
FACTORS THAT INFLUENCE INTERNATIONAL CONSUMERS'
PURCHASE INTENTION AND WILLINGNESS TO PAY FOR
PORTUGUESE WINE

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Abstract

Portugal finds itself in the middle of an international positioning dilemma in the wine sector. It belongs to the Old World of Wine and, therefore, has to bear high production costs due to the European wine classification system, which is associated with a differentiation strategy based on high quality and high prices. However, international consumers are not willing to reward the quality of Portuguese wine through prices, as they do with French and Italian wines. In this context, the main aim of this study is to identify which factors influence international consumers' intention to buy and willingness to pay for Portuguese wine.

Based on literature review, a questionnaire was built to analyse the influence of wine attributes, subjective knowledge, third-party opinions, perceived quality, and the quality image of Portugal as a wine producer on international consumers' willingness to pay and intention to purchase Portuguese wines. We collected 354 valid responses from international consumers, which were analysed to test the hypothesized relationships. The data was analysed using the Chi-squared test.

The results showed that all the factors studied have an impact on purchase intention. With regard to the willingness to pay, it was found that only the factors labelling, grape variety and the quality image of Portugal as a wine producer have an impact on willingness to pay a higher price for a Portuguese wine.

In terms of literature, this project contributes to expanding knowledge about the consumer's perspective on the wine market; and in terms of management, it helps companies to refine their strategies.

Keywords: Wine; Portuguese Wine; Attributes; Subjective Knowledge; Third Parties' Opinions; Perceived Quality; Purchase Intention; Willingness to Pay.

Resumo

Portugal encontra-se no meio de um dilema de posicionamento internacional no sector do vinho. Pertence ao Velho Mundo do Vinho e, por isso, tem de suportar custos de produção elevados devido ao sistema europeu de classificação de vinhos, que está associado a uma estratégia de diferenciação baseada na alta qualidade e em preços elevados. No entanto, os consumidores internacionais não estão dispostos a recompensar a qualidade do vinho português através dos preços, como fazem com os vinhos franceses e italianos. Neste contexto, o principal objetivo deste estudo é identificar quais os factores que mais influenciam a intenção de compra e a disposição a pagar dos consumidores internacionais pelo vinho português.

Com base na revisão da literatura, foi construído um questionário para analisar a influência dos atributos do vinho, do conhecimento subjetivo, da opinião de terceiros, da qualidade percebida e da imagem de qualidade de Portugal como produtor de vinho na disposição a pagar e na intenção de compra de vinhos portugueses por parte dos consumidores internacionais. Recolhemos 354 respostas válidas de consumidores internacionais, que foram analisadas para testar as relações hipotéticas. A análise dos dados foi efectuada através do teste Qui-quadrado.

Os resultados revelaram que todos os fatores estudados têm impacto em relação à intenção de compra. Relativamente à disposição a pagar, verificou-se que apenas os fatores rótulo, qualidade da uva e imagem de qualidade de Portugal como produtor de vinho têm impactos na disposição a pagar um preço superior por um vinho português.

Em termos de literatura, este projeto contribui para expandir o conhecimento sobre a perspectiva do consumidor no mercado do vinho; e em termos de gestão, ajuda as empresas a aperfeiçoar as suas estratégias.

Palavras-Chave: Vinho; Vinho Português; Atributos; Conhecimento Subjetivo; Opinião de Terceiros; Qualidade Percebida; Intenção de Compra; Disposição a Pagar.

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1. Introduction

Wine is an ancient beverage (Estreicher, 2017) enjoyed by many since the beginning of its production (Elliot & Barth, 2012). If once its production and consumption were more concentrated in European countries (Campbell & Guibert, 2007), nowadays, it surpasses any territorial and cultural border (Bisson et al., 2002). In general, in the modern world, the wine market continues to grow, with more and more companies and regions producing and selling wine (Masset et al., 2023). This is because in some regions of the globe wine production and consumption are increasing significantly and disproportionately to the decrease in other regions, for example in Europe (Lombardi et al., 2016; Correia et al., 2019). To organize the wine market, experts and producers have divided it into two main blocks: Old World of Wine and New World of Wine, referring to groups of wine producing countries with similar characteristics, which allows to group them (Roberto et al., 2009); the Old World includes European countries, such as France, Italy, Spain and Portugal, while the New World includes non-European countries like Argentina, Australia, New Zealand and the United States of America.

Although the Portuguese wine industry is relatively small when compared to other countries, such as the French or Italy, it has a lot of potential, both nationally and internationally (Costa et al., 2021). According to INE, the Portuguese wine production increased by 14,7% in 2021; in the previous year (2020), this sector recorded a revenue of approximately 1.6 billion euros, representing 55,7% of sales in the Beverage Industry. It is also relevant to add that, as reported by Informa D&B (2022), exports increased by 8,6% in 2021 compared to the previous year, highlighting France, the United States of America (USA) and the United Kingdom (UK) as the main destination markets.

Authors such as Galati et al. (2017) and Rebelo et al. (2019), state that global consumption is decreasing, which is a problem for wine exporters, such as Portugal. However, other authors state that while there is a decrease in the Old World, this does not happen in other markets, namely the Asian market, where the wine consumption is growing (Masset et al., 2016; García-Cortijo et al., 2019). In addition, Pomarici and Vecchio (2014) found that global consumers are increasingly interested in the wine culture, more knowledgeable about the product and more demanding about its quality. In that line, China, India, Turkey, Brazil, Mexico, and Chile are countries where there is

an increase in wine consumption and interest in a quality product, with an increase of luxury wine consumption in the last years (Wright et al., 2023).

Despite the potential to grow in wine exports, Portugal numbers still fall short of its direct competitors, i.e., Old World producers. The explanation can be taken from Ries and Trout (1993) that stated that: “marketing is not a battle of products. It’s a battle of perceptions.” (p. 25). While consumers perceive the Old World as producing higher quality wine than the New World and are willing to pay a higher price for them (Schamel, 2006), Portugal seems to not benefit from this perception. In fact, despite investing in the production of a good quality wine, the perception that international customers have of Portuguese wines is not consistent with the effort made by Portuguese producers (Miralles et al., 2008; Gouveia et al., 2017), making them unable to sell at the price of French and Italian wines (Ugaglia et al., 2019). Portugal cannot compete with the low prices of New World wines either, as they benefit from economies of scale and costs, unfeasible in small domestic markets (Castaldi et al., 2006).

Although there are numerous recent studies on international wine market addressing consumer preferences (Moulard et al., 2015; Galati et al., 2017; Carsana & Jolibert, 2017; Ferro & Amaro, 2018; Hu & Baldin, 2018; Giacomarra et al., 2020; Masset et al., 2023; Toni et al., 2022), as well as studies on what Portuguese consumers value in the Portuguese wine market (Monteiro et al., 2020; Larentis et al., 2019; Campos & Lins, 2022), there are few studies on what international consumers value the most in Portuguese wines (Santos & Ribeiro, 2012; Pérez-Rodríguez et al., 2022). Therefore, this project aims to fill this gap, specifically to identify “What factors influence international consumers’ purchase intention and willingness to pay for Portuguese wine”.

We believe that this project can contribute both to the literature and to the management of wine companies in Portugal. In terms of literature, it extends existing knowledge on the wine industry, specifically regarding the understanding how international consumers perceive Portuguese wines and the factors that influence that perception. As for the practical implications, this study may provide Portuguese wine companies with important insights to improve their international strategies.

This dissertation is composed of five chapters, besides the Introduction. Chapter 2 explores previous studies that are important for a better understanding of the study’s main concepts (e.g., wine, Old World of Wine and New World of Wine, purchase intention, willingness to pay, and drivers of purchase intention and willingness to pay)

and presents the hypotheses and the theoretical model. Chapter 3 details the methodology applied in the study. Chapter 4 is reserved for the dissemination of the results obtained through the questionnaire and the discussion of these results. Finally, Chapter 5 presents the study's main conclusions, its limitations and suggestions for future research, and its contributions to the literature and to management.

2. Literature Review

This section is divided into two parts. The first highlights the concept of wine, as well as a notion of the Old and New World of Wine, to have a better understanding of this market. The second part will emphasize the conclusions of some studies on the factors that most influence the purchase intention and willingness to pay of international consumers, thus defining variables that are intended to be used for the creation of a theoretical model, where the relationships between the variables will be exposed.

2.1. Wine

Wine is an alcoholic beverage that results from the fermentation of the juice of fresh or ripe grapes (Prado et al., 2013). From this fermentation arise numerous chemical compositions that give rise to different types of wine (Guerra, 2012).

It is believed that wine is among the products consumed for the longest time in History. It is known that the oldest vineyards in the world were cultivated in 8.000 BC, in Georgia (Estreicher, 2017). Additionally, Elliot and Barth (2012) show that there are records of wine consumption dating back at least over 2.000 years and that its consumption continues to the present day, recalling that the Bible mentions it several times. Wine is also a product that has no border barriers, being marketed globally – “It is hard to find a product with greater reach and range in so many dimensions” (Elliot & Barth, 2012, p. 183).

Several authors investigate the economic aspect of wine. According to Masset et al. (2023), wine is an experience good, which means that the consumer only notices its quality attributes, such as taste, after buying and tasting the product. Otherwise, the only source of information would be the bottle label (Nelson, 1970). Furthermore, Orrego et al. (2012) describe wine as a “... highly differentiated product ...” (p. 207), meaning that no other production can be a perfect substitute for a given wine, i.e., each wine is a unique product. For these reasons and based on Rosen’s consumer theory (1974), consumers do not evaluate the product as a whole, but are predisposed to pay for the attributes of the good they value most.

The consumer theory or the hedonic pricing model created by Rosen (1974), states that the prices of a good “... are defined as the implicit prices of attributes and are revealed to economic agents from observed prices of differentiated products and the specific amounts of characteristics associated with them.” (p. 34). In this way, and

according to Lancaster (1966) and Schäufele and Hamm (2017) wine can be broken down into the attributes, leading to the consumer's choice being made through these qualities and not in the product as a whole. Finally, Nerlove (1995) presents a shorter version of the model, where he assumes "... that prices and attribute contents can be taken as exogenous to (...) consumer." (p. 1697).

Regarding the attributes of wine, Nelson (1970) classifies them by categories, namely into research, experience, and credence attributes. Research attributes are the features, where the consumer can obtain information about the product at the moment of product analysis, like the label, which helps to substantially decrease the "... information asymmetries ..." (p. 182) existing in experience goods such as wine (Galati et al, 2017). This type of attributes can be subdivided into intrinsic attributes ("... objective characteristics of the product such as colour, type of wine, brand and alcohol content ..." - Hu and Baldin, 2018, p. 1267) and extrinsic attributes (which, according to Gonzaga et al. (2022), represent the features associated with the wine, such as the country of origin, the regions of wine, the price, the packaging, the expertise of the winery, the opinion of the experts and the reputation of the wine, among others (Jover et al., 2004)).

Concerning the experience attributes, these include the features that the consumer discovers and appreciates after buying the product, such as the visual, taste and smell of the wine (Orrego et al., 2012). To Nelson (1970) a clear notion about these attributes leads the customer to create an opinion about what he likes best and which brands meet his preferences.

Lastly, credence attributes are features that the consumer does not have access to during the decision-making moment (Dalziel et al., 2019), such as the climatic conditions existing in the year of harvest, i.e., environmental issues, the production and storage processes (traditionally and culturally important in the Old World of Wine). Lerro et al. (2021) further add health, sustainability and social topics as examples of credence attributes. Therefore, Grunert et al. (2004) highlight the need for there to be a third entity, which has authority and can assure consumers of the existence of these attributes, "since the consumer is seldom able to evaluate whether a food product has actually been produced under the promised conditions." (p. 269). In the case of Old World wines, there are certification bodies that guarantee the application of certain production methods by awarding these wines with certificates of appellation of origin.

2.2. Old World of Wine and New World of Wine

The wine industry is catalogued according to some characteristics into two groups: the Old World of Wine, and the New World of Wine.

The Old World countries are those with more historical and traditional productions and where there is a strong culture of wine consumption (Marco-Lajara et al., 2022). France, Italy, Spain, Portugal, and Germany are some examples of countries belonging to this group (Giacomarra et al., 2020). Contrarily, the New World countries are the ones that started producing wine after the European colonial expansion and are countries where wine is not a main actor in their habits and traditions, as in the case of Argentina, Chile, the United States of America (USA) and Australia (Vivas & Sousa, 2012; Banks & Overton, 2010). Wines produced by the Old World are globally recognised by their *terroir* (Ballantyne et al., 2019), more specifically by the fact that most of them have a certificate of appellation of origin. For this reason, the Old World wines are associated to the region where they are produced, since producers want to highlight this characteristic, which differentiates them from competitors (Tsiakis et al., 2022), as for example, the Port Wine produced in the Douro Demarcated Region. In the opposite spectrum, the wines produced by the New World are recognised by the consumer by their grape variety (Schamel, 2006; Giacomarra et al., 2020), for example the famous Merlot wines from the USA and the Cabernet Sauvignon from Argentina.

Regarding Old World countries, which includes Portugal, a key concept, highly valued by consumers is *terroir* – “from the French *terre* (meaning land), to refer to the special characteristics of a place that impart unique qualities to the wine produced.” (Cross et al., 2011, p. 152). The previously mentioned special characteristics include environmental conditions like the morphology, meteorology and soil components of a certain region which directly conditions the wine attributes, for example flavour, colour, and body (Leeuwen & Seguin, 2006). This term is further conceptualised by consumers when the wine features designations of origin, such as PDO and PGI (Protection of Designations of Origin and Protection of Geographical Indications, respectively), as these are quality certificates that prove that such wine contains the characteristics of the region (Hu & Baldin, 2018), the age-old production methods and techniques and the use of specific grape varieties (Banks & Overton, 2010). Over the years, this type of appellations of origin have become a component of brand intellectual property and a guarantee of uniqueness and quality, for the world wine market, due to international

agreements and the bargaining power of European traders in this market (Josling, 2006). Although this concept is globally and historically associated with Old World countries, more recently there is a growing interest by New World producers in linking their products to this concept (Ballantyne et al., 2019), as consumers perceive it as an attribute of high product quality and authenticity (Moulard et al., 2015).

Besides the historical reasons described, there are other characteristics that justify this division. The Old World of Wine is characterised by a more artisanal production and knowledge about the processes and production techniques, based on practice and experience that was being improved and transmitted through generations among small producers (Vrontis et al., 2016). Along with others, this is one of the reasons why wines from the Old World are perceived by customers as wines of high differentiation, quality, and authenticity (Moulard et al., 2015); being this (reputation of both the product and the producer) their competitive advantage (Remaud & Couderc, 2006).

Price is another distinguishing factor of Old World wines. Besides the perceived quality, the high costs that producers have to bear and the low economies of scale present in this context (Castaldi et al., 2006) are other reasons for the high price. The absence of large tracts of land where European vineyards can expand, the high cost of the square meter in these regions, and the high labour costs are factors that can explain the high production costs of Old World wine (Simpson, 2009). Finally, although the wine from the Old World is considered by most consumers as a product of excellent quality (Giacomarra et al., 2020), some experts and critics believe that protectionism and conservative business ideas persist, forcing producers to bear high costs and not allowing them to innovate in order to lower the production costs (Banks & Overton, 2010).

In the opposite spectrum, New World wine producers are recognised for using production methods based on science, innovation, applying new oenological techniques and procedures, which result in higher quality values than those they initially produced (Wongprawmas & Spadoni, 2018). Their production is also characterised by being aimed at mass markets, i.e., large volumes and more affordable prices (Banks & Overton, 2010). These results are acquired through cost reduction and in leveraging high economies of scale (Stasi et al., 2016), due to their geographical conditions, i.e., large countries, where agricultural land prices are cheaper than in Europe and where (in most regions) the cost of labour is also lower. They also benefit of lower barriers to trade and export of wine (Castaldi et al., 2006; Cholette et al., 2005), thus allowing them to enjoy higher productivity

and exercise a lower price strategy than Old World wines, becoming more competitive (Clarke et al., 2012).

In addition, they persist on a production based on the preferences of consumers, thus focusing more on the commercial phase (Remaud & Couderc, 2006). On the contrary, Old World producers, more conservative, direct their activity on the production phase, taking in consideration quality and tradition (Festa et al., 2016).

Finally, Nossiter (2004), in his documentary *Mondovino*, criticises the producers of the New World of Wine for contributing to the depreciation of the value of wine in a globalised manner, since their strategy of massification and standardisation may lead to a product similar to that of fast-food. Thus, it is essential the protection of uniqueness and quality of this industry.

So, due to the increasing globalisation, the wine market becomes increasingly complex, as it is affected by forces of integration, agglomeration, and standardisation while, simultaneously, by market forces that demand maximum quality, exclusivity, and product differentiation (Banks & Overton, 2010).

2.3. Purchase intention

Purchase intention (PI) is related to consumer preference and behaviour (Schwartz, 1992; Agarwala et al., 2019). According to Delbridge and Bernard (1998), consumer preference is “something that is preferred; the object of prior favour, or choice” (p. 908), which means that purchase decision of a consumer is preceded by preference (Xie et al., 2021). Regarding the wine market, consumer preferences are often conditioned by the cultural and social background of the individual (Cezanne & Saglietto, 2014), which was visible in the European context, until recently, since the consumption for this product, over other beverages, was accompanied by history, customs, and tradition in wine production.

Furthermore, the concept of consumer behaviour has undergone numerous changes since the early 1950s, with Katona’s theory (1951), which highlights two perspectives: economic and psychological. In the economic perspective, it is assumed that the consumer is rational and that all individuals always aim to maximise their utility. However, reality does not always match the theory and some consumers settle for what is acceptable, i.e., with a minimally satisfactory utility (Haghpour et al., 2022). The scarcity of important information on the product and on the competition at the purchasing

decision stage, and the difficulty in processing all the information provided, also explain the irrationality of consumers (Katona, 1964). The psychology perspective focuses on the intellectual and affective components of the individual, such as their experience with a certain product or recommendations from acquaintances, which directly influence the purchase decision, to understand “irrational” consumer attitudes (Sheth, 2021; Principato et al., 2021). Pleasure, price, advertising, and quality are also recognised as determinants that lead consumers to choose a certain product (Nassè et al., 2019). It is in the interest of organisations to frequently supervise consumers’ needs, tastes, and behaviours, so that they can provide quick and efficient responses (Chen et al., 2020). This control makes companies more effective and brings them competitive advantages (Nassè, 2021).

On the other hand, intention translates consumers’ commitment to perform a specific behaviour (Fishbein & Ajzen, 1980; Ajzen, 1991), making him/her feel willing to put this idea into practice and, therefore, it is something that precedes the act of buying (Eagly & Chaiken, 1993).

2.4. Willingness to pay

Willingness to pay (WTP) is defined as the highest amount a consumer is willing to pay for a particular good or service (Vock et al., 2013). For this reason, companies consider that obtaining information and understanding the WTP of their consumers and potential consumers is very important, as it is a way for managers to understand what leads consumers to pay more for a product (Moscovici et al., 2021), thus being “the cornerstone of marketing strategy” (James et al., 1993, p.3).

Since wine is an experience good, it is not perceived by consumers as a mere alcoholic drink in a bottle, being associated with an identity, a story told by the producers, where the details of the product’s trajectory are revealed from the beginning of its production until the moment the consumer holds the bottle in his or her hand (Flint & Golicic, 2009; Monaco & Guimelli, 2011; Foster et al., 2017). Furthermore, wine is composed of intrinsic and extrinsic attributes and its consumption depends on the consumer and his background. Ones will prioritize the country and/or region of origin, while others prefer to base their choice on the grape varieties used, others may already base their choice on friends and expert recommendations or international rankings, or even the price may become a crucial factor for choosing a wine (Espejel et al., 2011; Spielmann, 2015; Symmank, 2019). Thus, it is understandable that the consumer’s willingness to pay is also

related to the product attributes, i.e., the consumer will be willing to pay a higher price for products that contain the properties that he or she most values and perceives as quality attributes (Ruggeri et al., 2020).

Having discussed and properly understood the meaning of PI and WTP, let's now take a look at the factors that influence them in the following sections.

2.5. Drivers of purchase intention and willingness to pay of wine

2.5.1. Attributes of Wine

In recent years there has been a decline in wine consumption in Europe, due to changes in consumption habits and the increasing appreciation of substitute products, such as beer and other higher alcoholic beverages (Vivas & Sousa, 2012; Pomarici & Vecchio, 2014; Rebelo et al., 2019). However, some authors have realised that this decrease in consumption has a higher effect on Western European countries (Crescimanno et al., 2014; Castellinin & Samoggia, 2018). Several studies such as Galati et al. (2017) and Hu and Baldin (2018) highlight the fact that Old World producers should start investing more in markets where, in the past, it was not common to drink wine, but where there is currently an increase in consumption, such as the Russian and Chinese markets. We can therefore conclude that the increase in New World and emerging countries offsets the decrease in Old World countries.

Thus, wine producing and distributing companies should analyse the various drivers that condition the purchase intention and the willingness to pay of international consumers of Portuguese wine, so they can adapt their strategies to the needs and preferences of their consumers and potential consumers.

Wine is a product that has numerous attributes that help the consumer to create an opinion before purchasing it (Quester & Smart, 1996). Depending on the study and the target audience that is analysed, the relevant attributes during decision making will be different (Barber et al., 2012). A market study can lead to the identification of patterns among consumers “which may allow the segmentation of international markets base on consumption and/or purchase situations” (Aurifeille et al., 2002, p. 373). For this research, the following attributes will be analysed: labelling, country of origin, regions of wine, grape variety, and price, since the literature refers to them as influential attributes for purchase intention and willingness to pay (Botonaki & Tsakiridou, 2004; Erraach et

al., 2014; Cassago et al., 2021; Gonzaga et al., 2021), for the consumers studied. Thus, the first and second hypotheses of the theoretical model emerge:

H1: The importance of wine attributes influences the purchase intention of Portuguese wine.

H2: The importance of wine attributes has an influence on the willingness to pay of Portuguese wine.

The next subsections discuss the specific wine attributes that are integrated in this study.

2.5.1.1. Labelling

Since wine is an experience product, the label becomes a crucial factor in the customer's decision making at the moment of purchase (Elliot & Barth, 2012). Carsana and Jolibert (2017) consider the label an important attribute, because if the consumer buys a wine in a shop without any help of a specialist member of staff, the label is the only source of information at his/her disposal about the product. The label also constitutes an important component for the wine image (Ritchie, 2007) and a marketing element for the brand, since it is used as a tool to attract the consumer, differentiating themselves from other similar products (Lunardo & Rickard, 2020).

Retorta (1992) establishes that label is a silent way to advertise the product and a means of communication between the winemaker and the consumer. The main functions of labels are to identify the product and the brand; to capture the consumer's attention; to enlighten the consumer about the components of the product; and to concentrate and provide important information about the product, such as the expiration date (Lindon et al., 2011). Thus, it is possible to conclude that the label has these two roles: informative and advertising. So, companies choose to display two labels (Todd et al., 2021). The more objective, rational, and informative section about the wine is found in the label inserted in the back of the bottle, while the front unique label includes the more emotional and commercial functions, to identify the product and attract the consumer (Retorta, 1992; Pabst et al., 2019).

The literature shows several studies with divergent consumer's opinions about wine labels. According to Sáenz-Navajas et al. (2013) for the Old World label design is "an important factor where judging quality, and the present study suggests that a modern label is an indicator of low quality wine" (p. 51). Contrarily, Castellinin and Samoggia (2018), that studied the French consumers have found that the generational factor is quite

relevant, since Millennials prefer more colourful labels. On the other hand, Barber et al. (2007) and Chrea et al. (2011) analysed the preferences of New World consumers and found that both type of consumers prefer more traditional labels, with more “classic” designs. However, the study justifies the choice of Australians by the fact that such consumers have a high level of subjective knowledge and involvement with the product.

Therefore, labelling is an attribute that in many cases weighs on consumers’ decision during their choice of wine, due to its impact on purchase intention and willingness to pay. Although some studies reveal that, depending on some factors, such as gender, age, and consumer knowledge, the labelling neither has much influence on purchase intention (Escandon-Barbosa & Rialp-Criado, 2019), nor on willingness to pay (Pickering et al., 2022). Thus, I state the first and second sub-hypothesis of the theoretical model:

H1.1: The importance of label design and information influences the purchase intention of Portuguese wine.

H2.1: The importance of label design and information has an influence on the willingness to pay of Portuguese wine.

2.5.1.2. Country of Origin

The country of origin, also known as perceived country image, is an extrinsic attribute of the wine, which as the name implies, refers to the country where a particular wine was produced and helps the consumer form an idea or an opinion about the product (Bruwer et al., 2014; Valentin et al., 2021), during decision making.

Wine producers have long adopted a marketing strategy based on country of origin, particularly Old World wine producers, because they are aware that the concept of *terroir*, as well as the perception of the culture and traditions of the producing countries have a very positive and significant impact on the perceived quality and authenticity of the products (Fernández-Ferrín et al., 2019). Furthermore, although there are some discrepancies in the results of past studies (McCutcheon et al., 2009), there are therefore authors who mention the importance of the country of origin for wine, since consumers, namely those with a high degree of knowledge and involvement with the product (Trindade-Carlos et al., 2019), believe that the country of production has an influence on the characteristics of the product (Suhaily & Darmoyo, 2017). Additionally, ethnocentric tendencies (“... the biased preference for domestic products over foreign alternatives...” (Balabanis and Siamagka, 2017, p. 166)), also make the country of origin an attribute that

some consumers consider during decision-making, but in this case, if the wine is from a country other than their own, the consumer tends to reject its purchase.

In contrast, other authors reveal that some consumers do not give as much importance to this attribute. The most inexperienced consumers prefer attributes such as price and medals, identifying them as synonymous with quality (Tamaş, 2016).

Regarding the international market, there are countries known as good wine producers. France and Italy, of the Old World, and Argentina and the USA, of the New World, are good examples (Howley & Van Westering, 2008; Anderson, 2013). For this reason, it is natural that the average consumer, who is not willing to take risks, is predisposed to pay a higher value for a product he knows than to buy unknown product, even with a lower price (Sellers-Rubio & Nicolau-Gonzalbez, 2016). Thus, the third and the fourth sub-hypothesis of the theoretical model is developed:

H1.2: The importance of country of origin influences the purchase intention of Portuguese wine.

H2.2: The importance of country of origin has an influence on the willingness to pay of Portuguese wine.

2.5.1.3. Region of Wine

The concept of wine region encompasses “multidimensional facets in combination with inter-related winescape elements to define a wine’s unique sensory and tactile characteristics, and one which can often be traced back to a single source or locality.” (Famularo et al., 2010, p. 362). Often the concept of wine region is confused with country of origin. However, Pucci et al. (2017) distinguished the two concepts, stating that there are two key reasons for this differentiation. On the one hand, the attributes, and qualities, of products, such as wine, cheese, and other alcoholic drinks have associated factors that are designed by human specificities (namely techniques and procedures used) and natural specificities (including climate and soil) characteristic of the very region where these are produced and that may not exist in the rest of the national territory (Van Ittersum et al., 2003). On the other hand, many companies use the concept of wine region as a way to differentiate themselves from international competitors, but also from domestic competitors (Pucci et al., 2017).

The designation of origin system is a set of quality indications and certificates, awarded by regional wine commissions and approved by the European Commission

(Candiago et al., 2022), that prove the authenticity, history, and quality of a product, conveying trust and credibility to the consumer (Carsana & Jolibert, 2018; González & Dans, 2018). In other words, the certificates confirm that the wine complies with all the human aspects (production methods and techniques) and natural aspects (characteristics of the region) provided by the place where it is produced (Banks & Overton, 2010; Hu & Baldin, 2018). Designations of origin also serve to control production and protect unique regions and traditions, which, if not preserved, may cease to exist (Banks & Overton, 2010; Carter, 2018). They work to ensure also for fair competition between national and international producers (Malorgio et al., 2008).

The literature shows us that designation of origin has different effects on different foreign consumers. The older European consumers believe that certificates displayed on labels are an important sign of wine quality (Ginon et al., 2014). However, some New World wine consumers are not as aware of the added value acquired through designations of origin and therefore do not consider them as a significant factor in their product choice (Giacomarra et al., 2020). For this reason, Spielmann (2015) states that sometimes a wine having a certificate of region of origin is important, but it is not enough for the winery to have a long-term competitive advantage. Therefore, it is important to denote that consumers should know about certificates and consider them as a sign of authority, trust, and credibility so that they are willing to pay for a higher price (Moscovici et al., 2021).

In the Old World of Wine, the most well-known certificates are the Protected Designation of Origin (DOP) and the Protected Geographical Indication (PGI), i.e., industrial property rights, originally created and recognized by the European Union, being adopted by countries, such as Portugal, France, Italy, and Spain (Garavaglia & Mariani, 2017). The main purpose of such certificates is to defend products from specific regions with production methods and unique qualities alluding to their geographical area (Barbosa, 2003).

In 2009, due to the new European regulations implemented to this sector, the two new concepts DOP and PGI analogous to the already existing designations, emerged (Santos & Ribeiro, 2012). Currently, the Portuguese wine sector can award its wines through the European Union certificates belonging to the geographical indications system shown in Figure 1, including the Controlled Denomination of Origin (DOC) and DOP (Freire & Truninger, 2012; Melo, 2017). Thus, the fifth and sixth sub-hypothesis hypothesis of the model arises:



Figure 1 Examples of the Portuguese Quality Assurance Seals

H1.3: The importance of wine regions, such as DOC or DOP, influences the purchase intention of Portuguese wine.

H2.3: The importance of wine regions, such as DOC or DOP, has an influence on the willingness to pay of Portuguese wine.

2.5.1.4. Grape Variety

Grape varieties are groups of vines that through their specificities produce a unique wine (Kupe et al., 2021). Part of the uniqueness found in the grape varieties are transmitted by the *terroir* of the region, as grape varieties react differently to distinct *terroirs* (Andrés-De Prado et al., 2007). The same grape variety planted in different regions of the planet may originate products with different flavour, aroma, and colour.

The studies that analyse the effect of grape varieties on consumers' purchase intention and perception of quality, present some divergences in their results. Some authors indicate that the grape variety is a decisive factor in wine choice (McCutcheon et al., 2009; Banks & Overton, 2010; Ferro & Amaro, 2018). Nevertheless, novice consumers tend to base their choices on extrinsic attributes, such as price and medals, rather than intrinsic ones, such as grape varieties (Brata et al., 2022). Moreover, grape variety is an attribute that requires time, involvement, and experience with the product, so that the consumer can distinguish the types of grape varieties that exist and their individual characteristics (Agnoli et al., 2016). In addition, other authors, such as Masset et al. (2023) and Galati et al. (2017) highlight the fact that some consumers distinguish between national and international varieties preferring the second ones. On the contrary, Ramos and Thompson (1996) refer the potentiality and the valorisation of the national

grape varieties in foreign markets. More recently, Silva and Santos (2020) state that one of the great competitive advantages is “a large number of native wine grape varieties that confers differentiation to the Portuguese wines regarding the rest of Europe and the world wines” (p. 119). Therefore, the next sub-hypothesis of the theoretical model is:

H1.4: The importance of grape variety influences the purchase intention of Portuguese wine.

H2.4: The importance of grape variety has an influence on the willingness to pay of Portuguese wine.

2.5.1.5. Price

Price is an attribute that has different impacts on consumers (Erdem et al., 2002). On the one hand, it is an indicator of quality, especially for consumers with less knowledge, since they believe that more expensive wines are higher quality wines (Atkin & Thach, 2012; Stasi et al., 2014; Boncinelli et al., 2019), while the experts can distinguish its quality through other attributes and knowledge (Lewis & Zalan, 2014). However, the price also acts as a constraint, as it prevents access to consumers with lower financial resources, which affects a wide range of consumers (Erickson & Johansson, 1985; Wakefield & Inman, 2003). Moreover, wine is not an essential good, and is even often interpreted as the “nectar of the gods”, i.e., a luxury good, especially those with a premium price (Heine et al., 2016), which even affect the middle-class consumers (Erickson & Johansson, 1985).

Therefore, wine companies must act in a rational way regarding the price (Hinterhuber, 2015). Typically, companies can position themselves in the market by opting for a strategy of product differentiation or price competitiveness (Munteanu, 2015). Commonly the differentiation is done through an increase of the product quality, which consequently leads to an increase in price (Chenavaz, 2017; Wang et al., 2021). As far as the wine market is concerned, consumers’ quality perception of a brand and, consequently, its reputation, largely influence this strategy (Masset et al., 2023). On the opposite side of the spectrum, the price competitiveness approach applies production models based on product standardisation and massification to achieve economies of scale, and low production costs, enabling be highly competitive through the prices (Putra et al., 2018).

Due to the globalisation of markets, wine competition between firms has been increasingly intensifying (Lima & Carvalho, 2018). Therefore, pricing has become a

crucial strategy for companies (Rebello et al., 2019; Wu & Chiu, 2023). Nevertheless, due to the economic and financial instability of recent years, many wine companies that used the price competitiveness strategy realised that their competitors that bet on differentiation, even with high prices, did suffer less with this type of crisis, since consumers were insensitive to prices in this market segment (Del Rey & Loose, 2023). For this reason, a considerable number of companies have begun to change their strategy towards higher quality and product differentiation and higher prices (Gehani, 2013). Thus, to protect themselves against possible exogenous crises in the wine market and to improve their international image, it is crucial for Portuguese companies to understand whether the price of their product is an attribute that foreign consumers consider important and whether it affects their purchase intention and willingness to pay.

H1.5: The importance of price influences the purchase intention of Portuguese wine.

H2.5: The importance of price has an influence on the willingness to pay of Portuguese wine.

2.5.2. Product Knowledge

The purchase decision is a complex process, which becomes more difficult for consumers who do not have extensive knowledge about the product (Staub & Siegrist, 2022).

Product knowledge can be defined as the amount and quality of information retained in the consumer's mind, as well as the consumer's perception of that knowledge (Stanton & Cook, 2019). Therefore, this factor is composed of objective and subjective knowledge. Objective knowledge, also called real or factual knowledge consists of all the information that the consumer acquires and memorizes about a product (Bruwer et al., 2017). Since it is fact-based knowledge, it is possible to know whether the consumer is correct or wrong. In contrast, subjective knowledge is a singular perception of the quantity and quality of his objective knowledge about the product (Yang & Choi, 2022), which directly influences their confidence about their purchase choices and their willingness to pay (Utkarsh et al., 2019). Subjective knowledge is just an opinion, a perception, and, therefore, is not possible to classify it as right or wrong (Ellis & Caruana, 2018).

Previous studies highlight the importance of analysing the knowledge that a consumer has about the product, as a factor that directly conditions his behaviour and,

consequently, his purchase decision (Guo & Meng, 2008; Cakici & Shukla, 2017; Taylor et al., 2018; Muñoz et al., 2019). It should be added that subjective knowledge assumes a greater influence on consumer behaviour than objective knowledge (Xin & Seo, 2020), since, as mentioned earlier, consumers attach greater importance to the image and idea they have of a brand than to what the brand actually is (Ries & Trout, 1993), and the same applies to their knowledge (Çelik & Dağistan, 2018).

Other researchers such as Quester and Smart (1998) concluded that age and income are the main causes for a consumer to develop their wine knowledge. In fact, older consumers will have had more years and opportunities to try more varieties of wine and acquire greater knowledge about the product (Ellis & Thompson, 2018). Likewise, consumers with higher incomes can spend more money on wine and taste different types of wine quality (Bruwer & Campusano, 2018). Therefore, it is understandable that consumers to acquire greater knowledge spend more time choosing the product that satisfies their desires and are willing to pay for a higher price to be able to buy it. Contrariwise, consumers with less knowledge about the product will base their choice solely on price, opting for more expensive wines because they are allegedly associated to higher quality (Hollebeek et al., 2007). Consumer culture is another factor that compromises the knowledge of products associated with other cultures, which consequently affects the purchase intention of these consumers (Pookulangara & Koesler, 2011); for example, a Norwegian consumer, naturally, will not have a deep knowledge about regional products from Lebanon and he will prefer the products that he already knows and that are present in his culture. According to Hu and Baldin (2018), the lack of more widespread knowledge about grape wine compromises Chinese consumers' purchase relative to traditional western wine, compared to rice wine, that is very present in Chinese culture. The same may happen in relation to Portuguese wines, i.e., different cultures and lack of knowledge about wine may affect the importance that international consumers give to the analysis of wine attributes. For these reasons, product knowledge has become an important variable for the consumer during the buying process (Toni et al., 2022). Therefore, although the consumer may even think he knows about wine, in general, he may assume that he does not have much knowledge about a particular wine or a particular wine producing country and all the particulars that characterize its product, such as Portugal and Portuguese wine. Thus, I present the third the fourth hypothesis of this study:

H3: A higher subjective knowledge about wine impacts on the purchase intention of Portuguese wines.

H3.1: A higher subjective knowledge about wine in general impacts on the purchase intention of Portuguese wines.

H3.2: A higher subjective knowledge about Portuguese wines impacts on the purchase intention of this product.

H4: A higher subjective knowledge about wine impacts on willingness to pay of Portuguese wines.

H4.1: A higher subjective knowledge about wine in general impacts on willingness to pay of Portuguese wines.

H4.2: A higher subjective knowledge about Portuguese wines impacts on willingness to pay of this product.

2.5.3. Third-party Opinions

Since wine is an experience good and its quality is only fully perceived after purchase, consumers try to base their purchasing decisions on the opinions of people they trust, such as friends and family who have already tasted the wine, or on renowned expert in the field (Ashenfelter & Jones, 2013; Agnoli et al., 2016).

According to Marks (2015) an expert is “... someone who seems widely known and influential among consumers according to published evidence of popularity (e.g., circulation numbers for a newsletter or magazine, particularly if it is purchased; regular appearance over time of citations in widespread advertising)” (p. 320). When an expert comments and evaluates a wine, besides the visibility it gives to the product, it also helps the customer to have a more accurate perception of quality about the wine, contributing to the reduction of uncertainty and risk during the purchase (Ferro & Amaro, 2018). Depending on the type of consumers studied, the group of people who influence them can be different. On the one hand, Aqueveque (2008) stated that consumers attach great importance to expert opinion because they consider their reviews as a “... measure of “objective” quality ...” (p. 38). Ferro and Amaro (2018) also state that the high classification attributed by experts and juries in public ratings is one factor that most influence its price in a positive way. On the other hand, Sheth (2021) gives great relevance to the advice and recommendations of friends and family in consumers’ perception of

product quality and, consequently, in their intention to purchase for wine. Thus, the hypothesis formed for this variable are:

H5: Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have an impact on purchase intentions of Portuguese wines.

H6: Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have an impact on willingness to pay of Portuguese wines.

2.5.4. Perception of quality

The concept of a consumer's perception of quality of a given product is regularly misunderstood with that of perceived value, which in turn is confused with that of customer satisfaction (Sweeney & Soutar, 2001). Satisfaction is the opinion formed by the consumers after bought and used the product (Oliver, 1981), while perceived value is "the consumer's overall assessment of the utility of a product based on perceptions of what is received and what is given." (Zeithaml, 1988, p. 14); this means that the perceived value accompanies the whole purchase process, from the initial stage to the post-purchase (Woodruff, 1997), and the customer does not necessarily have to buy the product, i.e., he/she may consider that a certain product has high quality and not feel the need to obtain it, thus making the perceived value independent of the purchase decision (Charters & Pettigrew, 2003).

The perception of quality can be a complex concept to define because it is something very subjective and depends mainly on the opinion of each individual (Camarano et al., 2023). For this reason, several interpretations of the concept may arise (Charters and Pettigrew, 2003). Zeithaml (1988) defines quality as something that provides the product "... superiority or excellence." (p.3).

Perception of quality can be divided into objective and subjective categories. Subjective quality perception is each consumer's idea of quality, i.e., it is the value judgement made by customers or potential customers about a given product or service (Aaker, 1991; Aschemann-Witzel & Peschel, 2019) and which depends on the cultural, educational, socioeconomic context and preferences of each individual, being, therefore, an exclusively individual choice (Steenkamp, 1990, Mascarello et al., 2015). In a pre-purchase phase, the subjective quality perception is more dependent on the extrinsic attributes of the products, such as reputation (Ramos et al., 2011).

The objective quality perception is judged by observable attributes that differentiate the product from other competitors (Hoffmann et al., 2021). The quality of this type of attributes is assessed through some custom, standard, or social convention accepted by most people and, therefore, it is not an individual perception, but a collective one (Zeithaml, 1988; Jover et al., 2004). Contrary to subjective quality perception, it derives from the intrinsic attributes of the product, such as colour and alcohol content, in the case of wine (Ramos et al., 2011). Among the two types of quality, subjective quality perception is the one that stands out in studies carried out in the area of marketing, since it is the one that occupies a more important position in consumer choice (Charters & Pettigrew, 2003), and, therefore, it is the one that arouses more interest both in academics and in managers who want to understand consumer behaviour (Olshavsky, 1985).

In the case of experience products, such as wine, the perception of quality can only be made after the consumer purchases and experiences the product (Charters and Pettigrew, 2003). For the same authors, any prior assessment is mere speculation and not a final opinion formed by the customer. In contrast, Beckert et al. (2014) believe that the value of wine often comes from symbolism associated by society and subjective characteristics, which depend on the perspective of each individual.

Finally, according to Shapiro (1983), reputation is the sum of consumers' perceptions of product quality, i.e., it is the information they have about a good and with which they create an image about the product or company, facilitating their purchasing decision. From the supply point of view, producers with higher reputations can charge higher prices, since consumers are willing to pay more to acquire more quality (Shapiro, 1983). Thus, the seven and eight hypothesis of the theoretical model emerges:

H7: A positive perceived quality influences the purchase intention of Portuguese wine.

H8: A positive perceived quality has an influence on the willingness to pay of Portuguese wine.

In the wine industry, a factor that provides a higher reputation is the region of origin where the wine is produced (Masset et al., 2023) and this positive relationship is reinforced when the wine has specific appellations of origin (Galati et al., 2017). Although it is world famous for its Port Wine (Machado & Ribeiro, 2017), Portugal has not yet achieved the same recognition for table wines, not being, therefore, among the first

options that international consumers have in mind when they think about buying wine, thus affecting their purchase intention and willingness to pay (Rebelo & Caldas, 2013). Thus, here are presented the ninth and tenth hypothesis of the theoretical model:

H9: A positive quality image of Portugal as a wine producer influences the purchase intention of Portuguese wine.

H10: A positive quality image of Portugal as a wine producer has an influence on the willingness to pay of Portuguese wine.

To sum up, in this chapter we have started out by distinguishing between the Old World of Wine and the New World of Wine. We then moved on to give an explanation on the factors that influence the independent and dependent variables of the proposed model, as well as the relationships between them.

H1: The importance of wine attributes influences the purchase intention of Portuguese wine.

H1.1: The importance of label design and information influences the purchase intention of Portuguese wine.

H1.2: The importance of country of origin influences the purchase intention of Portuguese wine.

H1.3: The importance of wine regions, such as DOC or DOP, influences the purchase intention of Portuguese wine.

H1.4: The importance of grape variety influences the purchase intention of Portuguese wine.

H1.5: The importance of price influences the purchase intention of Portuguese wine.

H2: The importance of wine attributes has an influence on the willingness to pay of Portuguese wine.

H2.1: The importance of label design and information has an influence on the willingness to pay of Portuguese wine.

H2.2: The importance of country of origin has an influence on the willingness to pay of Portuguese wine.

H2.3: The importance of wine regions, such as DOC or DOP, has an influence on the willingness to pay of Portuguese wine.

- H2.4:** The importance of grape variety has an influence on the willingness to pay of Portuguese wine.
- H2.5:** The importance of price has an influence on the willingness to pay of Portuguese wine.
- H3:** A higher subjective knowledge about wine impacts on the purchase intention of Portuguese wines.
- H3.1:** A higher subjective knowledge about wine in general impacts on the purchase intention of Portuguese wines.
- H3.2:** A higher subjective knowledge about Portuguese wines impacts on the purchase intention of this product.
- H4:** A higher subjective knowledge about wine impacts on willingness to pay of Portuguese wines.
- H4.1:** A higher subjective knowledge about wine in general impacts on willingness to pay of Portuguese wines.
- H4.2:** A higher subjective knowledge about Portuguese wines impacts on willingness to pay of this product.
- H5:** Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have an impact on purchase intentions of Portuguese wines.
- H6:** Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have an impact on willingness to pay of Portuguese wines.
- H7:** A positive perceived quality influences the purchase intention of Portuguese wine.
- H8:** A positive perceived quality has an influence on the willingness to pay of Portuguese wine.
- H9:** A positive quality image of Portugal as a wine producer influences the purchase intention of Portuguese wine.
- H10:** A positive quality image of Portugal as a wine producer has an influence on the willingness to pay of Portuguese wine.

3. Methodology

This chapter is divided in two parts. First, it recalls the study's main research question and presents the theoretical framework. Then, it presents the methodology used, namely the data collection. Finally, it presents and explains the statistical tests used to analyse the data.

This study adopted a quantitative methodology, which according to Creswell (2013) is a way of evaluating theoretical questions or hypotheses, applying them to the reality of the population to be studied. According to the same author, surveys, as the one used in this study, are adequate to investigate a “quantitative or numerical description of trends, attitudes or opinions of a population by studying a sample of that population.” (Creswell, 2013, p. 29). Furthermore, since statistical methods are applied in quantitative studies, this makes it easier to diagram the data (Creswell, 2013), and they become more reliable and accurate in the eyes of the scientific community (Bowen, 2009; Queirós et al., 2017).

3.1. Theoretical Framework

The main goal of this research is to understand which are the attributes that most influence the purchase intention and willingness to pay related with Portuguese wine by international consumers. Therefore, the main question that the research aims to answer is: “What factors influence international consumers’ purchase intention and willingness to pay for Portuguese wine?”.

The theoretical model proposed in Figure 2 integrates the hypotheses presented in Chapter 2, which are based on the adaptation of conceptual models suggested by other researchers over time, thus shaping the scientific literature (McCutcheon et al., 2009; Danner et al., 2017; Amato et al., 2017; Escandon-Barbosa & Rialp-Criado, 2019; Monteiro et al., 2020; Tong et al., 2020; Orlowski et al., 2022). Such relationships as the relationship between wine attributes (WA) and purchase intention (PI) and between WA and willingness to pay (WTP) have been revealed in models such as McCutcheon et al. (2009), Escandon-Barbosa and Rialp-Criado (2019) and Orlowski et al. (2022). On the other hand, the relationship between subjective wine knowledge (SWK) and PI and between SWK and WTP was mentioned by Amato et al. (2017) and recently by Tong et al. (2020). Finally, the models by Monteiro et al. (2020) and Danner et al. (2017) tested the relationship between perceived quality (PQ) and purchase intention and between PQ and willingness to pay (WTP), respectively. Thus, in order to test the ten hypotheses

presented below and understand their relationships with the dependent variables (purchase intention and willingness to pay for Portuguese wines by foreign consumers) and with the independent variables (including wine label, country of origin, region of wine, grape variety, price, subjective wine knowledge, third-party opinion about the product, perceived quality and the quality image of Portugal as a producer of wine), a theoretical framework is presented:

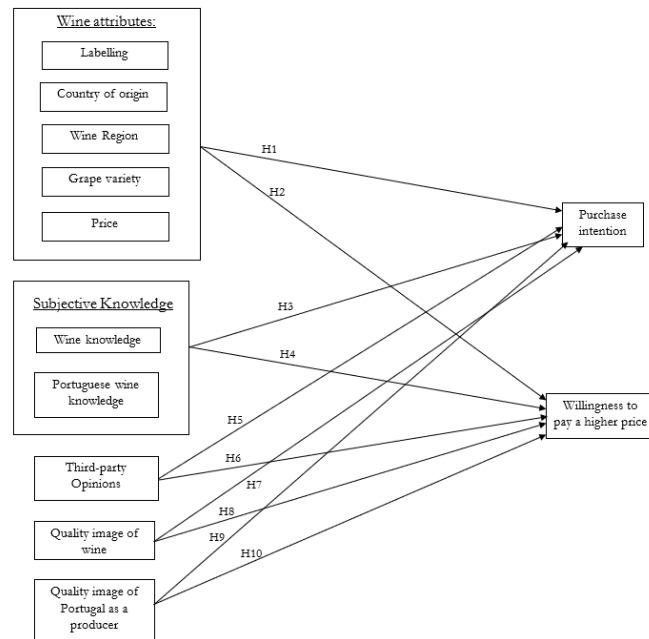


Figure 2 Proposed Conceptual Model

3.2. Data Collection

An online questionnaire was used as it makes it possible to study a large sample without requiring a long period of time to collect the data, since several respondents can answer the questionnaire simultaneously (Choy, 2014) anywhere in the world (Meho, 2006). Another advantage is that as all the questionnaires were answered online and anonymously, the pressure of a possible judgment felt by the respondents in relation to their opinions is reduced, which promotes greater freedom and confidence for the respondents to answer truthfully, resulting in a study that is more faithful to the reality of the market (Vissak, 2010).

The questionnaire prepared for data collection contains three main sections. The first focuses on international consumers' subjective knowledge of wine, on their opinions on the attributes they consider important when deciding to buy a wine, and on their perception of wine produced in Portugal. The second part of the survey centres on

consumers' intention and willingness to pay for Portuguese wine. The last section covers demographics, such as age, gender, nationality, country of residence and income.

The questionnaire used scales found in previous studies dealing with consumer behaviour and the wine market, with some adaptations (see Table 1). Using scales based on scientific literature made the questionnaire more succinct, direct, and quicker to answer, as well as promoting greater effectiveness and efficiency in testing the proposed model (Okoli & Pawlowski, 2004). Most of the questions used a five-point Likert scale, since this scale “allows researchers to collect quantitative estimates of subjective traits, producing numerical data that can be summarized” (South et al., 2022, p. 43).

Table 1 Constructs and Measurement Items

Constructs	Source	Measurement	Adaptations
Importance of wine attributes (WA)			
Rate the importance given to each attribute of the wine:			
WA_LB1	Viot (2012)	Shape and design of bottle/label	Shape and design of bottle/label
WA_LB2		Information on the label and back-label	Information on the label and back-label
WA_COO		Country of Origin	Country of Origin
WA_RW1		AOC	DOC / DOP
WA_RW2		Region of production (terroir)	Region of production (terroir)
WA_GV		Grape variety	Grape variety
WA_P		Price	Price
Subjective Wine Knowledge (SWK)			
SWK_1	Sellers- Rubio & Gonzalez (2016)	In a five-point scale, how would you describe your level of knowledge about wine culture?	In a five-point scale, how would you describe your level of knowledge about wine culture?
SWK_2			In a five-point scale, how would you describe your level of knowledge about Portuguese wine culture?
Subjective Knowledge of Portuguese Wine (SKPW)			
SKPW_1	Pucci et al. (2016)	I am familiar with Italian wines.	I am familiar with Portuguese wines.
SKPW_2		I like to read content about Italian wines.	I like to read content about Portuguese wines.
SKPW_3		I can distinguish among different wine regions of Italy.	I can distinguish among different wine regions of Portugal.

Third-Party Opinion (TPOP)			
Rate the importance given to each attribute of the wine:			
TPOP_1	Viot (2012)	Opinion of the press	Opinion of the press
TPOP_2		Experts’ opinion (Parker. R, Hachette, ...)	Experts’ opinion (Parker. R, Hachette, ...)
TPOP_3		Recommendations from friends or co-workers	Other people’s referrals (friends and colleagues)
Perceived Quality (PQ)			
PQ_1	Costa et al. (2021)	Well known and highly reputed.	Portuguese wines are well known and highly reputed.
PQ_2		Highly appreciated in foreign markets.	Portuguese wines are highly appreciated in foreign markets.
PQ_3		That received prizes and highly favorable reviews from wine critics.	Portuguese wines have received awards and very favourable reviews from wine critics.
PQ_4		Of exceptional quality.	Portuguese wines are having an exceptional quality.
PQ_5		Whose quality varies widely across harvest years, depending on climate conditions and grape quality.	Portuguese wines’ quality varies widely across harvest years, depending on climate conditions and grape quality.
Quality image of Portugal (QIP)			
QIP_1	Pucci et al. (2017)	Tradition/Culture	Tradition/Culture
QIP_2		Elegance	Elegance
QIP_3		High Quality	High Quality
QIP_4		Exclusivity	Exclusivity
QIP_5		Age	Age
QIP_6		Trendy	Trendy
QIP_7		Expensive	Expensive
QIP_8		Local grape variety	Local grape variety
Purchase Intention (PI)			
PI_1	Toni et al. (2022)	I will buy larger quantities of wines in the coming months.	I will buy larger quantities of Portuguese wines in the coming months.
PI_2		I will consider wine as my first purchase option concerning other categories of beverages.	I will consider Portuguese wine as my first purchase option concerning other categories of beverages.
PI_3		I intend to increase the volume of wine consumption.	I intend to increase the volume of Portuguese wine consumption.

PI_4		I will encourage friends, neighbours and/or relatives to buy and consume wine.	I will encourage friends, neighbours and/or relatives to buy and consume Portuguese wine.
Willingness to Pay (WTP)			
WTP_1	Sellers- Rubio &	How much you are willing to pay for a higher price?	How much do you usually pay for a bottle of wine?
WTP_2	Nicolau- Gonzalbez (2016)	Would you be willing to pay an extra charge for wine?	Would you be willing to pay an extra charge for a Portuguese wine?

A pre-test was carried out with seven consumers to detect potential problems with the length, clarity, and adequacy of the survey. Based on the respondents' feedback, some changes were introduced, namely clarifying some questions, and eliminating some redundancies.

The study has three restrictions regarding the respondents. The first was age, as only consumers with the legal age to drink should answer the survey. 18 was the minimum age for drinking alcoholic beverages in most countries. The second restriction was nationality. Since the aim is to study foreign consumers, this questionnaire was addressed exclusively to non-Portuguese wine consumers. As the survey is aimed at international consumers, the questionnaire was translated into six different languages, namely Portuguese (for citizens of CPLP - *Comunidade dos Países de Língua Portuguesa* - countries, except Portuguese), English, French, Italian, Spanish, and German, to overcome the language barrier and broaden the range of respondents. All versions were validated by native speakers of each language, to avoid translation errors and misinterpretations. The last restriction was related to familiarity and interest in this product, since individuals who have never had contact with wine are unable to form an opinion.

The survey was distributed in different ways: (1) the researcher's social media and by email to foreign friends, who in turn also circulated it to their friends, family, and acquaintances; (2) in an event of World Youth Day 2023 in the city of Porto; (3) with QR Codes for the questionnaire, which were distributed to tourist on the streets of Porto. The survey was available online from July 25, 2023, to August 15, 2023.

365 responses were collected, considering all the different language versions of the questionnaire. 11 responses were eliminated as respondents stated that they were not at all familiar with wine. The final sample is 354 answers, well above the indications of

Tabachnick and Fidell (2007) that refer that the number of respondents is good when $N > 50 + 8m$ (where “m” is the number of explanatory variables), which would be 106 respondents in this study.

Table 2 Demographic profile of the sample

Demographic variables N = 354	Total	
	Frequency (N)	Percentage (%)
Nationality		
Brazilian	134	37,9%
Italian	47	13,3%
French	42	11,9%
Spanish	30	8,5%
German	26	7,3%
Ukrainian	11	3,1%
Venezuelan	11	3,1%
Swiss	8	2,3%
North American	8	2,3%
Angolan	6	1,7%
Canadian	6	1,7%
Polish	5	1,4%
Belgian	3	0,8%
English	3	0,8%
Mozambican	3	0,8%
Peruvian	3	0,8%
Hungarian	2	0,6%
Croatian	2	0,6%
Turkish	1	0,3%
Irish	1	0,3%
Argentinian	1	0,3%
Country of Residence		
Brazil	99	28,0%
Italy	53	15,0%
France	43	12,1%

Portugal	39	11,0%
Germany	34	9,6%
Spain	32	9,0%
Venezuela	10	2,8%
Switzerland	8	2,3%
Canada	5	1,4%
United States of America	5	1,4%
Angola	4	1,1%
Belgium	3	0,8%
Mozambique	3	0,8%
United Kingdom	3	0,8%
Ukraine	2	0,6%
Argentina	2	0,6%
Croatia	2	0,6%
Hungary	2	0,6%
Peru	2	0,6%
Irland	1	0,3%
Poland	1	0,3%
Finland	1	0,3%
Gender		
Male	164	46,3%
Female	189	53,4%
I prefer not to say	1	0,3%
Age		
18 – 29	45	12,7%
30 – 40	78	22,0%
41 – 50	74	20,9%
51 – 60	97	27,4%
61 or older	60	16,9%
Income		
Finding it very difficult on present income.	1	0,3%
Finding it difficult on present income.	15	4,2%
Living reasonably on present income.	193	54,5%

Living comfortably on present income.	140	39,5%
I prefer not to say.	5	1,4%

As Table 2 reveals, the nationality and the country of residence that stand out for their significant number of responses are the Brazilian nation and Brazil, representing around 40% and 28%, respectively. The nationalities with the second highest percentage are French and Italian, with approximately 12% of the sample. Regarding the rest, no other nationality reached 9% representation in the sample. In addition to this information, Table 2 also shows a predominance of women (53%). The age group with the highest number of respondents was between 51 and 60 and the lowest was 18-29 years old. Finally, as for the respondents' income, the majority of the sample live reasonably (around 55%) or comfortably (40%) on their current income.

3.3. Data Analysis

As analysis techniques and methods for the study, we initially started by assessing the internal consistency between the constructs and their measurement and, in order to do so, we used the Cronbach's Alpha test. This is a statistical test that determines whether the indicators used to measure the constructs, when combined with each other, result in a good measurement for that same variable (Tavakol & Dennick, 2011). According to this test, the alpha coefficient is expressed as any value between 0 and 1, and the higher this coefficient (i.e., the closer to 1), the greater the reliability. However, to prove that there is a good degree of reliability, the alpha coefficient must be greater than 0,700, and in certain cases if the alpha is 0,600, internal consistency is considered reasonable (Hair et al., 2022).

With the aim of obtaining the value of the dependent variables Purchase Intention (PI) and Willingness to Pay (WTP), we performed an average of the answers to the questions relating to these variables, i.e., the value of the PI variable is given by the average of questions PI_1, PI_2, PI_3 and PI_4 and the value of the WTP variable is obtained by the average of questions WTP_1 and WTP_2 (as shown in Table 6, Appendix). While for the independent variables (including each of the wine attributes considered, subjective wine knowledge, subjective knowledge of Portuguese wine, third-party opinion, perceived quality, and quality image of Portugal), we included the question posed in the questionnaire to evaluate each one of the variables.

In order to actually test them and if there is any sort of relationship we used the Chi-squared test. It is a statistical method used to determine if there is a significant association between two categorical variables. It compares observed with expected data to assess whether any differences between them are due to chance or if there is a genuine relationship between them. As it is often used in hypothesis testing to determine if there's a statistically significant relationship between categorical variables, it is the type of methodology we decided to use in this dissertation (Maroco, 2007). Thus, the following generic hypotheses were considered for this type of test:

H0 - Null hypothesis, meaning the variables are independent

H1 – Alternative hypothesis, meaning the variables are dependent

To interpret the Chi-Square test, the value that must be analysed is the p-value $< \alpha$ (Goodman et al., 2019) (assuming α (test significance level) of 0,05), if p-value $< 0,05$, then the model is significant, that is, the independent variable has significant effects on the dependent variable. Otherwise, if p-value $> 0,05$ the model is not globally significant.

SPSS (Statistical Package for the Social Science) software was used to process the data and carry out these statistical tests, considering all the versions of the questionnaire released.

4. Results and Discussion

The main objectives of the following chapter are (1) to reveal the results to the validity and reliability test; (2) expose the responses to hypothesis tests and interpret them, to understand which of the hypotheses were statistically confirmed or rejected; (3) compare the study conclusions with those from the literature review; (4) present possible reasons that explain unexpected results.

4.1. Validity and reliability

As mentioned, a Cronbach's Alpha test was used to test their internal consistency. In this study, most of the constructs have an alpha coefficient of over 0,700 (as shown in Table 6, Appendix), which demonstrates the good reliability of the instruments, except for the WTP_Mean construct, which has an alpha coefficient of 0,507.

4.2. Hypothesis Test

To test the hypotheses, the study was divided into two parts. The first part focused on the dependent variable Purchase Intention and the second on the dependent variable Willingness to Pay. A Chi-squared test was then used to test the hypotheses for all the independent variables listed above.

4.2.1. Purchase Intention as dependent variable

In the first phase, as mentioned, it was analysed the relationship between the independent variables (wine attributes - labelling, country of origin, region wine, grape variety, and price; consumers' subjective knowledge of wine culture in general and Portuguese wine culture; third-party opinion; perceived quality; and the quality image of Portugal as a producer) and the Portuguese wine purchase intention (PI) variable, which means that the hypotheses H1, H3, H5, H7 and H9 and their respective sub-hypotheses were tested.

Table 3 Hypothesis testing – Model 1

Constructs	Items	Significance Level (p-value)	Hypothesis	Conclusion
Wine Attributes	WA_LB1	<,001	Reject H0	H1.1 is supported
	WA_LB2	<,001	Reject H0	

	WA_COO	<,001	Reject H0	H1.2 is supported
	WA_RW1	<,001	Reject H0	H1.3 is supported
	WA_RW2	<,001	Reject H0	
	WA_GV	<,001	Reject H0	H1.4 is supported
	WA_P	<,001	Reject H0	H1.5 is supported
Subjective Wine Knowledge	SWK_1	<,001	Reject H0	H3.1 is supported
	SWK_2	<,001	Reject H0	
Subjective Knowledge of Portuguese Wine	SKPW_1	<,001	Reject H0	H3.2 is supported
	SKPW_2	<,001	Reject H0	
	SKPW_3	<,001	Reject H0	
Third-Party Opinion	TPOP_1	<,001	Reject H0	H5 is supported
	TPOP_2	<,001	Reject H0	
	TPOP_3	<,001	Reject H0	
Perceived Quality	PQ_1	<,001	Reject H0	H7 is supported
	PQ_2	<,001	Reject H0	
	PQ_3	<,001	Reject H0	
	PQ_4	<,001	Reject H0	
	PQ_5	<,001	Reject H0	
Quality Image of Portugal	QIP_1	<,001	Reject H0	H9 is supported
	QIP_2	<,001	Reject H0	
	QIP_3	<,001	Reject H0	
	QIP_4	<,001	Reject H0	
	QIP_5	<,001	Reject H0	
	QIP_6	<,001	Reject H0	
	QIP_7	<,001	Reject H0	
	QIP_8	<,001	Reject H0	

Table 3 allows us to conclude that all the hypotheses and sub-hypotheses studied were confirmed, since they all have a p-value < 0,05, which means that H0 for each of the variables was rejected. In this case, we can also conclude that H1 and H3 were supported, since all their sub-hypotheses were supported. Thus, the results of this study suggest that all wine attributes, such as: labelling, country of origin, region of wine, grape variety and price are influential factors in the intention to purchase Portuguese wine for international consumers, which is in line with the conclusions reached by authors of previous studies (Olshavsky, 1985; Botonaki & Tsakiridou, 2004; Aqueveque, 2008; Erraach et al., 2014; Yang & Paladino, 2015; Muñoz et al., 2019; Sheth, 2021; Cassago et al., 2021; Gonzaga et al., 2021). In this way, it can be concluded that Portuguese wine

companies, when deciding how to present their product and/or brand to the market, should consider this set of attributes more carefully, as these factors will contribute to a greater or lesser purchase intention, thus compromising the sale or not of the product.

Furthermore, sub-hypotheses H3.1 and H3.2, when supported, suggest that greater subjective knowledge about both general wine culture and Portuguese wine culture has an impact on the purchase intention of the consumers analysed for Portuguese wine. Given that the sample of data collected showed that respondents have a relatively low general subjective knowledge of wine and Portuguese wine culture (revealing an average value of 2,5 and 2,4, respectively, on a Likert scale of 1-5), it is considered important that Portuguese wine companies find promotional strategies to become better known, such as participation in internationally known wine fairs. According to Razak et al. (2018), this type of strategy is not often used by small and medium-sized companies, as it requires some capital that these companies don't have, which is the case for many Portuguese companies (Oliveira et al., 2019). Therefore, a strategy that can and has already been implemented by some Portuguese wine companies, such as the Douro Boys, is the creation of alliances, where it is possible to share the costs of marketing and promoting the brand, such as participating in these international events in a competitive way and thus make their existence known to the market and/or improve their market image (Rebelo & Muhr, 2012).

Finally, the other factors that influence purchase intention, according to the model studied, are: positive opinion and recommendations from third parties (i.e. the press, experts, friends and family), perceived quality and the image of Portugal as a wine-producing country, which are conclusions supported by the literature review (Shapiro, 1983; Rebelo & Caldas, 2013; Ferro & Amaro, 2018; Sheth, 2021).

4.2.2. Willingness to Pay as dependent variable

Regarding this second part, it was analysed the relationship between the independent variables and the willingness to pay (WTP) variable, meaning that the hypotheses H2, H4, H6, H8 and H10 were tested, as well as their sub-hypotheses.

Table 4 Hypothesis testing – WTP

Constructs	Items	Significance Level (p-value)	Hypothesis	Conclusion
Wine Attributes	WA_LB1	<,001	Reject H0	H2.1 is supported
	WA_LB2	<,001	Reject H0	
	WA_COO	,283	Support H0	H2.2 is rejected
	WA_RW1	,357	Support H0	H2.3 is partially supported
	WA_RW2	,028	Reject H0	
	WA_GV	,011	Reject H0	H2.4 is supported
	WA_P	,067	Support H0	H2.5 is rejected
Subjective Wine Knowledge	SWK_1	,157	Support H0	H4.1 is rejected
	SWK_2	,129	Support H0	
Subjective Knowledge of Portuguese Wine	SKPW_1	<,001	Reject H0	H4.2 is rejected
	SKPW_2	<,001	Reject H0	
	SKPW_3	<,001	Reject H0	
Third-Party Opinion	TPOP_1	,010	Reject H0	H6 is partially supported
	TPOP_2	,153	Support H0	
	TPOP_3	,301	Support H0	
Perceived Quality	PQ_1	,095	Support H0	H8 is partially supported
	PQ_2	<,001	Reject H0	
	PQ_3	<,001	Reject H0	
	PQ_4	<,001	Reject H0	
	PQ_5	,008	Reject H0	
Quality Image of Portugal	QIP_1	<,001	Reject H0	H10 is supported
	QIP_2	,001	Reject H0	
	QIP_3	<,001	Reject H0	
	QIP_4	<,001	Reject H0	
	QIP_5	<,001	Reject H0	
	QIP_6	,007	Reject H0	
	QIP_7	,001	Reject H0	
	QIP_8	<,001	Reject H0	

Table 4 shows that for the dependent variable WTP there are some hypotheses and sub-hypotheses that were rejected. According to the Chi-squared test, hypothesis H2 was partially supported. To this end, it was found that its sub-hypotheses H2.2 and H2.5 were rejected, H2.3 was only partially accepted and H2.1 and H2.4 were fully supported, since the variables for the latter recorded p-values of less than 0,05, demonstrating that they

are statistically significant for WTP. The data makes it possible to conclude that wine attributes have a partial influence on WTP, since only the label and the grape variety were found to influence the willingness of international consumers to pay for a Portuguese wine. On the other hand, the rest of the results do not show any impact on WTP, which is not in line with the literature review. Regarding the non-influence of the country of origin and the partial impact of the region of wine on willingness to pay, these can be explained by the fact that the sample revealed relatively low subjective knowledge, which according to Trindade-Carlos et al. (2019) and Giacomarra et al. (2020) influences the importance given to these attributes, i.e., individuals with more subjective knowledge give more importance to these factors during their decision-making.

Likewise, H4, H6 and H8 were also only partially supported, as one of their sub-hypotheses was rejected (H4.1) and the other supported (H4.2). The conclusions drawn from this data are that subjective knowledge of wine does not have a total impact on willingness to pay, with subjective knowledge of Portuguese wine being the component that contributes most to this factor having some effect on willingness to pay. This result, although unlikely, is not completely inconceivable, as the fact that a consumer becomes aware of an aspect of general wine culture (thus increasing their subjective knowledge), for example, discovering that there is a red wine grape variety called Merlot, in no way contribute to increasing your willingness to pay for Portuguese wine. However, if they increase their subjective knowledge about Portuguese wine culture, such as knowing that the oldest demarcated region in the world is the Douro Demarcated Region, this could make the consumer willing to pay more for a Portuguese wine, mainly a wine from this region. However, it is important to highlight that such justification is just an assumption that could explain these results obtained, since all the studies we found on this topic show that subjective knowledge effectively influences the willingness to pay. On the other hand, according to Table 4, H6 is partially supported as the respondents' responses reveal that only the press's opinion is relevant to their willingness to pay, which may explain why the sample has relatively low subjective knowledge about wine. As these consumers do not consider themselves very knowledgeable in wine, it is likely that many of them do not know or are actively aware of the opinions and recommendations of wine experts and, therefore, it has no effect on the decision to pay for a Portuguese wine. On the other hand, in relation to advice from family and friends, the model reveals that these opinions arouse some interest in the consumer and, therefore, this has an impact on purchase

intention, but the same opinion is not so influential to the point that the individual is willing to pay for Portuguese wine.

Finally, we can state that H10 was supported, as its p-value resulted in a value lower than 0,05, which indicates that there is statistically sufficient evidence to reject the null hypothesis and support H10. These values reveal that the variable image quality of Portugal as a wine producing country has an impact on WTP_Mean, as demonstrated by studies by Rebelo and Caldas (2013).

Lastly, to summarize the results of the hypothesis testing, Table 7 (Appendix) describes the hypotheses and sub-hypotheses of the proposed theoretical model and reports their outcome, i.e., whether they were supported or not.

5. Conclusion

It was noticed that Portugal is a relatively well-known wine-producing country on the international market, largely due to its history and tradition in wine production. Despite that, Portuguese companies were not able to create a strong enough image (unlike their direct competitors, such as France and Italy - countries in the Old World of Wine), which is reflected in the number of sales and the price that international consumers are willing to pay for a bottle of their wine. Because of that, we set out to understand what international consumers are looking for in a quality wine, in order to help Portuguese companies to sell their product abroad. This study aims to investigate the main factors that influence the purchase intention and willingness to pay for Portuguese wine by international consumers.

This chapter is composed of three parts: (1) presentation of the main conclusions (2) contribution of the study to literature and business management; (3) study limitations and improvements for future research.

5.1. Main Conclusions

As previously mentioned, the model created for this study is based on previous research, bringing together all the constructs and their relationships in a single model. To carry out this study, a questionnaire was created which received 354 responses and the data was processed and analysed using SPSS software, applying the Chi-squared test to test the hypothesis. In addition, the data was also subjected to statistical tests to assess its validity and reliability.

In the first part we analysed the relationship between the independent variables (wine attributes - labelling, country of origin, region of wine, grape variety, and price; consumers' subjective knowledge of wine culture in general and Portuguese wine culture; third-party opinion; perceived quality image; and the quality image of Portugal as a producer) and the Portuguese wine purchase intention variable. Relating to this variable, all hypothesis (H1, H3, H5, H7 and H9) were supported, meaning that all the factors above affect the wine purchase intention.

For the second part, the same variables were used, but now related to willingness to pay for a Portuguese wine. Here, the hypothesis H2.1 – labelling, H2.4 – grape variety and H10 – quality image of Portugal as a producer were supported, which means these factors affect the willingness to pay. As for hypothesis H2.3 – region of wine, H6 – third-

party opinions and H8 – perceived quality of wine, these were only partially supported and hypothesis H2.2 – country of origin, H2.5 – price and H4 – subjective wine knowledge were completely rejected.

In conclusion, this study has helped to corroborate the idea that Portuguese wine does not yet have a well-established and positive market positioning and image in the minds of international consumers. Although we noticed that foreigners are willing to buy Portuguese wine, they are not willing to pay a higher price when compared to a French or Italian wine. In addition, the results also showed that there is still a long way to go for Portuguese wine producers. However, by implementing the right measures, Portuguese wine companies will have the opportunity to change and improve the image of Portugal and its wines on international markets.

5.2. Contributions to management and literature

This study is believed to be a good contribution to both literature and management. Regarding the literature, as mentioned above, there are several studies that deal with the area of wine, from the initial production phase to the moment the consumer buys the bottle. In addition to studying the market, there is a wide range of research that has focused on the Portuguese market (both on the supply and demand side), and others that have focused on international producers and consumers, but there are not many in-depth studies that combine these two aspects. We therefore believe that this research into the internationalization of Portuguese wine, with an emphasis on the perspective of the international consumer, will help to fill this gap in the literature and, consequently, help to diversify knowledge about this market.

Concerning the managerial contribution is believed that the results of the study will help managers of Portuguese companies with the mapping and re-structuring of strategies applied to the international marketing of Portuguese wine. As the research studies the factors that influence the purchase intention and willingness to pay of international consumers for Portuguese wine, companies can use it to analyse whether the strategies they are using, are in line with what consumers are looking for and, if they are not, they can adapt them. For example, the study shows that international consumers consider the opinion of third parties (experts, friends, and family) to be an important factor in their intention to purchase Portuguese wine. This means that the manager of a Portuguese company should devise strategies which, on the one hand, get wine experts

and influencers to try their products and share their opinions with their followers. On the other hand, for the company to reach the friends and family of these consumers, it can implement strategies such as selling its wines in restaurants that are frequented by tourists. In this way, these foreign consumers can taste them and then spread the word about their experiences in their home country.

Thus, through a more in-depth analysis of the factors that influence international consumers to buy more and be willing to pay more for Portuguese wine, company managers can have a more realistic view of which attributes and marketing strategies make sense to invest in to create a stronger image for Portuguese wine on the international market.

5.3. Limitations and Future research

As with all academic studies, this research has some limitations, however they can be resolved with improvements in future researches. The sample obtained in this research was mostly made up of respondents who did not know much about wine, especially Portuguese wine - which means that the results were very “neutral”, i.e., in most of the questions, the respondents chose to answer 3, on a Likert scale of 1 to 5. Obviously, this was not the desirable result, so our recommendation is to continue this interesting topic encompassing a wider sample of people with a higher proportion of consumers more knowledgeable about wine. Furthermore, another limitation of the sample is its concentration in a single country, i.e., even though this is a study of international consumers, and that any nationality can respond, the sample is heavily based on Brazilian consumers (around 38%). The second most responded-to nationality was Italian, but the percentage of Italians is much lower than the nationality with the most responses (13%), hence our previous recommendation.

Future studies may also explore moderation effects, such as the moderation effect of “Perceived Quality” between wine attributes and third-party opinion and purchase intention and willingness to pay. Moreover, it is also possible to use control variables (demographic variables), to analyse whether there are differences in the impacts on the dependent variables. For example, whether being male or female (gender) influences willingness to pay more for a Portuguese wine, or whether age influences purchase intention.

6. References

- Aaker, D. A. (1991). *Managing Brand Equity*. The Free Press.
- Agarwala, R., Mishra, P., & Singh, R. (2019). Religiosity and consumer behavior: A summarizing review. *Journal of Management, Spirituality & Religion*, 16(1), 32-34. <https://doi.org/10.1080/14766086.2018.1495098>
- Agnoli, L., Capitello, R., & Begalli, C. (2016). Behind intention and behaviour: Factors influencing wine consumption in a novice market. *British Food Journal*, 118(3), 660-678. <https://doi.org/10.1108/BFJ-05-2015-0181>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Amato, M., Ballco, P., López-Galán, B., De Magistris, T., & Verneau, F. (2017). Exploring consumers' perception and willingness to pay for “Non-Added Sulphite” wines through experimental auctions: A case study in Italy and Spain. *Wine Economics and Policy*, 6(2), 146-154. <https://doi.org/10.1016/j.wep.2017.10.002>
- Anderson, K. (2013). Is Georgia the next “New” wine-exporting country?. *Journal of Wine Economics*, 8(1), 1–28. <https://doi.org/10.1017/jwe.2013.7>
- Andrés-De Prado, R., Yuste-Rojas, M., Sort, X., Andrés-Lacueva, C., Torres, M., & Lamuela-Raventós, R. M. (2007). Effect of soil type on wines produced from vitisvinifera L Cv. grenache in commercial vineyards. *Journal of Agricultural and Food Chemistry*, 55(3), 779-786. <https://doi.org/10.1021/jf062446q>
- Aqueveque, C. (2008). The effect of extrinsic cues on imported wine evaluations: An experimental approach. *Journal of Food Products Marketing*, 14(3), 33-47. <https://doi.org/10.1080/10454440801985910>
- Aschemann-Witzel, J., & Peschel, A. O. (2019). Consumer perception of plant-based proteins: The value of source transparency for alternative protein ingredients. *Food Hydrocolloids*, 96, 20-28. <https://doi.org/10.1016/j.foodhyd.2019.05.006>
- Ashenfelter, O., & Jones, G. (2013). The demand for expert opinion: Bordeaux wine. *Journal of Wine Economics*, 8(3), 285-293. <https://doi.org/10.1017/jwe.2013.22>
- Atkin, T., & Thach, L. (2012). Millennial wine consumers: Risk perception and information search. *Wine Economics and Policy*, 1(1), 54-62. <https://doi.org/10.1016/j.wep.2012.08.002>

- Aurifeille, J. M., Quester, P. G., Lockshin, L., & Spawton, T. (2002). Global vs international involvement-based segmentation: A cross-national exploratory study. *International Marketing Review*, 19(4), 369-386. <https://doi.org/10.1108/02651330210435672>
- Balabanis, G., & Siamagka, N-T. (2017). Inconsistencies in the behavioural effects of consumer ethnocentrism: The role of brand, product category and country of origin. *International Marketing Review*, 34(2), 166-182. <https://doi.org/10.1108/IMR-03-2015-0057>
- Ballantyne, D., Terblanche, N. S., Lecat, B., & Chapuis, C. (2019). Old world and new world wine concepts of terroir and wine: Perspectives of three renowned non-French wine makers. *Journal of Wine Research*, 30(2), 122-143. <https://doi.org/10.1080/09571264.2019.1602031>
- Banks, G., & Overton, J. (2010). Old World, New World, third world? Reconceptualising the worlds of wine. *Journal of Wine Research*, 21(1), 57-75. <https://doi.org/10.1080/09571264.2010.495854>
- Barber, N., Ismail, J., & Taylor, D. C. (2007). Label fluency and consumer self-confidence. *Journal of Wine Research*, 18(2), 73-85. <https://doi.org/10.1080/09571260701660847>
- Barber, N., Kuo, P-J., Bishop, M., & Goodman Jr, R. (2012). Measuring psychographics to assess purchase intention and willingness to pay. *Journal of Consumer Marketing*, 29(4), 280-292. <https://doi.org/10.1108/07363761211237353>
- Barbosa, D. B. (2003). *Uma introdução à propriedade intelectual*. Editora Lumen Juris.
- Beckert, J., Rössel, J., & Schenk, P. (2014). Wine as a cultural product: Symbolic capital and price formation in the wine field. *Sociological Perspectives*, 60(1), 206-222. <https://doi.org/10.1177/0731121416629994>
- Bisson, L. F., Waterhouse, A. L., Ebeler, S. E., Walker, M. A., & Lapsley, J. T. (2002). The present and future of the international wine industry. *Nature*, 418(6898), 696-699. <https://doi.org/10.1038/nature01018>
- Boncinelli, F., Dominici, A., Gerini, F., & Marone, E. (2019). Consumers wine preferences according to purchase occasion: Personal consumption and gift-giving. *Food Quality and Preference*, 71, 270-278. <https://doi.org/10.1016/j.foodqual.2018.07.013>

- Botonaki, A., & Tsakiridou, E. (2004). Consumer response evaluation of a Greek quality wine. *Acta Agriculturae Scandinavica, Section C — Food Economics*, 1(2), 91-98. <https://doi.org/10.1080/16507540410024515>
- Bowen, G. A. (2009). Supporting a grounded theory with an audit trail: An illustration. *International Journal of Social Research Methodology*, 12(4), 305-316. <https://doi.org/10.1080/13645570802156196>
- Brata, A. M., Chiciudean, D. I., Brata, V. D., Popa, D., Chiciudean, G. O., & Muresan, I. C. (2022). Determinants of choice and wine consumption behaviour: A comparative analysis between two counties of Romania. *Foods*, 11(8). <https://doi.org/10.3390/foods11081110>
- Bruwer, J., & Campusano, P. (2018). Restaurants and the bring-your-own-bottle of wine paradox: Involvement influences, consumption occasions and risk perception. *Journal of Foodservice Business Research*, 21(2), 121-138. <https://doi.org/10.1080/15378020.2017.1332888>
- Bruwer, J., Chrysochou, P., & Lesschaeve, I. (2017). Consumer involvement and knowledge influence on wine choice cue utilisation. *British Food Journal*, 119(4), 839-844. <https://doi.org/10.1108/BFJ-08-2016-0360>
- Bruwer, J., Buller, C., Saliba, A. J., & Li, E. (2014). Country-of-origin (COO) brand loyalty and related consumer behaviour in the Japanese wine market. *International Journal of Wine Business Research*, 26(2), 97-119. <https://doi.org/10.1108/IJWBR-05-2013-0020>
- Cakici, N. M., & Shukla, P. (2017). Country-of-origin misclassification awareness and consumers' behavioral intentions: Moderating roles of consumer affinity, animosity, and product knowledge. *International Marketing Review*, 34(3), 354-376. <https://doi.org/10.1108/IMR-08-2015-0178>
- Cammarano, A., Varriale, V., Michelino, F., & Caputo, M. (2023). Employing online big data and patent statistics to examine the relationship between end product's perceived quality and components' technological features. *Technology in Society*, 73. <https://doi.org/10.1016/j.techsoc.2023.102231>
- Campbell, G., & Guibert, N. (2007). *Wine, society and globalization: Multidisciplinary perspectives on the wine industry*. Palgrave Macmillan.

- Campos, C., & Lins, S. (2022). “Wine, sweet wine”: Significados e determinantes da compra por impulso de vinho do Porto. *Innovar*, 32(83). <https://doi.org/10.15446/innovar.v32n83.99415>
- Candiago, S., Tscholl, S., Bassani, L., Fraga, H., & Vigl, L. E. (2022). A geospatial inventory of regulatory information for wine protected designations of origin in Europe. *Scientific Data*, 9(394). <https://doi.org/10.1038/s41597-022-01513-0>
- Carter, E. (2018). For what it’s worth: The political construction of quality in French and Italian wine markets. *Socio-Economic Review*, 16(3), 479–498. <https://doi.org/10.1093/ser/mwx060>
- Carsana, L., & Jolibert, A. (2018). Influence of iconic, indexical cues, and brand schematicity on perceived authenticity dimensions of private-label brands. *Journal of Retailing and Consumer Services*, 40, 213-220. <https://doi.org/10.1016/j.jretconser.2017.10.006>
- Carsana, L., & Jolibert, A. (2017). The effects of expertise and brand schematicity on the perceived importance of choice criteria: A Bordeaux wine investigation. *Journal of Product and Brand Management*, 26(1), 80-90. <https://doi.org/10.1108/JPBM-11-2015-1030>
- Cassago, A. L. L., Artêncio, M. M., Giraldi, J. M. E., & Costa, F. B. (2021). Metabolomics as a marketing tool for geographical indication products: A literature review. *European Food Research and Technology*, 247, 2143–2159. <https://doi.org/10.1007/s00217-021-03782-2>
- Castaldi, R., Cholette, S., & Hussain, M. (2006). A country-level analysis of competitive advantage in the wine industry. *Research in Agricultural & Applied Economics*, 2. <https://doi.org/10.22004/ag.econ.14859>
- Castellinin, A., & Samoggia, A. (2018). Millennial consumers’ wine consumption and purchasing habits and attitude towards wine innovation. *Wine Economics and Policy*, 7(2), 128-139. <https://doi.org/10.1016/j.wep.2018.11.001>
- Çelik, A. D., & Dağıstan, E. (2018). Consumers’ subjective and objective knowledge levels about genetically modified foods: Case study of Hatay ty. *Turkish Journal of Agriculture - Food Science and Technology*, 6(7), 903-908. <https://doi.org/10.24925/turjaf.v6i7.903-908.1889>

- Cezanne, C., & Saglietto, L. (2014). Human capital-intensive firms and symbolic value creation. *Timisoara Journal of Economics and Business*, 7(1), 70-88. <https://doi.org/10.2478/tjeb-2014-0004>
- Charters, S., & Pettigrew, S. (2003). "I Like It, But How Do I Know It's Any Good?": Quality and preference in wine consumption. *Journal of research for consumers*, 5, 1-22.
- Chen, K., Zha, Y., Alwan, L. C., & Zhang, L. (2020). Dynamic pricing in the presence of reference price effect and consumer strategic behaviour. *International Journal of Production Research*, 58(2), 546-561. <https://doi.org/10.1080/00207543.2019.1598592>
- Chenavaz, R. (2017). Better product quality may lead to lower product price. *The B.E. Journal of Theoretical Economics*, 17(1). <https://doi.org/10.1515/bejte-2015-0062>
- Cholette, S., Castaldi, R. M., & Fredrick, A. (2005). The globalization of the wine industry: Implications for old and new world producers. *San Francisco State University*.
- Choy, L. T. (2014). The strengths and weaknesses of research methodology: Comparison and complimentary between qualitative and quantitative approaches. *IOSR journal of humanities and social science*, 19(4), 99-104. <https://doi.org/10.9790/0837-194399104>
- Chrea, C., Melo, L., Evans, G., Forde, C., Delahunty, C., & Cox, D. N. (2011). An investigation using three approaches to understand the influence of extrinsic product cues on consumer behavior: An example of Australian wines. *Journal of Sensory Studies*, 26(1), 13-24. <https://doi.org/10.1111/j.1745-459X.2010.00316.x>
- Clarke, D. W., Perry, P., & Denson, H. (2012). The sensory retail environment of small fashion boutiques. *Journal of Fashion Marketing and Management*, 16(4), 492-510. <https://doi.org/10.1108/13612021211265872>
- Correia, L., Gouveia, S., & Martins, P. (2019). The European wine export cycle. *Wine Economics and Policy*, 8(1), 91-101. <https://doi.org/10.1016/j.wep.2019.04.001>
- Costa, A. I. A., Marano-Marcolini, C., Malfeito-Ferreira, M., & Loureiro, V. (2021). Historical wines of Portugal: The classification, consumer associations and marketing implications. *Foods*, 10(5). <https://doi.org/10.3390/foods10050979>
- Crescimanno, M., Galati, A., & Bal, T. (2014). The role of the economic crisis on the competitiveness of the agri-food sector in the main Mediterranean countries.

- Agricultural Economics (Czech Republic)*, 60(2), 49–64.
<https://doi.org/10.17221/59/2013-AGRICECON>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Inc.
- Cross, R., Plantinga, A. J., & Stavins, R. N. (2011). What is the value of terroir?. *American Economic Review*, 101(3), 152-156.
- Dalziel, P., Saunders, C., Tait, P., & Saunders, J. (2019). Credence attributes and New Zealand country of origin: A review. *Agribusiness and Economics Research Unit*.
- Danner, L., Johnson, T. E., Ristic, R., Meiselman, H. L., & Bastian, S. E. (2017). “I like the sound of that!” Wine descriptions influence consumers’ expectations, liking, emotions and willingness to pay for Australian white wines. *Food Research International*, 99(1), 263-274. <https://doi.org/10.1016/j.foodres.2017.05.019>
- Del Rey, R., & Loose, S. (2023). State of the international wine market in 2022: New market trends for wines require new strategies. *Wine Economics and Policy*, 12(1). <https://doi.org/10.36253/wep-14758>
- Delbridge, A., & Bernard, J. R. L. (1998). *The Macquarie Concise Dictionary*. Pan Macmillan Australia.
- Eagly, A. H., & Chaikenm, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Elliot, S., & Barth, J. E. (2012). Wine label design and personality preferences of millennials. *Journal of Product & Brand Management*, 21(3), 183-191. <https://doi.org/10.1108/10610421211228801>
- Ellis, D., & Caruana, A. (2018). Consumer wine knowledge: Components and segments. *International Journal of Wine Business Research*, 30(3), 277-291.
- Ellis, D., & Thompson, F. M. (2018). The effect of wine knowledge type on variety seeking behavior in wine purchasing. *Journal of Wine Research*, 29(2), 71-86. <https://doi.org/10.1080/09571264.2018.1471393>
- Erdem, T., Swait, J., & Louviere, J. (2002). The impact of brand credibility on consumer price sensitivity. *International Journal of Research in Marketing*, 19(1), 1-19. [https://doi.org/10.1016/S0167-8116\(01\)00048-9](https://doi.org/10.1016/S0167-8116(01)00048-9)
- Erickson, G. M., & Johansson, J. K. (1985). The role of price in multi-attribute product evaluations. *Journal of Consumer Research*, 12(2) 195-199. <https://doi.org/10.1086/208508>

- Erraach, Y., Sayadi, S., Gómez, A. C., & Parra-López, C. (2014). Consumer-stated preferences towards Protected Designation of Origin (PDO) labels in a traditional olive-oil-producing country: the case of Spain. *New Medit*, 13(4), 11-19.
- Escandon-Barbosa, D., & Rialp-Criado, J. (2019). The impact of the content of the label on the buying intention of a wine consumer. *Frontiers in Psychology*, 9, 1-11. <https://doi.org/10.3389/fpsyg.2018.02761>
- Espejel, J., Fandos, C., & Flavián, C. (2011). Antecedents of consumer commitment to a PDO wine: An empirical analysis of Spanish consumers. *Journal of Wine Research*, 22(3), 205-225. <https://doi.org/10.1080/09571264.2011.622516>
- Estreicher, S. K. (2017). The beginning of wine and viticulture. *Physica Status Solidi*, 14(7). <https://doi.org/10.1002/pssc.201700008>
- Famularo, B., Bruwer, J., & Li, E. (2010). Region of origin as choice factor: Wine knowledge and wine tourism involvement influence. *International Journal of Wine Business Research*, 22(4), 362-385. <https://doi.org/10.1108/17511061011092410>
- Fernández-Ferrín, P., Bande, B., Galán-Ladero, M. M., Martín-Consuegra, D., Díaz, E., & Castro-González, S. (2019). Geographical indication food products and ethnocentric tendencies: The importance of proximity, tradition, and ethnicity. *Journal of Cleaner Production*, 241. <https://doi.org/10.1016/j.jclepro.2019.118210>
- Ferro, G., & Amaro, I. B. (2018). What factors explain the price of top quality wines?. *International Journal of Wine Business Research*, 30(1), 117-134. <https://doi.org/10.1108/IJWBR-05-2017-0036>
- Festa, G., Cuomo, M. T., Metallo, G., & Festa, A. (2016). The (r)evolution of wine marketing mix: From the 4Ps to the 4Es. *Journal of Business Research*, 69(5), 1550–1555. <https://doi.org/10.1016/j.jbusres.2015.10.015>
- Fishbein, M., & Ajzen, I. (1980). *Understanding Attitudes and Predicting Social Behavior*. Prentice-Hall.
- Flint, D. J., & Golobic, S. L. (2009). Searching for competitive advantage through sustainability: A qualitative study in the New Zealand wine industry. *International Journal of Physical Distribution & Logistics Management*, 39(10), 841-860. <https://doi.org/10.1108/09600030911011441>

- Foster, W. M., Coraiola, D. M., Suddaby, R., Kroezen, J., & Chandler, D. (2017). 'The strategic use of historical narratives: A theoretical framework. *Business History*, 59(8), 1176-1200. <https://doi.org/10.1080/00076791.2016.1224234>
- Freire, D., & Truninger, M. (2012). 'Poached Pears in Wine': The oeste of Portugal and the European quality construction of place-based foods. *ICS - Working Papers*.
- Galati, A., Crescimanno, M., Abbruzzo, A., Chironi, S., & Tinervia, S. (2017). The premium price for Italian red wines in new world wine consuming countries: The case of the Russian market. *Journal of Wine Research*, 28(3), 181-193. <https://doi.org/10.1080/09571264.2017.1324773>
- Garavaglia, C., & Mariani, P. (2017). How much do consumers value protected designation of origin certifications? Estimates of willingness to pay for PDO dry-cured ham in Italy. *Agribusiness*, 33(3), 403-423. <https://doi.org/10.1002/agr.21494>
- García-Cortijo, M. C., Villanueva, E. C., Castillo-Valero, J. S., & Li, Y. (2019). Wine consumption in China: Profiling the 21st century Chinese wine consumer. *Ciência e Técnica Vitivinícola*, 34(2), 71 – 83. <https://doi.org/10.1051/ctv/20193402071>
- Gehani, R. R. (2013). Innovative strategic leader transforming from a low-cost strategy to product differentiation strategy. *Journal of Technology Management & Innovation*, 8(2), 144-155. <http://dx.doi.org/10.4067/S0718-27242013000200012>
- Giacomarra, M., Galati, A., Crescimanno, M., & Vrontis, D. (2020). Geographical cues: Evidences from New and Old World countries' wine consumers. *British Food Journal*, 122(4), 1252-1267. <https://doi.org/10.1108/BFJ-08-2019-0580>
- Ginon, E., Ares, G., Issanchou, S., Laboissière, L. H. E. S., & Deliza, R. (2014). Identifying motives underlying wine purchase decisions: Results from an exploratory free listing task with Burgundy wine consumers. *Food Research International*, 62, 860-867. <https://doi.org/10.1016/j.foodres.2014.04.052>
- González, P. A., & Dans, E. P. (2018). The 'terroirist' social movement: The reawakening of wine culture in Spain. *Journal of Rural Studies*, 61, 184-196. <https://doi.org/10.1016/j.jrurstud.2018.04.014>
- Gonzaga, L. S., Bastian, S. E. P., Capone, D. L., Danner, L., & Jeffery, D. W. (2022). Consumer perspectives of wine typicity and impact of region information on the sensory perception of Cabernet Sauvignon wines. *Food Research International*, 152. <https://doi.org/10.1016/j.foodres.2021.110719>

- Gonzaga, L. S., Capone, D. L., Bastian, S. E. P., & Jeffery, D. W. (2021). Defining wine typicity: Sensory characterisation and consumer perspectives. *Australian Journal of Grape and Wine Research*, 27(2), 246–256. <https://doi.org/10.1111/ajgw.12474>
- Goodman, W. M., Spruill, S. E., & Komaroff, E. (2019). A proposed hybrid effect size plus p-value criterion: Empirical evidence supporting its use. *The American Statistician*, 73(1), 168-185. <https://doi.org/10.1080/00031305.2018.1564697>
- Gouveia, S., Rebelo, J., & Macedo, A. (2017). Dynamics of wine exports: Empirical evidence of a Portuguese (Douro) wine region. *American Association of Wine Economists*.
- Grunert, K. G., Bredahl, L., & Brunsø, K. (2004). Consumer perception of meat quality and implications for product development in the meat sector—a review. *Meat Science*, 66(2), 259-272. [https://doi.org/10.1016/S0309-1740\(03\)00130-X](https://doi.org/10.1016/S0309-1740(03)00130-X)
- Guerra, C. C. (2012). Polifenóis da uva e do vinho. *Revista Brasileira de Viticultura e Enologia*, 4(4), 90-100.
- Guo, L., & Meng, X. (2008). Consumer knowledge and its consequences: An international comparison. *International Journal of Consumer Studies*, 32(3), 260-168. <https://doi.org/10.1111/j.1470-6431.2008.00677.x>
- Haghpour, B., Sahabeh, E., & Halvari, H. (2022). Opportunity cost in consumer behavior: Definitions, operationalizations, and ambiguities. *International Journal of Consumer Studies*, 46(5), 1942-1959. <https://doi.org/10.1111/ijcs.12842>
- Hair, J. F., Babin, B. J., Black, W. C., & Anderson, R. E. (2022). *Multivariate Data Analysis*. Cengage Learning.
- Heine, K., Phan, M., & Atwal, G. (2016). Authenticity and prestige: What luxury brands could learn from the wine industry?. *Luxury Research Journal*, 1(2), 177-190. <https://doi.org/10.1504/LRJ.2016.078127>
- Hinterhuber, A. (2015). Violations of rational choice principles in pricing decisions. *Industrial Marketing Management*, 47, 65-74. <https://doi.org/10.1016/j.indmarman.2015.02.006>
- Hoffmann, V., Mutiga, S. M., Harvey, J. W., Nelson, R. J., & Milgroom, M. G. (2021). Observability of food safety losses in maize: Evidence from Kenya. *Food Policy*, 98. <https://doi.org/10.1016/j.foodpol.2020.101895>

- Hollebeek, D. L., Jaeger, R. S., Brodie, J. R., & Balemi, A. (2007). The influence of involvement on purchase intention for new world wine. *Food Quality and Preference*, 18(8), 1033-1049. <https://doi.org/10.1016/j.foodqual.2007.04.007>
- Howley, M., & Van Westering, J. (2008). Developing wine tourism: A case study of the attitude of English wine producers to wine tourism. *Journal of Vacation Marketing*, 14(1), 87-95. <https://doi.org/10.1177/1356766707084221>
- Hu, L., & Baldin, A. (2018). The country of origin effect: A hedonic price analysis of the Chinese wine market. *British Food Journal*, 120(6), 1264-1279. <https://doi.org/10.1108/BFJ-02-2017-0121>
- Informa D&B. (2022, March 4). *Exportações de vinho crescem 8,6% em 2021 e fazem disparar superavit comercial*. <https://blog.informadb.pt/2022/03/setor-do-vestuario-em-portugal-e-espanha-vai-terminar-o-ano-com-vendas-23-abaxio-de-2019-2-2-2/>
- Instituto Nacional de Estatística. (2022, July 22). *Estatísticas Agrícolas – 2021*. https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=31589846&PUBLICACOESmodo=2
- James, C. A., Dipak, C. J., & Pradeep, K. C. (1993). Understanding Customer Value in Business Markets: Methods of Customer Value Assessment. *Journal of Business-to-Business Marketing*, 1(1), 3-30.
- Josling, T. (2006). The war on terroir: Geographical indications as a transatlantic trade conflict. *Journal of Agricultural Economics*, 57(3), 337–363. <https://doi.org/10.1111/j.1477-9552.2006.00075.x>
- 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 Quality and Preferences*, 15(5), 453-469. <https://doi.org/10.1016/j.foodqual.2003.08.002>
- Katona, G. (1964). *The Mass Consumption Society*. McGraw-Hill.
- Katona, G. (1951). *Psychological analysis of economic behavior*. McGraw Hill.
- Kupe, M., Sayinci, B., Demir, B., Ercisli, S., Aslan, K. A., Gundesli, M. A., Baron, M., & Sochor, J. (2021). Multivariate analysis approaches for dimension and shape discrimination of vitis vinifera varieties. *Plants*, 10. <https://doi.org/10.3390/plants10081528>
- Lancaster, K. J. (1966). A new approach to consumer theory. *Journal of Political Economy*, 74(2), 132-157.

- Larentis, F., Júnior, M. F., Bertolini, A. L., Silva, E. R., & Reche, R. A. (2019). Influenciadore na compra de vinhos: Os fatores mais valorizadas pelos consumidores na decisão compra de vinhos. *Revista de Administração Unimep*, 17(2), 300-323.
- Leeuwen, C. V., & Seguin, G. (2006). The concept of terroir in viticulture. *Journal of Wine Research*, 17(1), 1–10. <https://doi.org/10.1080/09571260600633135>
- Lerro, M., Yeh, C-H., Klink-Lehmann, J., Vecchio, R., Hartmann, M., & Cembalo, L. (2021). The effect of moderating variables on consumer preferences for sustainable wines. *Food Quality and Preference*, 94. <https://doi.org/10.1016/j.foodqual.2021.104336>
- Lewis, G., & Zalan, T. (2014). Strategic implications of the relationship between price and willingness to pay: Evidence from a wine-tasting experiment. *Journal of Wine Economics*, 9(2), 115-134. <https://doi.org/10.1017/jwe.2014.9>
- Lima, M. J. S., & Carvalho, L. C. (2018). Collaboration: The path to SME performance increase – A case study in a Portuguese wine region. In L. Carvalho (Ed.), *Handbook of Research on Entrepreneurial Ecosystems and Social Dynamics in a Globalized World* (pp. 243-259). IGI Global. <https://doi.org/10.4018/978-1-5225-3525-6.ch010>
- Lindon, D., Lendrevie, J., Rodrigues, J. V., Lévi, J., & Dionísio, P. (2011). *Mercator XXI - Teoria e Prática do Marketing*. Dom Quixote.
- Lombardi, P., Bianco, A. D., Freda, R., Caracciolo, F., & Cembalo, L. (2016). Development and trade competitiveness of the European wine sector: A gravity analysis of intra-EU flows. *Wine Economics and Policy*, 5(1), 50-59. <https://doi.org/10.1016/j.wep.2015.12.002>
- Lunardo, R., & Rickard, B. (2020). How do consumers respond to fun wine labels?. *British Food Journal*, 122(8), 2603-2619. <https://doi.org/10.1108/BFJ-04-2019-0286>
- Machado, L. P., & Ribeiro, D. (2017). A dinâmica do turismo do Porto e do norte de Portugal e a relação com o vinho do porto. *Revista Turismo & Desenvolvimento*, 1(27/28), 1013-1022. <https://doi.org/10.34624/rtd.v1i27/28.9681>
- Malorgio, G., Camanzi, L., & Grazia, C. (2008). Geographical indications and international trade: Evidence from the wine market. *New Medit*, 7(3), 4–13.
- Marco-Lajara, B., Seva-Larrosa, P., Martínez-Falcó, J., & García-Lillo, F. (2022). Wine clusters and Protected Designations of Origin (PDOs) in Spain: An exploratory

- analysis. *Journal of Wine Research*, 33(3), 146–167.
<https://doi.org/10.1080/09571264.2022.2110051>
- Marks, D. (2015). Seeking the veritas about the vino: Fine wine ratings as wine knowledge. *Journal of Wine Research*, 26(4), 319–335.
<https://doi.org/10.1080/09571264.2015.1083953>
- Maroco, J. (2007). *Análise estatística com utilização do SPSS, 3ª Edição*. Edições Sílabo
- Mascarello, G., Pinto, A., Parise, N., Crovato, S., & Ravarotto, L. (2015). The perception of food quality. Profiling Italian consumers. *Appetite*, 89, 175–182.
<https://doi.org/10.1016/j.appet.2015.02.014>
- Masset, P., Mondoux, A., & Weisskopf, J-P. (2023). Fine wine pricing in a small and highly competitive market. *International Journal of Wine Business Research*, 35(1), 164–186. <https://doi.org/10.1108/IJWBR-10-2021-0054>
- Masset, P., Weisskopf, J-P., Faye, B., & Le Fur, E. (2016). Red obsession: The ascent of fine wine in China. *Emerging Markets Review*, 29, 200–225.
<https://doi.org/10.1016/j.ememar.2016.08.014>
- 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.
<https://doi.org/10.1108/17511060910985953>
- Meho, L. I. (2006). E-mail interviewing in qualitative research: A methodological discussion. *Journal of the American society for information science and technology*, 57(10), 1284–1295. <https://doi.org/10.1002/asi.20416>
- Melo, R. B., Dorow, R., Reis, S. M., & Zabet, M. (2017). O agronegócio vitivinícola sob a ótica das indicações geográficas da União Europeia (UE). *Revista Semiárido De Visu*, 5(3), 167–179. <https://doi.org/10.31416/rsdv.v5i3.125>
- Miralles, C., Moretto, L., & Schmitt, V. G. H. (2008). Gestão de marcas e arranjos produtivos: A marca “Vinho do Porto”. *Comportamento Organizacional e Gestão*, 14(1), 85–95.
- Monaco, G., & Guimelli, C. (2011). Hegemonic and polemical beliefs: Culture and consumption in the social representation of wine. *The Spanish Journal of Psychology*, 14(1), 237–250. https://doi.org/10.5209/rev_SJOP.2011.v14.n1.21
- Monteiro, P., Guerreiro, J., & Loureiro, S. M. C. (2020). Understanding the role of visual attention on wines’ purchase intention: An eye-tracking study. *International Journal*

- of *Wine Business Research*, 32(2), 161-179. <https://doi.org/10.1108/IJWBR-03-2019-0017>
- Moscovici, D., Rezwanul, R., Mihailescu, R., Gow, J., Ugaglia, A. A., Valenzuela, L., & Rinaldi, A. (2021). Preferences for eco certified wines in the United States. *International Journal of Wine Business Research*, 33(2), 153-175. <https://doi.org/10.1108/IJWBR-04-2020-0012>
- Moulard, J., Babin, B. J., & Griffin, M. (2015). How aspects of a wine's place affect consumers' authenticity perceptions and purchase intentions: The role of country of origin and technical terroir. *International Journal of Wine Business Research*, 27(1), 61-78. <https://doi.org/10.1108/IJWBR-01-2014-0002>
- Muñoz, R. M., Fernández, M. V., & Salinero, M. Y. (2019). Assessing consumer behavior in the wine industry and its consequences for wineries: A case study of a Spanish company. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02491>
- Munteanu, C. C. (2015). Brand extensions differentiation: Implications for strategy. *International Conference on Marketing and Business Development*, 1(1), 115-119.
- Nassè, T. B. (2021). The concept of consumer behavior: Definitions in a contemporary marketing perspective. *International Journal of Management & Entrepreneurship Research*, 3(8), 303-307. <https://doi.org/10.51594/ijmer.v3i8.253>
- Nassè, T. B., Ouédraogo, A., & Sall, F. D. (2019). Religiosity and consumer behavior in developing countries: An exploratory study on Muslims in the context of Burkina Faso. *African Journal of Business Management*, 13(4), 116-127. <https://doi.org/10.5897/AJBM2018.8662>
- Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 78(2), 311-329. <https://doi.org/10.1086/259630>
- Nerlove, M. (1995). Hedonic price functions and the measurement of preferences: The case of Swedish wine consumers. *European Economic Review*, 39(9), 1697-1716. [https://doi.org/10.1016/0014-2921\(95\)00013-5](https://doi.org/10.1016/0014-2921(95)00013-5)
- Nossiter, J. (Producer, Director). (2004). *Mondovino* [Film]. Diaphana Films; Goatworks Films; Les Films de la Crusade.
- Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: An example, design considerations and applications. *Information & management*, 42(1), 15-29. <https://doi.org/10.1016/j.im.2003.11.002>

- Oliver, R. L. (1981). Measurement and evaluation of satisfaction processes in retail settings. *Journal of Retailing*, 5, 25–48.
- Oliveira, M., Costa, J. M., Fragoso, R., & Duarte, E. (2019). Challenges for modern wine production in dry areas: Dedicated indicators to preview wastewater flows. *Water Supply*, 19(2), 653-661. <https://doi.org/10.2166/ws.2018.171>
- Olshavsky, R. W. (1985). Perceived quality in consumer decision making: An integrated theoretical perspective. In J. Jacoby & J. C. Olson (Eds.), *Perceived Quality: How Consumers View Stores and Merchandise* (pp. 1-29). D.C. Heath and Company.
- Orlowski, M., Lefebvre, S., Back, R. M. (2022). Thinking outside the bottle: Effects of alternative wine packaging. *Journal of Retailing and Consumer Services*, 69, 1-14. <https://doi.org/10.1016/j.jretconser.2022.103117>
- Orrego, M. J. E., Defrancesco, E., & Gennari, A. (2012). The wine hedonic price models in the ‘Old and New World’: State of the art. *Revista de la Facultad de Ciencias Agrarias UNCuyo*, 44(1), 205-220.
- Pabst, E., Szolnoki, G., & Loose, S. M. (2019). The effects of mandatory ingredient and nutrition labelling for wine consumers – A qualitative study. *Wine Economics and Policy*, 8(1), 5-15. <https://doi.org/10.1016/j.wep.2019.02.001>
- Pérez-Rodríguez, G., Baptista, J. P., Igrejas, G., Fdez-Riverola, F., & Lourenço, A. (2022). Use social media knowledge for exploring the Portuguese wine industry: Following talks and perceptions? *Scientific Programming*, 2022. <https://doi.org/10.1155/2022/2912770>
- Pickering, G. J., Duben, M., & Kemp, B. (2022). The importance of informational components of sparkling wine labels varies with key consumer characteristics. *Beverages*, 8(27), 1- 21. <https://doi.org/10.3390/beverages8020027>
- Pomarici, E., & Vecchio, R. (2014). Millennial generation attitudes to sustainable wine: An exploratory study on Italian consumers. *Journal of Cleaner Production*, 66, 537–545. <https://doi.org/10.1016/j.jclepro.2013.10.058>
- Pookulangara, S., & Koesler, K. (2011). Cultural influence on consumers’ usage of social networks and its’ impact on online purchase intentions. *Journal of Retailing and Consumer Services*, 18(4), 348-354. <https://doi.org/10.1016/j.jretconser.2011.03.003>

- Prado, A. K. M., Caetano, M. H., Benedetti, R., & Benedetti, P. D. C. D. (2013). Os efeitos do consumo de vinho na saúde humana. *Revista Científica Unilago*, 1(1), 109-128.
- Principato, L., Mattia, G., Di Leo, A., & Pratesi, C. A. (2021). The household wasteful behaviour framework: A systematic review of consumer food waste. *Industrial Marketing Management*, 93, 641-649. <https://doi.org/10.1016/j.indmarman.2020.07.010>
- Pucci, T., Casprini, E., Rabino, S., & Zanni, L. (2017). Place branding-exploring knowledge and positioning choices across national boundaries: The case of an Italian superbrand wine. *British Food Journal*, 119(8), 1915-1932. <https://doi.org/10.1108/BFJ-11-2016-0582>
- Pucci, T., Faraoni, M., Rabino, S., & Zanni, L. (2016). Willingness to pay for a regional wine brand. *Micro & Macro Marketing*, 1, 39-54. <https://doi.org/10.1431/82867>
- Putra, Y. S., Sudarmiatin, & Suharto. (2018). Analysis of differentiation strategies to create competitive advantages in facing global markets. *KnE Social Sciences*, 3(3), 254–269. <https://doi.org/10.18502/kss.v3i3.1888>
- Queirós, A., Faria, D., & Almeida, F. (2017). Strengths and limitations of qualitative and quantitative research methods. *European Journal of Education Studies*, 3(9), 369-387. <https://doi.org/10.5281/zenodo.887089>
- Quester, P. G., & Smart, J. (1998). The influence of consumption situation and product involvement over consumers' use of product attribute. *The Journal of Consumer Marketing*, 15(3), 220-238. <https://doi.org/10.1108/07363769810219107>
- Quester, P. G., & Smart, J. (1996). Product involvement in consumer wine purchases: Its demographic determinants and influence on choice attributes. *International Journal of Wine Marketing*, 8(3), 37-56. <https://doi.org/10.1108/eb008661>
- Razak, D. A., Abdullah, M. A., & Ersoy, A. (2018). Small medium enterprises (SMEs) in Turkey and Malaysia a comparative discussion on issues and challenges. *International Journal of Business, Economics and Law*, 10(49), 2-591.
- Ramos, P. M. G., Martins, F. V., & Barandas, H. G. (2011). Differences in the perception of wine attributes: A comparative view between consumers, producers and intermediaries. *OIV bulletin*, 84, 372-406.

- Ramos, P. M. G., & Thompson, K. E. (1996). The UK market for Portuguese table wines: A structural analysis. *International Journal of Wine Marketing*, 8(2), 5-15. <https://doi.org/10.1108/eb008654>
- Rebelo, J., & Caldas, J. (2013). The Douro wine region: A cluster approach. *Journal of Wine Research*, 24(1), 19–37. <http://dx.doi.org/10.1080/09571264.2012.717220>
- Rebelo, J., Lourenço-Gomes, L., Gonçalves, T., & Caldas, J. (2019). A hedonic price analysis for the Portuguese wine market: Does the distribution channel matter?. *Journal of Applied Economics*, 22(1), 40-59. <https://doi.org/10.1080/15140326.2018.1550596>
- Rebelo, J., & Muhr, D. (2012). Innovation in wine SMEs: The Douro Boys informal network. *Studies in Agricultural Economics*, 114(2), 111-117. <http://dx.doi.org/10.7896/j.1118>
- Remaud, H., & Couderc, J-P. (2006). Wine business practices: A new versus old wine world perspective. *Agribusiness* 22(3), 405–416. <https://doi.org/10.1002/agr.20094>
- Retorta, M. E. (1992). *Embalagem e Marketing, a comunicação silenciosa*. Texto Editora Lda.
- Ries, A., & Trout, J. (1993). *Positioning: The Battle for Your Mind*. Warner Books.
- Ritchie, C. (2007). Beyond drinking: The role of wine in the life of the UK consumer. *International Journal of Consumer Studies*, 31(5), 534-540. <https://doi.org/10.1111/j.1470-6431.2007.00610.x>
- Roberto, L. M., Fávero, L. P., & Prado, B. P. (2009). Hedonic pricing models and the evaluation of attributes: The case of wines from Brazil, Argentina and Chile. *Esic-Market*, 134, 27-47.
- Rosen, S. (1974). Hedonic prices and implicit markets: Product differentiation in pure competition. *Journal of Political Economy*, 82(1), 34-55.
- Ruggeri, G., Mazzocchi, C., & Corsi, S. (2020). Drinking biodiversity: A choice experiment on Franciacorta sparkling wines. *British Food Journal*, 122(8), 2531-2549. <https://doi.org/10.1108/BFJ-06-2019-0451>
- 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. <https://doi.org/10.1016/j.foodqual.2012.06.006>

- Santos, J. F., & Ribeiro, J. C. (2012). Estratégias empresariais de base territorial: O caso Symington e a produção de Vinho do Porto. *Desenvolvimento Regional em Debate*, 2(1), 134-155. <https://doi.org/10.24302/drd.v2i1.86>
- Santos, J. F., & Ribeiro, J. C. (2012). The Portuguese online wine buying consumer: Characteristics, motivations and behaviour. *EuroMed Journal of Business*, 7(3), 294-311. <https://doi.org/10.1108/14502191211265343>
- Schamel, G. (2006). Geography versus brands in a global wine market. *Agribusiness*, 22(3), 363-374. <https://doi.org/10.1002/agr.20091>
- Schäufele, I., & Hamm, U. (2017). Consumers' perceptions, preferences and willingness-to-pay for wine with sustainability characteristics: A review. *Journal of Cleaner Production*, 147, 379-394. <https://doi.org/10.1016/j.jclepro.2017.01.118>
- Schwartz, H. S. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65. [https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)
- Sellers-Rubio, R., & Nicolau-Gonzalbez, J. L. (2016). Estimating the willingness to pay for a sustainable wine using a Heckit model. *Wine Economics and Policy*, 5(2), 96-104. <https://doi.org/10.1016/j.wep.2016.09.002>
- Shapiro, C. (1983). Premiums for high quality products as returns to reputations. *The Quarterly Journal of Economics*, 98(4), 659-679. <https://doi.org/10.2307/1881782>
- Sheth, J. (2021). New areas of research in marketing strategy, consumer behavior, and marketing analytics: The future is bright. *Journal of Marketing Theory and Practice*, 29(1), 3-12. <https://doi.org/10.1080/10696679.2020.1860679>
- Silva, P. M., & Santos, J. F. (2020). Marketing-mix standardization/localization strategy and export intensity: An empirical analysis based on the perceptions of Portuguese wine producers. *Review of International Comparative Management*, 21(2), 118-136. <https://doi.org/10.24818/RMCI.2020.2.118>
- Simpson, J. (2009). Old World versus New World: The origins of organizational diversity in the international wine industry, 1850-1914. *Working Papers in Economic History*.
- South, L., Saffo, D., Vitek, O., Dunne, C., & Borkin, M. A. (2022). Effective use of Likert scales in visualization evaluations: A systematic review. *Computer Graphics Forum*, 41(3), 43-55. <https://doi.org/10.1111/cgf.14521>

- Spielmann, N. (2015). Anything but typical: How consumers evaluate origin products based on their cues. *International Journal of Wine Business Research*, 27(1), 23-39. <https://doi.org/10.1108/IJWBR-07-2014-0031>
- Stasi, A., Muscio, A., Nardone, G., & Seccia, A. (2016). New technologies and sustainability in the Italian wine industry. *Agriculture and Agricultural Science Procedia*, 8, 290-297. <https://doi.org/10.1016/j.aaspro.2016.02.023>
- Stasi, A., Bimbo, F., Viscecchia, R., & Seccia, A. (2014). Italian consumers' preferences regarding dealcoholized wine, information and price. *Wine Economics and Policy*, 3(1), 54-61. <https://doi.org/10.1016/j.wep.2014.05.002>
- Stanton, J. V., & Cook, L. A. (2019). Product knowledge and information processing of organic foods. *Journal of Consumer Marketing*, 36(1), 240-252. <https://doi.org/10.1108/JCM-07-2017-2275>
- Staub, C., & Siegrist, M. (2022). Rethinking the wine list: Restaurant customers' preference for listing wines according to wine style. *International Journal of Wine Business Research*, 34(3), 447-465. <https://doi.org/10.1108/IJWBR-06-2021-0034>
- Steenkamp, J-B. E. M. (1990). Conceptual model of the quality perception process. *Journal of Business Research*, 21(4), 309-333. [https://doi.org/10.1016/0148-2963\(90\)90019-A](https://doi.org/10.1016/0148-2963(90)90019-A)
- Suhaily, L., & Darmoyo, S. (2017). Effect of product quality, perceived price and brand image on purchase decision mediated by customer trust (study on Japanese brand electronic product). *Jurnal Manajemen*, 21(2), 179-194. <https://doi.org/10.24912/jm.v21i2.230>
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203-220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0)
- Symmank, C. (2019). Extrinsic and intrinsic food product attributes in consumer and sensory research: Literature review and quantification of the findings. *Management Review Quarterly*, 69, 39-74. <https://doi.org/10.1007/s11301-018-0146-6>
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*, 5th ed. Pearson Education.
- Tamaş, A. (2016). Is the country of origin an important cue when buying wine?. *Journal of Eastern Europe Research in Business and Economics*, 2016. <https://doi.org/10.5171/2016.385656>

- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53-55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Taylor, J. J., Bing, M., Reynolds, D., Davison, K., & Ruetzler, T. (2018). Motivation and personal involvement leading to wine consumption. *International Journal of Contemporary Hospitality Management*, 30(2), 702-719. <https://doi.org/10.1108/IJCHM-06-2016-0335>
- Todd, M. J., Kelley, K. M., & Hopfer, H. (2021). USA mid-Atlantic consumer preferences for front label attributes for local wine. *Beverages*, 7(2). <https://doi.org/10.3390/beverages7020022>
- Tong, Q., Anders, S., Zhang, J., & Zhang, L. (2020). The roles of pollution concerns and environmental knowledge in making green food choices: Evidence from Chinese consumers. *Food Research International*, 130. <https://doi.org/10.1016/j.foodres.2019.108881>
- Toni, D., Pompermayer, R., Lazzari, F., & Milan, G. S. (2022). The symbolic value of wine, moderating and mediating factors and their relationship to consumer purchase intention. *International Journal of Wine Business Research*, 34(2), 190-211. <https://doi.org/10.1108/IJWBR-01-2021-0006>
- Trindade-Carlos, H. C., Chamorro-Mera, A., & García-Gallego, J. M. (2019). What Portuguese consumers care about when buying wine. How important is the design of the bottle?. *Ciência e Técnica Vitivinícola*, 4(1), 25-35.
- Tsiakis, T., Anagnostou, E., Granata, G., & Manakou, V. (2022). Communicating terroir through wine label toponymy Greek wineries practice. *Sustainability*, 14(23). <https://doi.org/10.3390/su142316067>
- Ugaglia, A. A., Cardebat, J. M., & Jiao, L. (2019). The French wine industry. In A. A. Ugaglia, J. M. Cardebat, & A. Corsi (Eds), *The Palgrave handbook of wine industry economics* (pp. 17-46). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-319-98633-3_2
- Utkarsh, Sangwan, S., & Agarwal, P. (2019). Effect of consumer self-confidence on information search and dissemination: Mediating role of subjective knowledge. *International Journal of Consumer Studies*, 43(1), 46-57. <https://doi.org/10.1111/ijcs.12482>

- Van Ittersum, K., Candel, M. J. J. M., & Meulenberg, M. T. G. (2003). The influence of the image of a product's region of origin on product evaluation. *Journal of Business Research*, 56(3), 215-226. [https://doi.org/10.1016/S0148-2963\(01\)00223-5](https://doi.org/10.1016/S0148-2963(01)00223-5)
- Valentin, D., Valente, C., Ballester, J., Symoneaux, R., Smith, I., Bauer, F. F., & Nieuwoudt, H. (2021). The impact of "Wine Country of Origin" on the perception of wines by South African and French wine consumers: A cross-cultural comparison. *Foods*, 10(8), 1-19. <https://doi.org/10.3390/foods10081710>
- Visalli, M., Dubois, M., Schlich, P., Ric, F., Cardebat, J-M., Georgantzis, N. (2023). A dataset on the sensory and affective perception of Bordeaux and Rioja red wines collected from French and Spanish consumers at home and international wine students in the lab. *Data in Brief*, 46. <https://doi.org/10.1016/j.dib.2022.108873>
- Viot, C. (2012). Subjective knowledge, product attributes and consideration set: A wine application. *International Journal of Wine Business Research*, 24(3), 219-248. <https://doi.org/10.1108/17511061211259206>
- Vissak, T. (2010). Recommendations for using the case study method in international business research. *Qualitative Report*, 15(2), 370-388. <https://doi.org/10.46743/2160-3715/2010.1156>
- Vivas, C., & Sousa, A. (2012). Globalization and international expansion strategies of the wine sector companies in Portugal. *American Association of Wine Economists- Proceedings Annual Conference 2012*.
- Vock, M., Van Dolen, W., & Ruyter, K. (2013). Understanding willingness to pay for social network sites. *Journal of Service Research*, 16(3), 311-325. <https://doi.org/10.1177/1094670512472729>
- Vrontis, D., Bresciani, S., & Giacosa, E. (2016). Tradition and innovation in Italian wine family businesses. *British Food Journal*, 118(8), 1883-1897. <https://doi.org/10.1108/BFJ-05-2016-0192>
- Wakefield, K. L., & Inman, J. J. (2003). Situational price sensitivity: The role of consumption occasion, social context and income. *Journal of Retailing*, 79(4), 199-212. <https://doi.org/10.1016/j.jretai.2003.09.004>
- Wang, Q. J., Niaura, T., & Kantono, K. (2021). How does wine ageing influence perceived complexity? Temporal-Choose-All-That-Apply (TCATA) reveals temporal drivers of complexity in experts and novices. *Food Quality and Preference*, 92. <https://doi.org/10.1016/j.foodqual.2021.104230>

- Wongprawmas, R., & Spadoni, R. (2018). Is innovation needed in the Old World wine market? The perception of Italian stakeholders. *British Food Journal*, 120(6), 1315-1329. <https://doi.org/10.1108/BFJ-07-2017-0409>
- Woodruff, R. B. (1997). Customer Value: The next source for competitive advantage. *Journal of the Academy of Marketing Science*, 25(2), 139–153. <https://doi.org/10.1007/BF02894350>
- Wright, D. K., Yoon, H., Morrison, A. M., & Šegota, T. (2023). Drinking in style? Literature review of luxury wine consumption. *British Food Journal*, 125(2), 679-695. <https://doi.org/10.1108/BFJ-06-2021-0661>
- Wu, C-H., & Chiu, Y-Y. (2023). Pricing and content development for online media platforms regarding consumer homing choices. *European Journal of Operational Research*, 305(1), 312-328. <https://doi.org/10.1016/j.ejor.2022.05.030>
- Xie, G., Huang, L., Apostolidis, C., Huang, Z., Cai, W., & Li, G. (2021). Assessing consumer preference for overpackaging solutions in e-commerce. *International Journal of Environmental Research and Public Health*, 18(15). <https://doi.org/10.3390/ijerph18157951>
- Xin, L., & Seo, S. (2020). The role of consumer ethnocentrism, country image, and subjective knowledge in predicting intention to purchase imported functional foods. *British Food Journal*, 122(2), 448-464. <https://doi.org/10.1108/BFJ-05-2019-0326>
- Yang, Y., & Paladino, A. (2015). The case of wine: Understanding Chinese gift-giving behavior. *Marketing Letters*, 26, 335-361. <https://doi.org/10.1007/s11002-015-9355-0>
- Yang, J., & Choi, J. (2022). Does knowledge of wine affect consumers' wine purchase behavior in restaurants? An application of extended theory of planned behavior (ETPB). *Beverages*, 8 (11). <https://doi.org/10.3390/beverages8010011>
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22. <https://doi.org/10.1177/002224298805200302>

7. Appendix

7.1. Questionnaire

My name is Marta Ribeiro and I am a student of the Master in Management at FEP - School of Economics and Management of the University of Porto.

This survey is part of my Master dissertation that focuses on the perception of international consumers about Portuguese wine. The study will help to understand the current image of Portuguese wine and how to improve it internationally. The questionnaire takes about approximately 5 minutes to answer. There are no right or wrong answers; please give your sincere opinion.

The survey is anonymous and confidential, and the information collected will be used only for the purpose of this research.

If you are interested in receiving the results of the study, please provide your email at the end of the form.

Your answer is crucial to the development of this investigation. Thank you for your collaboration!

Table 5 Questionnaire “International consumers’ perception of Portuguese wine”

Section	Question	Answer
Wine Interest	Are you a person who appreciate wine and/or interested in this product?	- Yes - No
Subjective Wine Knowledge (Sellers-Rubio & Nicolau-Gonzalbez, 2016)	How would you describe your level of knowledge about wine culture?	Please rate your level of agreement with the question on a scale from 1 (I am a beginner) to 5 (I am an expert).
	How would you describe your level of knowledge about Portuguese wine culture?	
Subjective Knowledge of Portuguese Wine Culture (Pucci et al., 2016)	I am familiar with Portuguese wines.	Classify, on a scale of 1 (Not agree) to 5 (The highest agreement), your level of agreement for each of the following statements.
	I like to read content about Portuguese wines.	
	I can distinguish among different wine regions of Portugal.	
Importance of Attributes	Grape variety	Please rate the degree of importance of each attribute
	Price	

(Viot, 2012)	Medals/ awards	below when buying a wine, on a scale from 1 (Not important) to 5 (Very important).
	Designation of Controlled Origin (DOC)/ Protected Designation of Origin (DOP)	
	Country of origin	
	Region of production (terroir)	
	Shape and design of bottle/label	
	Information on the label and back-label	
	Opinion of the press	
	Experts' opinion (Parker. R, Hachette)	
	Other people's referrals (friends or colleagues)	
Product Image of Country of Origin (Pucci et al, 2017)	Tradition/Culture	Classify, on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree), to what extent would you associate the following attributes with Portuguese wine.
	Elegance	
	High Quality	
	Exclusivity	
	Age	
	Trendy	
	Expensive	
	Local grape variety	
Perceived Quality (Costa et al., 2021)	Portuguese wines are well known and highly reputed.	Regarding the quality of Portuguese wine, classify, on a scale of 1 (Not at all associated) to 5 (Very much associated), your level of agreement for each of the following statements.
	Portuguese wines are highly appreciated in foreign markets.	
	Portuguese wines have received awards and very favorable reviews from wine critics.	
	Portuguese wines are having an exceptional quality.	
	Portuguese wines' quality varies widely across harvest years, depending on climate conditions and grape quality.	
Purchase Intention (Toni et al., 2022)	I will buy larger quantities of Portuguese wines in the coming months.	Please rate, on a scale of 1 (Strongly Disagree) to 5 (Strongly Agree), your level of agreement regarding your
	I will consider Portuguese wine as my first purchase option concerning other categories of beverages.	

	I intend to increase the volume of Portuguese wine consumption.	intention to purchase Portuguese wines.
	I will encourage friends, neighbours and/or relatives to buy and consume Portuguese wine.	
Willingness to Pay (Sellers-Rubio & Nicolau-Gonzalbez, 2016)	How much do you usually pay for a bottle of wine?	- Less than 3 euros - Between 3 and 5 euros - Between 5 and 7 euros - Between 7 and 10 euros - More than 10 euros
	Would you be willing to pay an extra charge for a Portuguese wine?	- Yes, less than 10% - Yes, between 10 and 20% - Yes, between 20 and 30% - Yes, more than 30% - No
Demographic Questions (Visalli et al., 2023)	What is your nationality?	Short answer
	What is your country of residence?	Short answer
	Gender	- Male - Female - Other - I prefer not to say
	Age	- 18–29 - 30–40 - 41–50 - 51–60 - 61 to order
	How would you characterize your income?	-Living comfortably on present income - Coping on present income - Finding it difficult on present income - Finding it very difficult on present income - I prefer not to answer

Table 6 Descriptive Statistics and Cronbach's alpha values

Constructs	Mean	Standard Deviation	Cronbach's alfa
WA	3,405	0,810	0,833
WA_LB1	3,04	1,133	
WA_LB2	3,54	1,004	
WA_COO	3,79	1,147	
WA_RW1	3,46	1,207	
WA_RW2	3,60	1,167	
WA_GV	3,13	1,246	
WA_P	3,27	1,109	
SWK	2,53	0,967	0,832
SWK_1	2,74	1,073	
SWK_2	2,32	1,016	
SKPW	2,43	0,973	0,843
SKPW_1	2,49	1,046	
SKPW_2	2,54	1,164	
SKPW_3	2,26	1,131	
TPOP	3,39	1,045	0,852
TPOP_1	2,83	1,183	
TPOP_2	3,41	1,301	
TPOP_3	3,94	1,076	
PQ	3,36	0,916	0,902
PQ_1	3,49	1,127	
PQ_2	3,41	1,118	
PQ_3	3,22	1,016	
PQ_4	3,41	1,077	
PQ_5	3,28	1,061	
QIP	3,18	0,829	0,913
QIP_1	3,79	1,020	
QIP_2	3,28	1,006	
QIP_3	3,62	1,012	
QIP_4	3,16	1,045	
QIP_5	3,42	1,141	
QIP_6	2,58	1,188	

QIP_7	2,35	0,911	
QIP_8	3,27	1,072	
PI	3,16	1,011	
PI_1	3,12	1,184	0,909
PI_2	2,95	1,164	
PI_3	3,17	1,084	
PI_4	3,40	1,130	
WTP	2,89	0,774	
WTP_1	3,05	0,861	0,507
WTP_2	2,73	1,024	

Table 7 Summary of hypothesis testing

Hypothesis No.	Hypothesis	It was supported?
H1	The value that international consumers give to wine attributes has a positive and significant influence on their purchase intention of wine Portuguese.	No
H1.1	The importance of label design and information has a positive and significant influence on the purchase intention of Portuguese wine.	No
H1.2	The weight given to the country of origin when choosing a wine has a positive and significant influence on the purchase intention of Portuguese wine.	No
H1.3	The importance of wine regions, such as DOC or DOP, has a positive and significant impact on the purchase intention of Portuguese wine.	No
H1.4	The value that international consumers give to grape variety has a positive and significant influence on the purchase intention of Portuguese wine.	No
H1.5	The importance of price has a positive and significant impact on the purchase intention of Portuguese wine.	No
H2	The value that international consumers give to wine attributes has a positive and significant influence on willingness to pay of wine Portuguese.	Partially

H2.1	The importance of label design and information has a positive and significant influence on the willingness to pay of Portuguese wine.	Yes
H2.2	The weight given to the country of origin when choosing a wine has a positive and significant influence on the willingness to pay of Portuguese wines.	No
H2.3	The importance of wine regions, such as DOC or DOP, has a positive and significant impact on the willingness to pay of Portuguese wines.	No
H2.4	The value that international consumers give to grape variety has a positive and significant influence on the willingness to pay of Portuguese wines.	No
H2.5	The importance of price has a positive and significant impact on the willingness to pay of Portuguese wines.	Yes
H3	A higher wine subjective knowledge affects positively on the purchase intention of Portuguese wines.	Partially
H3.1	A higher subjective knowledge about wine in general impacts positively on the purchase intention of Portuguese wines.	No
H3.2	A higher subjective knowledge about Portuguese wines impacts positively on the purchase intention of this product.	Yes
H4	A higher wine subjective knowledge affects positively on willingness to pay of Portuguese wines.	No
H4.1	A higher subjective knowledge about wine in general impacts positively on willingness to pay of Portuguese wines.	No
H4.2	A higher subjective knowledge about Portuguese wines impacts positively on willingness to pay of this product.	No
H5	Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have a greater impact on purchase intentions of Portuguese wines.	Yes
H6	Positive reviews or recommendations from third parties (experts, family, friends, and acquaintances) have a greater impact on willingness to pay of Portuguese wines.	No
H7	The higher the quality image perceived by the consumer, the higher the purchasing intention of Portuguese wines.	Yes

H8	The higher the quality image perceived by the consumer, the higher the willingness to pay of Portuguese wines.	Yes
H9	The better the consumer's perceived quality image of Portugal as a wine producer has a significant impact on the purchase intention of Portuguese wines.	Yes
H10	The better the consumer's perceived quality image of Portugal as a wine producer has a significant impact on the willingness to pay of Portuguese wines.	Yes