Tariff and Non-Tariff Barriers to Wine Exports and Initiatives to Reduce their Effects

A. Mariani (1), F. Napoletano (2), E. Pomarici (3), R. Vecchio (3)

- (1) Università degli Studi di Napoli "Parthenope", Via Generale Parisi, 80132 Naples, Italy angela.mariani@uniparthenope.it
- (2) francesco.napoletan@libero.it
- (3) Università degli Studi di Napoli Federico II, Via Università, 96, 80055 Portici, Italy pomarici@unina.it riccardo.vecchio@unina.it

Abstract

In the past, international wine trade experienced a significant increase mainly due to the growth in demand in northern Europe and the USA. Since the beginning of the new millennium, new import markets are developing, where market access is hampered by tariff and non-tariff barriers. As a result of this change, the problem of trade barriers and their phasing out takes on a new centrality. The objective of this paper is to analyse trade barriers and to discuss the new path of trade liberalization process.

The paper first provides an overview of main trends in wine international trade and of tariff and non-tariff barriers. Subsequently, it offers an analysis of the main initiatives designed to lower trade barriers, depicting the results achieved by the World Wine Trade Group (WWTG) and preferential trade agreements (PTAs) signed by the main wine exporters. Thirdly, it presents a reclassification of exports allowing a quantitative assessment of the flows more at risk of being hindered by trade barriers, considering trade within Regional Integrated Areas and within the WWTG countries.

Compared with the importance of the topic, literature on tariff and non-tariff barriers to wine trade is still quite limited. The current work intends to contribute to a better comprehension of the global situation by framing the issues in a qualitative and quantitative matter. Results may be useful as a basis for policy makers and traders, and foster further academic investigations.

Keywords: Wine export; International trade; Tariff barriers; Non-tariff barriers; Preferential trade agreements.

1. Introduction

For over twenty years, the world's wine market has experienced a rapid process of globalization. Growth in the wine trade boomed during the 1990s both in wine consumption in Northern Europe and in North America and in exports of the so-called New World wine producers. Recently, the wine international trade has been boosted by increasing demand in countries which until recently were marginally involved in wine imports, mainly in Asia, but it may be predicted that production will increase in some importing countries. Therefore, the international market scenario is undergoing substantial changes

in the geography of consumption, production and trade (Banks and Overton, 2010; Anderson and Nelgen, 2011a; Mariani et al., 2011; Mariani et al., 2012).

The growth of the international wine trade has been fostered by the trade liberalization process (Hussain et al., 2007). Trade barriers are known to be regulated at the multilateral level by the World Trade Organisation (WTO) and significant progress has been made over time towards a progressive reduction in tariffs and more effective regulation of nontariff barriers. Moreover, tariffs and, in varying degrees, non-tariffs have been removed in the framework of some Regional Integrated Areas (EU, NAFTA, MERCOSUR, ANZCERTA). Nevertheless, trade barriers are still a constraint, mainly in the new importing countries, and an issue of growing concern, because of the new path of discriminatory trade liberalization.

The current paper aims to offer a comprehensive interpretation of the complex problems related to trade barriers (tariffs and non tariffs), by analyzing the main initiatives to reduce the effects and evaluate the export flows most exposed to barriers.

The paper is organized in five sections. After this introduction, the following section provides a synthetic presentation of the evolution of wine international trade (in quantity – FAOSTAT data) over the last 60 years and then provides an overview of tariff and non-tariff barriers with the key principles of the WTO rules. Section 3 focuses on the two main initiatives designed to lower trade barriers. The first initiative is the World Wine Trade Group (WWTG), an informal grouping of government and industry representatives from the, so called, New World wine producing countries (Argentina, Australia, Canada, Chile, New Zealand, United States, and South Africa) founded in 1998. The group's main goals include improved understanding of global wine issues and enhanced wine trade among the parties. The second initiative are the preferential trade agreements (PTAs) which the main wine exporters are signing with a growing number of importer countries, resulting in a bilateral negotiated phase-out of tariffs and, in some case, nontariff barriers.

For these two sections of the paper our analysis was carried out through a review of academic literature, reports of governmental bodies and national government websites.

Section 4, proposes a reclassification of export flows aimed at evaluating the level of exposure to trade barriers, focusing on international wine trade in the period 2004-2010. The data source is the Global Trade Information Services, which allows to consider flows of different type of wines in value and quantity. Section 5 discusses the main findings presented in the previous sections and is followed by a concise conclusion.

2. Background

2.1 International wine trade: main trends

Wine has traditionally been a traded good but only in the past two decades the international wine trade has experienced considerable growth: in the '60s the exported share of global wine production was 10% and in 1990 this share reached only15%. However, by the year 2000 export reached 25% of global production and over 30% in 2010 (see Table 1).

Table 1: International wine market: key figures (five years averages, 1,000 hl)

	1961-65	1966-70	1971-75	1976-80	1981-85	1986-90	1991-95	1996-00	2001-05	2006-11*
a - World production	261,916	281,270	311,636	325,530	330,422	298,204	263,189	274,510	278,208	279,553
b - World Export	26,765	29,437	40,772	45,529	52,174	45,712	52,505	65,327	75,972	93,687
share (a/b)	10%	10%	13%	14%	16%	15%	20%	24%	27%	34%
c - World Consumption	220,704	252,288	278,373	286,119	285,766	239,033	221,239	222,615	229,110	231,721
d - Consumption in main traditionally producing										
countries (1)	152,534	158,426	161,201	153,850	137,532	116,186	103,512	95,110	88,775	81,780
share (d/c)	69%	63%	58%	54%	48%	49%	47%	43%	39%	35%
e - Consumption in traditional importing countries (2)	22,214	29,097	41,535	49,949	58,462	61,951	61,267	68,205	74,310	75,287
share (e/c)	10%	12%	15%	17%	20%	26%	28%	31%	32%	32%
f - Consumption in new importing countries (3)	45,957	64,766	75,636	82,319	89,772	60,895	56,460	59,300	66,025	74,654
share (f/c)	21%	26%	27%	29%	31%	25%	26%	27%	29%	32%
g - Import of traditional importing countries (2)	10,256	14,090	20,823	26,493	32,825	32,351	32,624	39,642	48,623	54,905
share on world import	38%	47%	51%	59%	64%	73%	67%	67%	67%	62%
h - Import in new importing countries (4)	4,203	8,104	11,546	10,963	11,190	6,663	8,811	12,528	17,248	25,560
share on world import	15%	27%	28%	24%	22%	15%	18%	21%	24%	29%
i - Export of traditional producers in West Europe (5)	9,964	12,394	24,915	31,918	38,840	35,496	39,429	45,153	48,608	57,614
share (i/b)	37%	42%	61%	70%	74%	78%	75%	69%	64%	61%
j - Export of New World Wine Producers (6)	332	299	368	835	836	1,579	4,518	10,269	17,479	26,534
share (j/b)	1%	1%	1%	2%	2%	3%	9%	16%	23%	28%

^{1:} France, Italy, Spain, Argentina, Chile.

Source: Faostat

^{2:} Germany, United Kingdom, USA, Canada, Switzerland, Sweden, Norway, Finland, Netherlands, Belgium (1961-1999 included Luxembourg), Denmark, Japan, Ireland, Austria.

^{3:} c - (d + e).

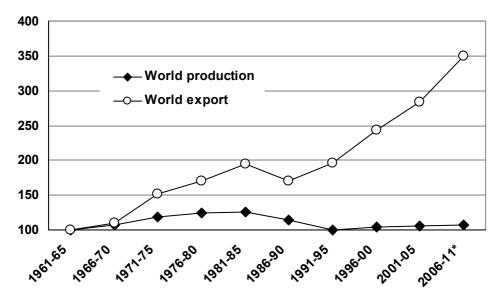
^{4:} Imports by countries included in line f.

^{4:} France, Italy, Spain, Germany, Portugal.

^{5:} Argentina, Australia, Chile, New Zealand, South Africa, USA.

^{*} Production (2006-11); Export/Import (2006-10), Consumption (2006-09).

Behind such evolution of shares of exported wine there are different issues related to production and export dynamics. Considering the last 60 years it is possible to observe that wine production increased from the beginning of the '60s of the 20th century to the middle of the '80s, then decreased for the following 10 years and increased again, without reaching the previous maximum. Exports increased during the '60 of the 20th centuries with the same pace of production but subsequently increased with an higher rate up to the middle of the '80s. Further on exports suffered a reduction, lasting a shorter period, and a new increase occurred at a considerably higher rate compared to production (see Figure 1).



Source: our calculation on Faostat data

Figure 1: World wine production and export evolution: growth index numbers, all wines in quantity, 1961 - 2011

The increase of export and export share on total production are the effect of a huge change in geography of consumption, as over the considered time span a substantial share of total consumption moved from the larger producing countries to countries without wine production or with a inadequate domestic production. Starting from the second half of the '70s consumption of wine has continuously decreased in traditional large producers in Europe and in South America (countries which were also key consumers), and with the crisis of Soviet Union it declined sharply also in Eastern and Central Europe. Meanwhile, conversely, starting from the '60s, consumption begun to increase in Northern Europe, North America and Japan, countries which could be nowadays considered the traditional importers, and later, from the middle of the '90s, has been boosted by the interest for wine in countries which until that time were marginally involved with such product (as in Asia or non producing countries in Central and South America) and by a return to consumption in Central and Eastern Europe. This group of new consumers, which could be considered the new importers, is therefore various in terms of geographical composition but also in terms of country size and contribution to consumption increase: the larger contribution comes from China, which is ranked in 2012 as the fifth world consumer, and Russia, which is ranked as seventh (Mariani et al., 2011). The increase of consumption outside the main producers, which after the middle of the '90s has overcompensated the decrease in such traditionally consuming countries, has therefore fed an increasing demand for import which resulted in the growth of wine international trade.

Concerning the impact of consumption changes on international trade, two main group of countries have to be considered. The first is the group of traditional importers which have continuously increased their quantity of import over 60 years and, in so doing, have also increased their share on world import up to the second half of the '80s. Later, their share started to decrease as it started to increase (with an higher pace) the import of the group of *new importers*, where the consumption started or restarted in the '90s. Indeed, the traditional importers which reached a share above 70% at the end of the '80s, at the end of the first decade of the 20th century have a share near 60%; on the other hand the new importers reached at the same time a share close to 30%. Some of the new importers belong to Regional Integrated Areas but many, and among these Russia and China, are outside Regional Integrated Areas and this gives momentum to the issue of tariff and non tariff barriers.

The increasing demand for wine in non producing countries has been supplied by traditional producing countries in Europe, mainly France, Italy and Spain with a not negligible contribution of Germany and Portugal, but also by the so-called New World wine producers (i.e. Argentina, Australia, Chile, New Zealand, South Africa, USA) which from the '60s have quite continuously increased their production, developing in the '80s a strong orientation toward export (Anderson, 2004; Cesaretti et al., 2006; Giuliani et al., 2011). As a consequence, the share of such New World wine producers on world wine export - which was negligible up to the '70s - is nowadays around 30%. Considering the evolution of export activity is also worth of notice that the increase of world export has been accompanied by an increase of concentration of exporters. If during the '60s the countries which now are the most important suppliers accounted for 30% of total export, nowadays this share is about 80%. Over the considered period of time Algeria, Morocco and Tunisia, which were primary exporters during the '60s, have ceased to export wine; moreover the export activities of many countries in central and eastern Europe suffered a strong reduction after the crisis of Soviet Union. Moreover, the evolution of wine market has favoured the development of intra-industry trade, as many countries (USA and Germany are relevant examples) are both importers and exporters.

All exporters in the old and new world are targeting the new importers, since these countries appear to offer the best business opportunities. The interest for wine in such countries is, nevertheless, stimulating also the internal supply and this could foster protectionist policies. In addition, the competitive scenario of suppliers could be modified by the future increasing role of other players which are potentially in the conditions to expand grape and wine production (mainly large countries as China, India, Brazil and other smaller states but with great potential as Ukraine).

2.2 Tariff and non tariff barriers to wine trade

Tariffs are the most visible trade barrier: they cause an increase in import prices and reduce economic welfare for both wine consumers in the importing countries and wine exporters (Dunn and Mutti, 2004). The level of tariffs is constrained by WTO rules: all

members are committed to set tariffs at levels (Most-Favoured-Nation Tariff) above which cannot be raised without compensation to other countries. Currently the WTO-bound tariffs are the result of the Uruguay Round, since the new negotiation, the Doha Round, is still in progress and it is doubtful that it will ever end with an agreement. Applied tariffs may be (and usually are) lower than the bounds, since tariffs may be reduced or cleared in the framework of preferential agreements.

Tariffs on wine, depending on the importing countries, could be expressed as: *ad valorem*, with one rate or different rates according to the price level of the product; specific volume-based (per litre); specifically alcohol-based (alcoholic strength); a mix of *ad valorem* and specific rates. In addition, tariffs can differ by type of wine (still bottled or bulk, sparkling wine). Specific tariffs based on volume are the most popular in Europe and North America, whereas *ad valorem* tariffs are the norm in the Asia-Pacific region, with the exception of Japan and Malaysia (Anderson, 2010).

Due to the presence of specific tariffs, evaluating and comparing the level of market protection for wine requires complex estimates, specific tariffs should be transformed into the so-called *ad valorem* equivalent (Babili, 2009)¹.

According to the literature, tariff protection is quite low in countries which have long been involved in importing wine (North America, EU², New World producing countries, Japan). By contrast, the tariff level is high in countries which have recently experienced growing wine imports, i.e. mainly Asian markets (Anderson and Nelgen, 2011b).

A wide and heterogeneous range of policy interventions other than border tariffs could affect and alter trade of goods, the so-called non-tariff barriers.

Deardorff and Stern (1998) suggest the taxonomy with five categories reported in Box 1.

Central to non-tariff barriers, and an issue of growing importance, are the technical barriers to trade (TBTs). This complex field has been regulated by the WTO through two agreements (key principles in Box 2):

- Agreement on Technical Barriers to Trade, designed to ensure that technical regulations (mandatory), standards (voluntary), and conformity assessment procedures (testing and certification) do not create unnecessary obstacles to trade.
- Sanitary and Phyto-Sanitary Measures Agreement, provides rules on how governments can apply food safety and animal and plant health measures. It applies to essentially all measures taken by a WTO member to protect human, animal or plant life or health within its territory from certain risks, and which may affect international trade. In seeking to protect health, WTO members must not use sanitary or phytosanitary measures that are: unnecessary, not science-based, arbitrary, or which constitute a disguised restriction on international trade.

¹ According to the WTO rules tariffs should be *ad valorem*.

² Although the main new world exporters complain that the EU has a higher tariff level (Wine Institute, 2013).

Box 1 – Categories of non-tariff barriers

- 1) **Quantitative and similar restrictions** such as: import quotas and their administration methods (licensing, auctions, and other); export limitations and bans; voluntary export restraints; foreign exchange controls; prohibitions such as embargos; domestic content and mixing requirements forcing the use of local components in a final product; discriminatory preferential trading agreements and rules of origin; and countertrade, such as barter and payments in kind.
- 2) **Non-tariff charges and related policies affecting imports** such as: variable levies; advanced deposit requirements on imports, anti-dumping and countervailing duties; border tax adjustment such as value-added taxes potentially imposed asymmetrically on imported and domestic competing goods.
- 3) **Customs procedure and administrative practices** such as: custom valuation methods; customs classification procedures; and customs clearance procedures, such as inspections and documentation creating trading cost.
- 4) **Technical barriers to trade** such as: health, sanitary, animal welfare, and environmental regulations; quality standards; safety and industrial standards; packaging and labelling regulations including trademark and other media/advertising regulations.
- 5) Various forms of government policies such as: subsidies and aids; participation and restrictive practices in trade (state-trading and government monopoly); government procurement policies with domestic preferences. In addition, the category extends to macro-economic and foreign exchange policies; policies relating to intellectual property; competition policies; foreign direct investment policies; national taxation and social security policies; and immigration policies.

Source: Deardorff and Stern (1998)

Implementation of such WTO regulations has given rise to some critical issues. With regard to the wine trade the main issue is that few standards have so far been defined by the Codex Alimentarius, recognized by the WTO as a standard-setting organization. While the International Wine Organization (OIV), though an intergovernmental organization committed to establishing technical and commercial standards for wine, is not recognized by the WTO (Battaglene, 2011)³. However, WTO regulations, as discussed in the next section have been successfully applied by the WWTG to ensure an effective reduction of TBTs among the participating countries.

The TBTs of most concern for wine trade, according to the literature, are the following (Wine Institute, 2013; Winemakers' Federation of Australia, 2010; ICE, 2010):

- Wine labelling regulations this is an issue of growing concern due to the lack of consistency in standards between countries. With health warnings and ingredients varying, producing a label unique to one country adds a significant additional cost to wine exporters.
- Oenological practices In many countries wine production is regulated by oenological rules. This means that it is possible to produce wine using a country-specific set

³ The OIV has applied to become observer at the WTO but the request has not yet been discussed.

Box 2 – WTO Technical barriers regulation: key principles

Agreement on Technical Barriers to Trade

Harmonization – Where international standards exist or their completion is imminent, WTO Members shall use them (or the relevant parts), as a basis for their technical regulations except when such international standards would be an ineffective or inappropriate means for the fulfilment of the legitimate objectives pursued, for instance because of fundamental climatic or geographical factors or technological problems.

Equivalence – WTO Members are encouraged to accept foreign technical regulations and conformity assessment procedures as "equivalent" to their own (even if they differ) provided that they fulfil the same objectives or offer an assurance of conformity with standards equivalent to their own procedures.

Mutual Recognition – WTO Members are encouraged to enter into negotiations for the Mutual Recognition (Acceptance) of the results of conformity assessment procedures.

Sanitary and Phyto-Sanitary (SPS) Measures Agreement

Risk assessment – WTO members are required to base their SPS measures on a risk assessment, as appropriate to the circumstances, and to take into account risk assessment techniques developed by relevant international organisations.

Harmonization – WTO members are encouraged to base their SPS measures on international standards, guidelines and recommendations, where they exist. The three international standard-setting bodies specifically mentioned are: the International Plant Protection Convention, the World Organisation for Animal Health, the Codex Alimentarius Commission. Governments are allowed to choose their own standards. However, if the national requirement results in a greater restriction of trade, a country may be asked by its trading partners to provide scientific justification demonstrating that the relevant international standard would not achieve the level of health protection the country considers appropriate.

Equivalence – WTO importing members should accept the SPS measures of exporting WTO members as equivalent if the exporting country objectively demonstrates to the importing country that its measures achieve the importing country's appropriate level of protection. Typically, recognition of equivalence is achieved through bilateral consultations and the sharing of technical information.

Source: Our elaboration.

of practices and substances with respect to what should be allowed by the Codex Alimentarius (OIV, 2005). The OIV, since its foundation in 1924, has undertaken a remarkable effort to define commonly accepted rules and is continuously updating the International Code of Oenological Practices and the International Oenological Codex. Nevertheless these documents are not universally accepted and the differences among national regulations still represent an obstacle to the wine trade.

- Maximum residue limits of agrichemicals differing between countries both in level and for approved use on products.
- Certification and testing procedures to access the markets, many importing countries require a complex set of certificates and certification forms, which may not always be justified in protecting health. Such certification requires considerable effort, resulting in an increase of costs and time lost.

It should be noted that the problem of non-tariff barriers could further intensify. The new fast-growing wine importing countries are setting up wine market regulations which could prove to be non-tariff barriers. Indeed, in some of these countries, growing interest in domestic wine production could lead to maintaining (or raising) protectionist policies and stepping up support for local producers.

Last but not least, it should be stressed that the international wine trade is constrained not only by national technical regulations resulting in non-tariff barriers but also by private standards. In the last decade there has been intense development of private standards, initially mainly targeting food safety (often exceeding requirements established in international standards developed by the Codex Alimentarius) and in recent years mainly related to social and environmental aspects. Such standards can be set by individual firms (usually large retailers), collective national organizations, or international standards organizations. Private standards are voluntary, but if required by large retailers and/or large companies they become *de facto* mandatory for suppliers. Such standards do not fall within the rules of the WTO. Indeed, these standards are a matter of increasing concern for the effects that they may have upon access to international markets, especially for small businesses (Henson and Humphrey, 2009).

3. Main initiatives targeting lower trade barriers to wine trade

Besides the process of trade liberalization on a multilateral basis, promoted by the WTO, two main different types of initiatives are underway to lowering barriers to wine trade: the World Wine Trade Group (WWTG) and preferential trade agreements.

3.1 Achievements of the World Wine Trade Group

A major initiative to reduce non-tariff barriers to trade in wine is the WWTG, an informal grouping of government and industry representatives from the New World wine producing countries of Argentina, Australia, Canada, Chile, New Zealand, United States, and South Africa, founded in 1998. In 2010 the Republic of Georgia has also become a full member. The WWTG shares information and collaborates to ensure the free trade of wine based on WTO rules and regulations. Some of the issues discussed include wine production, sales and trends; the state of bi-lateral and multi-lateral trade negotiations; the state of wine issues in the OIV, the Codex Alimentarius, and developments at the WTO; viti-vinicultural practices as well as labelling and intellectual property issues.

Measures to diminish the effects of protectionism within the members have been particularly successful, and the group has achieved three major results. Here summarized:

- 1) The Mutual Acceptance Agreement on Oenological Practices this agreement eliminates barriers to trade based on differences in oenological practices by establishing that signatory countries will accept that wine made in another signatory country should be allowed to be sold in its market, despite different cross-border winemaking practices. Market access is conditional upon compliance with WTO obligations to protect the health and safety of consumers and prevent deception of consumers. The agreement is a landmark in the development of international trade because it is the first multi-lateral Mutual Acceptance Agreement, in any field, fully compliant with the WTO's TBT Agreement.
- 2) The Agreement on Requirements for Wine Labelling this agreement addresses barriers to the wine trade arising from labelling by harmonizing labelling requirements, enabling the sale of wine in WWTG markets without having to redesign labels for each individual market. Under the agreement, labels must contain four items of mandatory information: country of origin, product name, net contents and alcohol content anywhere on a wine bottle label in a single field of vision.
- 3) The Memorandum of Understanding on Certification Requirements this aims to reduce trade barriers by encouraging the elimination of burdensome requirements and routine certifications of wine products and ingredients. According to the memorandum, signatories' certifications regarding wine composition, free sale condition, or analytical reports about the components of imported wines will no longer be required. However, those certifications will still be required if needed to protect human health or safety (like SPS agreement requirements). Certifications on vintage, grape variety and appellation will only be needed if there are reasonable doubts about the truthfulness of label representations.

The World Wine Trade Group (WWTG) has implemented an effective approach to removing technical barriers to trade and is trying to involve fast-growing importing countries, such as China and Brazil (Knaup, 2010) and more in general the APEC - Asian Pacific Economic Cooperation (WWTG website).

3.2 Wine exporters' main preferential trade agreements

Over the last few years, in response to the difficulties of the Doha Round negotiations, export-driven countries have chosen the path of bilateral preferential trade agreements (PTAs). Two points may be made about such agreements: on the one hand, these agreements are a way to phase-out tariff and non-tariff barriers to trade (thus facilitate trade); on the other, they create a comparative advantage for those signing them to the detriment of competitors (Dunn and Mutti, 2004). Of major interest are agreements with countries with high barriers to trade and with the greatest growth potential of imports. Besides, the benefits gained from expanding exports, being first on the market and being able to consolidate market position may also allow such countries to drive the evolution of consumer preferences.

The scenario is quite complex and in continuous development, with a plethora of different agreements in some way relevant to the wine trade. A glance of the main agreements signed or in discussion is reported in Table 2. To build this general portrait the primary sources were national government websites.

Table 2: Wine exporters main preferential trade agreements (PTA)

	EU	USA	Canada	Mexico	Others in America	R-K-B	GCC	TPP	AFTA	India	China (#)	Japan	South Korea
EU		WA	WA	PTA						N			PTA
USA	WA		PTA		PTA (Peru, Colombia, Panama, CAFTA - DR)			N					РТА
Chile	PTA	PTA	PTA	PTA	PTA (MERCOSUR)			M	PTA (Singapore)	PTA	PTA	PTA	PTA
Australia	WA	PTA					N	N	PTA (Singapore, Thailand, Philippines, Vietnam, Myanmar, Cambodia, Laos); N (Indonesia)	N	N	N	N
New Zealand	WA					N		M	PTA (Singapore, Thailand, Philippines, Vietnam, Myanmar, Cambodia, Laos)		PTA		

Explanatory notes:

WA (Wine Agreement) M (Member)

PTA (Preferential Trade Agreement) N (Negotiation ongoing for PTA)

(#) Since 2008 wine imports to Hong Kong and Macao have not been subject to tariffs and there are no certification requirements

CAFTA-DR (Dominican Republic-Central America FTA): Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and the Dominican Republic

R-K-B (Russia-Kazakhstan-Belarus): Free Trade Agreement

GCC (Gulf Cooperation Council): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and United Arab Emirates (Jordan and Morocco have been invited to join)

TPP (Trans-Pacific Partnership): Brunei, Chile, New Zealand and Singapore

AFTA (Asian Free Trade Area): Brunei, Indonesia, Malaysia, Philippines, Singapore, Thailand, Vietnam, Laos, Myanmar and Cambodia. Unlike the EU, AFTA does not apply a common external tariff on imported goods

Taking into consideration the different types of agreements and the participating countries shown in Table 2, some aspects should be highlighted:

- 1) The EU has followed a unique approach for the wine sector in the signing of trade agreements, with priority being the issue of protecting geographical indications. In these agreements the EU has offered several concessions regarding the reduction of technical barriers (recognition of oenological practices and simplified import procedures) in exchange of the protection of geographical indications.
- 2) Chile focuses much of its marketing strategy on wine export opportunities. As a result of its success in negotiating these FTAs, it has obtained preferential market access to the top developed and emerging wine markets around the world.
- 3) Chile (in 2005) and New Zealand (in 2008) have signed PTAs with China. Tariffs on wine imports (14% for bottled wine and 20% for bulk wine) have been progressively reduced, to reach zero in 2012 for New Zealand and in 2015 for Chile. As a result, Chile and New Zealand will be able to enjoy a significant advantage over competitors (ABARE, 2012).
- 4) Recently (2011), the EU and USA signed a Free Trade Agreement with the Republic of Korea of great importance for wine (immediate duty-free access).
- 5) Instead, the negotiations between UE and India for a PTA are still in progress, and the Indian market policy of protection for wine is a major issue between the two parties.
- 6) Australia and New Zealand are very active in negotiations to reach agreements with Asian countries.

4. The exposure of wine flows to trade barriers: a quantitative analysis

4.1 Methodology and data sources

To achieve a quantitative assessment of the wine trade flows more at risk of being hindered by trade barriers we focus on the flows of international trade in recent years, using a data source which allows to analyse the trade in a rather detailed way.

The export flows taken into account, in value (€) and quantity (HL), are still wines and the two product categories that compose them, according to the Harmonized System six-digit level of disaggregation: code 220421, non-sparkling wine in containers holding 2 litres or less (hereafter: bottled wine) and code 220429, non-sparkling wine in containers holding more than 2 litres (hereafter: bulk wine) ⁴. To assess the evolution over time, we analyzed the 2004-2010 period.

The data source is the Global Trade Information Services (GTI), which database provides import and export flows of 83 countries, even if not all these states are wine exporters and importers. Since some countries are missing, these export flows can be considered very close to the whole market, but not an exact representation.

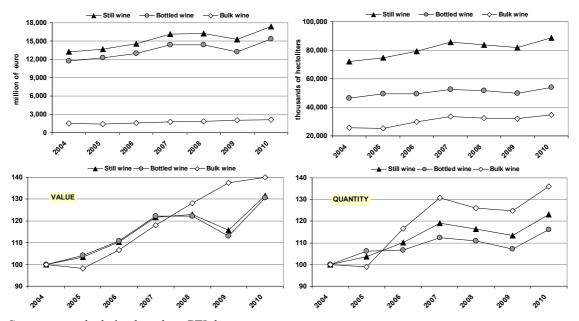
We present data on international wine trade proposing a reclassification of flows in

⁴ The Harmonized System six-digit level of disaggregation allows to quantify also flows of sparkling wine. Such type of wine has not be considered in the analysis as the market is dominated by three countries in the European Union (France, Italy and Spain) which face the same conditions for the access to importing markets.

two steps. As a first step we calculated the export flows that take place within Regional Integrated Areas (EU, NAFTA, MERCOSUR, ANZCERTA)⁵, since these flows are considered not to be exposed to trade barriers. As a second step we determined the export flows that are directed outside of the Regional Integrated Areas, highlighting the origin by groups of competitors. In particular the EU, the countries of WWTG and, as a residual, the other exporting countries. Finally, some data are presented on the geographical distribution of exports of two successful exporters, the EU and Chile, to identify markets that have contributed most to total growth.

4.2 Results

As shown in Figure 2, since 2004 world exports of still wine have seen remarkable growth, 32% in value and 23% in quantity. The most dynamic category has been bulk wine. Exports of bottled wines have grown by 30% in value and 16% in quantity; exports of bulk wine by 40% in value and 36% in quantity.



Source: our calculation based on GTI data.

Figure 2: World wine exports, in value and quantity, and growth index number, 2004-2010

The growth of the international wine trade has been fed both by trade within Regional Integrated Areas and by trade outside integrated areas, with the latter growing faster. As shown in Figure 3, this holds both for bottled wine and, with a higher increase, for bulk wine, in value and quantity.

Therefore, as shown in table 3, the share on world wine of wine export outside integrated areas increased in the period for still wine by 5.7 points in value and 6.2 points in quantity and for bulk wine by 14 points in value and 15 points in quantity.

⁵ EU: European Union; NAFTA: North American Free Trade Agreement; MERCOSUR: Mercado Común del Sur; ANZCERTA: Australia New Zealand Closer Economic Agreement.

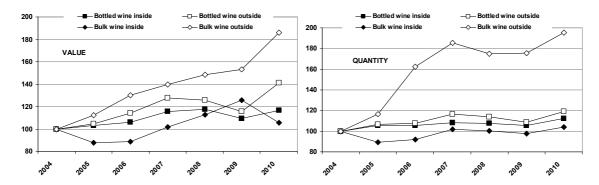
Table 3:	Wine	exports	inside	and	outside	Regional	Integrated	Areas:	structure	in	2010	and
	chang	ges from	2004 (Δ <i>20</i> .	10/2004))						

			Sh	ares	S	hares
	Expo	rt in 2010		value		uantity
	Value*	Quantity**	2010	Δ 2010/04	2010	Δ 2010/04
Still wine						
Export inside regional integrated areas	6,879	42,249	39.5	-5.7	47.6	-6.2
in European Union (27)	6,353	40,311	36.5	-7.1	45.4	-6.6
in NAFTA	230	723	1.3	0.6	0.8	-0.1
in MERCOSUR	69	479	0.4	0.2	0.5	0.0
in ANZCERTA	227	737	1.3	0.6	0.8	0.4
Export outside regional integrated areas	10,525	46,592	60.5	5.7	52.4	6.2
Total export	17,404	88,841	100.0	0.0	100.0	0.0
Bottled wine						
Export inside regional integrated areas	5,990	24,862	39.1	-4.6	46.0	-1.4
in European Union (27)	5,513	23,493	36.0	-6.1	43.5	-1.8
in NAFTA	211	433	1.4	0.6	0.8	-0.1
in MERCOSUR	69	478	0.4	0.2	0.9	0.1
in ANZCERTA	198	459	1.3	0.6	0.8	0.3
Export outside regional integrated areas	9,341	29,155	60.9	4.6	54.0	1.4
Total export	15,331	54,017	100.0	0.0	100.0	0.0
Bulk wine						
Export inside regional integrated areas	889	17,388	42.9	-14.1	49.9	-15.2
in European Union (27)	840	16,818	40.5	-15.3	48.3	-15.7
in NAFTA	19	290	0.9	0.1	0.8	-0.1
in MERCOSUR	0	1	0.0	0.0	0.0	0.0
in ANZCERTA	30	278	1.4	1.1	0.8	0.6
Export outside regional integrated areas	1,184	17,437	57.1	14.1	50.1	15.2
Total export	2,074	34,825	100.0	0.0	100.0	0.0

^{*:} million of €; **: thousands of hectolitres. *Source*: our calculation based on GTI data.

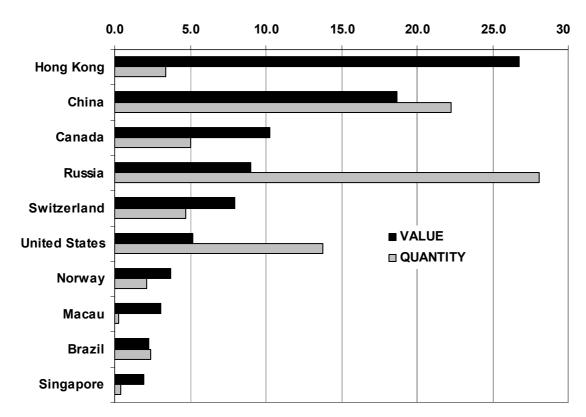
Considering the details of wine trade inside integrated areas, the decrease in share of these flows stems from EU behaviour, as trade within the EU grew rather slowly for both categories of bottled and bulk wines. Therefore the share of EU internal trade over total wine exports decreased in the considered period, when the shares of other integrated areas increased (particularly ANZCERTA) or remained substantially stable.

Focusing on exports outside integrated areas (Table 4), EU has increased its share on export, both in quantity and value. This is the result of an opposite behaviour of the two types of wines: bottled wines have gained almost 5 points in value and 10 in quantity, while bulk wines have lost several points. As underlined in Figure 4 Asian and Russia markets represent an important share of EU export growth.



Source: our calculation based on GTI data

Figure 3: World wine export, bottled and bulk wine, growth in value and quantity, growth index number, 2004-2010



Source: our calculation based on GTI data.

Figure 4: Weight of major markets on growth of EU-27 exports of bottled wines in value and quantity, 2004-2010

Contrary WWTG countries have reduced the importance of bottled wines and increased bulk wines (Table 4). It may be observed that wine exports to other WWTG countries performed better than exports to non-WWTG countries.

Table 4:	Wine exports outside Regional Integrated Areas by group of competitors and
	details on WWTG export, 2010 and changes from 2004

	Expor	t in 2010		res on ilue	Shares on quantity		
	Value*	Quantity**	2010	Δ 2010/04	2010	Δ 2010/04	
Still wine							
Export outside regional integrated							
areas	10,525	46,592	100.0	0.0	100.0	0.0	
from European Union (27)	5,370	18,438	51.0	2.9	39.6	4.1	
from WWTG countries	4,590	25,445	43.6	-3.4	54.6	0.4	
from Other countries	566	2,709	5.4	0.5	5.8	-4.6	
Details on WWTG		•					
Export among WWTG	1,298	6,455	12.3	-0.8	13.9	2.4	
WWTG export to other countries	3,291	18,990	31.3	-2.5	40.8	-2.0	
Bottled wine							
Export outside regional integrated							
areas	9,341	29,155	100.0	0.0	100.0	0.0	
from European Union (27)	5,071	13,576	54.3	4.9	46.6	10.1	
from WWTG countries	3,786	14,411	40.5	-5.6	49.4	-3.9	
from Other countries	485	1,168	5.2	0.7	4.0	-6.2	
Details on WWTG							
Export among WWTG	1,164	4,138	12.5	-1.5	14.2	0.8	
WWTG export to other countries	2,622	10,272	28.1	-4.1	35.2	-4.7	
Bulk wine							
Export outside regional integrated							
areas	1,184	17,437	100.0	0.0	100.0	0.0	
from European Union (27)	299	4,862	25.3	-10.5	27.9	-4.8	
from WWTG countries	804	11,034	67.9	12.5	63.3	6.7	
from Other countries	81	1,541	6.8	-2.0	8.8	-1.9	
Details on WWTG							
Export among WWTG	134	2,317	11.3	6.4	13.3	7.0	
WWTG export to other countries	669	8,717	56.5	6.1	50.0	-0.3	

^{*} million of \in ; ** thousands of hectolitres.

Source: our calculation based on GTI data.

Considering in details the WWTG countries from Table 5 it is clear that for bottled wines 3 countries have experienced good performances: Argentina and New Zealand, mainly due to increase of export towards other countries of WWTG, and Chile for the growth of export towards other markets.

The growth in exports of bottled wines of Chile is approximately related for 40% to direct flows to the EU, while the remaining part goes to emerging markets (Figure 5).

For bulk wines instead, Australia, United States and New Zealand show the best dynamics.

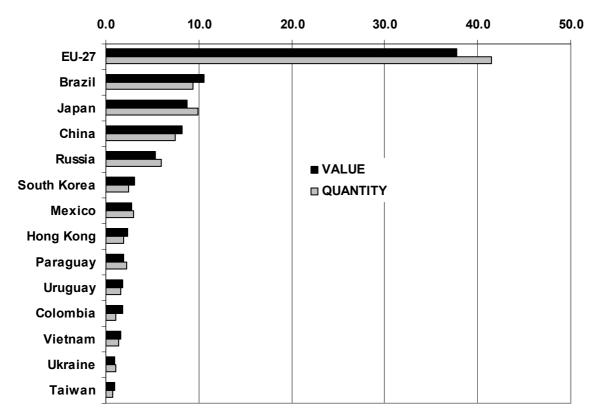
2014, Vol 15, No 1 21

Table 5: WWTG countries exports, total and to other WWTG countries, shares on total export outside the integrated areas, 2010 and changes from 2004

	Bottled wine								Bulk wine							
	Export in 2010		Shares of	Shares on value		Shares on quan- tity		Export in 2010		Shares on value		Shares on quan- tity				
	Value*	Quantity**	2010	Δ 2010/0 4	2010	Δ 2010/04		Value *	Quantity**	2010	Δ 2010/0 4	2010	Δ 2010/04			
WWTG coun-																
tries	3,786	14,411	40.5	-5.6	49.4	-3.9		804	11,034	67.9	12.5	63.3	6.7			
Chile	970	4,335	10.4	1.7	14.9	3.6		185	2,942	15.6	0.6	16.9	-4.6			
to WWTG	222	889	2.4	0.2	3.0	0.2		43	961	3.6	2.3	5.5	3.3			
Australia	1,146	4,146	12.3	-9.1	14.2	-6.1		231	3,431	19.5	3.8	19.7	6.7			
to WWTG	496	1,860	5.3	-4.4	6.4	-2.1		51	864	4.3	1.7	5.0	3.0			
United States	435	1,528	4.7	-1.9	5.2	-5.4		155	1,859	13.1	3.5	10.7	4.1			
to WWTG	2	6	0.0	0.0	0.0	-0.1		0	0	0.0	0.0	0.0	0.0			
South Africa	416	1,846	4.4	-0.8	6.3	-0.5		153	2,005	13.0	0.9	11.5	1.1			
to WWTG	64	219	0.7	0.1	0.8	0.2		5	93	0.5	-0.1	0.5	-0.4			
New Zealand	369	814	4.0	1.8	2.8	1.6		42	282	3.5	3.4	1.6	1.6			
to WWTG	146	313	1.6	0.8	1.1	0.7		17	91	1.4	1.3	0.5	0.5			
Argentina	438	1,738	4.7	2.7	6.0	2.9		37	513	3.1	0.3	2.9	-2.2			
to WWTG	234	851	2.5	1.8	2.9	2.0		19	307	1.6	1.1	1.8	0.6			
Canada	11	4	0.1	0.0	0.0	0.0		0	2	0.0	0.0	0.0	0.0			
to WWTG	0	0	0.0	0.0	0.0	0.0		0	0	0.0	0.0	0.0	0.0			

^{*:} million of €; **: thousands of hectolitres.

Source: our calculation based on GTI data.



Source: our calculation based on GTI data.

Figure 5 Weight of major markets on growth of Chilean exports outside WWTG of bottled wines in value and quantity, 2004-2010

5. Discussion

The current study has composed a comprehensive framework of the variety of tariff and non-tariff barriers affecting international wine trade, the efforts to mitigate their impact and the extent of trade flows most vulnerable to barriers. Wine export in many markets are still hampered by high tariffs and by a variety of technical barriers related to the particular characteristics of this alcoholic product, which is obtained with production practices often subject to rules and regulated by specific labelling systems. The stalemate in multilateral negotiations at the WTO level is pushing to negotiate bilateral agreements, to reduce the impact of tariff and non-tariff barriers which affect wine trade. In negotiating these agreements the different exporting countries are targeting specific issues to protect the distinctive elements of their offer. In this perspective we can explain the priority given by the EU to the protection of designations of origin and geographical indications, or that given by the producers of the new world to the protection of the possibility to use individual (quite liberal) oenological practices.

Quantitative analysis of trade flows exposed to trade barriers has substantiated that the initiatives to reduce their effects are highly desirable as the more exposed flows (i.e. those that are directed outside the regional integrated areas) are the ones that showed the largest growth. Furthermore the cooperation within the WWTG seems to start to give

good results since the exchange within the group is growing to a greater extent compared to exports to the rest of the world.

As the competitive performance is determined by many factors it would be arbitrary, without appropriate methodologies, to assess the effect of preferential access to the markets on changes of export flows. Anyway, our preliminary data analysis allows to consider realistic a relation between the competitive performance of Chile and New Zealand and their effectiveness in establish PTAs and, consequently, their discriminatory effect looks confirmed (ABARES, 2012). On the other hand, literature offers some explanations for the performance of other competitors which have been less effective in negotiating better market access. The poor performance of Australia has been also affected by an unfavourable exchange rate (Anderson and Wittwer, 2012). Conversely, the good competitive performance of EU can be explained by an increased marketing effort and a specific interest of customers for the peculiarities of EU wines (Anderson and Negeln, 2011; Mariani et al., 2012). Moreover, starting from 2008, the promotion of EU wines in extra European countries has been supported by the Common Agricultural Policy. Such policy, after the last reform in 2008⁶, was designed to provide support measures liable to strengthen competitiveness through national support programs which can include promotion activities outside EU.

Over the period 2009-2010, the financial support for the promotion of EU wines coming from the CMO has been € 122 millions⁷.

If the previous considerations indicate that there are more factors besides access to the market which determine the competitive performance of exporters, in the future the impact of tariff and non tariff barriers could become even stronger. After many years of surplus of supply the global wine market is experiencing a situation of shortage with an increase of production costs and of prices in intermediate markets which are determining a reduction of margins (Pomarici, 2013). Consequently, it could become more difficult to hold tariffs and costs associated with non tariff barriers. As such situation of scarcity could become permanent, for the combination of climate change effects and an increase in competition for the use of land, the risk of discriminatory effects of PTAs can likely become higher.

In such perspective it would be useful a renovate commitment of international organizations for a non discriminatory reduction of at least non tariff barriers. As mentioned in section 2 Codex Alimentarius does not cover many relevant issues concerning wine and the OIV is not recognized by WTO. As it is not likely that Codex Alimentarius will become more active on wine, which is a very special product, it would be desirable to increase the role of OIV⁸ and , eventually, an official recognition of this organization by WTO.

⁶ Reg. (CE) 479/2008, later transferred in the Reg. (CE) 1237/2007 (Single Market Organization); the promotion activities are ruled in details in the Reg. (CE) 555/2008.

⁷ Estimation in the report COM(2011) 774 final. The total financial support over the period 2009-2013 should be around 700 million €.

As a matter of fact, OIV is already including some important new importers as Russia and Brazil and a potentially important importer as India. Moreover as a Chinese province, Ningxia, has recently become an observer, and OIV is developing wider relationships with China.

References

- ABARE Australian Bureau of Agricultural and Resource Economics and Sciences- (2012)
- Economic analysis of import tariffs in the wine markets of China and the Republic of Korea, Research report 12.7 July.
- Anderson K. (ed.). (2004). *The World's Wine Markets Globalization at work*. Edward Elgar, Cheltenham UK.
- Anderson K. (2010). Excise and Import Taxes on Wine Versus Beer and Spirits: An International Comparison. *Economic Papers*, 29 (2): 215-228, June.
- Anderson K., and Nelgen S. (2011a). Wine's Globalization: New Opportunities, New Challenges. *Working Paper No. 0111*, Wine Economics Research Centre, University of Adelaide, June.
- Anderson K., and Nelgen S (2011b), *Global Wine Markets: A Statistical Compendium*, 1961 to 2009, Adelaide: University of Adelaide Press, www.adelaide.edu.au/press.
- Anderson K. Wittwer G. (2012), Modelling the impact of exchange rate movements on the world's wine markets, 2007-2011, Wine Economics Research Centre Working Paper No. 0312 www.adelaide.edu.au/wine-econ.
- APEC (2011). Seminar on Key Issues in Wine Regulation September 18-19, San Franc., California.
- Babili M. (2009). Ad Valorem Equivalent in the WTO, NAPC-TPD, Working Paper n. 43.
- Banks G., and Overton J. (2010). Old world, new world, third world: Reconceptualising the worlds of wine. *Journal of Wine Research*, 21 (1): 57-75.
- Battaglene T. (2011). "Overview of the International Framework of International Organisations and Agreements", Session Two, Part A The Importance of International Organizations in Wine Regulation, Seminar on Key Issues in Wine Regulation, September 18-19, San Francisco, California.
- Cesaretti G.P., Green R., Mariani A., and Pomarici E. (2006). Il mercato del vino: tendenze strutturali e strategie dei concorrenti [The wine market: structural trends and competitors' strategies], Franco Angeli, Milan.
- Dunn, R.M. Jr., and Mutti, J.H. (2004). International Economics, Routledge, London.
- Deardorff A.V., and Stern R.M. (1998). Measurement of Non-Tariff Barriers, OECD Economics Department Working Papers No. 179
- Giuliani E., Morrison A., and Rabellotti R. (eds.) (2011). *Innovation and Technological Catch-Up The Changing Geography of Wine Production*. Edward Elgar, Cheltenham UK.
- Henson S., and Humphrey J. (2009). The Impacts of Private Food Safety Standards on the Food Chain and on Public Standard-Setting Processes Paper prepared for FAO/WHO, May 2009, available at www.fao.org.
- Hussain M., Cholette S., and Castaldi R.M. (2007). An Analysis of Globalization Forces in the Wine Industry, *Journal of Global Marketing*, 21 (1): 33-47.
- ICE (2010). Raccolta delle documentazioni necessarie per l'esportazione del vino. Verona.
- Knaup M. (2010). The World Wine Trade Group and the Need to Promote Cooperation Among the Wine Producers of the New World. VinoAdvising.
- Mariani A., Napoletano F., and Pomarici E. (2011). Small wine-importing countries: dynamic and competitive performance of suppliers. *Le Bulletin de l'OIV*, 84:968-969-970.
- Mariani A., Pomarici E., and Boatto V. (2012). The international wine trade: Recent trends and critical issues, *Wine Economics and Policy*, 1: 24-40.
- Pomarici E. (2013). A letter by the Co-editor-in-chief: A future of wine scarcity?. *Wine Economics and Policy*, 2(1): 1-2.
- OIV (2005). Comparative List of Oenological Treatments and Processes. Working document, OIV, Paris.
- Wine Institute (2013). International Trade Barriers Report for U.S. Wines 2010.
- Winemakers' Federation of Australia (2010). Submission on the Trans-Pacific Partnership Agreement Submission to DFAT.