

Geographical Indications and International Trade: evidence from the wine market¹

GIULIO MALORGIO*, LUCA CAMANZI*, CRISTINA GRAZIA*

Jel classification: F130, Q130, Q170

1. Introduction

International wine markets are subject to an increasing competition. As traditional wine-producing Countries in the EU-25 address the domestic challenges of increasing stocks and stagnating per-capita consumption, the emergence of the so-called «New World» producers has animated extensive international discussions on the issues of labelling, brand protection and Geographic Indications of Origin (GIs) (Camanzi *et al.*, 2008).

In this environment, differentiated products can offer the hope of maintaining profitability. As sensory experience, wine differentiation primarily hinges on the transmission and perception of information on product quality.

Consumers face the problem of asymmetric information, with the potential that the average quality in the market will be less than optimal. Conversely, producers need to find ways to efficiently transmit information on the quality of their products, so as to maximize the potential price premium.

* Department of Agricultural Economics and Engineering, University of Bologna, Italy.

¹ This paper arises from a synthesis of two previous contributions by the authors, namely Camanzi *et al.* (2008) and Malorgio *et al.* (2008), which are both cited in the references. This paper arises from joint work of different authors financed by the Ministry of Research (RFO). In particular, G. Malorgio wrote paragraphs 1, 5 and 7; L. Camanzi wrote paragraphs 3 and 6; C. Grazia wrote paragraphs 2 and 4.

Abstract

The objective of this paper is to evaluate the role of the Appellation of Origin (AO) system on the international wine market, given I) the GIs international legal protection system, II) the main aspects of the evolution of the world wine demand and III) the strategic choices of firms on the international market.

On the demand side, through descriptive statistics and economic literature review, we show the increasing wine consumers' appreciation of reputation and origin attributes. On the supply side, we identify the main quality strategies implemented on the international wine market and show the more and more important role played by origin attributes in the strategic choices made by firms worldwide.

Finally, a direct survey on Italian Appellations of Origin concerning the registration on the international market shows an increasing risk of an imperfect use of geographical place names. The main consequences are identified for both producers and consumers. Firstly, a misperception of product quality attributes can arise and menace the effectiveness of AO as informative tool. Secondly, the free riding phenomenon may arise and affect the AO collective reputation with a consequently demand drop in the long term.

Key-words: Appellation of Origin, Consumer Information, Intellectual Property Right protection, International Trade Agreements, Wine market.

Résumé

Le présent document vise à évaluer le rôle que le système de l'Appellation d'Origine joue dans le marché international du vin, tout en considérant I) les Indications Géographiques en tant que système international de protection légale, II) les aspects principaux de l'évolution de la demande de vin à l'échelle mondiale et III) les choix stratégiques des entreprises sur le marché international.

Coté demande, à travers des statistiques descriptives et la consultation de la littérature économique, nous démontrons l'intérêt croissant des consommateurs pour la réputation et l'origine des vins qu'ils achètent.

Coté offre, nous identifions les stratégies principales pour la mise en valeur de la qualité sur le marché international du vin et montrons le rôle de plus en plus important des attributs d'origine dans les choix stratégiques des entreprises de par le monde.

En conclusion, une enquête directe menée sur les appellations d'origine en Italie, et qui concerne l'enregistrement sur le marché international, montre un risque croissant d'un emploi non adéquat des noms géographiques locaux. Les principales conséquences sont identifiées aussi bien pour les producteurs que pour les consommateurs. Primo, une perception erronée de la qualité d'une marchandise pourrait se produire and menacer l'efficacité de l'Appellation d'Origine en tant qu'outil d'information. Secondo, le phénomène de free-riding pourrait avoir lieu et affecter la réputation de l'Appellation d'Origine auprès des consommateurs et, par conséquent, provoquer la chute de la demande sur le long terme.

Mots-clés: Appellation d'Origine, Information des Consommateurs, protection du Droit de Propriété intellectuelle, Accords de Commerce International, Marché du vin.

In the traditional European approach, producers tend to organize themselves in consortia, which centre around the AO designation. This mechanism is much more than a simple geographic delineation. The consortium can be governed by history, tradition, culture, *terroir*, and even by tight controls over production decisions, irrigation, plant varieties, etc. Product quality is embodied in everything the Appellation stands for. The AO also plays an important role in the EU exports. In fact, it provides a tool for product differentiation in order to better fit demand segmentation to create higher added value for producers.

With growth in international trade, subtle national differences in regulatory and legal frameworks can become major irritants between exporting and importing Countries. Pragmatically, there is the need to find common ground so that trade can continue to flow. Discussions aimed at finding out that common ground has been found for a number

of years in different *fora*: from the Madrid Agreement in 1891 to the more recent talks within the TRIPS framework.

An important debate is currently taking place about the meaning of the notification and protection system. According to the US and other «New World» producing Countries, the GIs should be based on a voluntary registration system as identification tool. Therefore, GIs should be considered

as a form of territorial right and their utilization should be discussed in national legislation. On the other hand, according to the EU, the GIs should enter a multilateral register to be enforced in all Countries.

The aim of this paper is to discuss the efficiency of AO system on the international wine market as an instrument that can satisfy both the producers and consumers needs, and then to give advice on how to improve the market performance in the future.

The subject is introduced by an overview of the main international agreements for the protection of Appellations of Origin.

Moreover, we carry out a demand analysis in order to evaluate the consumers' appreciation of origin attributes. The analysis on demand is conducted through descriptive statistics and a critical review of the related economic literature.

The third step of our approach consists in a supply analysis carried out in order to describe and evaluate the alternative market strategies adopted by the main wine-producing Countries and identify the role of origin in a firm's strategic choices.

Finally, through two empirical analyses, we intend to show the risks that for both consumers and producers run as a consequence of the coexistence of brand names and Appellations of Origin on international markets. The first investigation is conducted through the United States Patent and Trademark Office (USPTO) trademark register database in order to illustrate some cases of imperfect use of quality signals on the international market. This analysis is aimed at quantifying the actual risks of altering the consumer's quality perceptions and weakening the AO reputation on the international markets. Then, we conducted a direct survey on the Italian AO Consortiums Association (Federdoc) in order to give some insights into the efforts made by producers to register the collective brand on the international markets.

2. The protection of the Appellations of Origin on the international market

The issue of international protection of GIs goes back to the Paris Convention for the Protection of Industrial Property in 1883 (known as «Paris Convention»), which included «indications of source or appellations of origin» as objects to be protected by national industrial property laws². Nowadays, this Agreement has more adherents than any other treaty addressing the protection of geographical indications. Namely, the Paris Convention currently requires member countries to prohibit the import of goods bearing

false indications. Hence, the import of goods marked with a GI that might be liable to mislead, but does not rise to the level of being false, does not need to be prohibited under the Paris convention (Bendeckey and Mead, 1992).

However, a more comprehensive form of regulation is provided by the Madrid Agreement for the Repression of False or Deceptive Indications of Source on Goods (1891), which prohibits the import of goods bearing a false or *misleading* indication to signatory countries or to a place in those countries. Nevertheless, as highlighted by Blakeney (2001), this Agreement failed to attract the accession of significant trading nations such as the United States, Germany or Italy.

The Lisbon Agreement for the Protection of Appellations of Origin and their International registration (1958) established an international system for registration and protection of appellations of origin by adopting the French definition of appellation of origin, defining it as «*the geographical name of a country, region, or locality, which serves to designate a product originating therein, the quality and the characteristics of which are exclusively or essentially due to the geographical environment (milieu géographique), including natural and human factors*». As underlined by Romain-Prot (1995), this Agreement failed to attract support from more than only a few nations. At first, the accession was confined to those nations that were protecting appellations of origin «as such». Hence, as highlighted by Geuze (2007), the international registration of an appellation of origin provides its protection as long as the appellation is protected in its country of origin. Later on, no exception was made for GIs, which had already become generic in MS.

The Trade Related Intellectual Property (TRIPS) agreement defines GIs as «*...indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin*»³. As highlighted by Romain-Prot (1995), this definition expands (but weakens) the Lisbon Agreement's concept of appellation of origin. Firstly, the criteria (quality, reputation, and other characteristics) are alternative and independent; secondly, the link between natural and human factors disappears. For example, goods that merely have a certain reputation, but not a specific quality due to their place of origin, are covered by the definition provided by the TRIPS, but not by the one provided by the Lisbon Agreement. Finally, under the TRIPS Agreement, a GI has to be an indication in order to be protected, but not necessarily the name of a geographical place on earth. Hence, as highlighted by Höpferger (2007), non-geographical place names or emblems would fall into the category of signs that could constitute GIs under the TRIPS Agreement.

The TRIPS Agreement provides an additional protection for wines and spirits⁴. Firstly, the Agreement specifies that each Member shall provide legal protection for wine GIs even where the true origin of the goods is indicated or the geographical indication is used in translation or accompa-

² The term «indication of source» can be defined as an indication referring to a country, or to a place in that country, a given product is native of. This definition does not imply any special quality or characteristic of the product on which an indication of source is used.

³ See Article 22 of the TRIPS Agreement.

⁴ See Articles 23-24 of the TRIPS Agreement. In the current debate, some Countries consider this additional protection as an unacceptable discrimination against all other products and they have demanded for an extension of that protection to all kinds of geographical indications (Blakeney, 2001).

nied by expressions such as «kind», «type», «style», «imitation» or similar. As no mention is made of misleading the public or unfairly competing, the presumption is that such conditions are not required for GI protection for wines and spirits (Josling, 2006)⁵. Hence, the level of protection for wines and spirits is enhanced beyond that provided for GIs, under which protection is limited to cases where the public is misled as to the true geographical origin of a product or where the use of the GI constitutes an act of unfair competition. Secondly, even if the Agreement does not set out the registration requirements for a geographical indication, it negatively addresses the issue by permitting Members to legislate to provide «an interested party» the capability to request the refusal or invalidation of the registration of a trademark which contains a GI identifying wines or spirits, which contains or consists of a GI which does not have the indicated origin. Thirdly, a protection for GIs for wines in the case of homonymous indications is provided. Conflicts typically arise with products presenting homonymous GIs and being sold into the same market. Concurrent use of homonymous GIs in the same territory may be problematic where the products on which a geographical indication is used have specific qualities and characteristics that are absent from the products on which the homonym of that geographical indication is used. In this case, the use of the homonymous geographical indication would be misleading, since expectations concerning the quality of the products on which the homonymous geographical indication is used are not met (Blakeney, 2001).

However, important exceptions limit the effectiveness of this additional protection. Firstly, a Member is not obligated to protect a GI of another Member where that GI has become the generic («customary») name for products and services, or in respect of grapevine products whose name is identical to the grape variety. For example, the US Bureau of Alcohol, Tobacco and Firearms (BATF) permits the use of «semi-generic names» such as «Champagne», «Burgundy» and «Chablis» if «the correct place of origin is directly connected to the name» (Brody, 1994). The main exception relates to the so-called prior trademarks. Hence, when a trademark has been acquired or registered in good faith before the date of application of the Agreement in that Member, or before the GI was protected in its country of origin, eligibility for or the validity of the registration of a trademark or the right to use a trademark shall not be prejudiced, on the basis that such trademark is identical with or similar to a geographical indication. Finally, the third main exception concerns the so-called grand-fathered uses, i.e. the continued uses of a GI identifying wines or spirits for goods or services prior to the conclusion of the Uruguay Round, even when the GI has not become generic and there

is no pre-existing trademark right. Namely, uses must have taken place in good faith or for at least ten years prior to 15 April 1994.

Parallel to, but distinct from the TRIPS Agreement, there are a number of bilateral and multilateral (including regional) agreements, which contain provisions modifying the TRIPS provisions dealing with geographical indications. For example, in 1994, the EU negotiated an agreement with Australia which included the phasing-out of European wine names used by Australian wine-makers that had slipped into generic use. The Agreement also provided for mutual recognition of oenological practices of each party and improved European market-access conditions for Australian products, by removing a number of technical barriers to trade between both parties. On 10 March 2006, the US-EU wine trade Agreement was signed. The Agreement covers wines with an actual alcohol content of not less than 7% and not more than 22%. It addresses several key issues, sets a framework to facilitate future wine trade between the United States and Europe and provides for mutual acceptance of existing oenological (wine making) practices (with the mutual acceptance of wine making practices the US will exempt the EU wine from new US certification requirements for imported wine), certification (the EU will simplify its import certification requirements for the US wine) and labelling (the Protocol on Wine Labelling sets specific conditions for the use of vine names, vintage characteristics, production methods, product types and variety names).

Moreover, the US and the EU agree to recognize certain of each other's names of origin in specific ways (article 7) and the US agrees to seek legislative changes to limit the use of 16 semi-generic names. The «traditional expressions» that the US will be allowed to use under specified conditions are: Chateau, classic, clos, cream, crusted/crusting, fine, late bottled vintage, noble, ruby, superior, sur lie, tawny, vintage and vintage character. These terms may only be used if they have been approved for use on wine labels in the US on a Certificate of Label Approval (COLA). Current US laws permit these names to be used on non-European wines. The new rules will prohibit new brands from using these names on non-European wine, but will grandfather existing uses of these semi-generic names.

3. The effectiveness of Appellations of Origin for producers and consumers

According to the economic theory, the creation of a brand has important effects on social welfare. Firstly, when quality is not adequately signalled to consumers, a decrease in the average quality provided on the market is expected to arise. In this sense, the brand acts as informative tool and can increase consumer utility. Secondly, the brand creation increases quality differentiation and thus let producers gain positive profits in the short-term, according to the degree of products substitutability (Dixit and Stiglitz, 1977). Finally, as far as the brand corresponds to an actual quality differ-

⁵ Article 23.1 permits each Member to «provide the legal means to interested parties to prevent the use of a geographical indication» identifying wines or spirits that do not originate in the place indicated by the geographical indication in question.

entiation, the Intellectual Property Right acts as a tool to protect both consumers and producers interests.

In the specific case of Appellations of Origin, we can consider that an AO has an important role for both producers and consumers. On the demand side, the Appellation of Origin represents a quality signal, which provides information about the region of origin and the wine's average quality. On the supply side, the Appellation of Origin represents a long-term commitment constraining a firm's strategy in terms of quantity and quality; in exchange, producers have access to a collective reputation.

On the one hand, Appellations of Origin represent a way to solve the asymmetric information problem (Laporte, 2001). In a context where wine quality is not directly observable for consumers, AO represents an important quality sign concerning the wine characteristics by providing information about the wine geographical origin and its average quality. In fact, wine market is characterized by a very heterogeneous supply and by the impossibility to observe the product quality before purchase. This leads to relevant asymmetric information between producers and consumers and consequently implies strong promotional and information research costs (Nelson, 1970, Darby and Karny, 1973). The major consequence of the inefficiency of quality signals as regards consumer expectations on quality and typicality is the risk of a decrease in the average quality level supplied on the market, which can imply a long-term demand drop (Akerlof, 1970). In this context, the AO aims at reducing consumer information costs.

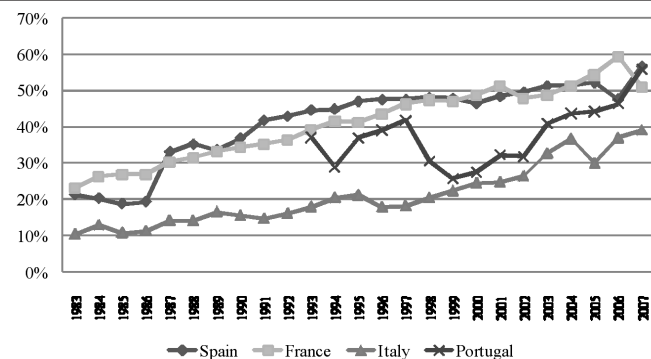
On the other hand, Appellations of Origin have important consequences on the «characteristics space» (Lancaster, 1966). The *delimited production area* and the existence of *specific production requirements* (the maximum yield of wine from grapes, the minimum density of rootstocks per hectare, the minimum natural alcohol content by volume, the minimum total acidity, etc.) confer to wine *specific quality characteristics and substantially differentiate each Appellation of Origin from the other ones*. As a result, the construction of an AO provides an increase in the *inter-appellation* quality differentiation and a decrease in the *intra-appellation* quality differentiation, by conferring specific quality characteristics to the wines belonging to the same AO. The quality differentiation is thus based on the *specific production requirements* to which producers commit. In exchange of quantity restrictions (delimited production area and maximum yield per hectare), which limit the producer's strategic flexibility in the long term, producers have access to a collective reputation, which may increase the consumer's willingness to pay for the AO (Chambolle and Giraud-Héraud, 2003).

4. Consumer appreciation of quality and origin attributes

This section of the paper aims at evaluating the role of quality in the consumer's behaviour through descriptive statistics and literature review.

The demand analysis through descriptive statistics shows that wine's quality seems to be a fundamental factor behind consumption trends. In fact, if we consider the demand for wine from 1983 to 2007, we observe that the two categories «quality wine» and «table wine» have been moving in different directions. In particular, there has been a substantial fall in consumption of «table wines». Over the same period, there has been a growth in consumption of «quality wines», but not sufficiently large to compensate for the reduction in the first category. If we consider the traditional producing and consuming Countries (France, Italy and Spain), the gross human consumption per-capita of total wine has decreased of about 45% from 1983 to 2007, whereas the opposite trend is registered in the case of quality wines produced in a specific region (PSR). Figure 1 shows the role of quality wines PSR on the total GHC per capita in France, Italy, Spain and Portugal.

Figure 1 – Role of quality wines PSR on per-capita gross human consumption in the traditional wine producing and consuming Countries (1983-2006).



Source: Eurostat data, Wine Balance Sheet (2008).

European consumers appear to be more quality-oriented than quantity-oriented. The raising importance of occasionally wine consumption is confirmed by several socio-economic surveys. In 2003, about 67% of Italian wine consumers drink wine each day, while about 33% drink it only occasionally. 75% of occasional consumers are identified as «wine-passionate» consumers, which also have a «wine-culture». As for France, the INRA-ONIVINS survey 2005 confirms the increasing role of occasional consumption.

As for the Italian market, a recent ISMEA survey (2005) examines the role of the designation of origin in consumer purchase choices. According to this survey, Italian consumers recognize the Appellations of Origin as high quality products from the point of view of *i)* taste and *ii)* food safety (due to the existence of production system's control mechanisms). Moreover, an increasing knowledge concerning AO is registered, which highlights an increasing interest in these categories of products.

Further, the demand analysis through the review of economic literature shows an increasing relevance of objective characteristics (as region of origin, reputation and other objective characteristics) on consumer willingness to pay for

wine. Hence, when a product has a high proportion of attributes that can only be assessed during consumption (experience attributes) as with wine (Chaney, 2000), then the consumers will fall back on extrinsic cues in the assessment of quality (Speed, 1998). Several papers show the impact of objective characteristics on price differentials. This category includes the vintage's year, the Appellation, the region, the grape varieties, which usually appear on the label and are therefore easy to be identified by consumers. Combris *et al.* (1997, 2000) use data for Bordeaux and Burgundy wine to estimate a hedonic price function. In both studies, price is strongly explained by objective attributes appearing on the label of the bottle. The authors conclude that consumers may decide to vary their willingness to pay for wine primarily according to observable attributes. See also Nerlove (1995) and Gergaud (1998) for an analysis carried out using data for Champagne. The relevance of objective traits is also underlined in Oczkowski (1994). Landon and Smith (1997) use an unbalanced panel of 196 red wines from the five Bordeaux vintages from 1987 to 1991 and estimate two hedonic price equations. The authors confirm the relevance of the objective traits and show that long-term reputation explains much more variation in the consumer willingness to pay than short-term quality changes. This finding has been confirmed by focusing only on a balanced panel of 151 wines for the 1989 and 1990 vintages (Landon and Smith, 1998). Subsequent applications to premium wines from North America, Australia, South Africa and Chile by Schamel (2000) and to Australian premium wines by Oczkowski (2001) support the presence of significant reputation effects. Schamel (2003) estimates a hedonic pricing model of premium wines sold in the US in order to analyze the factors behind price differentials based on regional origin and points out that the domestic regions command higher prices than wines imported from other New World sources.

As for the Italian market, Benfratello, Piacenza and Sacchetto (2004) estimate an hedonic model using a dataset on two premium quality wines (Barolo and Barbaresco) covering the 1995-1998 vintages and show that the reputation acquired by wines and producers during the years is more important than taste in driving market prices.

Other papers, dealing with experimental studies, point out that the AO can improve the consumer's WTP (Bazoche, Combris, Giraud-Héraud, 2005).

Mtimet and Albisu (2006) examine the Spanish AO wine consumer behaviour by the use of a choice experiment technique. Empirical results indicate the importance of the designation of origin and wine aging attributes on wine selection. The grape variety variable, although it has a lower utility value, is also found to be significant (especially a foreign variety), thus confirming the emergence in the Spanish wine market of the «New World» marketing strategies based on well-known varietal wines.

5. Quality strategies on the international wine market: the role of origin

Two main production–marketing systems coexist on the international wine market. Behind these systems, two main strategies can be identified: the private brand strategy and the Appellation of Origin system. These two strategies can be distinguished through the degree of commitment–flexibility, which characterizes producer strategic choices.

The *private brand strategy* is advantageous for the firms, because it allows quicker adjustments to market conditions, particularly changing in this field of the agrifood consumption. Let us consider as an example the large firms of «New World» producing Countries (Jacob's Creek, Gallo, Southcorp, etc.). These firms develop a whole series of brands, easily identified by consumers, thanks to great market volumes and notoriety. Considerable investments in promotion are associated with these brands. The firm's efficiency is based on its capacity for scale economies, which allows it to meet market volume requirements and to develop strategies of price promotion. For example, around 66% of Australian wine is sold on price or multi-buy promotion on the UK market.

On the other hand, the *Appellation of Origin system* requires the producer's commitment to specific production requirements, which constraint the producers in terms of quantity. In exchange, the producer benefits from a collective reputation related to the Appellation. The quantity constraints may result in a loss of strategic flexibility (Giraud-Héraud and Grazia, 2008). The loss of strategic flexibility can constitute a limitation of firm's expansion in the markets which are characterized by an increasing wine consumption trend (especially the Anglo-Saxons Countries) and, therefore, by a great level of competition between Appellations of Origin and «New World» wines. Indeed, whereas the wine consumption is nowadays stagnating in the Countries with the highest wine production (and consumption) as France, Italy or Spain, on the other hand, it is not the same in the U.S.A, in the United Kingdom and in the Asian Countries, as China or Japan, where the competition between the AO and the private brands is very strong and leads to several strategic difficulties for producers.

The importance of wine origin for traditionally producing Countries can be appreciated from the trend of wine *production* and *exports* in the leading trio of producing and exporting Countries (France, Italy and Spain)⁶.

Table wines still make up more than half of Community wine production (98 million hl in the 2004/2005 wine year) but their share is declining in favour of quality wines. The increase in the share of quality wines on the total wine production is mainly resulting from conversion of lands and reclassification on some table wines in response to changing demand. The analysis of the trend of volume of *exports* by category of wine (for France, Italy and Spain) points out that the growth in exports of quality wines has been slower

⁶ France, Italy and Spain together account for 50% of world production and 60% of world exports.

but more constant than for table wines. There is a relative stability of quality wine's image on the exports markets. The conjoint analysis of the trend in production and exports points out that the relative importance of exported volumes of quality wines with respect to the total production has increased from 4% to 10% between 1983 and 2006. This underlines an increasing importance of strategy on quality wines for the traditional producing Countries with respect to exports markets.

The competition between the two above-mentioned systems (*private brand vs. Appellation of Origin*) is particularly tight in those markets characterized by increasing consumption. Nevertheless, we observe that many producers around the world started to use Geographical Indications to differentiate their product (Hobbs, Kerr and Phillips, 2001): the increasing competition by foreign wines and the evolution of consumer behaviour towards an increasing appreciation of quality, implies the implementation of origin-oriented strategies.

In this perspective, it is worth noticing the development of the American Viticultural Areas (AVAs) in California and, in particular, in Oregon and Washington (Rousset, Traversac, 2006): over 160 American Viticultural Areas are nowadays approved. An American Viticultural Area (AVA) is a delimited grape-growing region distinguishable by geographic features, with boundaries defined by the United States government's Alcohol and Tobacco Tax and Trade Bureau (TTB). The TTB defines these areas at the request of wineries and other petitioners. An AVA specifies a location. Once an AVA is established, at least 85% of grapes used to make a wine must be grown in the specified area if an AVA is referenced on its label. Current regulations impose the following additional requirements on an AVA: *i*) evidence that the name of the proposed new AVA is locally or nationally known as referring to the area, *ii*) historical or current evidence that the boundaries are legitimate and *iii*) evidence that growing conditions such as climate, soil, elevation, and physical features are distinctive. It can be noticed that the AVA implies a lower level of commitment as compared to the European AO. In fact, it does not limit the type of grapes grown, the method of vinification, or the yield, for example. Some of those factors may, however, be used by the petitioner when defining an AVA's boundaries.

The use of Geographical Indications in Australia started in 1993 when the Australian Wine and Brandy Corporation Act (1980) was updated to enable Australia to fulfil its Agreements with the European Community on Trade in Wine and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The use of GIs is aimed at «providing the legal means for interested parties to prevent use of a geographical indication identifying wines for wines not originating in the place indicated by the geographical indication in question». With respect to the European AO system, it is much less restrictive in terms of vine-growing and wine-making practices. In fact, the only restriction is

that wine which has the regional name must consist of a minimum of 85% of fruits from that region. This protects the integrity of the label and safeguards the consumer.

6. The assessment of the effectiveness of Geographical Indications on the international market: empirical results

In order to assess the risk of consumer misperception of the link between the geographical place name and the actual region of origin, we carried out an analysis on the USPTO database with respect to the 17 *semi-generic names* concerned by the EU-US Wine Agreement. This analysis points out some examples of trademarks, which explicitly refer to European Appellations of Origin, but have been registered by firms located outside the delimited production area. The main results of the analysis follow (see Table 1 below):

Table 1 – Registration on the Us market of semi-generic names.

Burgundy	Arbor Valley American Burgundy, Inglenook classic Burgundy Taylor California Cellars Burgundy
Chablis	Arbor Valley American Chablis Inglenook Chablis
Champagne	Chamblue (Sparkling wine)
Claret	Bearitage California Claret, Vanderbilt Claret, Crown Claret
Madeira	Arbor Valley American Madeira
Marsala	Arbor Valley American Marsala
Rhine	Taylor New York Rhine Wine
Sherry	Arbor Valley American Sherry, Arbor Valley American cream sherry
Tokay	Y-Tokay
Source: elaboration on United States Patent and Trademark Office (USPTO)	

I) Several semi-generic names appear in non-wine related products. In this case, the level of consumer misperception is relatively low. See for example «The Champagne of Tea», «Pink Champagne» (Beauty products), «The Champagne of Water (Drinking Water)», «Champagne Honey mustard splash» (salad dressing), «Marsala» (Fresh olives and grapes) or «Porto's» (Bakery goods);

II) Some of the semi-generic names are explicitly mentioned in trademarks referring to wine (relatively high risk of misperception), which have been registered by producers located outside the delimited production area. See examples in the Table below;

III) A few semi-generic names are not registered as trademarks, neither from producers located in the delimited production area, nor from US firms (Haut Sauterne, Hock, Moselle, Retsina, Sauterne). «Porto» and «Malaga» do not appear in trademarks registered from producers located outside the delimited production area;

IV) The most «used» geographical place names (both in non-wine and wine related sectors) are likely to be those with the highest notoriety on the international market; hence, in addition to the risk of consumers misperception, an opportunistic behaviour may take place when producers located outside the original production area may take advantage of the collective reputation of the Appellations of Origin;

V) In particular, some multinational firms seem to develop a sort of strategy based on an explicit mention to European Appellations of Origin (Arbor Valley).

As second step of the investigation, we searched in the USPTO database for names similar to the Italian Controlled and Guaranteed Designations of Origin (DOCG). Results are illustrated by Table 2.

Eleven out of the thirty-four DOCG names are not registered at all (neither from the Consortium nor from other firms not related with the actual product's origin or with the wine sector): Albana di Romagna, Bardolino, Carmignano, Ghemme, Soave Superiore, Taurasi, Torgiano Rosso Riserva, Valtellina Superiore, Vermentino di Gallura, Vernaccia di San Gimignano, Gattinara.

More interestingly, we found that some DOCG are not registered by the Consortium, but their geographical place name has been registered as trademark or service mark by non-wine related firms (Barbaresco, Barolo, Chianti, Gavi o Cortese di Gavi). In this case, the risk of misperception is relatively high, in particular for the DOCG Chianti, which has not been registered by the Consortium. In fact, its geographical place name appears in wine-related trademarks (Arbor Valley American Chianti, Inglenook Chianti, Good Chianti, Chianti Station).

The risk of misperception can arise in spite of the registration from the Consorzio di Tutela. For example, the DOCG Asti has been registered by the Consortium, but the geographical place name «Asti» appears in trademarks registered by non-wine related firms.

An effective intervention of the Consortium is registered for Brachetto d'Acqui, Brunello di Montalcino, Chianti Classico, Franciacorta Spumante, Gattinara, Ramandolo, Recioto di Soave and Vino Nobile di Montepulciano.

A relatively important action is that of individual firms, which register their individual brand (containing the geographical place name of the AO): Marchesi di Barolo, Priore Casa Vinicola in Gattinara, Gavi La Scolca, Martini & Rossi Asti Spumanti Martini, The Bosca Millennium Collection Asti, Poggio Rosso Chianti Classico, Barone Pizzini Franciacorta DOCG brut. In some cases, the individual registration strategy allows the firm to protect its brand (and indirectly the geographical place name of the concerned AO), in spite of a lacking intervention of Consorzio di Tutela (Ruffino Chianti 2004, DOCG from 1877, Chianti DOCG 2001 Piccini, Chianti Vino Pasolini).

In order to give an insight into traditional wine producing Countries attitude towards brand registration in international markets, we conducted a direct survey among the most representative Consortia in Italy. Consortia were chosen from the National Confederation for Voluntary Consortia for the Oversight of the Denominations of Origin (Federdoc). Preliminary results refer to 21

Table 2 – Registration of Italian DOCG on the US market.

	Registered by the Consorzio di Tutela	Risk of misperception	
		Registered in wine sector (high risk)	Registered in non-wine sectors (low risk)
Asti spumante – Moscato d'Asti	Consorzio dell'Asti (Trademark), Asti (Certification Mark)		Astipure, Asti, Asti aircraft safety technology, Asti Magnetics Corp.,
Barbaresco			Barbaresco (Service Mark)
Barolo			Villa Barolo Restaurant and Wine Bar (Service Mark), Barolo, Barolo Tuscan Grill (Service Mark), Barolo (watches), Barolo (shoes)
Brachetto d'Acqui	Brachetto d'Acqui (Certification Mark)		
Brunello di Montalcino	Brunello di Montalcino (Certification Mark)		
Chianti		Arbor Valley American Chianti, Inglenook Chianti (Constellation Brands), Good Chianti, Chianti Station	Chianti
Chianti Classico	Chianti Classico (Trademark), Chianti Classico from 1716 (Trademark), Consorzio Vino Chianti Classico		
Franciacorta Spumante	Franciacorta DOCG (Trademark)		
Gavi o Cortese di Gavi			Gavi, Gavi Fund, Piazza Gavi
Montefalco Sagrantino	Montefalco Sagrantino (Certification Mark)		Sagrantino di Montefalco (Service Mark), registered by an Italian firm
Ramandolo	Ramandolo (Trademark)		
Recioto di Soave	Recioto di Soave (Certification Mark)		
Vino Nobile di Montepulciano	Vino Nobile di Montepulciano (Certification Mark)		
Source: elaboration on United States Patent and Trademark Office (USPTO)			

Consortia that account for 40.3% of Italian production with Appellation of Origin and that include 9 out of 24 Appellations of Origin Controlled and Guaranteed (37.5%).

As detailed in Table 3, the survey shows that almost one out of two Consortia interviewed (48%) have not taken any action yet to register their Appellation of Origin as a brand, neither on the national nor on the EU market, nor on the international market. At least two of them are presently evaluating the cost of registration in few Countries which are their main importers.

Strategy	Consortia	
	(n.)	(%)
No action	10	48%
Presently evaluating costs of registration	2	10%
Registered international marks	7	33%
Trademark	5	24%
Collective mark	3	14%
Madrid Agreement	1	5%
National or European collective mark	4	19%
Total	21	100%

Source: Direct survey on Appellations of Origin associated to Federdoc

Among those Consortia that have already registered a mark, we notice that quite a few (19%) have taken this action only to protect their Appellation on the national or European market. Therefore, only one third of the Consortia considered makes use of international marks, in the form of individual trademarks, collective marks and international marks (according to the Madrid Agreement).

The most used tool for the Appellation protection on the international markets is the Individual trademark, chosen by 24% of Consortia of our sample, followed by the collective mark which is used by a smaller percentage of Producers Associations – 19%. Only in one case (5%), we recorded the use of the Madrid Agreement through which the Appellation is protected in 31 Countries.

Table 4 illustrates the main countries where the Italian Consortia register their marks. As regards the Countries where Appellations seek for protection, Canada and the US rank first (71% of cases), followed by Japan (57%), Argentina, Australia, Chile and South Africa (43%). Another relevant group of Countries includes Brazil, Philippines, Mexico, New Zealand, Venezuela, where 29% of our sampled Consortia registered their marks. Finally, there are several Countries such as India, Indonesia, North Korea, Paraguay, Peru, South Korea, Switzerland, Taiwan, Thailand and Uruguay, where only one Appellation is registered as mark.

In the last three years, the overall registration process cost was about 126.000 euros and it has been more expensive

for trademarks (almost 89.000 euros) than for collective marks (37.300 euros), but this was due to the greater use of the former as compared to the latter.

At present, two important Consortia are pursuing registration of both trademarks and international marks in many other Countries such as Albania, Algeria, Bulgaria, Croatia, Cuba, Malta, Morocco, Romania, Singapore, Tunisia, Turkey, Vietnam.

Table 4 – Countries in which marks are registered by Italian Consortia.

Countries	Registered marks	
	(n.)	(%)
Canada, USA	5	71%
Japan	4	57%
Argentina, Australia, Chile, South Africa	3	43%
Brazil, Philippines, Mexico, New Zealand, Venezuela	2	29%
India, Indonesia, North Korea, Paraguay, Peru, South Korea, Switzerland, Taiwan, Thailand, Uruguay	1	14%
Total	7	100%

Source: Direct survey on Appellations of Origin associated to Federdoc

The main difficulties in the registration process relate to refusals, in particular in Australia, Canada Russia and Switzerland. Other issues arose because of the bureaucratic burden, the excessive time length and costs (consultants and personnel) required by the procedure.

As for the legal actions in protection of the Appellation or of the mark, the survey shows that Consortia had to spend even more than for the registration process (164.000 against 126.100 euros). However, we notice that in most cases they are oriented at protecting the Appellation of Origin, with a cost up to 114.000 euros, while the protection of the trademark/collective mark more rarely occurred with a lower overall cost.

7. Final remarks

Over the last few years, the stronger higher competitiveness on the international wine market has increased the implementation of strategies to differentiate production and, at the same time, the demand for a protection system being apt to guarantee high investments and commitments by producers.

The conducted study aimed at assessing the effectiveness of the AO on the international wine market. Results of the analysis are both positive and negative.

As for the positive aspects, the AO is a key to ensure fair competition and consumer information. According to market surveys, it is perceived as origin and quality indicator. It assists consumers in making the right choice, whether to buy an AO product or not. Consumers show willingness to pay a premium price if the origin of the product is guaranteed.

As for the negative factors, we observe a weak performance of the AO on international markets. In fact, given the present IPR system, in some cases we observe a double registration of brand and double costs for producers: one for the AO registration and one for the industrial brand registration. Furthermore, we observe a weak recognition of specific investments and quantity and quality commitment for AO producers and some risks of altering the consumer's perception of quality.

The debate at national and international level, concerning industrial brand and AO brand, is also linked to distribution of monopole rent derived from monopolistic competition by the brand. In the case of industrial brands, since these are property of a firm, the firm will directly benefit from them. In the case of Appellations of Origin, the beneficiaries are all the producers of the area, who may be considered as a club. In fact, the management of AO is always a collective concern, with many difficulties because of the different interests and behaviours of the beneficiaries.

This is the reason why, in order to develop its potential benefits, the Appellations of Origins need a strong economic regulation and specific controls to adapt supply to demand in order to avoid short-term opportunist behaviours and stabilize product's quality in the long term, and to increase its notoriety and information guarantee and trust among consumers. Individual and collective brands should coexist, with differentiated and specific dynamics to fit wider segmented wine markets.

Moreover, the AO implies specific techniques, a traditional competence linked to territory, a collective patrimony with an economic value and also a strong social and cultural dimension, all constituting determinant factors of quality policy for European producers.

The Agreement on Trade-Related Aspects of Intellectual Property Rights represents an important step towards the universal recognition of GIs protection. While previous agreements, including the Madrid and the Lisbon Agreements, have already regulated related legal figures such as indications of source and appellations of origin, the TRIPS Agreement is nowadays the standard subscribed by all Members of the World Trade Organization and, therefore, the one with the widest possible international recognition.

The TRIPS Agreements not only sets some minimum standards but, according to Article 23.4, it also calls for negotiations for the «*establishment of a multilateral system of notification and registration of geographical indications for wines and spirits eligible for protection in those Members participating in the system*». Negotiations on a multilateral system of notification and registration of GIs for wines and spirits are currently underway in the special session of the TRIPS Council. The debate turns around a number of key questions: when a geographical indication is registered in

the system, what legal effect, if any, that would need to have within member countries and to what extent the effect should apply to countries choosing not to participate in the system. WTO Members remain divided on whether countries should be obliged to protect the GIs to be covered through the multilateral system – as advocated by the EU and Eastern European countries – or whether it should be left to each country to decide at the national level – as supported by Australia, Canada, Japan and the United States⁷.

The former Countries propose that when a geographical indication is registered, this would mean that the term is to be protected in other WTO members⁸. The latter group of Countries proposes a decision by the TRIPS Council to set up a voluntary system where notified geographical indications would be registered in a database. Those governments choosing to participate in the system would have to consult the database when taking decisions on protection in their own countries. Non-participating members would be «encouraged» but «not obliged» to consult the database.

At present, the debate is very heated and a solution does not seem to be at hand, nevertheless it is necessary to set out common rules as soon as possible so that firms and consumers can receive all the relevant information to make their choices. Preventing misleading information and opportunist behaviours means preventing a market failure and helping the development of a more diversified, profit-oriented agriculture.

References

Akerlof G.A., 1970. The market for «lemons»: quality uncertainty and the market mechanism. *Quarterly Journal of Economics*, 84(1): 488-500.

Bazoche P., Combris P. and Giraud-Héraud E., 2005. Willingness to pay for Appellation of Origin in the world chardonnay's war: an experimental study. XII (Enometrics, Macerata, Italy, 27-28 Mai 2005).

Bendeckey L., Mead C.H., 1992. International Protection of Appellations of Origin and Other Geographical Indications. *The Trademark Reporter* 82 p.765-792.

Benfratello L., Piacenza M. and Sacchetto S., 2004. What Drives Market Prices in the Wine Industry? Estimation of a Hedonic Model for Italian Premium Wines. Ceris-CNR Working Paper n.11.

Blakeney M., 2001. Proposals for the International Regulation of Geographical Indications. *The Journal of world intellectual property*, 4: 629-652.

Brody P., 1994. Protection of Geographical Indications in the Wake of Trips : Existing United States Laws and the Administration's Proposed Legislation. *The Trademark Reporter*, 84(5): 520.

Camanzi L., Grazia C., Leishman D., Malorgio G., Menghini A. (2008), Strategies toward Quality and Brand Protection. In R. Fanfani, E. Ball, L. Gutierrez, E. Ricci Maccarini (Eds.), *Competitiveness in Agriculture and Food Industry: US and EU perspectives*, pp. 173-190. Bononia University Press.

⁷ These proposals have been laid out side by side, so that they can be compared easily, in a Secretariat paper (document TN/IP/W/12 of 14 September 2005), available on Documents Online <http://docsonline.wto.org>.

⁸ Except in a country that has lodged a reservation within a specified period: if it does not make a reservation, it cannot be able to refuse protection on these grounds after the term has been registered.

Chambolle, C., Giraud-Héraud, E. (2003). Certification de la qualité par une AOC: un modèle d'analyse. *Économie et Prévision*, n. 159, 2003-3.

Chaney I.M., 2000. External search effort for wine. *International Journal of Wine marketing*, 12(2): 5-21.

Combris, P., Lecocq, S., and Visser, M., (2000). Estimation of a hedonic price equation for Burgundy wine. *Applied Economics*, vol. 32 (8), 961-967.

Combris P., Lecocq S., Visser M., 1997, «Estimation of a Hedonic Price Equation For Bordeaux Wine : does quality matter?», *The Economic Journal*, 107: 390-402.

Darby M., Karny E., 1973. Free competition and the optimal amount of fraud. *Journal of Law and Economics*, 16: 67-88.

Dixit A.K., Stiglitz J.E., 1977. Monopolistic Competition and Optimum Product Diversity. *American Economic Review*, 67: 297-308.

Eurostat, Wine Balance Sheet, online database available at <http://epp.eurostat.ec.europa.eu>.

Gergaud O., 1998. Estimation d'une fonction de prix hédonistiques pour le vin de Champagne. *Économie et Prévision*, 136 : 93-105.

Geuze M., 2007. Let's have another look at the Lisbon Agreement: its terms in their context and in the light of its objects and purpose. *International Symposium on geographical indications*, Beijing, June 26-28.

Giraud-Héraud E., Grazia C., 2006. Certification of quality, demand uncertainty and supply commitment in agriculture: a formal analysis. In R. Fanfani, E. Ball, L. Gutierrez, E. Ricci Maccarini (Eds.), *Competitiveness in Agriculture and Food Industry: US and EU perspectives*, pp. 119-136. Bononia University Press.

Hobbs, J. E., Kerr, W. A., Phillips, P. W. B (2005). Identity Preservation and International Trade: Signaling Quality across National Boundaries, *Canadian Journal of Agricultural Economics / Revue Canadienne d'Économie*, 49(4), 567-579.

Hopperger M., 2007. Geographical Indications in the international arena. The current situation. *International Symposium on geographical indications*, Beijing, June 26-28.

ISMEA, 2005. I prodotti agroalimentari protetti in Italia. Le tendenze della produzione e del mercato e la situazione a livello comunitario.

Josling T., 2006. The War on *Terroir*: Geographical Indications as a Transatlantic Trade Conflict. *Journal of Agricultural Economics*, 57(3): 337-363.

Lancaster K., 1966. A new approach to consumer theory. *Journal of Political Economy*, 74: 132-157.

Landon S., Smith C.E., 1998. Quality expectations, reputations, and price. *Southern Economic Journal*, 64(3): 628-647.

Laporte C., 2001. L'Appellation d'Origine Contrôlée: une solution efficiente pour résoudre le problème de l'asymétrie d'information sur les marchés des vins de qualité? INRA-ESESAD working paper No 5.

Malorgio, G., Camanzi, L., Grazia, C. (2008). Effectiveness of Appellations of Origin on international wine market. In Canavari M., Cantore N., Castellini A., Pignatti E., Spadoni R. (eds., in press). *International marketing and trade of quality food products*, Wageningen, The Netherlands: Wageningen Academic Publishers.

Mtimit N., Albisu L.M., 2006. Spanish Wine Consumer Behaviour: A Choice Experiment Approach. *Agribusiness*, 22(3): 343-362.

Nelson P., 1970. Information and consumer behaviour. *Journal of Political Economy*, 78 : 311-329.

Nerlove M., 1995. Hedonic price functions and the measurement of preferences: the case of Swedish wine consumers. *European Economic Review*, 39(1): 697-716.

Oczkowski, E. (2001). Hedonic wine price functions and measurement error. *The Economic Record*, vol. 77 (239), 374-382.

Oczkowski E., 1994. A hedonic price function for Australian premium table wine. *Australian Journal of Agricultural Economics*, 38: 93-110.

Romain-Prot V., 1995. Origine géographique et signes de qualité: protection internationale. *Revue de Droit Rural*, 236, pp.432-438.

Rousset, S., Traversac, J-B (2006). Dai vini ordinari ai nuovi standard di qualità: strategie di identificazione delle winery californiane. In Cesaretti, G. P., Green, R., Mariani, A., Pomarici, E. (Eds.), *Il Mercato del vino-Tendenze strutturali e strategie dei concorrenti*. Milano: Franco Angeli.

Schamel, 2000. Individual and collective reputation indicators of wine quality. Technical Report, Centre for International Economic Studies, Adelaide University.

Schamel, 2003. International Wine Market: Analyzing the Value of Reputation and Quality Signals. Paper prepared for the 2003 AAFA Annual Meeting, Montreal, Canada, July 27-30.

Speed R., 1998. Choosing between line extensions and second brands: the case of the Australian and New Zealand wine industries. *Journal of Product and Brand Management*, 7(6): 519-536.

United States Patent and Trademark Office, Trademark Electronic Search System (TESS), online database available at <http://tess2.uspto.gov/bin/gate.exe?f=tess&state=lmi2nf.1.1>.