not provide an acceptable level of explanation (communalities < 0.5) (Hair et al., 2006). Table 5 shows the three factors resulting from PCA, named for their most salient attributes. In addition to attributes, the three classes identified with LCM were specified as variables in PCA and Figure 1 displays the factor scores of the three classes.

Table 5

Principal component analysis on the attributes' importance during wine choice for the three classes for a special occasion.

	Liking for typicality and experience oriented	Inclination to information and brand design	Attention to price
	Factor1	Factor2	Factor3
<i>Factor loadings:</i>			
Certification	0.80		
Region of Origin	0.69		
Consumption Occasion	0.69		
Previous Experience	0.68		
Vintage	0.59		
Grape Variety	0.56		
Packaging		0.74	
Organic		0.71	
Brand		0.64	
Back Label Information		0.56	
Sales Promotion			0.82
Price			0.80

The three factors associated with an eigenvalue higher than 1 explain the 59% of the variance on the responses. The first factor extracted explains the 24% of the variance and identifies *Liking for typicality* defined by attributes that accent wine *per-se* features. As is illustrated, 'Certification', 'Region of Origin', 'Vintage' and 'Grape Variety' are positively correlated with this factor. Besides these extrinsic attributes, 'Consumption Occasion' and 'Previous Experience' also define this factor. Class 1 has a positive correlation with Factor 1: *Brunello Lovers* class has a particular attention towards extrinsic cue relevant origin, vintage and grape variety. For the others two classes, this factor is the least important one and it is negatively correlated with both.

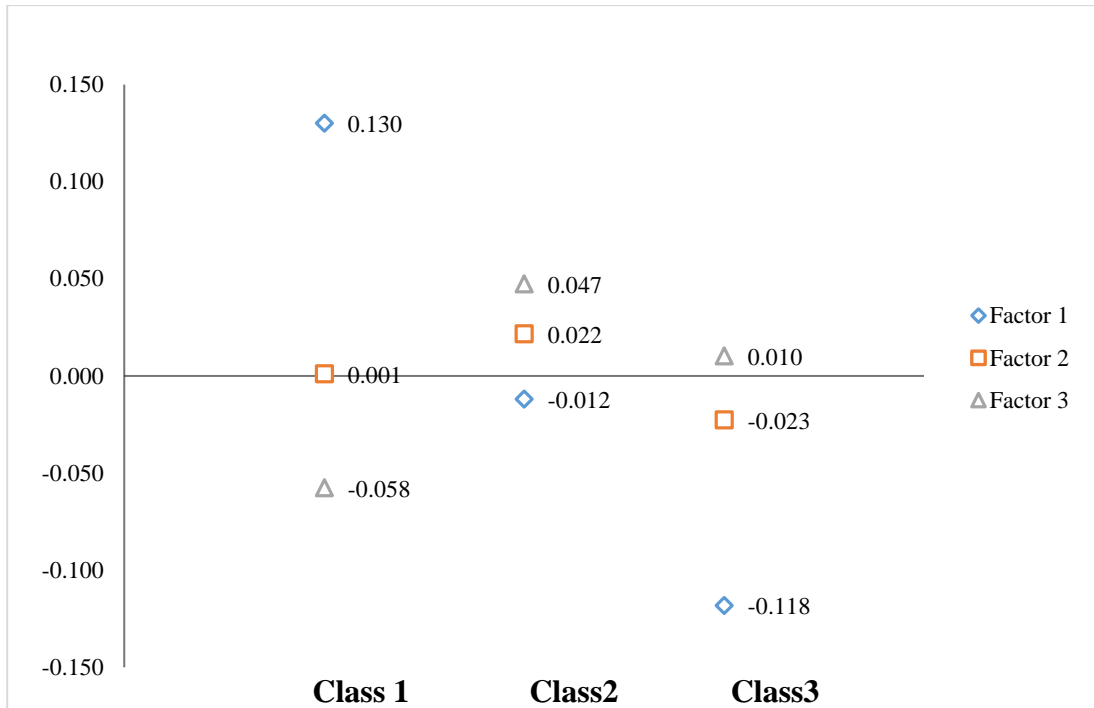


Figure 1. Factor scores of the three classes for a special occasion.

Factor 2 (19% of the explained variance), described by ‘Packaging’, ‘Organic’, ‘Brand’ and ‘Back Label Information’, can be interpreted as *Inclination to information and brand design*. It is positively correlated with Class 1 and Class 2, and in this last it is intermediate with respect to the other two factors. Consumers of Class 2 show also a positive connection with Factor 3 (16% of the explained variance), which can be named *Attention to price* for its positive correlation with ‘Price’ and ‘Sales Promotion’ attributes. In Class 3, Factor 3 is the only positive coefficient, underlined the attention of *Price Sensitive* consumers for the price. Instead, in Class 1 Factor 3 is the only negative coefficient.

## 6. Conclusions

The aim of this study is to analyze how consumers react to the introduction of a higher-tier typology of premium wine within a PDO. The results of the choice experiment have been presented, along with a segmentation of consumers and a PCA on attributes that affect wine purchase. Findings of this study suggest that, for a

special occasion, consumers choose PDO wine with a great reputation, such as Brunello di Montalcino and Chianti Classico Gran Selezione. In particular, these labels provide a high quality image tied with the territory that is positively evaluated by consumers.

A wide segment of consumers (38%) prefers Chianti Classico Gran Selezione. This choice is a sign of recognition of the quality of that label, representing both a top wine over the others typologies inside Chianti Classico denomination and a possible competitor for Brunello di Montalcino. These results show the validity of this new strategy within a territory esteemed and awarded with DOCG.

Nevertheless, the greater attention of consumers is pointed towards Brunello di Montalcino, which grasps preferences of 62% of respondents. For years now, Brunello is strongly identifiable by target markets, with a specific taste model and related to a strong evocative power territory (Mattiacci & Zampi, 2004).

Among those respondents who prefer Brunello wine, it is possible to individuate two classes of consumers. One is the segment named *Brunello Lovers*, with 42% of consumers, and characterized by a high family income and a high degree of knowledge of the oenological sector. They attribute great importance to certification and origin, considering these as elements of quality. The inclination towards quality is also confirmed by the sign and coefficient of price level, which indicates a perception of price as a quality cue. This segment of consumers pays also close attention to attributes as consumption occasion and previous experience in choosing wine.

In addition, consumers of Class 3, which have a low or sufficient knowledge of wine sector, recognize 'Montalcino' brand as an indicator of product quality, and they choose this label for a special occasion. However, they are *Price Sensitive*, with a low family income and a great inclination towards choosing products with lower prices. The only attributes that drive the purchase action of these individuals are price and promotion sales.

One aspect of this research which is worthy of further investigation concerns how consumers perceive the quality of other typologies within Chianti Classico after the introduction of Gran Selezione. This strategy might damage consumers' perception of the other products in line, in particular of Chianti Classico Riserva, causing a decrease in its demand.

A limitation of this paper is the absence in the DCE of at least one 'Super Tuscan', a type of red premium wine without PDO certification that does not belong to the regional tradition. These market success products could be further competitors for Gran Selezione, especially for expert consumers with a greater willingness to pay. Furthermore, our study is limited to wine produced in Tuscany: extending the analysis to other Italian PDO wines could contribute to expand the field on interest and to better generalize the results.

In this study, by performing a LCM and a PCA, we described the inclinations and attitudes toward wine of three segments of consumers. In particular, this drawn picture can help Chianti Classico wine producers to better understand consumers' behavior and intention of wine purchasing for a special occasion. For instance, in a market with increasing competitiveness, this additional supply differentiation might represent a development strategy both for adding value to wine production and for tackling a new target of consumers.

In order to better display this new typology of product and to fascinate the market, Consorzio of Chianti Classico should have a primary role to continue the activity of promotion and valorization. Further, new communication and marketing policies are necessary to guarantee a clear identity of premium quality of the new type of wine.

## References

- Alfnes, F., Guttormsen, A.G., Steine, G., Kolstad, K., 2006. Consumers' willingness to pay for the color of salmon: a choice experiment with real economic incentives. *Am. J. Agr. Econ.* 88 (4), 1050–1061.
- Batt, P. J., Dean, A., 2000. Factors influencing the consumer's decision. *Aust. NZ Wine Ind. J.* 15 (4).
- Bernetti, I., Casini, L., Marinelli, N., 2006. Wine and globalisation: changes in the international market structure and the position of Italy. *Brit. Food J.* 108 (4), 306–315.
- Boncinelli, F., Contini, C., Romano, C., Scozzafava, G., Casini, L., 2017. Territory, environment, and healthiness in traditional food choices: insights into consumer heterogeneity. *Int. Food Agribus. Manag.* 20 (1), 143–157.
- Boxall, P. C., Adamowicz, W.L., 2002. Understanding heterogeneous preferences in random utility models: a latent class approach. *Environ. Res. Econ.* 23 (4), 421–446.
- Brunori, G., Rossi, A., 2007. Differentiating countryside: Social representations and governance patterns in rural areas with high social density: the case of Chianti, Italy. *J. Rural Stud.* 23 (2), 183–205.
- Bruwer, J., Buller, C., 2012. Country-of-origin (COO) brand preferences and associated knowledge levels of Japanese wine consumers. *J. Prod. Brand Manag.* 21 (5), 307–316.
- Caldieraro, F., Kao, L.J., Cunha Jr, M., 2015. Harmful Upward Line Extensions: Can the Launch of Premium Products Result in Competitive Disadvantages?. *J. Marketing* 79 (6), 50–70.
- Carlsson, F., Frykblom, P., Lagerkvist, C.J., 2007. Preferences with and without prices—does the price attribute affect behavior in stated preference surveys?. *Environ. Res. Econ.* 38 (2), 155–164.
- Carsana, L., Jolibert, A., 2017. The effects of expertise and brand schematicity on the perceived importance of choice criteria: a Bordeaux wine investigation. *J. Prod. Brand Manag.* 26 (1), 80–90.
- Castriota, S., 2015. *Economia del Vino*. EGEA, Milano.
- Charters, S., Mitchell, R., Menival, D., 2011. The territorial brand in wine. 6th Academy of Wine Business Research Conference, Bordeaux. 10–11th, June.

Consorzio Barolo, 2017. The additional geographical definitions. Available at (<<http://www.langhevini.it/pagine/eng/territorio/menzioni-geografiche-aggiuntive.lasso/>>). (Accessed 4 July 2017).

Consorzio Chianti Classico, 2017. La piramide del Gallo Nero. Available at (<http://www.chianticlassico.com/vino/tipologie/>). (Accessed 11 May 2017).

Contini, C., Romano, C., Scozzafava, G., Boncinelli, F., Casini, L., 2015a. Wine consumption and sales strategies: the evolution of Mass Retail Trading in Italy. *Wine Econ. Policy* 4(2), 116–127.

Contini, C., Casini, L., Stefan, V., Romano, C., Juhl, H.J., Lähteenmäki, L., Scozzafava, G., Grunert, K.G., 2015b. Some like it healthy: can socio-demographic characteristics serve as predictors for a healthy food choice?. *Food Qual. Prefer.* 46, 103–112.

Corsi, A.M., Mueller, S., Lockshin, L., 2012. Let's see what they have... what consumers look for in a restaurant wine list. *Cornell Hosp. Q.* 53 (2), 110–121.

Costanigro, M., Scozzafava, G., Casini, L., 2017. Vertical differentiation, perceptions restructuring, and wine choices: the case of the Gran Selezione in Chianti wines. AAWE working paper No. 211.

De Magistris, T., Groot, E., Gracia, A., Miguel Albisu, L., 2011. Do millennial generation's wine preferences of the “New World” differ from the “Old World”? A pilot study. *Int. J. Wine Busin. Res.* 23 (2), 145–160.

Desai, P.S., 2001. Quality segmentation in spatial markets: when does cannibalization affect product line design?. *Market. Sci.* 20 (3), 265–283.

Dhar, R., Simonson, I., 2003. The effect of forced choice on choice. *J. Marketing Res.* 40 (2), 146–160.

Di Vita, G., Chinnici, G., D'Amico, M., 2014. Clustering attitudes and behaviours of Italian wine consumers. *Calitatea* 15 (S1), 54.

Dodds, W.B., Monroe, K.B., Grewal, D., 1991. Effects of price, brand, and store information on buyers' product evaluations. *J. Marketing Res.* 28 (3), 307–319.

FEDERDOC (2016). V.Q.P.R.D. d'Italia – I vini italiani a Denominazione d'Origine 2016. Available at (<http://www.federdoc.com/new/wp-content/uploads/2015/03/vqprd-2016.pdf>). (Accessed 18 April 2017).

Gerini, F., Alfnes, F., Schjøll, A., 2016. Organic-and animal welfare-labelled eggs: competing for the same consumers?. *J. Agr. Econ.* 67 (2), 471–490.

- Gluckman, R.L., 1986. A consumer approach to branded wines. *Eur. J. Marketing* 20 (6), 21–35.
- Hagenaars, J., McCutcheon, A., 2002. *Applied Latent Class Analysis Models*. Cambridge University Press, New York.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 2006. *Multivariate Data Analysis*. Pearson Prentice Hall, Upper Saddle River, NJ.
- ISMEA, 2013. Vini Dop e Igp: i numeri della produzione. Available at (<http://www.ismeamercati.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/2488.pdf>). (Accessed 13 April 2017).
- Jenster, P.V., Jenster, L., 1993. The European wine industry. *Int. J. Wine Mark.* 5 (1), 30–73.
- Jiuan Tan, S., 1999. Strategies for reducing consumers' risk aversion in Internet shopping. *J. Consum. Mark.* 16 (2), 163–180.
- Jover, A.J.V., Montes, F.J.L., Fuentes, M.D.M.F., 2004. Measuring perceptions of quality in food products: the case of red wine. *Food Qual. Pref.* 15 (5), 453–469.
- Kass, G.V., 1980. An exploratory technique for investigating large quantities of categorical data. *Appl. Stat.* 29 (2), 119–27.
- Keown, C., Casey, M., 1995. Purchasing behaviour in the Northern Ireland wine market. *Brit. Food J.* 97 (1), 17–20.
- Kirk, R.E., 2012. *Experimental Design: Procedures for the Behavioral Sciences*, 4<sup>th</sup> ed.. SAGE, Thousand Oaks.
- Lai, M., Del Giudice, T., Pomarici, E. 2006. Unobserved heterogeneity in the wine market: an analysis on Sardinia wine via Mixed Logit. *Colloque International de la Vineyard Data Quantification Society, Bordeaux*. 26-27th, May.
- Lancaster, K.J., 1966. A new approach to consumer theory. *J. Polit. Econ.* 74 (2), 132–157.
- Lockshin, L. Hall, J., 2003. Consumer purchasing behaviour for wine: what we know and where we are going. *International Colloquium in Wine Marketing*. Adelaide, July 26th.
- Lockshin, L., Jarvis, W., d'Hauteville, F., Perrouy, J.P., 2006. Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Qual. Prefer.* 17 (3), 166–178.

- Loureiro, M.L., Umberger, W.J., 2007. A choice experiment model for beef: what US consumer responses tell us about relative preferences for food safety, country-of-origin labeling and traceability. *Food Policy* 32 (4), 496–514.
- Louviere, J.J., Hensher, D.A., Swait, J.D., 2000. *Stated choice methods: analysis and applications*. Cambridge University Press, Cambridge.
- Lusk, J.L., Schroeder, T.C., 2004. Are choice experiments incentive compatible? A test with quality differentiated beef steaks. *Am. J. Agr. Econ.* 86 (2), 467–482.
- Magidson, J., Vermunt, J., 2004. Latent class models. In: Kaplan, D. (Ed.), *Handbook of Quantitative Methodology for the Social Sciences*. Sage, Newbury Park, pp. 175–198.
- Magidson, J., Vermunt, J.K., 2005. An extension of the CHAID tree-based segmentation algorithm to multiple dependent variables. In: *Classification - the Ubiquitous Challenge*. Springer, Berlin Heidelberg, pp. 176–183.
- Martínez, L.M.C., Mollá-Bauzá, M.B., Gomis, F.J.D.C., Poveda, Á.M., 2006. Influence of purchase place and consumption frequency over quality wine preferences. *Food Qual. Prefer.* 17 (5), 315–327.
- Mattiacci, A., Zampi, V., 2004. Brunello di Montalcino: how a typical wine could revive a poor country-village. *Brit. Food J.* 106 (10/11), 767–778.
- McFadden, D., 1974. Conditional logit analysis of qualitative choice behavior. In: Zarembka, P. (Ed.), *Frontiers in Econometrics*. Academic Press, New York, pp. 105–142.
- MiPAAF, 2014. Approvazione delle modifiche allo statuto del Consorzio Vino Chianti Classico. (14A06416). DECRETO 29 luglio 2014. (GU n.187 del 13–8–2014).
- Mitchell, V.W., Greatorex, M., 1989. Risk reducing strategies used in the purchase of wine in the UK. *Eur. J. Marketing* 23 (9), 31–46.
- Mtimet, N., Albisu, L.M., 2006. Spanish wine consumer behavior: a choice experiment approach. *Agribusiness* 22 (3), 343–362.
- Mueller, S., Lockshin, L., Saltman, Y., Blanford, J., 2010. Message on a bottle: the relative influence of wine back label information on wine choice. *Food Qual. Prefer.* 21 (1), 22–32.

Nylund, K.L., Asparouhov, T., Muthén, B.O., 2007. Deciding on the number of classes in latent class analysis and growth mixture modeling: a Monte Carlo simulation study. *Struct. Equ. Modeling* 14 (4), 535–569.

OIV, 2012. Vine and Wine Outlook 2012. Available at (<http://www.oiv.int/public/medias/4524/oiv-vine-and-wine-outlook-2012-completfinal.pdf>). (Accessed 11 May 2017).

Quester, P.G., Smart, J., 1998. The influence of consumption situation and product involvement over consumers' use of product attribute. *J. Consum. Mark.* 15 (3), 220–238.

Rubini, L., Motta, L., Di Tommaso, M.R., 2013. Quality-based excellence and product-country image: case studies on Italy and China in the beverage sector. *Meas. Busin. Excel.* 17 (2), 35–47.

Sáenz-Navajas, M.P., Campo, E., Sutan, A., Ballester, J., Valentin, D., 2013. Perception of wine quality according to extrinsic cues: the case of Burgundy wine consumers. *Food Qual. Prefer.* 27 (1), 44–53.

Scarpa, R., Thiene, M., Galletto, L., 2006. Consumers WTP for wine with certified origin: latent classes based on attitudinal responses. In: *Proceedings of the 10th Joint Conference on Food, Agriculture and the Environment, Duluth, Minnesota, 27-30th August*.

Scozzafava, G., Boncinelli, F., Contini, C., Romano, C., Gerini, F., Casini, L., 2016. Typical vine or international taste: wine consumers' dilemma between beliefs and preferences. *Rec. Patents Food Nutr. Agric.* 8 (1), 31–38.

Skuras, D., Vakrou, A., 2002. Consumers' willingness to pay for origin labelled wine: a Greek case study. *Brit. Food J.* 104 (11), 898–912.

Swait, J., 1994. A structural equation model of latent segmentation and product choice for cross-sectional revealed preference choice data. *J. Retailing Consum. Serv.* 1 (2), 77–89.

Tzimitra-Kalogianni, I., Papadaki-Klavdianou, A., Alexaki, A., Tsakiridou, E., 1999. Wine routes in Northern Greece: consumer perceptions. *Brit. Food J.* 101 (11), 884–892.

Williamson, P.O., Lockshin, L., Francis, I.L., Loose, S.M., 2016. Influencing consumer choice: short and medium term effect of country of origin information on wine choice. *Food Qual. Prefer.* 51, 89–99.

Zeithaml, V.A., 1988. Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *J. Marketing* 52 (3), 2–22.



## **ARTICLE 3**



# **The impact of occasion in purchasing wine: personal consumption or gift-giving.**

## **Abstract**

The act of purchasing a bottle of wine is a complex action, depending on numerous factors where wine attributes have a central role in this sense, and particularly the cues perceived as sign of quality. Purchase and consumption occasions, however, are relevant themes. The previous literature on consumer behaviour has underlined that individuals act different when buying something for themselves compared when buying something for a gift-giving occasion. Therefore, our hypothesis is that, the role of the different wine attributes could change according to the type of occasion. The aim of this study is to investigate consumers' preferences towards different qualitative attributes considered when purchasing a bottle of wine for two types of occasions, personal consumption and gift-giving. With this purpose, we conducted a choice experiment on Italian wine consumers. Price, geographical indication (presented as IGT, DOC and DOCG), organic claim and brand (presented as famous producer/not famous producer) are the attributes considered in this study. The application of a Random Parameters Logit allowed us to evidence differences between the two scenarios, in terms of relative importance of the attributes. The gift-giving occasion was further investigated with a Latent Class Model, which highlighted three distinct classes of consumers, described by different preferences for the attributes. Moreover, a Principal Component Analysis was implemented in order to profiling members of classes, using a series of items belonging to four scales. Our results show differences in attributes' choice depending on the type of circumstance, and reveal heterogeneity among consumers' preferences and attitudes for the gift-giving scenario. This study provides crucial insights for winemakers and retailers, suggesting advice for diversifying their marketing strategies.

*Keywords:* Choice experiment; Wine; Gift-giving; Latent Class Model.

## **1. Introduction**

The wine market offers a wide range of products and products' attributes that consumers can evaluate before purchasing a bottle (Dodd et al., 2005). Therefore, when a consumer has to choice among different bottles of wine he/she is in front of a very burden cognitive task for evaluating simultaneously a multidimensional set of information.

Many studies have analysed attributes that affect wine selection process, which can be divided into intrinsic and extrinsic (Olson and Jacopy, 1972). Intrinsic attributes are directly related to the physical-chemical aspects of the product, such as colour, alcohol content, and flavour, that are specific for each product and cannot be altered without changing the product itself (Lockshin & Hall, 2003). Extrinsic attributes are lower level cues that can be changed without changing the product and include brand, price, packaging, and designation of origin (Sáenz-Navajas and al., 2013).

In purchasing a bottle of wine, consumers consider both intrinsic and extrinsic attributes for inferring the product quality. Some authors have underlined the great importance of intrinsic attributes upon quality perceptions than extrinsic cues (Jacoby et al., 1971; Charters and Pettigrew, 2007). However, often there is not the opportunity to taste the wine before buying it, and consumers cannot value the intrinsic qualitative characteristics of the product (Barber et al., 2006). In the classification of Nelson (1970, 1974), these attributes are considered experience properties of goods, namely features which can only be discerned after the purchase or during the consumption. Thus, consumers have to choose the bottle of wine using the available information they view on the bottle and on the label, particularly when having less knowledge of the wine sector. In addition, price-based cues can drive consumers in wine choice (Hollebeek et al., 2007), especially to reduce the perceived

risk of a making a wrong purchase choice (Dodds and Monroe, 1985; Mitchell and Greator, 1989).

In consumers' selection of product, the purchase and consumption occasion are relevant themes (Hall et al., 2001; Aqueveque, 2006). People can buy a bottle of wine for daily use, like a dinner at home, or for a special occasion, as a dinner with friends or a celebration. Depending on the type of occasion, the choice of a bottle of wine has specific characteristics. Balestrini and Gamble (2006) highlight that consumers give more importance to the country of origin of wine when purchasing a bottle for a special occasion rather than for private consumption. Hall et al., (2001) evidence that the attributes which influenced most the different consumption occasions are taste, price and colour. However, if the taste is important across all situations, price and brand acquire a particular weight for a very special occasion like business related.

Among the variety of special occasions, gift-giving situation is a particular example to take into account and numerous previous studies have investigated this purchasing situation compared with buying for a personal consumption (Grønhaug, 1972; Ryans, 1977; Clarke and Belk, 1979; Baumann & Hamin, 2014; Gillison & Reynolds, 2016; Carsana and Jolibert, 2017). Wine is a very suitable product to be offered as a present, and in purchasing a bottle of wine as a gift or for self-consumption the consumers' attention focuses on different qualitative attributes (Hatak and Stoeckl, 2008).

In addition, when a consumer buys a product, her/his decision is not only linked to products' cues and beliefs on it, but also depends on personal attitudes and inclinations. Many consumers associate high product quality with well-known brands (Aaker, 1991), and this brand awareness-quality inference may influence purchase decisions. Other factors that may affect consumers' choices are the propensity toward the relation price/quality of the product and the inclination for organic food's themes. Furthermore, particularly in evaluating a product for a gift-

giving occasion, individual altruism may play a role in influencing products' selection.

This study has the purpose of verifying if consumers behave in a different way in choosing a bottle of wine for two occasions, gift-giving and personal consumption. Furthermore, we also focus on the gift-giving scenario, in order to evidence segments of consumers featured by the degree of utility they assign to several wine attributes and by personal attitudes and inclinations. In particular, this research aims to test the following hypothesis. (Hypothesis 1) Consumers behave differently when they purchase a bottle of red wine in a gift-giving situations rather than for self-consumption, weighting and considering the selected wine attributes differently for each occasion. (Hypothesis 2) In making a gift, consumers select a bottle of red wine by evaluating attributes in a different way, according to their personal attitudes and inclinations.

The current study is based on a discrete choice experiment (DCE). We applied a random parameters logit (RPL) model for accounting for consumer preference heterogeneity for both purchase situations, and a latent class model (LCM) for the gift-giving scenario.

The article is organised as follow. After a literature review, the section "Materials and methods" presents details on the DCE, on the survey and on the econometric model. In "Results" the results of RPL and LCM are presented. In the last section, we debate on the heterogeneity emerged proposing insights and indications for the development of marketing strategies.

## **2. Literature review**

### *2.1 Gift-giving behaviour*

Since the anthropologic research of Mauss (1954), scientific literature has investigated various aspects of gift-giving behaviour. Gift-giving is a multi-dimensional phenomenon, typified by social, economic, and personal aspects and

dependent on the characteristics of giver, gift, recipient, and condition involved (Belk, 1979).

Sherry (1983) has split the complex behavioural process of gift-giving into three stages: the search and the purchase of the gift (Gestation); the exchange of the gift (Prestation); the gift disposition and the redefinition of the relationship between giver and recipient (Reformulation). Our study focused on the action of purchase a gift, included in the first phase of this classification.

Belk (1979) has attributed four functions to the act of gift-giving: communication; social exchange; economic exchange; and socialization. The gift can represent a symbolic message in the communication between the giver and the recipient, expressing love or some other emotions, thankfulness or apology. The giver has to accurately choose the gift in order to avoid the risk of a misunderstanding of the message for the recipient (Scammon et al., 1982). In terms of social exchange, gift promotes the establishment, the maintenance and the improvement of interpersonal relations (Laroche et al., 2000). For example, the gift for a wedding represents a symbol of social support, while a bottle of wine or some flowers demonstrate the appreciation for a dinner invitation (Scammon et al., 1982). Considering the function of economic exchange, the act of exchanging a gift is meant to confer material benefits upon the recipient (Sherry, 1983). Although gift is often something voluntary given and there are not expectations of compensation (Belk, 1979), gift brings with it an economic value assessed by recipients. The function of socialization, expressed by the effect of gifts in terms of self-concept and behavioural patterns of the recipient, is clearer on children than on adults.

All these gift-giving functions suggest that consumers' behaviour in purchasing can differ in various occasions. In the previous literature, numerous scholars have analysed consumers when choosing a product for personal use compared to the purchase of the same product as a present. For gift purchase, consumers consider more alternatives of products, study more brochure and visit a great number of stores (Grønhaug, 1972), more likely stores with a quality image (Ryans, 1977).

Furthermore, people spend more time in selecting the same product as a present than for personal use (Clarke and Belk, 1979). The gift-giving purchase is an emotional act because the selection of a gift for someone else can produce anxiety (Moreau et al., 2011), both because of unfamiliarity with the recipient's preferences and of the will of making a good impression but fearing a failure (Wooten, 2000). The type of task involvement further underlines this dichotomy between gift selection and personal use: gift purchasing represents a more involving situation than buying for personal use (Belk, 1975; Clarke and Belk, 1979). This high situational involvement is heightened when consumers perceive risk in a specific situation (Laurent and Kapferer, 1985), and in the gift-giving occasion the social component of risk is perceived much greater than in purchase for personal use (Vincent and Zikmund, 1976). Some authors evidence that consumers, in order to reduce the risk in the gift-giving occasion, consider the products' quality more important and the price less relevant respect when buying products for themselves (Shapiro, 1970). Belk (1982) agrees with this concept only in part, asserting that high-involvement gift-giving situations match not only with higher quality but also with more expensive gifts. However, within the high involvement category, Belk stressed a distinction between a birthday gift and a wedding gift, therefore supposing that others factors may play a role during the selection of the present.

## *2.2 Wine as a gift*

Wine, with its symbolic and cultural dimension, is a product particularly suitable as gift for special occasions and celebrations. In the act of giving the present from the donor to the recipient, wine takes with it social and symbolic benefits. However, several consumers feel a sense of lack confidence in purchasing wine for friends, because of friends could have particular tastes to please or a major degree of wine knowledge compared to the giver (Olsen et al., 2003). In order to overcome this stressed status and to reduce risks, even in choosing the bottle of wine, consumers pay attention to quality factors, especially those quality extrinsic and intrinsic

attributes previously described . In a qualitative research, Hatak and Stoeckl (2008) evidenced that the favourite wine for a gift is the red wine, made of a popular local variety and a region of origin, with a good reputation and image, with a natural cork and a 'modern' or 'artistic' label, priced around 11 €. Among the cork's type, Barber et al. (2009) restated the importance of natural cork for consumers in gift giving and special occasion. This preference is justified by the fact that style of closure is considered a direct sign of quality of the wine (Barber et al., 2006), and a wine with a natural cork is reputed to have a high quality compared with a screw top (Barber and Almanza, 2007). Yu et al. (2009), in a study on Chinese consumers, showed that price is a discerning cue, displaying that people paid higher prices for wine destined for gift-giving. This result is also highlighted by Cholette and Castaldi (2005), affirming that wines intended as gifts were likely to be more expensive than bottles bought for everyday consumption. Yu et al. (2009) added that also origin was an influential factor in wine purchase, and particularly French wine was the most chosen for a special occasion and as a gift. However, in the choice of wine produced in France, consumers do not only consider France as a famous country that produces premium wines. France also represents a symbol, a link to a perceived positive imagine that consumers strongly desire to gift. Yang and Paladino (2015), in a research on the gift-giving purchase of wine in China, outlined some important characteristics that positively influence consumers, and these were the country of origin with an ethnocentric preference and gift packaging. Carsana and Jolibert (2017) evaluated the importance that consumers gave to wine cues in two different purchase occasion, the gift-giving and the personal consumption. They underlied that, in both purchase situations, the AOC (appellation d'origine controlee) level was rated as the principal attributes in choosing a wine. Furthermore, they added that other relevant cues for wine choice are, in order, wine category, vintage and, only for the gift occasion, the commercial brand.

### 3. Materials and methods

#### 3.1 Choice model

We have performed a DCE in order to test the importance that consumers placed on several attributes for two different purchasing situations. The use of DCE technique is very common in consumers' studies about food in general (Contini et al., 2015; Gerini et al., 2016; Boncinelli et al., 2017) and, in particular, for studying the preferences of wine consumers (Lockshin et al., 2006; Mueller et al., 2010; Williamson et al., 2016; Costanigro et al., 2017).

The selection of attributes was based on a review of the most cited literature on wine consumers' preferences and some of the features identified in literature related to gift giving occasion. The selected attributes and their corresponding levels chosen for this choice experiment are shown in Table 1.

Table 1  
Attributes and levels in the discrete choice experiment.

Attribute	Levels	Information level
Price	4	5€, 8€, 11€, 14€
Geographical Indication	4	none, IGT, DOC, DOCG
Organic Claim	2	Organic, none
Brand	2	Famous producer, Not famous producer

Geographical Indications (GIs) and price are two of the most important qualitative attributes for consumers when they choose a bottle of wine (Mtimet and Albisu, 2006; Remaud et al., 2008). The levels of GI selected for the choice are these fixed by the Italian classification system of GI wine (Legislative Decree, No. 61/2010), in accordance with the European Union regulations (Council Regulation (EC), No. 479/2008, p.17). The GI wine classification consists in DOCG (*Denominazione di Origine Controllata e Garantita*), DOC (*Denominazione di Origine Controllata*),

and IGT (*Indicazione Geografica Tipica*). The first two appellations are related to a quality discipline, and the DOCG wines are subject to stricter regulations compared to DOC and IGT wines. The wines that do not follow any qualitative discipline above mentioned do not present a GI appellation and are commonly called ‘table wines’.

Price is a relevant attribute in selecting wine, particularly when intrinsic cues are not available before the purchase (Mitchell and Greatorex, 1989). The four levels of price (5€, 8€, 11€, 14€) selected for this research cover the segments of Premium (5€-8€) and Super Premium (8€-14€) wine price range (Castriota, 2015).

Finally, the brand is another extrinsic attribute used by consumers for wine quality assessment. Indeed, the strength of the brand name is an important feature for choosing a product as a gift (Laroche et al., 2000). There are many wine brands in the market, often belonging to small and family producers. However, while brand is clearly recognizable for other product typologies, the concept of brand in wine generates some confusion among consumers (Viot and Passebois-Ducros, 2010). Some of these consider as brand the region of origin, the grape variety or the denomination of origin presented on the label, which actually represent different attributes. In order to avoid this multi-faceted view of wine brand (Spawton, 1990), we have shown the choice set to respondents with the word ‘producer’ instead of the term ‘brand’. This solution seems to be rationale since the term ‘producer’ is considered one of the brand elements that constitute the “brand hierarchy” for wine (Keller, 2000). In the choice experiment, as levels of this attribute, we have not selected specific names of real brands available in the market, but we opted for a dichotomous choice (Famous/Not famous) grounded in the fame of brand. Famous brand, as symbol of high quality perceived, may attract consumers to purchase a bottle of red wine. This may be particularly true when a bottle of wine is a present, because well-known brands are one of the main risk-reduction strategy used by consumers (Rubio et al., 2014).

Consumers also consider the organic claim as a signal of positive overall quality (Larceneux et al., 2012). As Wiedmann et al. (2014) assert, the image of organic

products has a strong effect on consumer attitudes and product perception. This effect may be due both by the message of environmental friendly and health safety that organic label transmits to consumers, as well the symbol of quality that organic label wears with it.

Using DCREATE, a STATA 14.2 Software module, we create an efficient experimental design. Starting from all combinations of levels and attributes, we have obtained a design with six choice-sets with two alternatives each, plus a none-of-them option (D-efficiency = 0.69). We have performed our experiment without blocking.

During the choice exercise, we have asked consumers to choose one bottle of red wine (0.750 l) among two bottles and a no-choice option. An example of a choice task is presented in Figure 1. The no-choice option is recommended (Louviere et al., 2000) in order to make the purchase scenario more real. We performed a between group experiment, thus we have two sub-samples according to the two purchase scenarios: one group of respondents select a bottle of red wine for a gift (Scenario 1); in the other case, a second group choose a bottle of red wine for their own consumption (Scenario 2). The respondents were randomly assigned to one of the two scenarios.

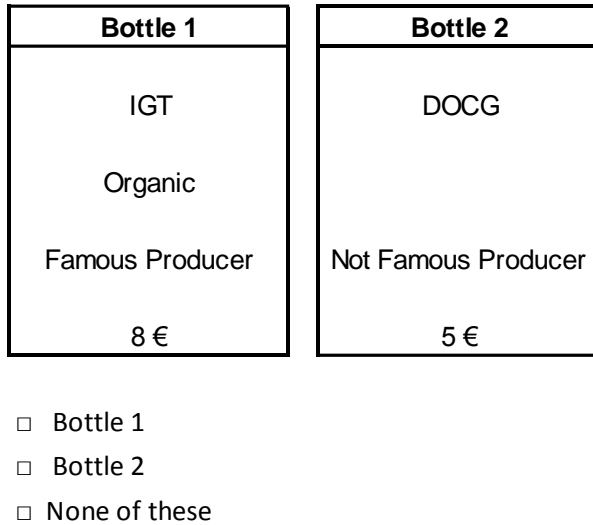


Fig. 1. Example of choice set

In order to mitigate hypothetical bias and social desirability behaviour, instead of asking directly to respondents what choice they would make, we have inquired respondents to predict what choice would have made an average consumer. This technique was called by Fisher (1993) ‘indirect questioning’ and was developed by Lusk et Norwood (2009) with the name of ‘inferred valuation method’. These authors have evidenced that people during consumers’ preference survey have a propensity to misrepresent their true preferences, in order to show themselves in the best possible way to researchers. This tendency, to choose responses that people believe to be more socially desirable or acceptable rather than choosing what really reflect their thoughts or feelings, is referred as social desirability bias (Grimm, 2010). Inferred valuation method is a technique planned to mitigate this bias and to overcome this gap.

### 3.2 Survey and questionnaire

An on-line questionnaire was administered to 618 consumers, randomly distributed two scenarios: 300 respondents on scenario 1 and 318 respondents on

scenario 2. The online survey method was evidenced to be superior to a traditional offline (paper-and-pencil) method (Sethuraman et al., 2005), allowing to be more speed- and cost-effecting in collecting data (McCullough, 1998). All respondents were over 18 years of age and have bought at least one bottle of wine in the previous twelve months.

After the stated choice experiment, consumers' habits were investigated through a small questionnaire. The information was related to the number of bottles they have purchased in the last six months and, in case of an affirmative answer, how many of these were intended to be a gift. The subjective wine knowledge was auto-declared with a ten-point Likert scale, ranging from 1 'no expert' to 10 'very expert'.

The individual characteristic of 'altruism', 'brand awareness-quality inference', 'inclination toward organic product' and 'price/quality product relation' were measured using multi-items Likert scales with seven points. The end poles of each scale were labelled 'completely disagree' and 'completely agree'. In particular, we have used a three-item scale proposed by Lusk et al. (2007) for calculating altruism. For investigating brand awareness-quality inference, we have taken a five-items scale elaborated by Rubio et al. (2013) from previous literature. For measuring inclination toward organic products and the relationship between price and quality, we have adopted two three-items scales proposed by Grunert et al. (2001). The last section of the questionnaire has concerned socio-demographic information, occupation and household income (Table 2).

Table 2 Socio-demographic statistics.

Categories	Pooled Sample	%	Gift-Giving	%	Personal	
					Consumption	%
<i>Gender</i>						
Male	275	44.5	117	39.0	158	49.7
Female	343	55.5	183	61.0	160	50.3
<i>Age (years)</i>						
18-34	330	53.4	170	56.6	160	50.3
35-54	184	29.8	80	26.7	104	32.7
more than 54	104	16.8	50	16.7	54	17.0
<i>Education level</i>						
Primary School	1	0.2	0	0.0	1	0.3
Middle School	23	3.7	7	2.3	16	5.1
High School	276	44.7	143	47.7	133	41.8
Tertiary Education	318	51.4	150	50.0	168	52.8
<i>Occupation</i>						
Employee	400	64.7	197	65.6	203	63.8
Student	138	22.3	69	23.0	69	21.7
Retired worker	37	6.0	18	6.0	19	6.0
Unemployed	27	4.4	14	4.7	13	4.1
Homemaker	16	2.6	2	0.7	14	4.4
<i>Taking into account all available income, your family can reach the end of the month:</i>						
With high difficulty	15	2.4	6	2.0	9	2.8
With difficulty	29	4.7	17	5.7	12	3.8
With few difficulty	183	29.6	91	30.3	92	28.9
With few facility	227	36.7	117	39.0	110	34.6
With facility	132	21.4	57	19.0	75	23.6
With high facility	32	5.2	12	4.0	20	6.3
<i>Consumer's self-reported wine knowledge (average value from 1 to 10)</i>						
	5.1	4.8		5.3		
Total	618	100	300	100	318	100

### 3.3 The econometric specification

We have estimated a RPL with correlated errors of consumers' choice using the software NLOGIT 5.0 for both scenarios. RPL is a generalization of logit model characterized by coefficients of observed variables that differ randomly over people rather than to be fixed (Train, 1998). We specified our model according to Lancaster (1966) and to McFadden's random utility theory (1973). The  $i$ -th consumers' utility of choosing a product, in our case a bottle of wine  $j$ , at choice occasion  $t$  is depended by the product attributes:

$$U_{ijt} = NOCHOICE + \beta_1PRICE_{ijt} + \beta_2IGT_{ijt} + \beta_3DOC_{ijt} + \beta_4DOCG_{ijt} + \\ + \beta_5ORGANIC_{ijt} + \beta_6BRAND_{ijt} + \varepsilon_{ijt} \quad (1)$$

where *NOCHOICE* is the alternative-specific constant, coded as a dummy variable equal to 1 for the no-choice option and 0 otherwise.  $\beta_s$  are the parameters associated with the attributes. The price variable (PRICE) is a continuous variable and measured in Euro. IGT, DOC and DOCG variables refer to the IGT, DOC and DOCG Geographical Indications, respectively. ORGANIC and BRAND are coded as dummy variables because they indicate whether the corresponding claims analysed are present or absent in the model.  $\varepsilon_{ijt}$  is the error term that is assumed to be independently distributed with an extreme value distribution.

In order to test whether estimates from the RPL were equivalent across the two scenarios, we have performed a test of joint equality for the estimated parameters. The test for equality is a log-likelihood ratio (Swait and Louviere, 1993). Rejecting the null hypothesis of equality of RPL parameters across the two scenarios, we could compare the results between our two situations.

In addition, for the gift-giving scenario a LCM was estimated in order to investigate heterogeneity among respondents by segmenting them into classes with similar preferences (Greene and Hensher, 2003). The specification of the model for

LCM is the same of equation (1). We have focused on this scenario because exploring consumers' choices for the gift-giving occasion was the main objective of this work.

Finally, with the aim of exploring the respondents' attitudes, we have executed a Principal Component Factor Analysis (PCA) using the items of four scales about consumers' attitudes and inclinations described above. Then, we have estimated the factor scores of each component in order to evaluate the importance of these consumers' characteristics for the classes identified by means of the LCM.

## **4. Results**

### *4.1 Random Parameters Logit*

Table 3 contains the results from the estimated utility functions for both scenarios, gift-giving and personal consumption. Since the log-likelihood ratio test between the two scenarios is rejected ( $p = 0.00$ ), we can compare the results related to them.

With the purpose of investigating if there were differences between the two scenarios groups according to socio-demographic characteristics, we have performed a Chi-squared test. All the tests, excepted for gender, rejected the null hypothesis. This means that the random assignment of the respondents to the two scenarios designed homogenous sets for factors such as age, education level, occupation, household income, and degree of knowledge in the wine sector. Although gender did not answer to this prerogative, we could reasonably assume that gender is a factor with limited impact in the ambit of the two situations we compared, especially in the wine choice (Forbes, 2012).

Looking at the results of RPL model between the two scenarios, the coefficients estimates are different in terms of magnitude and statistical significance. This indicates that the purchasing situation has a greater influence in the wine choice and the attributes play a different role according to the purchasing scenario.

Table 3  
Parameters estimated from RPL for both scenarios.

<b>Mean Values</b>	<b>Gift-Giving</b>	<b>Own Consumption</b>
<b>Random parameters in utility functions</b>		
ORGANIC	1.49*** (0.26)	0.25 (0.22)
BRAND	1.93*** (0.25)	0.99*** (0.14)
IGT	-0.25 (0.42)	0.73** (0.29)
DOC	0.17 (0.43)	1.60*** (0.36)
DOCG	0.01 (0.47)	1.45*** (0.45)
<b>Non-random parameters in utility functions</b>		
PRICE	-0.13*** (0.04)	-0.30*** (0.04)
NOCHOICE	-1.92*** (0.56)	-3.54*** (0.51)
<b>Standard deviations of parameter distributions</b>		
ORGANIC	1.29*** (0.27)	1.31*** (0.18)
BRAND	1.33*** (0.21)	0.68*** (0.16)
IGT	1.11*** (0.28)	1.11*** (0.40)
DOC	1.01*** (0.32)	1.68*** (0.42)
DOCG	1.53*** (0.41)	1.62*** (0.51)
$\chi^2$	1,659.81	1,442.8
n° observations	1,800	1,908
Pseudo R <sup>2</sup>	0.42	0.34
Loglikelihood	-1,147.60	-1,374.75

(\*\*\*) (\*\*) denotes statistical significance respectively at 1% and 5%; standard errors in brackets.

The no-choice option is negative and significant for both situations, indicating that consumers gain a higher utility in purchasing a bottle instead of not buying it. Moreover, as expected, the price variable is statistically significant and always negative, in accordance with the economic theory.

In the gift-giving scenario, famous brand (1.93) and organic (1.49), respectively, are the only two significant factor. Instead GI parameters are all not significant. The attribute 'Famous brand' is also significant in the own consumption scenario (0.99), even if with a limited impact on choice probability. Moreover, in this scenario organic label is not a statistically significant variable. As above-mentioned, none of the GIs attributes increase consumers' utility for the gift-giving scenario, differently

from the own consumption scenario where, respectively, DOC (1.60), DOCG (1.45) and IGT (0.73) are positive and statistically significant. Price is the variable with low significant coefficient both for purchase scenario (-0.13) and for personal consumption occasion (-0.30). The significant coefficients of the standard deviations for all the random attributes suggest that preferences varied across the population for all the parameters (Train, 1998).

4.2 Latent Class Analysis

The preference heterogeneity found in the RPL for gift-giving scenario was further investigated applying a LCM, with the aim of detecting significant differences among members of different classes. The analysis of statistical criteria, such as the Akaike Information Criterion (AIC) and the Bayesian Information Criterion (BIC), have allowed us to choice of the optimal number of latent classes. The model that better fits the choice of class number is the one with the lowest values of AIC and BIC (Scarpa et al., 2007).

Table 4  
Statistics for determining the optimal number of consumers’ segments for a special occasion.

<b>Model</b>	<b>LL</b>	<b>AIC (LL)</b>	<b>BIC (LL)</b>	<b>Npar</b>
2-class model	-1188.1	2406.2	2488.7	15
3-class model	-1134.4	2314.8	2441.2	23
4-class model	-1121.0	2303.3	2474.3	31

*Note:* LL = Log-Likelihood; AIC(LL) = Akaike information criterion; BIC(LL) = Bayesian Information Criterion based on Log-Likelihood; Npar = number of estimated parameters.

The solution with three classes is the best fit in our research, with the minimum BIC statistic value (Table 4). In particular, BIC decreases passing from two to three classes, for then increasing when additional segments beyond three are added. Furthermore, the change in AIC is smaller considering three and four classes than considering two and three classes.

The results of the LCM with three classes for gift-giving scenario are presented in Table 5.

Table 5  
Latent class model parameter estimation.

Attributes	Organic Supporter	Brand Follower	Unyielding
	Class 1	Class 2	Class 3
Organic	2.09***	0.82***	0.36
Brand	1.43**	2.14***	0.20
IGT	-1.13	-0.75	0.50
DOC	-0.97	-0.41	0.93
DOCG	0.43	-1.07	1.12
Price	0.08	-0.21**	0.05
No choice	-1.27	-3.64***	0.83
Class size	38%	52%	10%
Self-reported wine knowledge (average)	4.98	4.64	5.23

$R^2 = 0.4263$ ;  $LL = -1134.4063$ ;  $BIC(LL) = 2441.21$

Note: \*\* and \*\*\* denote significance at the 5% and 1% level, respectively

A preliminary analysis of the parameters across the three classes evidences that two attributes, organic claim and brand, have a significant and positive parameter for Class 1 and Class 2, but with different values. As for the results of RPL, GIs are not significant for the three segments. In particular, Class 1 shows significant parameter estimates for organic claim and brand. These consumers obtain the highest utility from the organic claim in choosing a bottle of red wine for making a present, followed by the name of the famous brand. Members of this class, which represents 38% of the sample, are so referred as ‘Organic Supporter’. Consumers who firstly gain utility from the famous brand of the wine characterize the second class, which includes the majority of the population (52%) and leads us to refer to this group as ‘Brand Follower’. Respondents in this class have significant parameters for organic claim and price, which has a negative value. This class stands out as the only group with a significant parameter estimate for No-choice, suggesting that ‘Brand

Follower' consumers obtain great utility in choosing a bottle of red wine. The third class shows a group of consumers that have not any statistically significant parameters, and for this called 'Unyielding'. However, this class represents only a small part of the respondents, including 10% of the sample.

#### 4.3 Principal Component Factor Analysis

After having described the results of the segments, in order to profiling members of the classes, we have investigated the attitudes and inclinations that affect consumers' purchase. We have asked participants to evaluate a list of items belonging to four sets of Likert-scales previously described, retrieved from previous literature.

Table 6  
Principal component factor analysis on the items describing personal attitudes for gift-giving occasion.

Variables	Factor loadings
<b><i>Altruism</i></b>	
1) I am willing to make sacrifices for the good of those around me	0.68
2) I enjoy contributing to charities and other non-profit organizations	0.75
3) Paying taxes is important because they fund programs such as schools and roads from which everyone benefits	0.59
<b><i>Price/quality relation</i></b>	
4) I always try to get the best quality at the best price	0.79
5) I compare prices between products variants in order to get the best value for money	0.61
6) It is important for me to know that I get quality for all my money	0.64
<b><i>Organic Products</i></b>	
7) I always buy organically grown food products if I have the opportunity	0.90
8) I make a point of using natural or organic products	0.90
9) I don't mind paying a premium for organic products	0.84
<b><i>Brand awareness-quality inference</i></b>	
10) When the product is not from a recognized brand, it is lower quality	0.81
11) The "more famous" the brand name, the better the quality of a product that carries that name	0.86
12) Brand name is a determining issue in purchasing a product	0.68
13) The more a product is advertised, the better its quality	0.88
14) I feel secure purchasing a brand whose advertising I have seen in some communications medium	0.77

A Principal Component Factor Analysis (PCA) on these items (performed by using STATA 14.2 software), with Varimax rotation, has allowed us to test the underlying preferences. All the items are included in the analysis because they provide an acceptable level of explanation (communalities < 0.5) (Hair et al., 2006).

The results of the PCA reported in Table 6 show that the aggregation pattern resulting from the respondents’ answers confirm the ex-ante classification of the items into four dimensions with an explained variance of 63% to the total variance.

The mean scores of each class are displayed in Table 7. The first factor extracted is identified by all items pertinent the scale for measuring consumers’ attitudes towards organic products. This factor is the only positive correlated with Class 1: *Organic Supporter* class’s members, as the name indicates, have a particular attitude towards the purchase of organic wine. For the others two classes, this factor is the least important one and it is negatively correlated with both segments. Furthermore, this class shows a negative correlation with brand awareness-quality, price/quality and altruism factors. Oppositely, Class 2, *Brand Follower*, presents a negative correlation with the organic factor and positive correlations with the other three factors. Therefore, members of Class 2 are featured by attitudes towards altruism, importance for price/quality relation and the inference for brand awareness-quality. Finally, Class 3 shows a negative correlation with all four factors, supporting the results of LCM where all attributes are no significant and confirming their *Unyielding* behaviour.

Table 7  
Factor scores of the three classes for a gift-giving occasion.

Average scores of Factor Analysis for classes	Organic Supporter	Brand Follower	Unyielding
	Class1	Class2	Class3
Organic	0.089	-0.063	-0.026
Brand awareness-quality inference	-0.007	0.010	-0.003
Price/Quality	-0.008	0.020	-0.012
Altruism	-0.037	0.047	-0.010

## **5. Discussion and conclusions**

In this study, we have investigated consumer's preferences for a bottle of red wine to purchase for two different circumstances, making a present and for personal consumption, respectively. Applying a discrete choice experiment, our results have highlighted that consumers behave differently in purchasing a bottle of red wine according to distinct situations. Therefore, the selection of the bottle of red wine is occasion-specific, in line with the results of previous studies on wine choice (Hall et al., 2001; Aqueveque, 2006; Carsana and Jolibert, 2017).

When the red wine bottle is destined for a gift, attributes such as being a famous brand, the organic certification and price take a relevant importance in the eyes of gift seekers. The magnitude of the price coefficients is different. In other words, hold all other factor constant the respondents have elicited different preferences according to the circumstance. In the gift-giving scenario, the magnitude is lower than the other one, indicating a wine demand less reactive to price changes.

The crucial impact of the brand for gift-giving scenario may have a double interpretation. Indeed, gift-giving is a high psychological involvement situation for consumers, that also produces some anxiety and stress. In this perspective, the giver wants to make a right choice and he/she feels to reduce the risk of a wrong purchase by choosing a famous branded wine. This risk-reduction strategy is also proved by the evidence that these consumers have the lower degree of knowledge about wine and its features. The additional explanation for the preference of the well-known brand wines considers the value of the gift. Indeed, consumers seem to receive some utility in communicating the economic value of the present to the receiver just to say how he/she is important to him/her. In this sense, a bottle of red wine with a famous brand, is a signal of how the giver has spent for the wine. In other words, the giver wants to be sure that the recipient understands the real value of the gift, whatever the recipients' knowledge of the wine is. For consumers, a well-known brand is an objective cue easily recognizable for measuring the value of a product. The 'famous

brand' is a purchasing factor also for the self-consumption, but the importance of this attribute seems less relevant in this circumstance.

When consumers have to make a present, the organic label is a relevant quality signal for them. Indeed, an organic wine can provide more credit in terms of product quality. Oppositely, when a consumer buys a bottle of red wine for personal consumption, organic claim is not significant. Therefore, the circumstance plays a role in the definition of organic as vertical differentiation attribute.

A specular situation is related to GIs. In personal consumption scenario they are the most relevant attributes (in terms of the magnitude of parameters), while for the gift-giving these cues do not affect consumers wine choice. This result differs from conclusions of the consolidated literature on this topic, which indicated GIs as distinctive cues in the selection of wine as a present. This could be related to the evidence that in recent years, a proliferation of the number of GIs occurring in the Italian market. This rapid spread may have reduced the differential values of GI labelled wine, limiting the consumers ability to distinct between different GIs, in particular for those with low knowledge of wine sector. Too many wines with GIs do not help the consumer in their search process and decrease the marginal utility of wine with GIs. This designations policy, with different GIs often within the same territory, may have created a 'mark inflation' on the market of wine, with a consequent reduction of consumers' awareness (Adinolfi et al., 2011). However, in the design of this choice experiment, we provided a generic information about the presence of the GI attribute without including the name and the origin of the wine. In other words, the attribute presented in the choice set is, for instance, only 'DOCG' wine, and not 'DOCG Chianti Classico'. Likely, the interaction between GI and specific name of GI can still have some impact on consumer choice, since specified GIs are much appreciated and have a great reputation among consumers. This aspect should be investigated in further researches, testing the interactions between appellations and specific territory with different quality reputation.

From the latent class model and the PCA, we can infer further information for better understanding the gift-giving scenario. A wide segment (52% of the sample) chooses a bottle of red wine looking primarily to the famous brand. This seems related to the evidence that a great share of individuals with low knowledge of wine sector pertains to this segment. These consumers use ‘famous brand’ for their purchases as a signal of quality. This result is confirmed by the higher average PCA scores for the dimension of brand awareness-quality inference scale in this segment.

In the gift-giving scenario, the 38% of respondents is characterized by a strong preference for organic wine. The findings of the PCA highlighted that consumers belonging to this segment link an organic wine not only to a generic ‘good symbol’ but also to a healthy and environmental-friendly product. The last consumer group, which represent 10% of respondents, shows an unusual behaviour, because all the attributes are not statistically significant and all the factors present negative scores. Looking at the self-reported wine knowledge, these consumers declared a great average value compared with other two classes. Probably, when these consumers have to make a present, they already know which bottle of red wine to purchase. They have more information on specific brands and specific cellars producer of red wine, and this knowledge is also likely given by previous tastings of these labels. The choice of these consumer is not driven by extrinsic attributes presented in DCE, but by their previous specific idea on wine that they want to donate.

In sum, the results of this study contribute to better understanding the influence of circumstances on consumers’ evaluation of the attributes in the choice of a bottle of red wine. This study demonstrated that circumstance is a relevant factor in determining the importance of such wine characteristics.

The ‘famous brand’ feature is one of the most important cues for purchasing wine, particularly for a gift-giving occasion. Previous wine choice literature has not given to this attribute great attention, pointing mainly on others cues. Therefore, producers have to pay more attention to the development of their brand, implementing marketing strategies for increasing its knowledge and its ‘image’. A famous brand,

especially for consumers who are not expert in the wine sector, is a signal for reducing the information gap on product quality. Branding contributes to brand awareness, and brand awareness helps consumers in choosing wine for occasions with risks associated, such as making a present.

The percentage of wine sold as a gift in Italy is an information not available in the literature. However, wine is particularly suitable as a gift and this percentage may play an important role. In this sense, retailers could prepare inside stores specific corner presenting wine for gift-giving, helping consumers in the choice and allowing the development of wine sales.

Future studies could analyse different types of gift-giving situations, considering also the relationship between the giver and the recipient. A gift for a close friend could differ from a bottle of wine as a gift for an acquaintance, as well as a gift for a birthday or for a celebration could be different from a bottle of red wine to take to friends' house for a dinner.

Moreover, future studies could include other qualitative cues, such as origin, vintage, grapes variety, or medals, in order to better understand their impacts in the gift-giving occasions. Moreover, the type of packaging, not considered in this study, may be a relevant attribute to include in the analysis. In some countries, such as these of Far East (Yang and Paladino, 2015), the packaging is very evaluated by consumers for the gift-giving occasion. A special packaging, such as wooden boxes or paper gift-bags, could be appreciated by consumers.

This study is not exempt from limitations, which could be also considered for further researches. Although the sample is comparable in size to many other studies using the same method, respondents were recruited using an on-line questionnaire. The main limitation of this study refers to the hypothetical setting of the choice experiment. In this kind of exercise, participants tend to overstate their willingness to pay. In order to avoid this risk, further studies should apply other non-hypothetical method, such as experimental auction or real choice experiments wherein real money and products are exchanged.

## References

- Aaker David, A. (1991). *Managing brand equity. Capitalizing on the value of a brand name*. The Free Press, US.
- Adinolfi, F., De Rosa, M., Trabalzi, F., (2011). Dedicated and generic marketing strategies: The disconnection between geographical indications and consumer behavior in Italy. *British Food Journal*, 113(3), 419–435.
- Aqueveque, C. (2006). Extrinsic cues and perceived risk: the influence of consumption situation. *Journal of Consumer Marketing*, 23(5), 237-247.
- Balestrini, P., & Gamble, P. (2006). Country-of-origin effects on Chinese wine consumers. *British Food Journal*, 108(5), 396-412.
- Barber, N., & Almanza, B. A. (2007). Influence of wine packaging on consumers' decision to purchase. *Journal of foodservice business research*, 9(4), 83-98.
- Barber, N., Almanza, B. A., & Donovan, J. R. (2006). Motivational factors of gender, income and age on selecting a bottle of wine. *International Journal of wine marketing*, 18(3), 218-232.
- Barber, N., Taylor, D. C., & Dodd, T. (2009). The importance of wine bottle closures in retail purchase decisions of consumers. *Journal of Hospitality Marketing & Management*, 18(6), 597-614.
- Baumann, C., & Hamin, H. (2014). Premium generic brand (PGB) choice vis-à-vis generic and national brands: A scenario comparison for self-use, family consumption and gift giving in a food versus non-food and cross-cultural context. *Journal of Retailing and Consumer Services*, 21(4), 492-501.
- Belk, R. W. (1975). Situational variables and consumer behavior. *Journal of Consumer research*, 2(3), 157-164.
- Belk, R. W. (1979), "Gift-giving Behavior," Research in , 2, (ed.) Jagdish Sheth, (Greenwich, CT: JAI Press), 95-126.
- Belk, R. W. (1982). Effects of gift-giving involvement on gift selection strategies. *ACR North American Advances*.
- Boncinelli, F., Contini, C., Romano, C., Scozzafava, G., & Casini, L. (2017). Territory, environment, and healthiness in traditional food choices: insights into consumer heterogeneity. *International Food and Agribusiness Management Review*, 20(1), 143-157.
- Carsana, L., & Jolibert, A. (2017). The influence of brand schematicity on the importance of product cues: self-purchasing versus gift-giving situations. *Journal of Consumer Marketing*, 34(3).
- Castriota, S. (2015). *Economia del vino*. EGEA spa.

Charters, S., & Pettigrew, S. (2007). The dimensions of wine quality. *Food Quality and Preference*, 18(7), 997-1007.

Cholette, S., & Castaldi, R. (2005), "Analyzing the US retail wine market using price and consumer segmentation models", *Second International Wine Marketing Symposium, Sonoma State University, Rohnert Park, CA*, 8-9 July, pp. 1-27.

Clarke, K., & Belk, R. W. (1979). The effects of product involvement and task definition on anticipated consumer effort. *ACR North American Advances*.

Contini, C., Casini, L., Stefan, V., Romano, C., Juhl, H. J., Lähteenmäki, L., Scozzafava, G., & Grunert, K. G. (2015). Some like it healthy: Can socio-demographic characteristics serve as predictors for a healthy food choice?. *Food Quality and Preference*, 46, 103-112.

Costanigro, M., Scozzafava, G., & Casini, L., 2017. Vertical differentiation, perceptions restructuring, and wine choices: the case of the Gran Selezione in Chianti wines. AAWE working paper No. 211.

De Magistris, T., López-Galán, B., & Caputo, V. (2016). The Impact of Body Image on the WTP Values for Reduced-Fat and Low-Salt Content Potato Chips among Obese and Non-Obese Consumers. *Nutrients*, 8(12), 830.

Dodd, T. H., Laverie, D. A., Wilcox, J. F., & Duhan, D. F. (2005). Differential effects of experience, subjective knowledge, and objective knowledge on sources of information used in consumer wine purchasing. *Journal of Hospitality & Tourism Research*, 29(1), 3-19.

Dodds, W. B., & Monroe, K. B. (1985). The effect of brand and price information on subjective product evaluations. *ACR North American Advances*.

Fisher, R. J. (1993). Social desirability bias and the validity of indirect questioning. *Journal of consumer research*, 20(2), 303-315.

Forbes, S. L. (2012). The influence of gender on wine purchasing and consumption: An exploratory study across four nations. *International Journal of Wine Business Research*, 24(2), 146-159.

Gerini, F., Alfnes, F., Schjøll, A., 2016. Organic-and animal welfare-labelled eggs: competing for the same consumers?. *Journal of Agricultural Economics*, 67 (2), 471-490.

Gillison, S., & Reynolds, K. (2016). Shopping for yourself versus shopping for someone else. *Journal of Consumer Marketing*, 33(4), 225-234.

Greene, W. H., & Hensher, D. A. (2003). A latent class model for discrete choice analysis: contrasts with mixed logit. *Transportation Research Part B: Methodological*, 37(8), 681-698.

Grimm, P. (2010). Social desirability bias. *Wiley International Encyclopedia of Marketing*.

Grønhaug, K. (1972). Buying situation and buyer's information behavior. *European Marketing Research Review*, 7(7), 33-48.

Grunert, K. G., Brunsø, K., Bredahl, L., & Bech, A. C. (2001). Food-related lifestyle: a segmentation approach to European food consumers. In *Food, people and society* (pp. 211-230). Springer Berlin Heidelberg.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L., 2006. *Multivariate Data Analysis*. Pearson Prentice Hall, Upper Saddle River, NJ.

Hall, J., Lockshin, L., & Barry O'Mahony, G. (2001). Exploring the links between wine choice and dining occasions: Factors of influence. *International Journal of Wine Marketing*, 13(1), 36-53.

Hatak, I., & Stoeckl, A. (2008). Purchasing wine as a gift; influencing factors and preferences: an empirical qualitative approach. In *4th International Conference of the Academy of Wine Business Research, Siena, Italy*.

Hollebeek, L. D., Jaeger, S. R., Brodie, R. J., & Balemi, A. (2007). The influence of involvement on purchase intention for new world wine. *Food Quality and Preference*, 18(8), 1033-1049.

Jacoby, J., Olson, J. C., & Haddock, R. A. (1971). Price, brand name, and product composition characteristics as determinants of perceived quality. *Journal of Applied Psychology*, 55(6), 570.

Keller, K. L. (2003). Building, measuring, and managing brand equity. *Aufl., Upper Saddle River*.

Krebs, D. L. (1970). Altruism: An examination of the concept and a review of the literature. *Psychological bulletin*, 73(4), 258.

Lancaster, K. J. (1966). A new approach to consumer theory. *Journal of political economy*, 74(2), 132-157.

Larceneux, F., Benoit-Moreau, F., & Renaudin, V. (2012). Why might organic labels fail to influence consumer choices? Marginal labelling and brand equity effects. *Journal of Consumer Policy*, 35(1), 85-104.

Laroche, M., Saad, G., Cleveland, M., & Browne, E. (2000). Gender differences in information search strategies for a Christmas gift. *Journal of Consumer Marketing*, 17(6), 500-522.

Laurent, G., & Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of marketing research*, 41-53.

Lockshin, L., & Hall, J. (2003). *Consumer purchasing behaviour for wine: what we know and where we are going* (Doctoral dissertation, University of South Australia, Wine Marketing Research Group).

Lockshin, L., Jarvis, W., d'Hauteville, F., Perrouy, J.P., 2006. Using simulations from discrete choice experiments to measure consumer sensitivity to brand, region, price, and awards in wine choice. *Food Quality and Preference*, 17 (3), 166–178.

Louviere, J. J., Hensher, D. A., & Swait, J. D. (2000). *Stated choice methods: analysis and applications*. Cambridge university press.

Lusk, J. L., & Norwood, F. B. (2009). An inferred valuation method. *Land Economics*, 85(3), 500-514.

Lusk, J. L., Nilsson, T., & Foster, K. (2007). Public preferences and private choices: effect of altruism and free riding on demand for environmentally certified pork. *Environmental and Resource Economics*, 36(4), 499-521.

Mauss, M. (1954). *The gift: The form and reason for exchange in archaic societies*. Cohen and West. London.

McCullough, D. (1998). Web-based market research: The dawning of a new age. *DIRECT MARKETING-GARDEN CITY-*, 61, 36-38.

McFadden, D., 1973. Conditional logit analysis of qualitative choice behavior. In: Zarembka, P. (Ed.), *Frontiers in Econometrics*. Academic Press, New York, pp. 105–142.

Mitchell, V. W., & Greatorex, M. (1989). Risk reducing strategies used in the purchase of wine in the UK. *European Journal of Marketing*, 23(9), 31-46.

Moreau, C. P., Bonney, L., & Herd, K. B. (2011). It's the thought (and the effort) that counts: How customizing for others differs from customizing for oneself. *Journal of marketing*, Vol.75 No. 5, pp. 120-133.

Mtimet, N., & Albisu, L. M. (2006). Spanish wine consumer behavior: A choice experiment approach. *Agribusiness*, 22(3), 343-362.

Mueller, S., Lockshin, L., Saltman, Y., Blanford, J., 2010. Message on a bottle: the relative influence of wine back label information on wine choice. *Food Quality and Preference*, 21 (1), 22–32.

Nelson, P. (1970). Information and consumer behavior. *Journal of political economy*, 78(2), 311-329.

Nelson, P. (1974). Advertising as information. *Journal of political economy*, 82(4), 729-754.

Olsen, J. E., Thompson, K. J., & Clarke, T. K. (2003). Consumer self-confidence in wine purchases. *International Journal of Wine Marketing*, 15(3), 40-51.

Olson, J. C., & Jacoby, J. (1972). Cue utilization in the quality perception process. *ACR Special Volumes*.

Remaud, H., Mueller, S., Chvyl, P., & Lockshin, L. (2008). Do Australian wine consumers value organic wine? (Doctoral dissertation, AWBR-University of Siena).

Rubio, N., Oubiña, J., & Villaseñor, N. (2014). Brand awareness–Brand quality inference and consumer's risk perception in store brands of food products. *Food quality and preference*, 32, 289-298.

Ryans, A. B. (1977). Consumer gift buying behavior: an exploratory analysis. *Contemporary marketing thought*, 44, 99-104.

Sáenz-Navajas, M. P., Campo, E., Sutan, A., Ballester, J., & Valentin, D. (2013). Perception of wine quality according to extrinsic cues: The case of Burgundy wine consumers. *Food Quality and Preference*, 27(1), 44-53.

Scammon, D. E., Shaw, R. T., & Bamossy, G. (1982). Is a gift always a gift? An investigation of flower purchasing behavior across situations. *ACR North American Advances*.

Scarpa, R., Thiene, M., & Tempesta, T. (2007). Latent class count models of total visitation demand: days out hiking in the eastern Alps. *Environmental and Resource Economics*, 38(4), 447-460.

Sethuraman, R., Kerin, R. A., & Cron, W. L. (2005). A field study comparing online and offline data collection methods for identifying product attribute preferences using conjoint analysis. *Journal of Business Research*, 58(5), 602-610.

Shapiro, Benson A. (1970), "The Effect of Price on Purchase Behavior," *Broadening the Concept of Marketing*, (ed.) David Sparks, (Chicago: American Marketing Association). 43.

Sherry Jr, J. F. (1983). Gift giving in anthropological perspective. *Journal of consumer research*, 10(2), 157-168.

Spawton, T. (1990). Marketing planning for wine. *International Journal of Wine Marketing*, 2(2), 2-49.

Swait, J., & Louviere, J. (1993). The role of the scale parameter in the estimation and comparison of multinomial logit models. *Journal of marketing research*, 305-314.

Train, K. (1998). Recreation Demand Models with Taste Differences over People. *Land Economics*, 74(2), 230-239.

Vincent, M., & Zikmund, W. G. (1976). An experimental investigation of situational effects on risk perception. *ACR North American Advances*.

Viot, C., & Passebois-Ducros, J. (2010). Wine brands or branded wines? The specificity of the French market in terms of the brand. *International Journal of Wine Business Research*, 22(4), 406-422.

Wiedmann, K. P., Hennigs, N., Henrik Behrens, S., & Klarmann, C. (2014). Tasting green: an experimental design for investigating consumer perception of organic wine. *British Food Journal*, 116(2), 197-211.

Williamson, P.O., Lockshin, L., Francis, I.L., Loose, S.M., 2016. Influencing consumer choice: short and medium term effect of country of origin information on wine choice. *Food Quality and Preferences*, 51, 89–99.

Wooten, D. B. (2000). Qualitative steps toward an expanded model of anxiety in gift-giving. *Journal of Consumer Research*, 27(1), 84-95.

Yang, Y., & Paladino, A. (2015). The case of wine: understanding Chinese gift-giving behavior. *Marketing Letters*, 26(3), 335-361.

Yu, Y., Sun, H., Goodman, S., Chen, S., & Ma, H. (2009). Chinese choices: a survey of wine consumers in Beijing. *International Journal of Wine Business Research*, 21(2), 155-168.

## CONCLUSIONS

This thesis provides an overview of the wine sector, pointing the attention both on producers, with their entrepreneurial motivations and their managerial “style”, and on consumers, with their purchase’s preference for different occasions. Results emerged from the three articles allow us to better understanding some aspects of the actual reality of wine chain, with the aim of implementing strategies that promote a further development.

The first article, resorting to the qualitative method, evidences that non-economic motivations play a crucial role in entrepreneurs’ decision of establishing and running a wine business. For wine owners, themes as the passion for wine, the desire of independence, living close to nature in a rural area have a particular weight. Depending on the priorities given by entrepreneurs to motivations and goals in pursuing their company, and combining these with their characteristics and managerial practices adopted, it was possible to describe two business styles: one business-oriented and one lifestyle-oriented. The business-oriented style is characterized by a particular attention to economic motivation, nevertheless recognizing gained non-pecuniary benefits in running a wine production business. The way that these entrepreneurs started their wine business and the strategies they followed for running it have completed reasons for belonging to this group. The lifestyle-oriented style is underlined by the preponderance of non-pecuniary motivations in establishing and running their business, despite maintaining a profitable business for supporting lifestyle gains was necessary. The strong presence of lifestyle entrepreneurs inside the family small-medium firms highlighted by this study offers a new perspective in the analysis of the wine sector. Further investigation and interpretation of the management should take into account non-economic profits, in order to avoid restricting economic analysis. For instance, in cost accounting field, for supporting his desired lifestyle and his non-monetary

benefits, the lifestyle entrepreneur may decide to sustain greater costs during the productive process, and thus to obtain a lower economic profit. In this case, the lifestyle entrepreneur would consider the utility derived from the immaterial profits greater than the disutility from the lower economic profits. The success of these entrepreneurs could be measured not only in economic terms but also considering personal success and accomplishment of own non-monetary goals. In this way, it could be possible a new interpretation of the contribution of small-medium family firms in the economic pattern.

A further contribution of this thesis concerns consumers' preference in purchasing a bottle of wine. Although there is a great literature about wine consumers' behavior, the articles here presented play a part in adding explanations on this phenomenon, focusing particularly on wine attributes and purchasing occasions. In detail, the aim of the second article is to verify whether the introduction of a higher-tier certification within a PDO denomination (Chianti Classico DOP) may represent an effective strategy to leverage the value of the brand and to strengthen the relationship between quality production and territory. The results, detecting preferences heterogeneity among consumers, show the existence of a segment that appreciates the introduction of this higher-tier certification within a PDO denomination and therefore validates this development quality strategy. In a system featured by many designations of origin, with a 'mark inflation' in the marketplace and therefore a diminishing consumer's cognizance, this qualitative differentiation may help to further enhance the tie between wine and territory, to diversify the market supply, and to increase consumer's awareness. Other Consortiums of Protection may undertake such actions in order to better promote their products, providing benefits both to producers and to consumers.

The third article evidences that consumers show a different behavior in buying a bottle of wine depending on purchasing and consumption occasion. In particular, this study concerns differences between a self-consumption and a gift-giving circumstance. Depending on the type of occasion, the bottle of wine chosen has

specific characteristics. Considering different qualitative attributes, for a gift-giving scenario, consumers prefer wine with a famous brand and an organic claim, while for a self-consumption occasion consumers choose wine with Geographical Indications. This result shows the strength of 'famous brand' attribute, particularly for a special occasion and for consumers with a low degree of knowledge about wine. By a marketing point of view, producers have to pay more attention to the development of their brand, implementing strategies for increasing its knowledge and its 'image'. For the gift-giving scenario, a further segmentation of the sample highlighted three distinct classes of consumers, described by different preferences for attributes and by personal attitudes. This heterogeneity between classes provides insights for winemakers and retailers, suggesting advice for diversifying their marketing strategies.