

## COMPETITIVENESS OF ITALIAN WINES IN THE INTERNATIONAL MARKET

M. CRESCIMANNO<sup>1</sup> and A. GALATI<sup>2</sup>

<sup>1</sup> *Università degli Studi di Palermo, Department of Agricultural and Forest Sciences, Viale delle Scienze, Edificio 4, 90128 Palermo, Italy*

<sup>2</sup> *Università degli Studi di Palermo, Department of Agricultural and Forest Sciences, Viale delle Scienze, Edificio 4, 90128 Palermo, Italy*

### Abstract

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In the last few years the wine market has been affected by a deep structural transformation due to the entry in the world productive scenario of new competitors and for changing of the demand not only at geographical level but also for more and more orientation of consumers towards the quality wines. This transformation has involved even the Italian wine sector, that takes in the international wine scenario a significant importance, both in terms of supply and of the weight on the world wine export. Recently, the Italian sector showed a remarkable ability front to the world economic and financial crisis thanks to its ability to satisfy a diversified demand oriented toward the quality wines productions, more and more requested by the Italian and foreign consumers.

The competitiveness analysis of Italian wine in the main partner countries, compared to the agri-food products, shows different scenario depending on the wine categories considered. In general results reveal an increasing competitiveness in some markets, such as Asiatic, East or North European countries, which do not have a viticulture tradition and where the acknowledgement of the health characteristics of wine and of the product as an expression of an Italian lifestyle are strategic factors for the success of Italian wine. Contextually, emerges a disadvantage in traditional markets (France) and in new producing markets (USA). In this context is necessary to consider the peculiarities of each market that differ in terms of dimension, culture, purchasing power, through the adoption of focused strategies.

*Key words:* Wine industry; Competitiveness; International trade; Italy

### Introduction

Over the last few decades, the wine market has been affected by a deep structural transformation due to globalization and mounting international competition (Bernetti et al., 2006). On the one hand, the entrance of new countries on the world productive scenario, whose role is continually strengthening, set beside the traditional wine producing countries of the “Old World”, such as France, Italy and Spain, has led to an overall geographical reconfiguration of the productive scenario. On the other hand, the demand for wine has also registered a geographical change with a fall in the traditional market, in line with social changes that have occurred through time, and an increase in new consumer markets. Contextually, preferences and customs associated with

wine consumption have changed with a general decline in the quantity of wine sold and an increasing orientation of consumers towards quality wines apt to satisfy more complex needs than purely gastronomic ones, the function of which is enriched with experiential, symbolic and hedonistic elements (Nosi, 2012). In 2007, a deep economic and financial crisis was added to this changing process of the world wine market; a crisis that involved indiscriminately all economic sectors and, among them, that of agriculture and food, until then characterized by a strong resilience ability compared with other sectors. In the European scenario, that as assert Plahuta et al. (2007) is a world leader in terms of wine production, world's wine growing-areas, consumption and trade, the role of Italy is relevant, both in terms of supply, increasingly oriented towards designation productions (ISMEA,

2012), and export, absorbing in 2011 about ¼ of world export (OIV, 2012). Furthermore, Italy has one of the longest and most important traditions, producing a great variety of wines from a number of geographically different regions (Bernetti et al., 2006). Wine is, in fact, one of the most representative products of the ‘Made in Italy’ food productions, that, thanks to its high quality and marked distinction, has contributed to the strengthening of the reputation of Italian products in the world as an offer of excellence, strongly tied to the territory (Carbone and Henke, 2012).

The aim of this paper is to analyze the competitiveness of Italian wine on the international market, with specific reference to sparkling wine, bottled wines and cask wine of less value, in relation to their weight in the more general context of agri-food trade. In particular, we intend to verify the changes in Italy’s competitive position during the period 2000-2012, related not only to structural changes of the sector, but also to the entrance into force in 2009 of the new common organization of the market in wine, and to the deep economic and financial crisis in Italy and in the world.

After outlining the reference frame of the Italian wine sector as seen on the wider international scenario, this work will illustrate the working method used to respond to the aims of the research. Then, the results of the analysis of the competitiveness will be described and discussed. The paper ends with some final remarks by the Authors.

## The Italian Wine Sector in the International Scenario

Italy takes on a role of relevant importance on the international wine scenario, with a concentration in 2011 of 10.2%

of surface under vineyard, and 15.7% of the world wine supply, preceded only by Spain and the United States, and 24.4% of the world export, proving itself as the main exporter (OIV, 2012) (Table 1). The dynamics registered in the period 2000-2011 confirm the change of the world competitive scenario which had begun some decades earlier, marked by a reduction in the market shares held by the main European producers who, nevertheless, continued to maintain leadership in the world market, in favour of emergent producers, particularly China, Chile, Australia and the USA, who have appeared more recently on the global competitive market, but where there are lots of large size firms which have achieved good performances and high market shares, while applying targeted marketing policies (Vrontis et al., 2011).

In Italy, according to the VI General Census of Agriculture (ISTAT, 2011), the sector counts 383.6 thousand companies stand on a surface of 632.1 thousand hectares; compared to the census data of 2000, there is, on the one hand, a decrease of 52% in the number of productive units and of 11.9% of surfaces under vineyard, and, on the other hand, an increase of average investment per company, which went from 0.9 to 1.6 hectares. This data show an important process of transformation more and more oriented towards the aggregation and specialization of companies which operate in the sector.

On the basis of annual data on cultivation (ISTAT, 2013a), viticulture in Italy in 2011 covered a surface of 762.1 thousand hectares, of which well 88.7% (675.8 thousand hectares) addressed to the production of wine grapes, registering in the period studied a contraction of 7.9% of the wine grape production investments (Table 2). A central role in reshaping the productive surface has been played by the regime of

**Table 1**  
**World vitiviniculture scenario (value in %)**

Countries	Vineyards surface, mha		Wine production, mhl		Wine consumption, mhl		Wine exporters, mhl	
	2000	2011	2000	2011	2000	2011	2000	2011
Argentina	2.6	2.9	4.5	5.8	5.5	4.0	1.4	3.1
Australia	1.8	2.3	2.9	4.2	3.6	4.8*	5.2	7.1
Chile	2.2	2.7	2.4	3.9	3.0	4.1*	4.4	6.7
China	3.8	7.4	3.8	4.9	4.7	7.0	0,1	0.1*
France	11.6	10.6	20.6	18.7	15.3	12.3	24.9	14.2
Italy	11.6	10.2	18.4	15.7	13.6	9.4	24.3	24.4
South Africa	1.6	1.7	2.5	3.6	3.1	4.1*	2.3	3.6
Spain	15.7	13.6	14.9	12.6	6.2	4.2	14.3	22.4
USA	5.3	5.3	7.7	7.1	9.4	11.7	4.6	4.2
World	7 847	7 585	280 000	265 000	225 665	244 306	60 300	99 400

\* 2009 data

Source: Own calculation on International Organisation of Vine and Wine (OIV) data.

grubbing-up, introduced in 2008, with EU Regulation No 479/2008, relating to the reform of the common organization of the market in wine. The latest data given out by the Ministry of Agriculture, Food and Forest Policy, led to the grubbing-up of more than 20.5 thousand hectares, with the 2008/09 and 2009/2010 period (MiPAAF, 2013). The new regulation, apart from tending towards a greater equilibrium between supply and demand, also through other measures such as the application of quotas to grape production or the disposal for wine which is distilled into potable alcohol, also intends to increase European producers' competitiveness in foreign markets and preserve the relationship between product and territory in a perspective of safeguarding the environmental, cultural and social patrimony of rural areas.

In relation to supply, wine production in 2011 reached 4.2 million tons (48.4% red wine, 47.4% white wine and 4.2% must), registering a contraction of 22% compared to 2000, to the value of 1.9 billion euros, equal to 3.7% of the value of agricultural production at basic prices, marking a contraction in the same period of 8.5% (ISTAT, 2013b). Wine supply concerns significantly all the Italian regions in which viticulture extends over deeply diversified environments, from coastal plains to high altitudes (Malorgio et al., 2011). The multiplicity of plantation environments, and also varietals differences on a regional basis, find their widest expression in 521 designation, of which 330 Protected designation of origin (PDO), 73 Controlled and guaranteed designation of origin (DOCG) and 118 Indication of geographical origin (IGT) (INEA, 2012). The strong orientation towards quality improvement, both of the basic raw material and of the finished product, but also of some intangible characteristics, attributable in particular to the *terroir*, has in many ways been a forced choice for many productive realities in Italy, especially as far as international competitiveness is concerned.

As regards to consumption, in Italy the trend registered on the international market is confirmed, with a contraction of purchases which decreased from 30,800 hl in 2000 (45.05 litres per capita) to 23,000 hl in 2011 (38.17 litres per capita) (OIV, 2013). In fact, the part of population consuming wine has decreased, but, above all, styles of wine consumption have changed, from wine as an energetic product to a product for occasional consumption linked to special situations, or cultural consumption for connoisseurs (ISMEA, 2012). This tendency is also highlighted by the increasing amount that Italian families spend for these product categories.

Referring to trade, which will be discussed in detail in the next chapters, Italy showed a positive trade balance in 2011 that attested at more than 4 billion euros, in particular, due to the exportation of bottled wine, recording in the period in question an increase of 81.9%.

The process of the change of the Italian wine sector has also involved distribution channels, in which the increasingly centralized role of the large-scale distribution (LSD) is confirmed. On the basis of the latest data diffused by Mediobanca, there is a progressive weakening of market shares held by LSD, which represent the main selling means, above all, for basic wines, from Ho.Re.Ca. channels and wine shops and bars, mostly oriented towards the sale of "icon wine", in view of a strengthening of sales through wholesalers and other channels which include on-line selling (I numeri del vino, 2012).

## Material and Methods

In the economic literature, several approaches have been developed to measures of international competitiveness based on trade data. The advantage of using the trade data is that, as suggest Frohberg and Hartman (1997), demand and sup-

**Table 2**  
**Market balance for the wine sector in Italy (2000-2011 period)**

	u.m.	2000	2011	Var.%
Area under Vineyard	m ha	805.6	762.1	-5.4
Area under vineyard for wine	m ha	733.6	675.8	-7.9
Grapes production	m t	8 869.5	7 282.9	-17.9
Grapes for wine production	m t	7 345.8	6 034.2	-17.9
Wine production	m t	5 408.8	4 218.5	-22.0
Value of wine production	M €	2 055.60	1 881.00	-8.5
Wine export	M €	2 446.90	4 368.00	78.5
Wine import	M €	204.50	289.20	41.4
Trade balance	M €	2 224.4	4 079.0	81.9
Wine consumption	m liters	30 800	23 052	-25.2
Wine consumption per capita	Liters	54.05	38.17	-29.4

Source: Own calculation on ISTAT and OIV data.

ply responses are considered simultaneously and that costs of marketing and transport are taken into account.

In this paper, Italy's competitive performance is assessed for the wine products on the international market, by analysing bilateral trade flows and market shares and making use of specific indicators based on the principle of comparative advantage. Although these indices are not dynamic, as suggest Trail and da Silva (1996), their trend it is more important for explain the competitive advantage.

The first two indices used are the Export market share (EMS) and the Import market share (IMS), for outline the structure and geography of trade in wine products that are expressed as:

$$EMS = 100 \left( \frac{X_{ij}}{X_{iw}} \right); IMS = 100 \left( \frac{M_{ij}}{M_{iw}} \right)$$

In the formula,  $X$  and  $M$  stand for exports and imports,  $j$  and  $w$  for the region, whilst  $i$  is the product. Market shares are expressed as values from 0 to 100; thus, a value of zero indicates that the exports (or imports) of a given product  $i$  from a given country  $j$  are nil; whilst a value of 100 indicates that the entirety of export (or import) of product  $i$  is carried out by country  $j$ .

The third index used in this paper, is the Relative Trade Advantage (RTA) proposed by Vollrath (1991) as alternative specification of revealed comparative advantage and which is derived by Balassa's index, from which differs for the removal of the double-counting of country and product, for which it has been much criticised. The RTA, obtained from the difference between the Relative Export Advantage (RXA) and the Relative Import Advantage (RMP), shows positive (or negative) values if the country in question has an advantage (or disadvantage) in its competitive position for trading in product  $i$ .

$$RTA = RXA - RMP$$

Specifically, the RXA expresses the export share for product  $i$  of a given country in the market  $j$  compared to the share held for other products; the index has a higher (or lower) unit value if the country's has an advantage (or disadvantage) in its competitive position for exporting product  $i$ . In the formula,  $X$  stands for exports and  $M$  stands for imports. The indices  $i$  and  $n$  relate to categories of products, whilst  $j$  and  $r$  relate to region.

$$RXA = \left( \frac{X_{ij}/X_{ir \neq j}}{X_{nj \neq i}/X_{nr \neq i}} \right)$$

There is a similar index for imports, the RMP, which expresses the import share for product  $i$  of a given country in the market  $j$  compared to the same share held for the remain-

ing products; this indicator is greater (or less) than 1 if the country in question has an advantage (or disadvantage) in its competitive position for importing product  $i$ .

$$RMP = \left( \frac{M_{ij}/M_{ir \neq j}}{M_{nj \neq i}/M_{nr \neq i}} \right)$$

Vollrath, in addition, proposes a new version of the index (RC) in which the Relative Export Advantage (RXA) and Relative Import Advantage (RMP) are expressed in logarithmic form, but this of limited use where trade flux is limited or nil (Havrila and Gunawardana, op.cit.).

The RTA index has been applied in a number of studies to analyse revealed competitive advantage of various sectors of different countries (Traill and Da Silva, 1996; Froberg and Hartmann, 1997; Bavororà, 2003; Fertö and Hubbard, 2003; Havrila and Gunawardana, 2003; Ascuito et al., 2008; Crescimanno and Galati, 2012). Regarding the wine sector, the Vollrath index was applied also to analyze the international competitiveness of wine production in Bosnia and Herzegovina (Ivanković et al, 2005) and in the Slovak Republic (Hambalková, 2006). In particular, as opposed to the traditional approach, in this paper the RTA index is used to capture Italy's competitive advantage with respect to the individual world partners and the trade intensity ties between the partners.

For the competitiveness analysis of Italian wine, we have analyzed the trade based on the data concerning export and import money flow taken from the database of Italian National Institute of Statistics (ISTAT, 2013c) and in the 2000-2012 periods. More in detail, the analysis of the Italian wine competitive performance has been carried out taking into consideration, on the one hand, the trade flows concerning the 6-digit classification of the harmonized nomenclature, relative to the three commercialized typologies of wine -sparkling, grape wine in pack  $\leq 2$  liters (bottled wines) and grape wine in pack  $> 2$  liters (cask wines, of less value, although is not possible establish a unique relationship in this sense), and, on the other hand, the agri-food trade concerning the 2 digit classification of the nomenclature Ateco 2007, relating both the products of agriculture, forestry and fishing and food, beverages and tobacco products.

## Results and Discussions

### Structure and dynamics of Italian wine trade

Wine is one of the main products of Italian agri-food export. It covered 14.2% of foreign sales on average 3-year period of 2009-2011, which has not changed significantly with

respect to the first 3-year period of reference. On the contrary, it has little weight on agri-food importation (0.7%).

In the triennium 2009-2011, wine export reached on average a value of 3.9 billion euros, registering, compared to the triennium 2000-2002, an average annual increase of 4.2%, partly ascribable to a large spread of wine consumption also in those Countries not associated with viticulture traditions (Gerolimetto and Mauracher, 2009) (Figure 1). In the same period, imports increased at a less dynamic rate (+2.8%) with an average value of 264.8 million euros. The registered trend, therefore, have determined an increase in trade balance, which is attested at 3,649.3 million euros, and an increasing of trade specialization, as emerges from the analysis of normalized trade balance, which moved from 85.8% to 87.3% between the two triennium of reference.

Sales abroad concern mainly bottled wines (79.4%), followed by sparkling wines (11.8%) and cask wines (8.8%). Among these three categories of wine, sparkling wine registers the best performance (+10.7%). However, as far as imports are concerned, the purchase of sparkling wine prevails (51.5%), even though cask wines have a considerable weight (30.4%), the purchase of which registers an average annual increase rate of 19.2%. Imports of bottled wine are more reasonable (18.1%).

The analysis of the Export and Import market shares trend (EMS and IMS), referring both to wine on the whole and to the three categories considered in this paper, has allowed to highlight the change in the trade structure.

Analysis of EMS shows how, in the triennium 2009-2011, three markets absorbed more than half the value of Italian wine exportation, particularly Germany (21.9%), which is the biggest wine importing market in the world (Nosi, 2012), the United States (21.2%) and the United Kingdom (12.1%), even though there are some differences in the types of product. In fact, while the USA and United Kingdom are more oriented towards the purchase of bottled wine and sparkling wine,

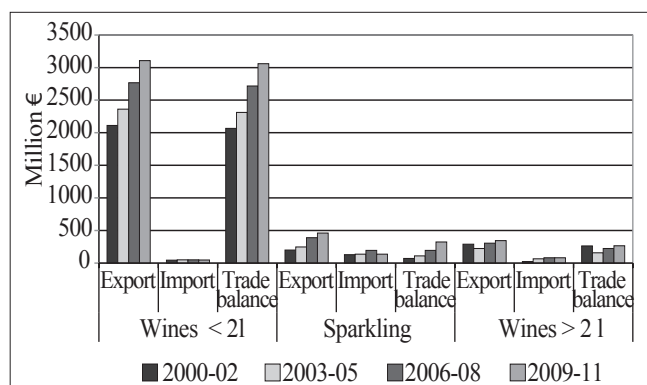


Fig. 1. Dynamics of Italian wine trade

Germany is the main purchaser of cask wine (Table 3). Other important target markets are: Switzerland (6.4%), which purchases all three categories of wine, and Canada (5.9%), interested mainly in cask wine. The evolution of market shares in our reference period highlights a progressive reduction of German shares in bottled wine and sparkling wine, compared to an increasing bearing of the cask wine category, and the United States in the three types of wine (even though there is a rise in the export value in both countries). The presence of wine in the United Kingdom is increasing, especially the sparkling wine category, ever more appreciated in spite of the financial crisis that in the last few years has led to a reshaping of purchases (Baccaglio, 2011). Moreover, positive dynamics are recorded in the bottled wine category in Russia, thanks to the 2006 closure of the Russian border to Georgian and Moldavian wines, and also in Canada, Denmark and China, which represent the new consumer markets, and for cask wines in the Czech Republic. The increasing demand of wine above all from the Chinese market is due to a change in the way Chinese consumers approach foreign products. They see wine as a convincing substitute of the traditional alcoholic drinks such as rice wine or sorghum and maize drinks (Mitry et al., 2009), for its benefits to health which have also contributed to the increase in consumption and to the culture of wine in the Asiatic Country (Corsi et al., 2013). On the other hand, shares held by Japan have decreased, where Italy is the second supplier, after France, of bottled wines (16.0% in 2011) and the third supplier of sparkling wine (9.0%) (Centro Interdipartimentale per la Ricerca in Viticoltura ed Enologia, 2013).

As far as imports are concerned, France is the main supplier market (61.7%), especially for sparkling wine (96.5% of the value of sparkling wine bought by Italy) and of bottled wine (48.9%), followed by American (17.8%) and Spanish (10.4%) markets for the purchase of, above all, cask wines (Table 4). Among the other markets, the German and Portuguese ones have great importance as suppliers of bottled wine.

The evolution of IMS shows a contraction of French market shares, which has decreased by 18.1% because of the sudden reduction of purchases of cask wines from it, and of Portuguese shares, a consequence of the reduction of the weight of bottled wines. Conversely, an increasing importance of the USA (17.1%) and Spain (+5.2%) is recorded among supplier markets, mainly for the cask wines category. In our period of reference, there is a market diversification, which rose from 39 in 2000 to 50 in 2011.

#### *Competitiveness of Italian wine in the main partner countries*

The Relative Trade Advantage index has been determined for the three items, which make up the wine category, in or-

der to evaluate the competitive advantage or disadvantage of Italy with respect to its main commercial partners and its relative evolution during the reference period.

Taking into account the multitude of information, and in order to make the reading of the results and of the trend registered easier, the countries were classified into 8 groups in relation to the evolution of the index value between the two triennium of reference, according to the following proposed in the Table 5.

As for sparkling wine, relative to the main trade partners, a positive high index value with Russia (5.2) was seen, considering that 8.0% of the Italian agri-food export value in this market is made up of sparkling wine and that the same mar-

ket absorbs 8.3% of Italian sales of sparkling wine in third country markets, with Brazil (2.4), whose high index value is due to the net specialization of Italy in the export of this product, and with the United States (2.3), in which the Italian advantage is, rather, due to a higher grade of penetration of the Italian product on the market. Values above the unit are also shown in Portugal (2.1), due to the net exportation benefit, and in Switzerland (1.5).

Other markets where values are above the unit are Canada, Australia and China, for the net advantage of Italian exportation, and United Kingdom and Austria, as a consequence of the high shares of sparkling wine absorbed by such markets compared to Italian exportation on the whole.

**Table 3**  
**Export market share (EMS)**

Countries	Wine				Sparkling		Wines ≤ 2 l		Wines > 2 l	
	2000-02		2009-11		00-02	09-11	00-02	09-11	00-02	09-11
	M€	%	M€	%	%	%	%	%	%	%
Argentina	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Australia	11.1	0.4	19.8	0.5	2.0	1.4	0.3	0.4	0.3	0.2
Austria	63.6	2.4	84.8	2.2	1.0	4.2	2.7	1.8	1.9	2.8
Belgium	38.7	1.5	72.2	1.8	1.2	2.8	1.6	1.8	0.7	0.7
Brazil	20.8	0.8	28.5	0.7	1.6	1.1	0.8	0.7	0.2	0.3
Canada	115.1	4.4	229.6	5.9	1.7	2.2	5.2	6.8	0.8	2.0
Czech R.	8.4	0.3	36.3	0.9	0.1	0.6	0.1	0.6	2.3	4.6
Chile	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
China	3.6	0.1	41.5	1.1	0.0	0.7	0.0	1.1	0.9	1.0
Denmark	52.4	2.0	126.2	3.2	0.6	1.6	2.3	3.6	0.8	1.7
France	112.2	4.3	94.9	2.4	3.9	2.6	1.8	1.9	23.0	6.7
Germany	753.9	29.0	857.2	21.9	27.8	19.6	28.6	20.5	32.4	37.9
Japan	109.4	4.2	105.0	2.7	7.4	3.8	4.3	2.7	1.2	1.0
Greece	14.3	0.5	9.0	0.2	0.6	0.6	0.1	0.1	3.7	0.6
Ireland	9.2	0.4	22.9	0.6	0.0	0.3	0.4	0.7	0.0	0.0
Norway	19.5	0.7	61.1	1.6	0.6	0.5	0.8	1.6	0.7	2.3
Netherlands	51.5	2.0	102.2	2.6	2.1	2.0	2.2	2.9	0.4	0.7
Portugal	12.8	0.5	9.2	0.2	4.0	1.4	0.0	0.1	1.5	0.0
UK	249.7	9.6	475.3	12.1	7.8	11.4	10.8	12.9	1.8	6.0
Romania	0.3	0.0	6.1	0.2	0.1	0.2	0.0	0.1	0.0	0.9
Russia	8.9	0.3	95.7	2.4	1.9	8.3	0.2	1.5	0.4	3.6
Spain	18.9	0.7	35.5	0.9	1.0	0.7	0.5	1.0	2.5	0.6
USA	623.9	24.0	830.0	21.2	21.4	17.2	26.7	23.8	6.0	3.0
Switzerland	158.7	6.1	250.5	6.4	5.6	6.5	5.6	6.4	10.4	6.6
Hungary	3.0	0.1	17.8	0.5	0.7	0.4	0.0	0.1	0.4	4.0
Other Countries	140.3	5.4	302.6	7.7	7.0	9.7	4.9	6.9	7.7	12.4
World	2 600.7	100.0	3 914.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% category	100.0		100.0		7.7	11.8	81.2	79.4	11.1	8.8

Source: Own calculation on ISTAT data.

**Table 4**  
**Import market share (IMS)**

Countries	Wine				Sparkling		Wines ≤ 2 l		Wines > 2 l	
	2000-02		2009-11		00-02	09-11	00-02	09-11	00-02	09-11
	M€	%	M€	%	%	%	%	%	%	%
Argentina	0.4	0.2	0.8	0.3	0.0	0.0	0.5	1.2	0.5	0.3
Australia	0.6	0.3	0.5	0.2	0.0	0.0	1.1	0.9	0.6	0.1
Austria	0.7	0.4	1.6	0.6	0.0	0.1	1.1	2.4	0.8	0.3
Belgium	0.3	0.2	0.2	0.1	0.0	0.0	0.6	0.3	0.1	0.0
Brazil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	0.1	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Czech R.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Chile	1.6	0.8	1.5	0.6	0.0	0.0	3.4	2.3	0.3	0.5
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Denmark	0.1	0.0	0.2	0.1	0.0	0.0	0.2	0.2	0.0	0.0
France	158.6	79.8	163.3	61.7	95.8	96.5	47.5	48.9	54.5	10.2
Germany	3.0	1.5	6.6	2.5	0.4	0.8	3.9	9.7	3.0	1.0
Japan	0.4	0.2	0.2	0.1	0.0	0.0	0.7	0.4	0.0	0.0
Greece	0.9	0.5	0.8	0.3	0.0	0.0	2.0	0.6	0.1	0.7
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Norway	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Netherlands	0.5	0.2	1.2	0.5	0.1	0.5	0.7	1.1	0.0	0.0
Portugal	10.6	5.4	6.0	2.3	0.0	0.0	21.8	12.5	3.7	0.0
UK	4.1	2.1	1.6	0.6	1.8	0.3	3.1	2.0	1.6	0.2
Romania	0.4	0.2	0.8	0.3	0.0	0.0	0.0	1.4	1.7	0.1
Russia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spain	10.3	5.2	27.5	10.4	1.7	1.1	5.1	9.7	23.9	26.5
USA	1.4	0.7	47.1	17.8	0.0	0.0	2.6	1.1	0.5	57.8
Switzerland	0.9	0.4	0.8	0.3	0.0	0.0	1.7	1.5	0.2	0.0
Hungary	0.8	0.4	1.1	0.4	0.0	0.0	0.7	0.9	1.8	0.8
Other Countries	2.9	1.5	2.9	1.1	0.0	0.4	2.9	2.8	6.4	1.3
World	198.6	100.0	264.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0
% category	100.0		100.0		65.3	51.1	22.5	18.1	13.2	30.4

Source: Own calculation on ISTAT data.

**Table 5**  
**Adopted classification of countries based on RTA evolution**

Group	Definition	Indices combination
I	Increase of the competitive advantage	$+RTA_{2009-11} > +RTA_{2000-02}$
II	Decrease of the competitive advantage	$+RTA_{2009-11} < +RTA_{2000-02}$
III and IV	Transition from competitive advantage to competitive disadvantage	$-RTA_{2009-11} < +RTA_{2000-02}$
V	Increase of the competitive disadvantage	$-RTA_{2009-11} > -RTA_{2000-02}$
VI	Decrease of the competitive disadvantage	$-RTA_{2009-11} > -RTA_{2000-02}$
VII and VIII	Transition from competitive disadvantage to competitive advantage	$+RTA_{2009-11} > -RTA_{2000-02}$

The competitive advantage with Germany is more moderate, in spite of the fact that it is the main target market of sparkling wine in terms of value, considering that the same product absorbs a relatively modest share of Italian agri-food export. In the reference period, as figure 2 shows, the competitive advantage with Russia increased -where the Italian product is increasingly appreciated even though only by wealthy consumers who associate its consumption to an Italian lifestyle-, but also with the United Kingdom -where Italian sparkling wine signals a continuous growth in the last few years in spite of the effects of the financial crisis on the English wine market, China, Denmark and, to a lesser extent, Switzerland and Canada (Group 1). Among these, the Chinese market offers remarkable opportunities. In fact, in spite of a fast growth of local wine production in the last few years, the per capita production of wine remains relatively low and is not enough to satisfy domestic supply, thus making the importation of wine necessary in the light of the expected rapid growth of per capita consumption (Mityry et al., 2009). Moreover, while local wines tend to satisfy daily wine consumption, more demanding consumers see wine as a status symbol and hence tend to buy imported wines (Corsi et al., 2013). However, the competitive advantage over Portugal and Brazil, has diminished (Group 2), as a consequence of a contraction in the Italian exportation market share which has been absorbed by the two markets, both with reference to sparkling wine and the agri-food as a whole, but also over the United States, Australia and Japan. There are negative index values with France (-6.3), considering that it is the main if not the only supplier market, being the undisputable leader in the world market of the product at issue (Carbone and Henke, 2010), disadvantage which has increased as a consequence of an growing dependence on the part of Italy.

For bottled wines the calculated results of indicator of RTA show a high index value with a competitive advantage for Italy in Canada (5.1), United States (3.3), Denmark (2.6), Brazil (2.0), Ireland (1.9) and China (1.7), as a consequence of the high weight of these categories of wine on Italian agri-food export in these markets, with shares that reach 39.4% in Canada and 18.4% in China. In our reference period, Italy strengthened its competitive advantage on all these countries, except Brazil, which belongs to Group II, due to an increasing weight of these products on Italian agri-food export destined to satisfy the demand of these markets (Figure 3). The increasing competition in the Asiatic markets, and in particular China for bottled wines, is tied to a sustained growth in the consumption of premium and super premium wines in the same markets, thanks to consumers who have worked abroad or a foreign workers resident in China (Corsi et al.,

2013). However, high negative index values with Portugal (-19.7), Japan (-11.7), Chile (-4.8) and France (-3.1) are seen. The result in Japan is linked to the higher weight that these categories of wine take on within agri-food import compared to that assumed in the context of exportations. As has already emerged from the analysis of the market shares, Japan is a privileged partner for Italian wine exportation, which finds consensus among local consumers, thanks to a sound wine culture and a growing curiosity on the part of Japanese consumers towards Italian quality products (Corsi et al., 2013). During the 2000-02 and 2009-11 period, as Figure 3 shows, the Italian competitive disadvantage with Portugal, Chile and Japan decreased as a consequence of a lesser degree of penetration of this category of wine by the above-mentioned markets and a lesser weight of the same product on agri-food import. On the contrary, the competitive disadvantage with France (Group 5) increased for the growth Italian demand for French wines.

Finally, regarding the value of the RTA index for cask wines and compared to the main trade partners, Italy shows a competitive advantage with Hungary (4.4), the Czech Republic (4.2) and Norway (3.9), although they are markets which absorb relatively modest exportation shares of this type of wine, but assume a heavier weight for agri-food exports. Positive index values are recorded also with Germany (1.9), considering that the German market absorbs 37.9% of Italian exportation of this category of wine, Switzerland (1.6) and China (1.5), as a consequence of a net advantage in the exportation of cask wine in these markets. The dynamics registered during the reference period highlight countries such as Romania, Norway and Hungary (Group VII and VIII) with whom Italy improved its competitive position because of a greater degree of penetration of the Italian product on such markets, whereas in the first triennium it presented a competitive disadvantage (Figure 4). The competitive advantage with Germany and the Czech Republic (1 Group) increased, while the same advantage decreased with Switzerland and China, as a result of a reduction of the weight of this typology of product within agri-food production. The analysis highlights a marked competitive disadvantage with the United States (-34.0), with whom Italy worsens its position, turning from a weak competitive advantage in the first triennium to a marked disadvantage in the triennium 2009-2011, linked to the weight of these products in the import value of agri-food products. The trend observed could be linked on the one hand to the growth of surface under vineyard and of wine production in North America (Nosi, 2012), and on the other hand, to a recent tendency which links stronger flows of cask wines to greater economic and environmental sustainability (ISMEA, 2013).



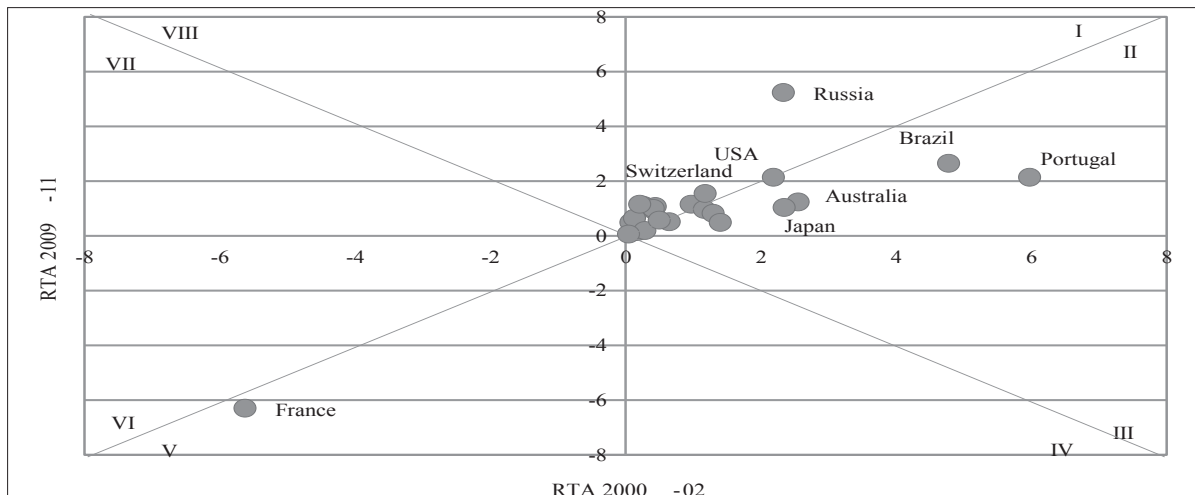


Fig. 2. RTA of sparkling (2000-02 and 2009-11)

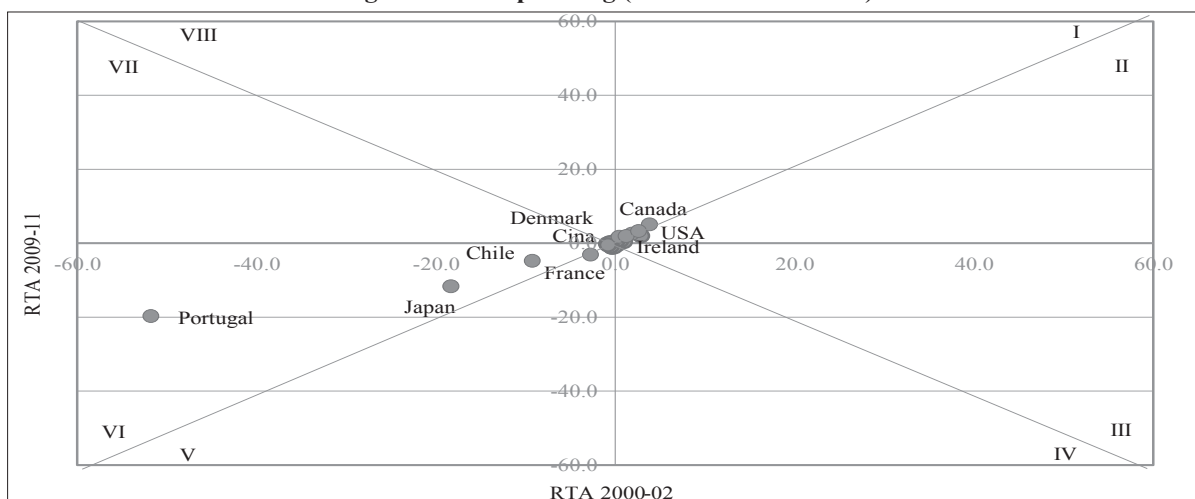


Fig. 3. RTA of Wines in bottles  $\leq 2$  l (2000-02 and 2009-11)

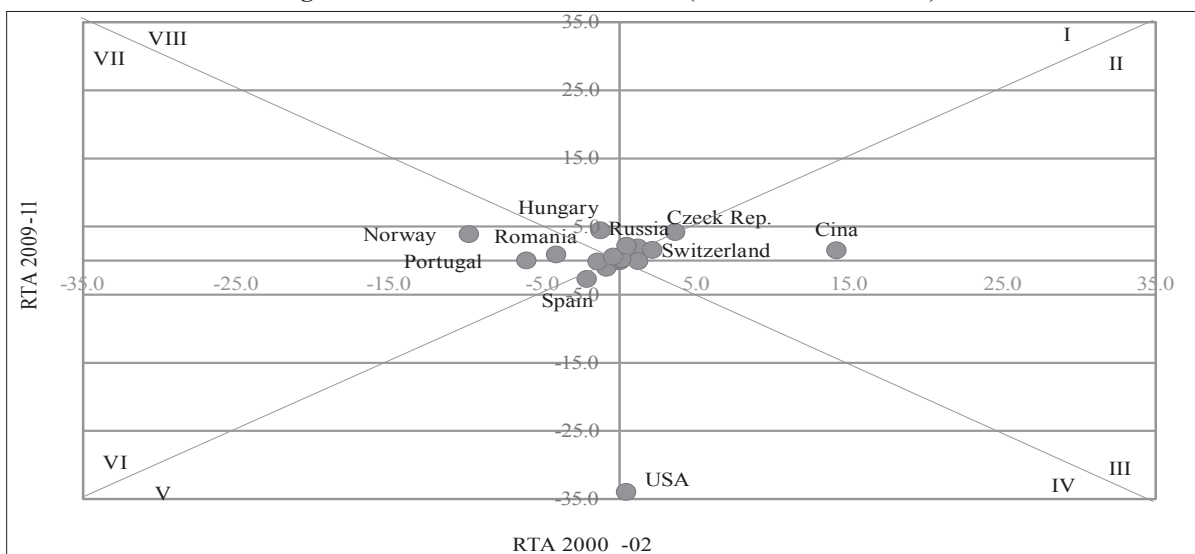


Fig. 4. RTA of wines in conts  $> 2$  l (2000-02 and 2009-11)

To a lesser extent, a competitive disadvantage with Spain (-2.7) is observed as a result of a growing penetration in the Italian market. The Iberian country, together with Australia, in fact, showed greater dynamism at an international level with considerably growing flows in this sector of the market (Carbone and Henke, 2010) thanks to increased production in the last few years, tied to the coming into production of recently planted vineyards.

## Conclusions

The results of the present study show how Italy seems to have managed to seize the opportunities offered by the recent change of the international wine market, progressively opening itself to foreign countries, not only in the traditional consumer markets but also in the emerging ones, thanks to its ability to satisfy a diversified demand more and more oriented towards quality products also in the recent period of crisis.

In particular, the analysis carried out via the application of the Vollrath index to the bilateral trade of Italy with its main trade partners, as well as evaluating Italian competitiveness, it has highlighted, indirectly, the degree of appreciation for Italian wine with respect to the agri-food industry as a whole. More specifically, an increasing competitiveness has been identified in some markets which do not have a viticulture tradition, where there is inadequacy of local production to satisfy domestic demand, and where the acknowledgement of the health characteristics of wine as an expression of an Italian lifestyle are strategic factors for the success of Italian wine.

The competitive challenge can act on two sides: on the one hand, the achieve of new consumer markets that represent  $\frac{1}{3}$  of total world consumption, and, on the other hand, the maintenance of traditional partners through the offer of better quality wines. Consequently, it is necessary to consider the peculiarities of each market of reference that are different for dimension, culture, and purchasing power. It is important the adoption of focused strategies and without disregarding obstacles linked to promotion and distribution and to the knowledge of the complex system, which regulates the commerce.

## References

- Asciuto, A., R. Carapezza, A. Galati and E. Schimmenti, 2008. The competitiveness of the Italian flower and ornamental plant sector. *New Medit*, 7 (1): 26-37.
- Baccaglio, M., 2011. Esserci o non esserci, queste le condizioni. *Il corriere vinicolo*, 15.
- Bavorovà, M., 2003. Influence of policy measures on the competitiveness of the sugar industry in the Czech Republic. *Agricultural Economics*, 49 (6): 266-274.
- Bernetti, I., L. Casini and N. Marinelli, 2006. Wine and globalization: changes in the International market structure and the position of Italy. *British Food Journal*, 108 (4): 306-315.
- Carbone, A. and R. Henke, 2010. Performance e competitività del vino italiano sui mercati internazionali. *Agriregionieuropa*, 6 (22): 1-9.
- Carbone, A. and R. Henke, 2012. Le esportazioni agroalimentari Made in Italy: posizionamento e competitività. *Questione Agraria*, 2: 51-74.
- Corsi, A.M., N. Marinelli and A. Sottini, 2013. Italian wines and Asia: policy scenarios and competitive dynamics. *British Food Journal*, 115 (3): 342-364.
- Crescimanno, M. and A. Galati, 2012. The Atlantic bluefin tuna: structure and competitiveness of Italian fishing in the international trade. *New Medit*, 11 (1): 58-64.
- Fertő, I. and L. J. Hubbard, 2003. Revealed Comparative Advantage and competitiveness in Hungarian Agri-Food Sectors. *The World Economy*, 26 (2): 247-259.
- Frohberg, K. and M. Hartmann, 1997. Comparing Measures of competitiveness (Discussion Paper, No. 2, 1997), Institute of Agricultural Development In Central and Eastern Europe, pp.1-18.
- Gerolimetto, M. and C. Mauracher, 2009. Struttura ed evoluzione delle esportazioni italiane di vino da tavola e a denominazione di origine. *Economia agro-alimentare*, 11 (3): 119-135.
- Hambalková, M., 2006. The factors of competitiveness and the quantification of their impact on the export efficiency of grape and wine in the Slovak Republic. *Agricultural Economics*, 52 (8): 389-394.
- Havrila, I. and P. Gunawardana, 2003. Analysing comparative advantage and competitiveness: an application Australia's textile and clothing industries. *Australian Economic Papers*, 42 (1): 103-117.
- I numeri del vino, 2012. I canali di vendita del vino in Italia nel 2011 - Indagine Mediobanca. Available at <http://www.inumeridelvino.it/>.
- INEA, 2012. Annuario dell'Agricoltura italiana 2011. Istituto Nazionale di Economia Agraria, Roma, 107 pp.
- ISMEA, 2012. Gli scambi internazionali e nazionali nel 2011. Available at: <http://www.ismea.it>.
- ISMEA, 2013. Report Vino Commercio estero. Available at <http://www.ismea.it>.
- ISTAT, 2011. Censimento Agricoltura 2010. Available at: <http://dati-censimentoagricoltura.istat.it/>.
- ISTAT, 2013a. Data warehouse, Superficie e produzione. Available at: <http://dati.istat.it/>.
- ISTAT, 2013b. Valore aggiunto ai prezzi di base dell'agricoltura per regione. Available at: <http://www.istat.it>.
- ISTAT, 2013c. Coeweb – Statistiche commercio estero. Available at: <http://www.coeweb.istat.it/>.
- Ivankovic, M., S. Bojnec and A. Kolega, 2005. Competitiveness

- of Wine Production: The Case of Bosnia and Herzegovina. *Die Bodenkultur*, **56** (4): 219-229.
- Malorgio, G., E. Pomarici, R. Sardone, A. Scardera and D. Tosco**, 2011. La catena del valore nella filiera vitivinicola. *Agricoltura e Sviluppo*, **7** (27): 1-13.
- MiPAAF**, 2013. OCM vino: 2009-2013. Available at: <http://www.politicheagricole.it/flex/cm/pages/ServeAttachment.php/L/IT/D/d%252F7%252F2%252FD.4d8b4b0cc83ba06e7ab2/P/BLOB%3AID%3D378>.
- Mitry, D. J., D. E. Smith and P. V. Jenster**, 2009. China's role in global competition in the wine industry: A new contestant and future trends. *International Journal of Wine Research*, **1**: 19-25.
- Nosi, C.**, 2012. Il vino fra produzione e mercato, RubbettinoUniversità, Catanzaro, 169 pp.
- OIV**, 2012. Statistical report on world vitiviniculture 2012, International Organisation of Vine and Wine. Available at <http://www.oiv.int/oiv/files/0%20-%20Actualites/EN/Report.pdf>.
- OIV**, 2013. StatOIV Extrats - Consumption. Available at: <http://www.oiv.int/oiv/info/frstatoivextracts2>.
- Plahuta, P., A. Kuhar, P. Stanovnik and P. Raspor**, 2007. Genetically Modified Wine-New Economic Issue. *Bulgarian Journal of Agricultural Science*, **13**: 449-458.
- Traill, W. B. and J. G. da Silva**, 1996. Measuring International Competitiveness: the Case of the European Food Industry. *International Business Review*, **5** (2): 151-166.
- Vollrath, T. L.**, 1991. A Theoretical Evaluation of Alternative Trade Intensity Measures of Revealed Comparative Advantage. *Weltwirtschaftliches Archiv*, **130**: 265-279.
- Vrontis, D., A. Thrassou and M. Rossi**, 2011. Italian wine firms: strategic branding and financial performance. *International Journal of Organizational Analysis*, **19** (4): 288-304.

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