

Quality Improvements and International Positioning of Chilean and Argentine Wines

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1. Introduction

The wine industry has become a sophisticated, knowledge-intensive, natural resource-based industry. Over time, this has translated into major quality improvements and considerable technological changes. In light of this, one might be sceptical about the ability of developing countries to enter the market successfully and sustain increased exports. However, trade data clearly show that some developing countries have successfully entered the wine industry, to the point that three of them – Chile, Argentina and South Africa – currently rank among the top ten leading wine exporters.

This paper looks at the cases of Chile and Argentina, adopting a comparative perspective. It addresses a number of key questions: for example, what can explain the fact that the wine export boom unfolded only in the 1980s in Chile and in the 1990s in Argentina and not earlier, as, for example, in California and Australia? Is there evidence to suggest that Chilean and Argentine wine exports have been characterized by an increase in quality and value-added contents over time? Are the (internal and external) conditions under which the Chilean and Argentine wine industries currently compete at the global scale any different from those in the past?

In order to answer these questions, this paper is structured as follows: Section 2 discusses how to define and assess the quality of Chilean and Argentine wines from a methodological perspective. Section 3 discusses the natural assets and competitive cost structure that underlay the successful export performance of the Argentine and Chilean wine industries, as well as the impact of macro-economic conditions at their point of departure. Section 4 assesses the quality improvements introduced in the Chilean and Argentine wine industries over time. Section 5 explores whether such improvements have been matched by an equal improvement of their positioning in the international market. The concluding section questions the long-term sustainability of the export boom of Chilean and Argentine wines.

2. Defining and assessing wine quality: a methodological perspective

Defining and measuring wine “quality” is a challenging task, as the perception of quality is inevitably influenced by subjective, highly idiosyncratic criteria and depends on individual taste, expectations and aesthetic culture (Oczkowski, 2001). The Romans had already recognized the subjective dimension of wine quality in the famous proverb “*quam ob rem de pricipatu se quisque iudicem statuet*” – which means that for what wine is concerned, everybody should rely only on personal judgments (Pliny the Elder, *Naturalis Historia*, book XIV). In more recent times, the most famous quote on wine quality belongs to the reputed American oenologist Maynard Amerine, who claimed that “*quality in wines is much easier to recognize than to define*” (Amerine and Roessler, 1976).

During the last three decades, however, the modern wine industry has been able to clearly quantify some of the components determining wine quality: negative quality factors, such as off-flavors, are scientifically detectable and objectively classifiable; positive quality factors are usually ranked according to a series of codified categories: subtlety and complexity, balance and harmony, duration, aging potential, stylistic purity, varietal expression. Moreover, one should consider that, despite their clear limitations, quality indicators, such as those just mentioned, are reflected in both ranking by experts and consumer acceptance statistics (Jackson, 2008).

In this context, the widely diffused and highly criticized 100-point scale invented more than thirty years ago by Robert Parker has been defined as “*a precision assessment tool that offers consumers certainties in an uncertain world*” (Brook, 2000).¹ In his newsletter *The Wine Advocate*, Robert Parker regularly judges the wines he tastes, awarding them points based on the scale out of 100. The underlying assumption of Parker’s scale, which has become the dominant force in the wine world, is that a professional assessment of wine quality is possible. Also in Europe, Parker’s writings have had a tremendous influence on the winemaking community, and especially on premium wine producers. According to Beazley (2000): “*The financial implications [of Parker’s writings] are so significant that no European fine-wine producer can afford to ignore them, making him a stylistic dictator*”.

At the same time, however, many wine critics are increasingly unsympathetic towards the “Parkerization” of the wine industry worldwide, and in particular, towards the convergence on a pronounced wine “oakiness” and high alcohol contents as a global style of winemaking, irrespective of the characteristics and the importance of local *terroir* (McCoy, 2006). This is even more significant, considering that Parker’s scale has traditionally refers to higher-priced premium wines only, and has not included either ordinary table or bulk wines until 2009, when he published a guide of wines priced under 25 US\$ (Parker, 2009).

It should be recalled here that wines are internationally classified based on alcohol concentration. These are still, sparkling and fortified wines.² Still wines, which account for 88 percent of the market, are divided into basic and premium wines. In general, premium wines are made of high oenological quality varieties of French origin and are usually sold bottled, rather than in bulk as most basic wines are. High oenological quality varieties include grape varieties – such as Cabernet Sauvignon, Merlot, Pinot Noir, Cabernet Franc, Chardonnay, Sauvignon Blanc – which are particularly appreciated by international consumers and, therefore, dominate the world wine export markets (see Table 1).

¹ Parker’s scoring system starts with a potential of 50 points. The wine’s general color and appearance can earn up to 5 points. Aroma and bouquet can earn up to 15 points, depending also on the wine’s cleanliness. The flavor and finish can earn up to 20 points, depending also on the wine’s depth and length on the palate. Finally, the potential for further evolution and improvement through aging can earn up to 10 points.

² The alcohol content of still and sparkling wines ranges between 9 and 16 percent by volume. The third category, that of fortified wines, ranges between 16 and 22 percent by volume. Sparkling wines (dry or sweet) include, among others, the French champagne, the Italian spumante, the Portuguese *viño verde*. Fortified wines include, among others, marsala, vermouths, ports and sherries.

Table 1. High quality oenological grape varieties of French origin

Red varieties	Cabernet Sauvignon, Carmenère, Malbec, Merlot, Pinotage, Pinot Noir, Sangiovese, Syrah, Tempranillo, Zinfandel
White varieties	Chardonnay, Chenin Blanc, Pinot Blanc, Sauvignon Blanc, Sauvignon Gris, Sémillion

Source: OIV, 2010

Premium wines also follow the rules of **appellation control or geographical indication**, while basic wines normally do not (Johnson, 2007). In the wine industry, the concept of quality is increasingly associated not only with the presence of high oenological quality grape varieties, but also with the concept of *terroir*, namely the idea that quality is linked to “an origin of some kind” (Trubek, 2008). The French term *terroir* is presently used in the specialized literature to define the characteristics of a determined viticultural site in terms of soil, weather conditions and farming techniques, all contributing to the unique qualities of the wine. According to Hugh Johnson (1998), the reason why wines taste differently is that the composition of the soil where grapes are grown may vary drastically, much as everything above the surface does.³

The attempt to codify what Trubek (2008) has defined as “the taste of place”, connected to the idea of quality, dates back to the 1930s, when France introduced the AOC (*appellations d'origine contrôlées*) or appellation control legislation in order to protect French wines from a growing international competition, namely a legally defined and protected geographical indication system which identifies where the wine grapes are grown. As early as 1855, however, the establishment of the renowned Bordeaux wine classification system introduced the idea that a scientific approach to the local *terroir*, as something that could be known and studied, was not only possible but also desirable from a marketing perspective (Rohel, 2010).⁴

Currently, in some wine producing countries, especially in the New World, the appellation control legislation is limited to aspects of geographic origin and varietal authenticity. In others, especially in the Old World, it regulates grape varietal use, dictates production procedures, prohibits certain vineyard practices (such as irrigation), limits maximum yields and specifies maturation conditions. Such more rigid practice is meant to assure both quality and stylistic authenticity, but there is a wide debate on whether highly constraining appellation control systems, rigorously adopted in Europe really succeed in doing so, and on whether quality can more generally be guaranteed by law (Jackson, 2008).

Despite some notable exceptions, there is no doubt that the overarching international context and the regulatory framework, negotiated internationally and defining the product,

³ In this respect, he argues: “Properly understood, the concept of “terroir” means the whole ecology of a vineyard, every aspect of the surroundings, from bedrock to late frosts and autumn mists, not excluding the way the vineyard is tended, nor even the soul of the vigneron” (Johnson, 1998, p. 4).

⁴ In the 1855 classification, a five-group hierarchy was established for the best wines of the Medoc region, based on price. Despite its longevity and popularity, however, several recent studies have pointed to the obsolescence of this classification. According to Lewin (2009), for example, only one third of Medoc wines would currently belong to the same group as in 1855, if they were reclassified based on their average prices over the past decade.

its ingredients and its geographical origin, have played a major role in shaping wine quality standards. The changes in product characteristics towards rising value-added content are clearly reflected by the range of increasingly differentiated prices at which wines are sold on the market. International consumers tend not only to pay higher prices for bottled, high quality premium wines than bulk wines, but also to distinguish several categories of premium wines, such as icon-premium, ultra-premium, super-premium and premium wines (see Table 2). This reflects the reality of an extremely diversified product, which, at the cheap end of the market, can be considered a relatively ordinary, affordable beverage and, at the highest end, a luxury, positional good (Archibugi, 2007).⁵

Table 2. Wine quality segments based on price ranges

Category	Quality segments	Definition	Price range US\$/bottle	Main characteristics	Geographical indication
Premium Wine	Highest quality standard in the premium Category	Icon-premium Ultra-premium	>100 50-100	Consolidated image over time; complexity and aging potential; excellent reports by critics	Wines come from geographically defined and limited areas. In the Old World, they also have to follow specific rules regarding the grape variety, alcohol content, yield, pruning, etc.
	Intermediate quality standard in the premium category	Super-premium	20-50	Recognizable brand; complex structure; good reports by critics; richness and character.	Wines come from geographically defined and limited areas. In the Old World, rules are less strict than those governing the highest segment
		Premium	8-20		
Basic wine	Lowest quality standard in the premium Category	Popular-premium	5-8	Recognizable varietal characteristics; fruity flavour; easy to drink	The standard of the wine varies with the region, the grape variety and the year. Governing rules are soft
		Varietal-premium	3-5		
Basic wine		Bottled table wine	1-3	Varietal; simple structure; not much character	No geographical indication rules
		Bulk wine	<1	No brand; no restrictions; simple structure	

Source: Author's elaboration based on Rabobank, 2007

⁵ Plenty of evidence shows that international premium wine prices are strongly correlated to Parker's ratings, namely that changes in ratings for the same wine result in large price changes (Gibbs et al., 2009; Hadj Ali et al., 2008). Price elasticity with respect to ratings has increased considerably since 1993, in parallel to the increased globalization of the premium wine market (Gibbs et al., 2009). This is due to the increased proportion of "naïve" (vs "sophisticated") consumers that globalization has brought into the market, and who rely on reputational information rather than their own personal taste and quality assessment to purchase premium wines.

The solidity of the current position of Chile and Argentina as leading wine exporters actually opens up a series of interesting questions about the determinants of the export boom of their wine industries, their different performance over time, and the extent to which their increased exports have been characterized by increased quality and value-added, or have been confined to the low-end of the quality spectrum. It is worth remembering that, until a few years ago, the Argentine wine style was totally unattractive to international palates, and wine was produced in massive quantities for a particularly healthy but indulgent domestic market. In this respect, Stein (2004) claims:

The wines made during the 1970s for the Argentine taste were heavily coloured, alcoholic beverages of thirteen percent or more degrees and were often oxidized in flavour as a result of exposure to varying amounts of air after fermentation. Many producers stabilized their wines with boiled must, producing a sweetish drink with similarities to poor quality Sherry. Boiled must was not the only thing added to wine: the practice of watering wines, initiated during the early years of the industry, continued to occur fairly frequently according to contemporary observers (Stein, 2004, p.11).

Analogously, until the 1970s Chilean wines were confined to the niche of decent-but-not-great wines, and were often criticized as boring and monotonous, based on the limited number of varieties cultivated and the relative homogeneity of their taste (Robinson, 2001). In this respect, Robinson (2005) argues:

Chile's golden age was the end of the nineteenth century, when the rest of the wine world had been crippled by phylloxera, and this isolated wine producer could supply almost limitless quantities of healthy, deep-coloured wines [...] For the next hundred years there were very few changes in the vineyards and cellars of Chile. Professionals visiting the country in the late 1970s were quickly frustrated at the oxidized style of wines bottled for the local market. This tended to favour very fruity wines, lower in tannins and higher in acidity, very far from what foreign buyers would ever like (Robinson, 2005, p.134).

From the above, it becomes clear how the export success of the Chilean and Argentine wine industries was far from predictable, and how crucial it is to investigate whether their successful export performance was a natural extension of earlier practices, or rather the result of radical changes in product and process techniques that led to tangible improvements in product quality over time. In order to understand whether the recent export boom of Argentina and Chilean wines was based on a constantly increasing product quality, or whether only quantity increased and quality levels deteriorated or remained unchanged over time, a series of proxy indicators of wine quality specified below will be used (see Table 3). These will assess the progress (or lack thereof) in the achievement of **product differentiation** of Argentine and Chilean wines, as well as the progress (or lack of) in the **positioning in the international market** of Argentine and Chilean wines. Before doing that, however, some clarification on the natural and historical conditions of departure of the export boom of Chilean and Argentine wines are provided.

Table 3. Selected indicators to assess quality improvements of Chilean and Argentine wines

Area	Quality indicators	Relevance
Product differentiation	Replacement of low quality grapes (the País or Criolla variety), with high quality grapes of French origin	Due to its adaptability to all climatic conditions, the País or Criolla grape has been for centuries the most common vine cultivated in both Chile and Argentina. Given its poor oenological quality, it is only suited for inexpensive, domestic wine consumption
	Identification and valorization of a typical, emblematic variety (such as Zinfandel in California, Tannat in Uruguay, or Pinotage in South Africa)	The identification of an indigenous variety is very important for strengthening the international recognition of a national identity and for differentiating from foreign competitors
	Introduction of zoning practices of main winemaking areas and designation of origin regulations	A reliable appellation system is considered synonymous with high quality almost everywhere in the world and is a key asset for strengthening international reputation.
Positioning in the international market	Rising export unit values	An increase of export prices generally reflects the higher quality of the products being offered. Changing economic conditions, however, may also have an influence
	Increased exports to demanding markets of destinations	Until the 1980s, both Chilean and Argentine wine exports were concentrating in Latin America, a market traditionally demanding lower quality wines than, e.g., Europe or the United States
	Better international ranking over time	Global competition in wines is very pronounced. Serious investment in marketing strategies and branding usually results in increased international recognition and ranking in international competitions

Source: Author's elaboration

3. Conditions of departure of the export boom

When analyzing the recent export boom of Argentine and Chilean wines, compared to other Latin American countries – such as Peru, Ecuador or Bolivia – it is striking to note how unanimously the specialized literature on the subject considers the natural and climatic conditions of Chile and Argentina ideal for vine cultivation – with this also being a common topic in the local and international press.

The key and most-publicized viticultural advantage of Chile is the absence of pests and diseases, such as oidium and phylloxera. In order to survive, the Europeans had (and still have) to graft their vines onto resistant American rootstocks, which inevitably alter the flavour of the wine. Chileans are the only producers in the world who can plant phylloxera-free vines, since the typical French varieties were imported into Chile in 1851, thereby fully

preserving their identity and original taste until the present day (to the point that international agronomists have proposed including them in UNESCO’s World Heritage protected patrimony). Another commonly recognized viticultural asset of Chile is related to the country’s very favourable natural conditions: climate (limited precipitation, high levels of summer sunshine and great luminosity, moderate temperatures, light winds), soil composition and types (mostly poor in organic matter and well-drained) and geography (splendid natural barriers that completely isolate the country – the Andes Cordillera to the East, the ocean to the West, the Atacama desert to the North, the Antarctic to the South) make Chile the ideal place to produce quality wines.⁶

Contrary to Chile, Argentina is characterized by more delicate climatic conditions. Climate is more unpredictable than in Chile, with spring frosts and summer hails. However, from a more qualitative point of view, Argentina has a more diversified *terroir* and a broader range in the latitude of planted vineyards (from the cool lowlands of Patagonia in the South to the high altitudes of Calchaquies Valley in the far North) than Chile, California, Australia, or any other New World producer (*Austral Spectator*, 2004).⁷ In particular, the wide range of climatic conditions and the presence of high altitude plains with cool climates are considered a real asset for the production of quality wines (Arkell, 1999). They are at the origin, for example, of the production of more than 50 grape varieties, including the red Malbec and the white Torrontés, which represent the two typical and internationally recognized Argentine specialties, as will be seen in more detail in the following sections.

As a matter of fact, Chile and Argentina are both considered a sort of “viticultural Nirvana” where grapes can achieve slow maturation and a perfect equilibrium of sugars, tannins and acids (see Table 4). Additionally, land and production costs are comparable, and are lower with respect to their direct competitors, such as Australia, California and New Zealand (Rabobank, 2007).

Table 4. Strength of basic production factors in Chile and Argentina

	Chile	Argentina
Geography	Isolation (no phylloxera, few diseases) Wine growing regions between latitudes 33° and 27° South from Atacama desert to Tierra del Fuego)	Different regions and altitudes (from Salta to Patagonia) Very high average altitude of vineyards - 2,700 ft (intense sunlight, cold nights, dry mountain air)
Climate	Four clearly differentiated seasons Little rain in spring and almost none in summer and autumn Cold winters but low incidence of frost in spring Intense light (adds flavour)	Intense light (adds flavour) Abundant water High plains with cool climate Well-defined winters, hot summers Little rain (but abundant melting snow from the Andes allows irrigation when required)

⁶ Chile is divided into 13 administrative regions (I-XII from North to South), plus the Metropolitan Region, including the capital city, Santiago, and its surroundings. Grape growing for wine production currently takes place in one third of the territory and in 7 of the 13 Chilean regions.

⁷ Argentina is a Federal State and is administratively organized into 24 provinces and the Autonomous City of Buenos Aires, the Federal Capital District. Wine grapes are grown in 13 of the 24 provinces, and in 8 of them viticulture represents an economically meaningful activity.

	Abundant water from the Andes No need of reservoirs for irrigation Numerous microclimates Wide thermal range	Ample sunshine Few diseases No much wind, except Patagonia No hail, except Mendoza
Land	Relatively cheap land (approx. 20,000 US\$ per hectare)	Abundant and cheap land (approx. 16,000 US\$ per hectare)
Raw materials	Little use of pesticides Presence of pre-phylloxera vines, no American rootstocks Mainly drip irrigation Totally ungrafted vines	Little use of pesticides 50% of vines are more than 25 years old Mainly flood irrigation Mainly ungrafted vines
Labour	Low unskilled labour costs Easily available manpower	Low unskilled labour costs Easily available manpower
Firm gate price /litre	0.30-0.40 US\$	0.40-0.50 US\$

Source: Author's elaboration based on Rabobank, 2006 and 2007

As seen in the table above, both Chile and Argentina rely on very favourable natural conditions for wine production, as well as on a series of competitive basic production factors, such as low cost of inputs (e.g., limited use of pesticides and use of ungrafted vines), cheap labour and abundant land. Therefore, it is not as surprising that both countries have become successful wine exporters, nor that they are performing better than other Latin American countries. However, such favourable characteristics have always existed as a point of departure and have represented a structural comparative advantage for centuries. Besides, they can also be found in less successful wine producing developing countries, such as Uruguay and Brazil (Benavente, 2004). Thus, none of these factors alone can fully explain why Chile and Argentina have suddenly succeeded in competing in an increasingly sophisticated industry, where a few established producers – such as France, Italy and Spain – have dominated the international market for centuries.

The timing of the recent entry of the Chilean and Argentine wine industries into the international market can be directly related to a series of conjunctural socio-economic factors, namely to the process of trade liberalization and market opening that characterized the early 1980s in Chile, and the early 1990s in Argentina, as well as to those countries' transition to democracy. Their delay with respect to other New World producers can be ascribed to a turbulent political climate, unstable macroeconomic conditions, economic recession and social unrest under the dictatorship of Pinochet in Chile (1973-1988) and the military regimes consecutively led by Videla (1976-1981), Viola (1981), Galtieri (1981-1982) and Bignone (1982-1983) in Argentina. These factors prevented both countries from attracting foreign investors, modernizing and competing in a timely manner compared to other New World producers.

In Chile, not before the 1990s, with the end of the dictatorship, did foreign investors show a renewed interest in the potential of the Chilean economy and its fertile natural conditions, and were reassured by the results of the more “pragmatic”, export-led model to promote economic growth (Stiglitz, 2002). Measures such as the Liberalization Decree on

Foreign Investment was introduced by the military government in the second half of the 1980s, with the aim of promoting economic recovery. However, tangible positive results came about only after democratic elections were finally held, resulting in the election of President Patricio Alwyn. With the transition to democracy, the introduction of export subsidies, better control of the financial system and the stabilization of both inflation and interest rates, the wine revolution could finally take off. Thanks to the arrival of foreign investors, the trend towards a drastic uprooting of vines that had characterized the 1980s, and the progressive replacement of vineyards with pines and eucalyptus trees for the expanding wood-processing industry, could be completely reversed. In 2000, the total amount of planted land could rise again to 103,876 hectares, the same level as in the 1950s, representing an 81 percent increase in only five years.

The same is true for Argentina, even though, with respect to Chile, the Argentine wine industry entered the world market with approximately ten years delay. This can be ascribed to a prolonged turmoil of political nature, as well as to the radical changes and instability that characterized Argentina's macroeconomic setting differently from Chile, especially considering that until 1989 a strict import substitution policy kept the Argentine internal market, including that for wine, fully protected. After 1991, a drastic trade liberalization and privatization process took place, led by President Carlos Menem and symbolized by the Deregulation Decree Nr. 2284, and by a radical monetary reform which pegged the Argentine peso to the US dollar – a policy which put an end to a long period of financial instability and hyperinflation but culminated ten years later in a 140 billion US\$ external debt default and a devastating financial crisis. Paradoxically, however, the wine industry was one of the few industries that performed greatly during the decade of the 1990s, and also one of the few exceptions during the 2001-2002 financial crisis, as both local and foreign companies continued to expand and increase their operations despite four years of uninterrupted recession.

Both in Chile and Argentina, therefore, the impact of political changes and macro-economic conditions on the expansion of the wine industry has been undeniable. Contrary to the past, however, a competitive pricing structure based only on stable macro-economic conditions and static comparative advantages – such as natural resource endowments, low labour costs or the availability of cheap land – was certainly not enough for Argentina and Chile to breach into the international wine market. Under the new circumstances – characterized by the aggressive entry of New World producers, such as California and Australia, and by the defensive-offensive reaction of Old World producers, who have been fighting back to regain lost market shares – upgrading the quality of the wines produced, adapting them to commercial requirements, differentiating the product and meeting international standards and consumer tastes were the necessary conditions for all latecomers in entering the international wine industry.

4. Quality improvements of Chilean and Argentine wines

This section assess to what extent the quality of Chilean and Argentine wine improved over time, and whether such improvements have corresponded to higher perceived value in the international market. It should be recalled here that quality is inherently a subjective, idiosyncratic concept, and thus very difficult to measure. However, in Section 2 a set of

indicators have been identified – relating to both the product characteristics *per se*, as well as its positioning in the international market – aimed at measuring the evolution of Argentine and Chilean wines over time in terms of quality improvements. The indicators include:

- the replacement of low quality grapes traditionally grown in Chile and Argentina (such as País, Cereza, Misión or Criolla) with **high-quality grapes** of French origin, which are more highly demanded by international consumers;
- the identification and valorization of a **typical, endogenous variety**, which is very important for strengthening the national (wine) identity and for differentiating it from foreign competitors with a “symbolic” local specialty; and
- the introduction of **zoning practices** of principal winemaking areas and the designation of origin regulations, which are considered synonymous with quality almost everywhere.

Looking at the market, rather than at the product *per se*, it becomes clear that, in order to track the quality upgrading of Chilean and Argentine wine exports, it is equally important to measure the following variables:

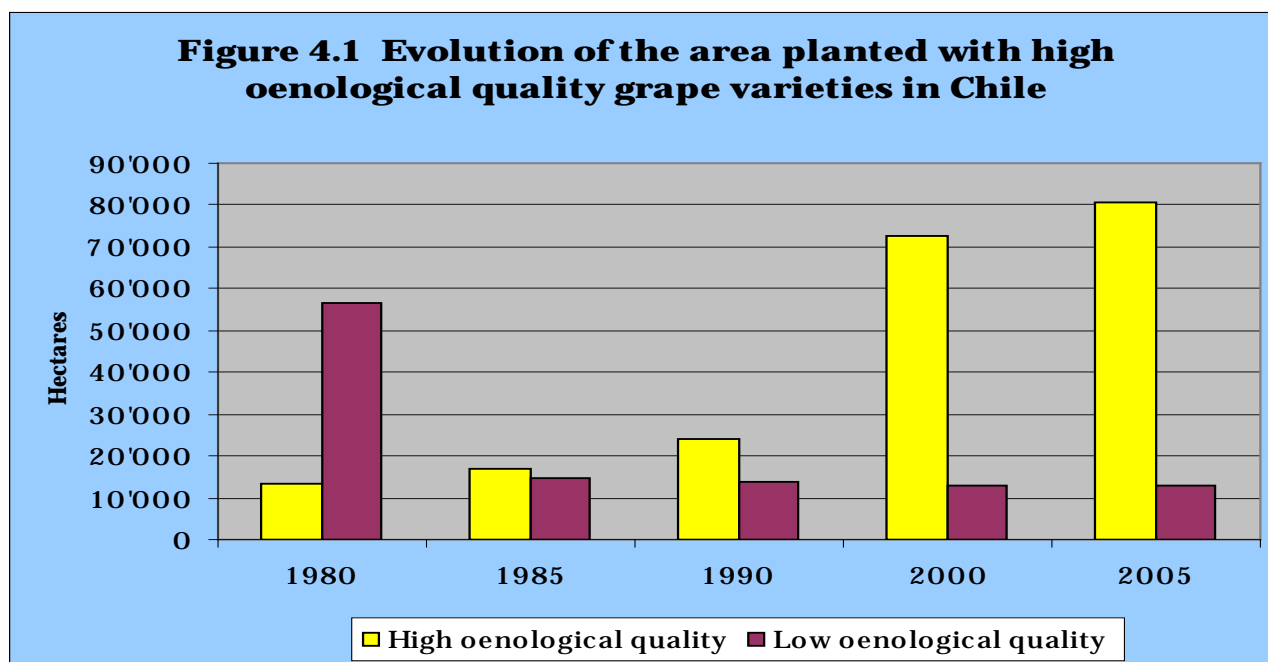
- the **export unit values** trends, which generally reflect the higher quality of the products being offered;
- changes in the **composition of destination markets**, which may be traditionally oriented towards wines of different quality levels; and
- the evolution of **international rankings** over time, as measured in the present case by *Wine Spectator*, which is one the most influential and reputed international wine magazines.⁸

4.1 Replacement of low quality grapes (the País variety), with high-quality grapes of French origin

In the case of Chile, the global trend towards an increase in the consumption of fine wines and the concomitant steep decline in consumption of table wine is reflected in the drastic replacement of the traditional, low-quality wine grape variety (País), with fine French grape varieties required for the production of export wines (see Figure 4.1), namely Cabernet Sauvignon, Merlot, Chardonnay and Sauvignon Blanc, but also, to some extent, Syrah and Pinot Noir (*Wine Spectator*, March 2012). Jancis Robinson, a prominent wine writer who publishes weekly columns in the *Financial Times*, recently argued that, contrary to the past, Chile can now produce not only well-made wines of Cabernet

⁸ Some studies show that the findings don't change if other international magazines, or wine guides, are taken as a reference. For example, McDermott (2005) compared the ranking of Chilean and Argentine wines by *Wine Spectator* and *Wine Enthusiast* from 1993-2003, and found that overall, the weighted scores of the two magazines differed but to the same degree for both countries, thus the ultimate message of the comparative analysis did not change.

Sauvignon and Merlot grapes, but also a “full-throttle Syrah, a surprisingly delicate Pinot Noir, and some of the most interesting old-vine Carignan in the world, as well as a range of competent white wines”. She also argued that “the most exciting thing about Chile is how rapidly its wine scene has been evolving with an ever-wider range of successful grape varieties and newer, cooler wine regions emerging all the time” (*The Financial Times*, 25-26 September 2010).⁹



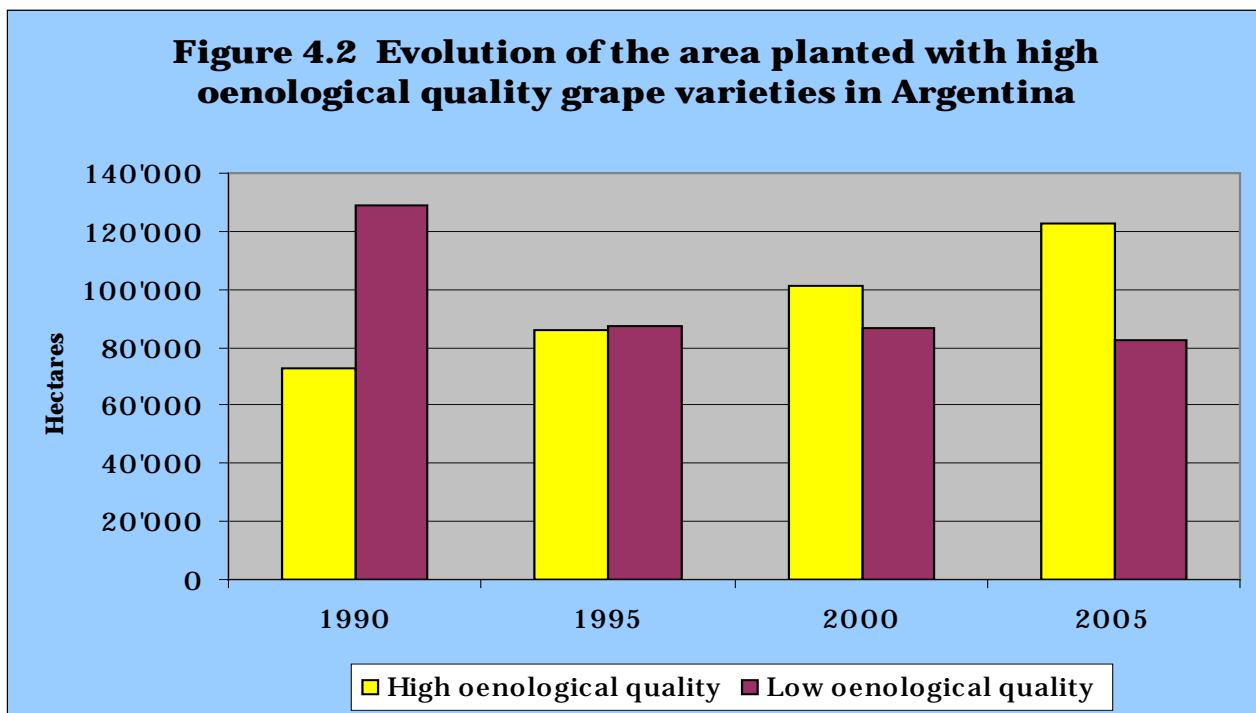
Source: Author’s elaboration based on SAG, 2009

- High oenological quality grapes: Cabernet Sauvignon, Merlot, Syrah, Pinot Noir, Carmenère, Cabernet Franc (red varieties); Chardonnay, Sauvignon Blanc, Riesling, Semillon, Gewürztraminer (white varieties)
- Low oenological quality grapes: País, Misión, Criolla

In the late 1980s, more than 10,000 hectares of vines were replanted in Chile with what are internationally considered high-quality oenological varieties and since then these have largely overtaken the amount of hectares planted with the old País variety. Wine experts argue that some of the best red wines of the Southern Hemisphere come from Chile and are made principally from Cabernet Sauvignon, which is the base of the great Medoc wines (Purdy, 2001). In fact, Cabernet Sauvignon represents the most planted red variety in Chile: in 1997 it surpassed, and subsequently overtook by more than double, the local País variety. Currently, higher quality premium wines are made solely from Cabernet Sauvignon, even though many of these still lack the structure to age and develop in a bottle, which is something most sophisticated wine consumers would normally look for (Robinson, 2005). Chilean super-premium wines, made of an assemblage of red varieties (Bordeaux style) and aged in small oak barrels, have seen their profile being raised uninterruptedly.

⁹ Source: <http://www.ft.com/cms/s/2/e31cb6be-c769-11df-aeb1-00144feab49a.html#axzz22IekHUB8>.

As in the case of Chile, data on the evolution of vineyards' planted area confirm that Argentina is following the worldwide tendency, led by changing consumer tastes, to switch from the massive production of ordinary table wines to a lower quantity but higher value production of premium wines. Although the Criolla grape still represents about half of the country's vineyards, the 1980s were characterized by an intensive eradication process of all grape vines of lower oenological quality (-35 percent) and the 1990s by a stabilization of the vine planted area, as well as by a sustained process of conversion towards international fine varieties. At the end of the 1990s, one eighth of total planted vineyard area had been converted to the production of exportable wine varieties made of high oenological quality grapes (see Figure 4.2). However, besides betting on the traditional French varieties to appeal to international markets, as the large majority of Chilean producers have done in the past, Argentine vine growers have atypically preserved a space for old European varieties such as Bonarda, Sangiovese and Nebbiolo, allowing them to offer a much broader range of wines beyond the "big four" French varieties than any other New World producer. This puts Argentina in the group of wine-making countries with the broadest range of grape varieties in the world.



Source: Author's elaboration based on INV, 2009

- High oenological quality grapes: Barbera, Bonarda, Cabernet Franc, Cabernet Sauvignon, Malbec, Merlot, Pinot Noir, Sangiovese, Syrah, Tannat (red varieties); Tempranillo, Chardonnay, Chenin Blanc, Pedro Gimenez, Pinot Blanc, Sauvignon Blanc, Sauvignonasse, Semillón, Torrontés Riojano, Ugni Blanc, Viognier (white varieties)
- Low oenological quality grapes: País, Misión, Criolla

The stirring of the export potential of Argentine wines is even more interesting, considering that their distinguishing features bring them so far from most New World wines and so close to the European culture that Argentina could be better defined as an atypical, half-way “old” New World producer (Farinelli, 2007; Goldfarb, 2007). Already in 1884, the founder of the modern Argentine wine industry, Tiburcio Benegas, recommended that wine should be made in a European style, namely that of *bourgogne* and *bordeaux*, using fine French grape varieties rather than the widely spread Criolla grape and avoiding all forms of adulteration, quite common at that time.¹⁰ This shows the familiarity of Argentine consumers with assemblage or blend wines of European style, and the fact that, contrary to many other New World producers, the bias towards pure varietal wines was recently introduced by the changing fashion of international markets.

4.2 Identification and valorization of a typical variety

In the Chilean case, special attention needs to be paid to the growth of the Carmenère variety (+104 percent in the last three years), which is becoming more and more the “wine of Chile”. Grown in very few other countries, Carmenère was cultivated and vinified for decades in Chile as Merlot, because of its similar, “plummy” and herbaceous taste. Not until 1994 did Jean-Michel Bourisquot, a French ampelographer¹¹ from Montpellier, suggest during one of his visits to the country that there were strange differences in some of the Chilean Merlot plantations (e.g., darker collared leaves, larger grapes, longer ripening periods). He also suggested that these were not due to the presence of different clones of Merlot but very likely to a totally different variety called Carmenère, which was once known as Grand Vidure and had disappeared from most European countries after the explosion of phylloxera.

At present, Carmenère is almost unique to Chile, with a total of 6,849 hectares planted (see Table 5). After the discovery, some producers tried to deny the evidence, fearing a collapse of their (blended) Merlot sales, but many others quickly understood that Carmenère could become for Chile the equivalent of Pinotage in South Africa, Tannat in Uruguay or Zinfandel in California. In the world, only 4,500 additional hectares are planted in Northern Italy, Napa Valley and Washington State, while China has started a few new plantations of this variety. Carmenère was discovered in 1994 in the oldest winery in Chile, Viña Carmen, which had imported this variety in the 1850s. In 2009, Jean-Michel Bourisquot commemorated the fifteenth anniversary of the rediscovery of Carmenère in Chile, and acknowledged the role of Viña Carmen “*in having given back this variety not only to Chile but to the entire world*” (*Wine Spectator*, March 2010).

¹⁰ According to Stein (2004), from his Trapiche winery Tiburcio Benegas formulated real recipes for what he called imitation Bordeaux and Bourgogne wines. The imitation Bordeaux wines consisted of 75 percent Malbec with 25 percent Cabernet Sauvignon and another kind of Cabernet (Franc?) plus a bit of white Semillon. Imitation Burgundy wines were made of 25 percent Grey Pinot Noir, 25 percent Gamay and a touch of Pinot Blanc and Gamay Blanc.

¹¹ Ampelography (from Greek Αμπελος, “vine” + γραφος, “writing”) is the field of botany concerned with the identification and classification of grapevines. Traditionally this has been done by comparing the shape and colour of the vine leaves and grape berries; more recently the study of vines has been revolutionised by DNA fingerprinting (Source: Wikipedia).

Table 5. Evolution of the planted hectares with high quality oenological grape varieties in Chile, 1995-2005

Grape Variety	1995	2000	2005	Variation 2005/2000	Variation 2000/1995	Variation 2005/1995
Red varieties						
Cabernet			40,441			
Sauvignon	12,281	35,967		+12,44%	+192,87%	+229,30%
Merlot	2,704	12,824	13,142	+2,48%	+374,26%	+386,02%
Pinot Noir	215	1,613	1,361	-15,62%	+650%	+533,02%
Carmenère	-	4,719	6,849	+45,14%		
Syrah	19	2,039	2,988	+46,54%	+10631,58%	+15626%
Cabernet Franc	17	689	1,099	+59,51%	+3952,94%	+6364%
White varieties						
Chardonnay	4,402	7,672	8,156	+6,31%	+6,31%	+85,28%
Sauvignon Blanc	6,135	6,790	8,379	+23,40%	+23,40%	+3658%
Chenin Blanc	106	76	76	0%	0%	-28,30%
Riesling	296	286	293	+2,45%	+2,45%	-2,01%
Semillón	2,649	1,892	1,708	-9,73%	-9,73%	-35,52%
País	15,280	15,179	14,909	-1,78%	-1,78%	-2,43%

Source: SAG, 2009

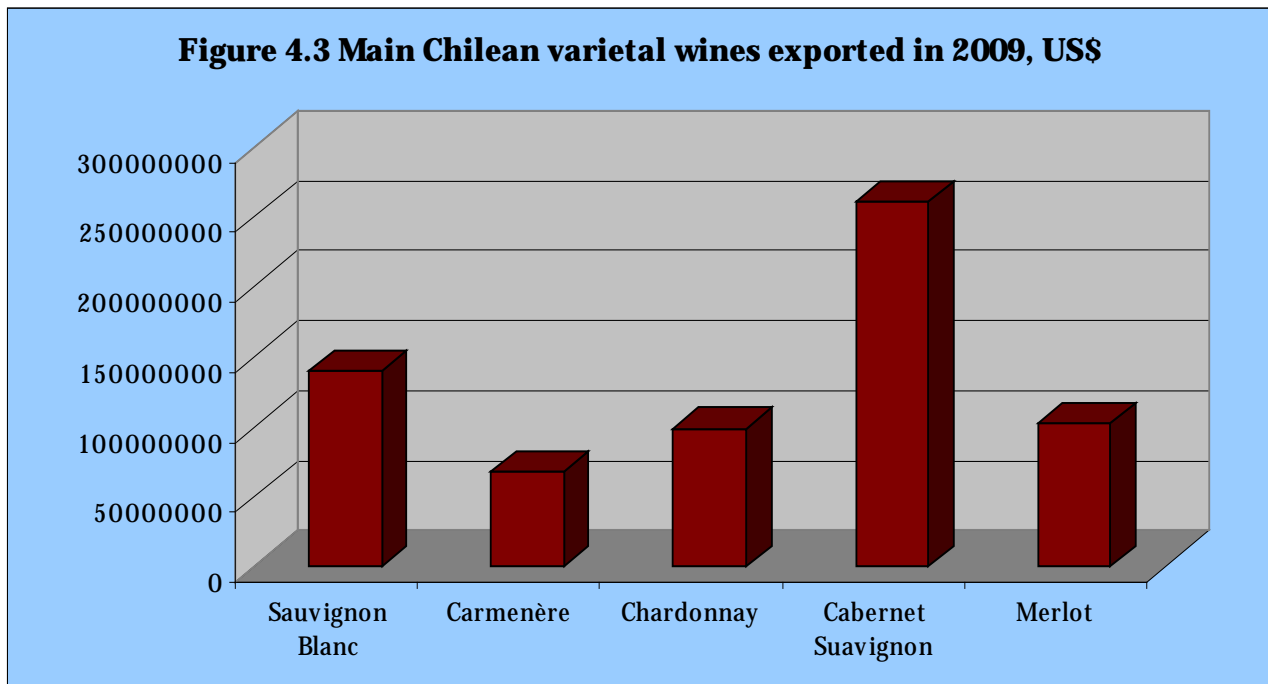
According to data provided by the Chilean Agricultural and Ranching Service (SAG), Carmenère currently represents 25 percent of total Chilean wine exports, and will become the country's icon product within the next ten years.¹² At present, the best Chilean Carmenères are still blended with Cabernet Sauvignon, but many oenologists are trying their best to extract the most attractive taste from this "new" and relatively unknown wine grape. The Chilean Carmenère is now being exported as a varietal alone (see Figure 4.3) and increasingly receiving international recognition. For example, in 2009 the Carmin de Peumo Carmenère from Concha y Toro was awarded 97 points by Robert Parker, in his magazine the *Wine Advocate*.

This success is also due to the remarkable progress Chileans have achieved in identifying the best *terroir* for each variety, namely Maipo Valley for Cabernet Sauvignon, Casablanca and Limarí Valley for Chardonnay, San Antonio Valley for Sauvignon Blanc, Colchagua and Peumo Valley for Carmenère, Leyda Valley for Pinot Noir.¹³ In the past, Chilean vineyards used to be planted in the hottest zones of the central winemaking belt, which begins in Santiago and ends 300 kilometres away to its south. Currently, vines are being planted in cooler areas, especially in sub-regions marked by the ocean's influence, and a detailed mapping of the Chilean viticultural potential, which has been neglected for long time, is

¹² Source: www.sag.cl

¹³ In Chile, there are thirteen wine sub-regions, so-called « Valleys », which stretch from about 400 kilometers north of the capital city, Santiago, down to 650 kilometers south. Within this elongated area, there are several different climate and soil conditions, depending on the proximity of the valleys to the Pacific Ocean, rather than to the Andean mountains or their central position.

finally underway, as the recent commitment of several Chilean institutions and research centers to fill this gap clearly shows.



Source: ProChile, 2010

As in the case of Carmenère in Chile, over the past decade Malbec has become the flagship of Argentine wines. It is derived from French Cot, but has developed distinctive characteristics which, after 130 or 140 annual cycles, transformed it into a truly “endogenous” variety. Currently it represents nearly half of the area devoted to finer varieties, and its importance has been growing uninterruptedly (see Table 6). Malbec is considered by the specialized literature as Argentina’s “winning horse” (*Wine Spectator*, December 2009). The winemaker Nicolas Catena was the first Argentine winemaker who made a premium varietal Malbec for export, in 1994. The forefather of Nicolas Catena, who emigrated from Italy to Argentina in 1898, had planted the very first Malbec vineyards in Argentina in 1902. Until 1989, however, the family winery was known mainly as a table wine producer.

In the 1980s, Nicolas Catena spent a few years in California, as a post-doctoral student in economics at the University of Berkeley. When he returned to Argentina, in the late 1980s, he brought back with him all the lessons and the new ideas about winemaking techniques, vertical integration to acquire more control over the quality of grapes produced, and varietal focus for marketing purposes, which were permeating the Napa Valley. It nevertheless took fifteen years of research at the vineyards and three years of trial-and-errors at the winery before he could bottle the first Catena Malbec. In turn, he successfully experimented with a new, unusual pricing strategy for the Argentine context, which consisted of establishing straight away a high price from the start for all his premium wines, a price that international consumers at the time were reluctant to pay for a wine from the New World (13-16 US\$ rather than the usual 4-6 US\$). His strategy was so successful that Catena Zapata is now selling its Malbec Reserva for more than 100 US\$.

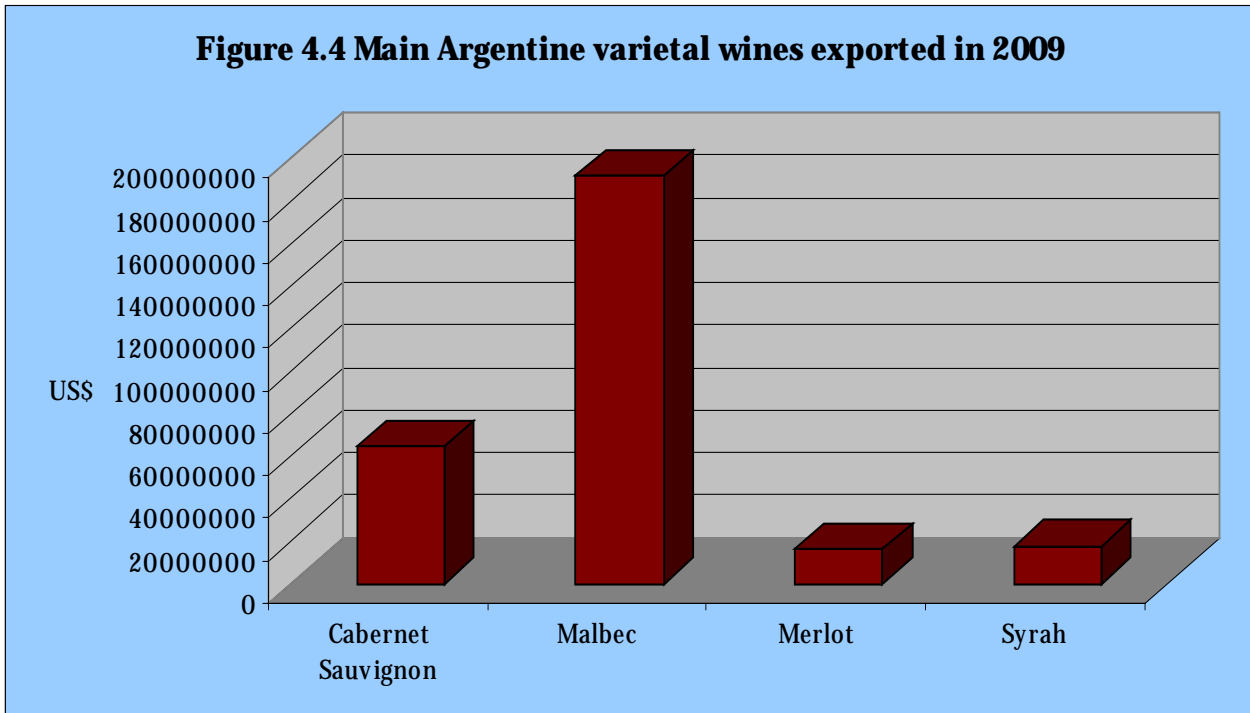
Table 6. Evolution of the planted hectares with high quality oenological grape varieties in Argentina, 1990-2005

Grape Variety	1990	2000	2005	Variation 2005/2000	Variation 2000/1990	Variation 2005/1990
Red varieties						
Malbec	10,45	16,34	21,18	+29,57%	+56,35%	+102,47%
	7	9	3			
Bonarda	12,186	14,98	18,03			
		9	3	+20,31%	+23,00%	+47,98%
Cabernet Sauvignon	2,347	12,199	16,92			
			8	+38,77%	+419,77%	+621,26%
Syrah	687	7,915	11,678	+47,60%	+1051,67%	+1599,85%
Merlot	1,160	5,513	7,371	+33,70%	+375,26%	+535,43%
Tempranillo	5,659	4,335	6,099	+40,69%	-23,40%	+7,78%
Pinot Noir	232	1,047	1,253	+19,68%	+351,29%	+440,09%
Barbera	958	1,061	910	-14,23%	+10,75%	-5,01%
White varieties						
Torrontés	8,625	8,181	8,106			
Riojano				-0,92%	-5,15%	-6,02%
Chardonnay	908	4,525	4,771	+5,44%	+398,35%	+425,44%
Chenin	4,031	3,591	3,027	-15,71%	-10,92%	-24,91%
Ugni Blanc	2,229	2,846	2,603	-8,54%	+27,68%	+16,78%
Semillon	1,255	1,028	988	-3,89%	-18,09%	-21,27%
Sauvignon Blanc	278	827	1,478			
				+78,72%	+197,48%	+431,65%
Sauvignonasse	998	798	713	-10,65%	-20,04%	-28,56%
Riesling	293	156	131	-16,03%	-46,76%	-55,29%
Total	18,617	22,04	21,373			
		7				
País (Criolla)	129,07	87,34	82,44			
	1	7	7	-5,61%	-32,33%	-36,13%

Source: INV, 2009

The increased popularity of Malbec is spearheading Argentine wine exports, and over half of Argentine exported wines are either varietal bottlings of Malbec or Malbec-based blends (see Figure 4.4). Additionally, one quarter of the 600 Malbec wines reviewed by *Wine Spectator* in 2009 received ratings above 90 points, an outstanding result compared to other varieties, especially considering that international consumers are just starting to get familiar with different styles of Malbec, originating from different *terroirs*, namely from the warmer areas in northern Mendoza (e.g. Agrelo and Lujan de Cuyo) to the cooler areas in the southern part (e.g. Tupungato and La Consulta). This shows the immense potential of this variety, in terms of diversification and distinctive styles. In the future, Argentina is expected to further increase its export potential thanks to the growing popularity of its emblematic Malbec grape, to the point that wine experts have predicted that by 2015 Argentine red Malbecs will occupy a “place in the pantheon of noble wines” (Fielden, 2001; Stein, 2004 and 2008; Stein and Zucca, 2005). As the renowned wine critic Robert Parker explains, “*Malbec, a grape long considered challenging and often disappointing in France, produces prodigious wines of great perfume, quality and longevity in Argentina. Malbec is the red wine hope of Argentina*” (Parker, 2005).

Figure 4.4 Main Argentine varietal wines exported in 2009



Source: Pro Mendoza, 2010

4.3 Introduction of zoning practices of main winemaking areas and designation of origin regulations

Another indicator of the commitment of the Chilean wine industry to quality upgrading and diversification is the introduction of the denomination of origin concept. According to Law 464 enacted in 1995, five large wine producing regions have been recognized in Chile, from North to South, corresponding to the same number of regional appellations (*Denominación de Origen*). Within each region, thirteen sub-regions or valleys are distinguished, together with a number of zones for each sub-region. With a great variety of soils and different climates, the valleys (or sub-regions) carry the names that most often appear on Chilean wine labels. In particular, Article 3 of Law 464 establishes that the name of the valley origin can only appear on the label if at least 75 percent of the bottled wine has been produced with grapes that have been cultivated in that valley, and also that only high-quality grape varieties can be certified through the appellation system.

Data show that in 1997 Chile produced 2.4 million hectolitres of wine with denomination of origin, corresponding to 57 percent of total wine production, while ten years later this amount had increased to 7 million hectolitres, corresponding to 85 percent of total wine production (see Table 7). There is clear evidence that Chile is following the international pattern of shifting from the production of table, bulk wines to the production of fine, bottled wines, and progressively increasing the quality of bottled wine produced by following the rules of denomination of origin, which are compatible with the EU regulatory system.

Table 7. Evolution of Chilean wine production with Denomination of Origin

Year	Premium wine with Denomination of Origin		Premium wine without D.O.	Table wine	Total
	Quantity (in hectolitres)	% of total	Quantity (in hectolitres)	Quantity (in hectolitres)	
1997	2,489,287	57,75%	1,330,057	490,905	4,310,249
1998	2,996,983	56,92%	1,443,082	825,438	5,265,503
1999	2,395,729	55,97%	1,318,548	565,874	4,280,151
2000	3,748,213	58,39%	1,956,098	715,063	6,419,374
2001	4,460,397	81,82%	583,290	408,098	5,451,785
2002	4,430,500	78,79%	834,463	358,267	5,623,230
2003	5,460,865	81,72%	947,611	273,745	6,682,221
2004	5,474,888	86,89%	577,173	248,675	6,300,736
2005	6,303,212	79,93%	1,047,796	534,503	7,885,511
2006	7,163,042	84,78%	861,365	424,370	8,448,777
2007	7,038,873	85,04%	879,062	359,525	8,277,460
2008	6,919,658	79,64%	1,331,964	436,552	8,688,173
2009	8,665,659	85,86%	1,152,065	275,198	10,092,923
2010	7,445,528	81,35%	1,271,634	435,222	9,152,384

Source: Author's elaboration based on SAG, 2011

The Chilean system of regions, sub-regions, zones and areas set up by the law ideally tries to emulate the European conception of “denomination”, which would become an integral part of the names of the wines. However, the geographic areas have been identified based on political and administrative criteria, rather than on winemaking ones. It has been argued, for example, that, from a strictly scientific point of view, it would probably have made more sense to trace vertical distinctions rather than simple horizontal ones. The climate (fresher closer to the Andes and to the sea, warmer in the central valleys) is actually one of the most important distinguishing factor of the Chilean *terroirs* (Robinson, 1999). Additionally, the “embryonic” Chilean denomination of origin system is inspired by principles of geographical reference, but includes no other standard regulating harvesting or winemaking practices, as is the case in the European system (Arkell, 1999).

In any case, the Agriculture and Livestock Service (SAG, *Servicio Agrícola y Ganadero*), the government institution dealing with wine control and certification by the Ministry of Agriculture, deserves a special mention for having actively pursued the promulgation of this law and is now acting as a regulatory and control body for its enactment. Chile has been very active also in promoting international wine trade by recognizing the effectiveness of the regulatory systems for wine standards of New World producers. In 2001 it became part of a Mutual Acceptance Agreement on Oenological and Winemaking practices between the governments of the USA, Canada, Australia, Chile and New Zealand, which represents a breakthrough to access new export markets.

The case of Argentina is very different. The denomination of origin law was enacted only in 2004, and is presently applied to three regions only, namely Luján de Cuyo, San Rafael (in

the Mendoza province), and Rio Negro,¹⁴ and to much more limited quantities in comparison to the total amount of DOC wine produced in Chile. Accurate data on the amount of wine vinified with DOC certification is currently missing. However, the recognition of the DOC certification is regulated by rigorous filters and control mechanisms by INV, the National Institute for Vitiviniculture. In fact, the Argentine wine industry is the most tightly controlled of the continent: through INV, the state annually sets the dates for the end of the harvest and the release of the new wines, and it establishes the minimum percentage of alcohol of that year's wines – thereby neglecting some of the most envied and criticized freedoms of the New World, which Chile, instead, has transformed into one of its key competitive advantages.

5. International positioning of Chilean and Argentine wines

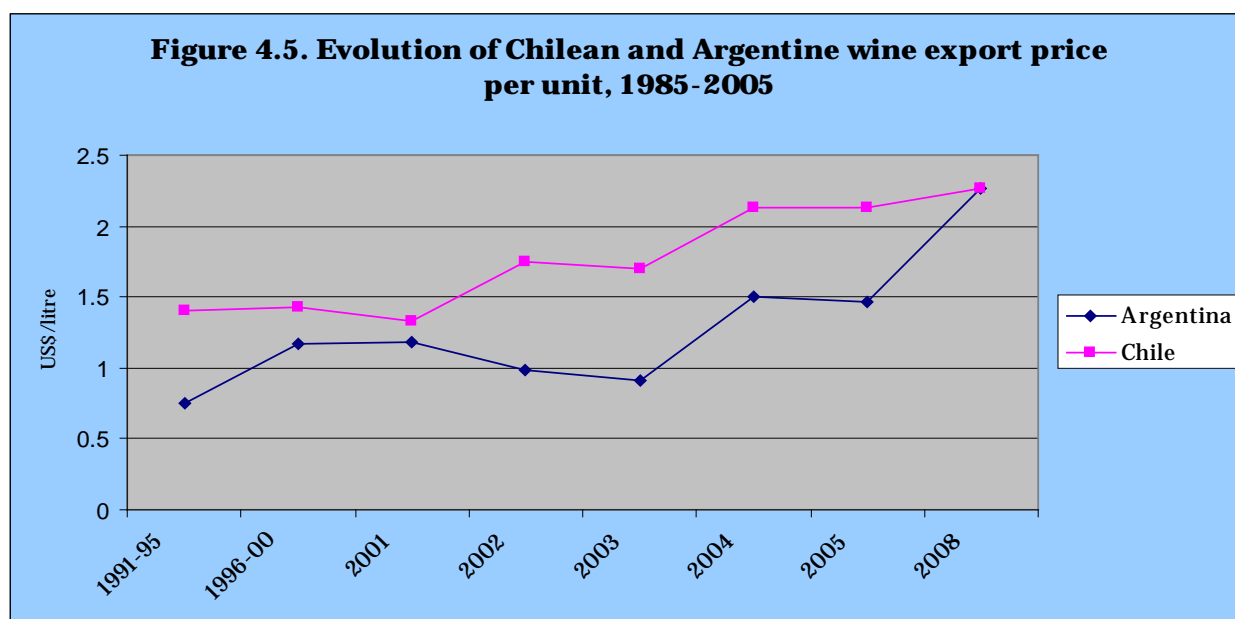
This section assesses whether the substantial efforts put in place to improve the quality of Chilean and Argentine wines, described above, correspond to an equally visible improvement of average prices, international ranking and market outreach over time. From an analytical perspective, these represent also key variables, since in the wine industry the definition of product quality is no longer the exclusive domain of wine producers, and a predominant role is now played by consumers, who are often inexperienced and purchase wines in supermarkets (Cusmano, Morrison and Rabellotti, 2009). As Aylward and Zanko (2006) put it, *“beyond any intrinsic characteristics, the ultimate criterion of [wine] quality is the value perceived by the market”*. For developing countries, as the examples of the Chilean and Argentine industries show, this makes entry conditions even more difficult, as they have to face a twofold challenge: that of increasing the quality contents of their wines, but also that of consolidating their reputation to make sure that international consumers clearly perceive such improvements and are available to reward them with increasingly high prices.

5.1. Rising export unit values

Looking at the composition of wine exports, it emerges that, in 2008, more than 70 percent of the wines produced in Chile were exported. Of these, approximately two thirds were fine wines sold in bottle at 3.64 US\$, while one third were sold in bulk at 0.63 US\$ per litre. On average, Chilean export prices per unit increased over the last years from an average of 1.20 US\$ per litre in the period 1985-90, to 1.40 US\$ in the period 1991-95, to 1.45 US\$ in the period 1996-2000 US\$, to 1.80 US\$ in the period 2001-2005, up to 2.26 US\$ per litre in 2008 (Rabobank, 2009). Contrary to the Chilean case, in Argentina ordinary table wines now represent 30 to 40 percent of all exports and are sold at approximately 0.50 US\$ per litre, while premium wines, which are sold in bottle at 2.40 US\$ per litre, represent more than half of export volume and over 70 percent of export value (see Figure 4.5). This is reflected in the dramatic increase of the **Argentine export price per unit**, which, increased over the last years from an average of 0.45 US\$ per litre

¹⁴ In Argentina, the viticultural zone can be divided into three well differentiated areas due to their natural climatic characteristics and the diversity of their soils: the Northeast area, including the provinces of Calchaqui, Catamarca and La Rioja; the Midwest area, including the Mendoza and San Juan provinces, where the majority of vineyards are concentrated; and the South area, including the Neuquén, Rio Negro and Chubut provinces.

in the period 1985-90, to 0.75 US\$ in the period 1991-95, to 1.17 US\$ in the period 1996-2000 US\$, to 1.20 in the period 2001-2005, up to 2.27 US\$ per litre in 2008, which was marginally above the export price per unit of Chilean wine (Rabobank, 2009).



Source: Author's elaboration based on Rabobank, 2007

Indeed, demanding international consumers have been increasingly receptive towards wine originating from South America, and this allowed Chile to more than double the average price per unit of foreign sales in two decades – a clear indication of the surprising strength of its wine exports in the world market, especially considering that Australia represents its direct competitor. Chile has traditionally exported both bottled and bulk wine. The efforts of many wineries to increase their premium-bottled wine exports are reflected in the expansion of bottled versus bulk wine exports.

It should be highlighted that, in the 1980s, less than 1 percent of the total production was exported in bottles (Alvarado, 2004). The now common 750cc bottles were introduced in Chile in 1964 by a local winery (Concha y Toro). Until then, most Chilean wine was distributed internationally in bulk, in demijohns of 10 litres or jugs of 5 litres. At present, the situation has changed substantially: the quantity of wine exported in bottles has equalled and then surpassed the quantity exported in bulk (it now represents 86 percent of total wine exports) and the price per hectolitre is now 3.7 times higher (see Table 8).

Table 8. Export volumes and prices of bottled vs. bulk Chilean wines

	Wine export volume (litres)		Wine export price (US\$ per litre, FOB)	
	Bottled	Bulk	Bottled	Bulk
2007	364,500,000	352,000	2.99	0.54
2008	370,500,000	218,000	3.17	0.92
2009	382,900,000	279,000	2.89	0.77
2010	426,000,000	275,000	3.00	0.97

Source: US Foreign Agricultural Service, 2010; Viñas de Chile, 2011

The transition illustrated by the table above was far from easy or automatic. Over time, **Chile** has developed the reputation of an exporter of low-priced, good quality, extremely fruity and “clean” varietal wines. Thus, for a long time a few international consumers have been ready to pay 10-15 US\$ for a bottle of Chilean wine. In 2008, almost half of the Chilean bottled wine exported was paid 15-25 US\$ per case, which corresponds to 1.25-2.08 US\$ per bottle (see Figure 4.6). Wine experts argue that Chilean wines tend to receive an inferior price than its competitors, for the same intrinsic value product. In other words, there is a gap between the intrinsic quality (physical, chemical, tasting) and the perceived quality, which leads consumers to pay an inferior price. This is a serious weakness, which involves aspects that go beyond purely quality issues, and increasingly appears to be a matter of image, commercialization, market intelligence and after sale services. Additionally, even though the “classic” French varieties are indeed the most successful at the international level, and an emblematic variety (Carmenère) has been clearly identified, Chile has not yet developed a local style which is strong enough for international consumers to distinguish Chilean wines with enough clarity and originality (Purdy, 2000).



Source: ProChile, 2010

Contrary to Chile, **Argentina**, has avoided becoming trapped in the niche of good quality cheap wines. Its growth has been slower but it has targeted higher prices since the beginning. Jancis Robinson, the wine critic of the *Financial Times*, recently argued that, compared to Chile, Argentina could offer wines with “a stronger personality and substantially upper along the scale” (*The Financial Times*, 25-26 September 2010). The reluctance of Argentine winemakers to follow marked international trends, as Chile has done very effectively, explains why Argentina does not have a clear image in the export market yet, but in the medium to long term this could be a tremendous advantage, since it will allow the country to produce wines with different varieties and styles. As it can be seen from the table below, between 2007 and 2010, exports of bulk wine diminished drastically (-35 percent), while exports of bottled wines more than tripled. The price of bottled wine increased from 2.77 US\$ per litre in 2007 to 3.35 US\$ per litre in 2010, while the price of

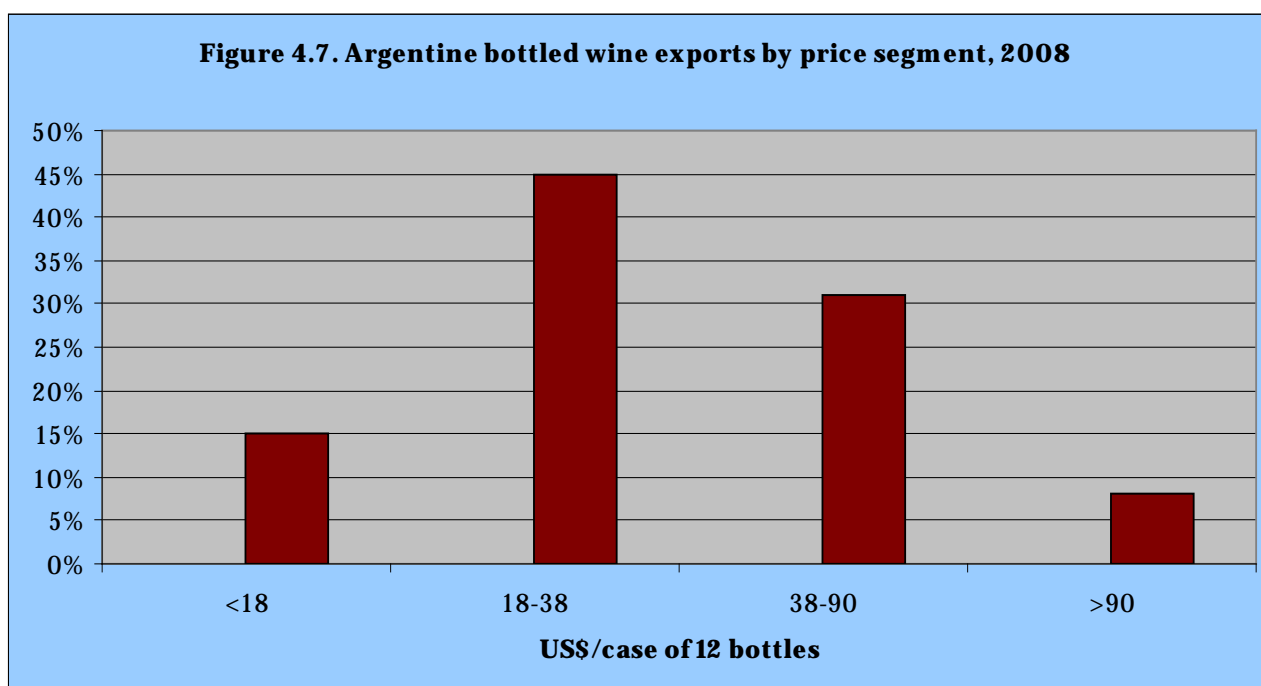
bulk wine increased from 0.34 US\$ per litre to 0.84 US\$ per litre during the same period (see Table 9).

Table 9. Export volumes and prices of bottled vs. bulk Argentine wines

	Wine export volume (litres)		Wine export price (US\$ per litre, FOB)	
	Bottled	Bulk	Bottled	Bulk
2007	63,739,500	68,046,000	2.77	0.34
2008	72,660,000	99,714,000	3.12	0.39
2009	176,891,833	69,078,601	3.12	0.53
2010	193,700,146	44,580,343	3.35	0.84

Source: Wines of Argentina, based on data provided by DGA, 2011

On average, in 2008 half of the Argentine bottled wine exported earned 18-38 US\$ per case, which corresponds to 1.5-3.1 US\$ per bottle (Figure 4.7). This shows that the international prices of Argentine wines are becoming comparable to those of the better known Chilean wines, and that Argentina is becoming known for its ability to produce high-quality wines as well.

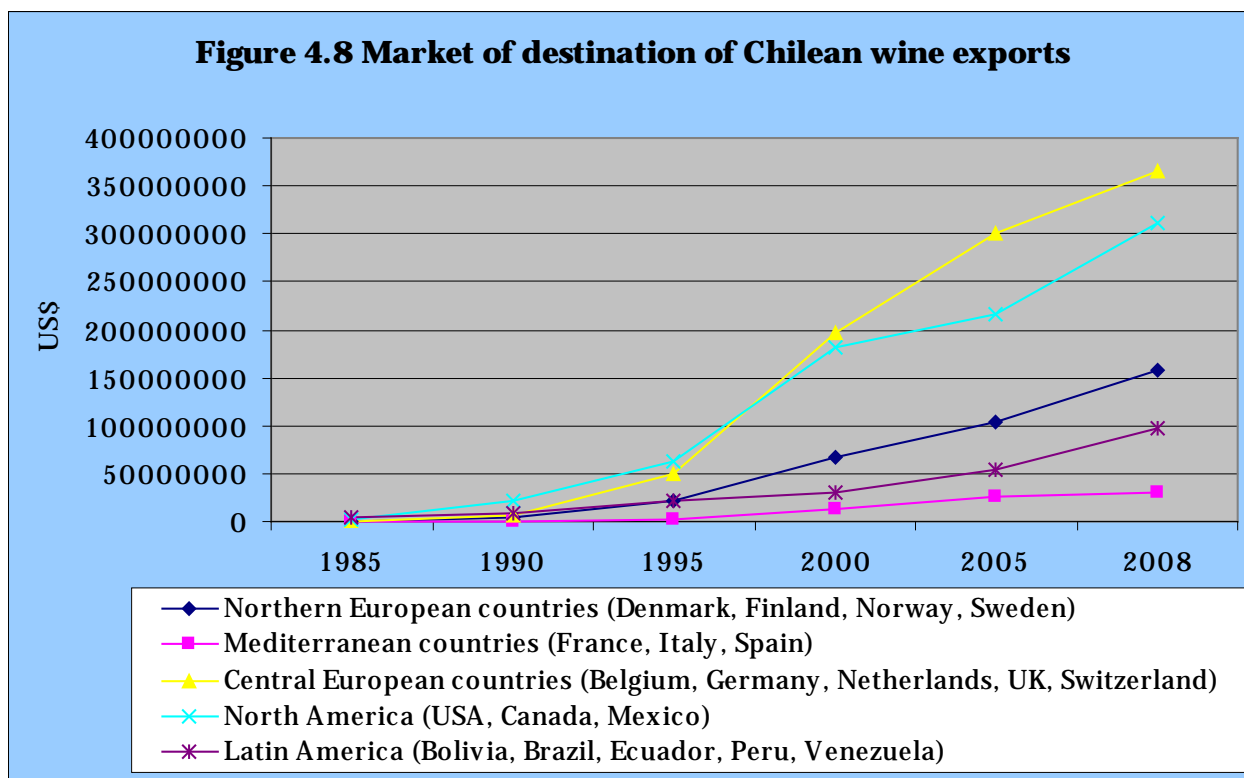


Source: Wines of Argentina, 2010

5.2 Increased exports to more demanding market destinations

In terms of countries of destination, the United States have represented Chile's biggest export market for over a decade, but since 1999 they rank second, after the European Union (led by Great Britain). Canada is the third, but a large part is imported in bulk and bottled locally under names that sometimes do not explicitly recall the Chilean origin of the wine. Since the early 1990s, Chilean wines have received an increasingly enthusiastic reception in Western Europe (especially in Germany, the Netherlands, Switzerland and the Nordic countries), which together represent the destination of almost 50 percent of

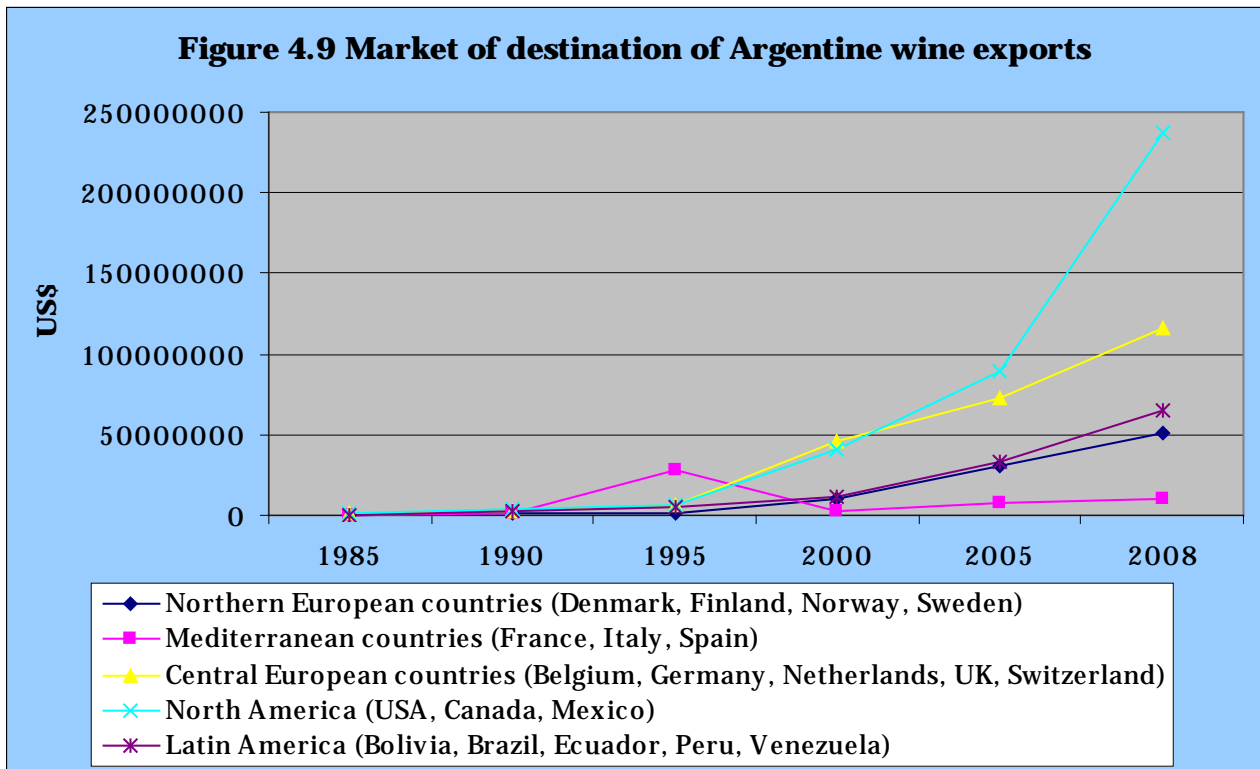
Chilean exports. This allowed a remarkable expansion and diversification of their final market destinations: from 36 countries in 1984, Chile was exporting wine to over 122 countries in 2008. Among these, China has become one of the largest markets for Chilean wines, although this only emerges clearly when looking at figures in terms of volume and not in terms of value. This is explained by the fact that China does not yet represent a sophisticated, discerning market, which would create demand pull effects on quality upgrading. More importantly, as shown by the figure below, there has been a drastic increase in the share of wine exports directed to higher-quality markets (such as Europe and the United States), and a drastic decrease of the share of exports directed to low-level, cheap markets (such as those of Latin America, where Chile traditionally exported the bulk of its sweet, lower quality wines). In particular, in 1985 36.2 percent of Chilean wine exports in terms of value were destined to Latin American countries, while in 2008 this figure had dropped to 7.1 percent. Conversely, in 1985 the percentage of wine exports destined to Western Europe was 3.6, while in 2008 it had risen to 42.3 percent. In 2008, the UK was the main market destination, followed by the US, Canada and Mexico (see Figure 4.8).



Source: Comtrade

In the case of Argentine wines, the industry successfully managed to diversify its exports to different geographical markets. At present, the main importing countries are Great Britain and the United States, followed by Japan and Belgium. This represents an important quality indicator, since in the past, as in the case of Chile, the main importers of Argentine wines were traditionally other Latin American countries which used to orient their imports towards bulk table wine. From 22 countries in 1984, in 2008 Argentina exported its wines to more than 115 countries. Argentina's exports to the United States have grown much faster than, for example, Chile's (see Figure 4.9). In particular, in the period in which

Argentine exports to the US were growing by nearly 80 percent, Chilean exports to the US hardly registered any increase. In 1985, 18 percent of Argentine wine exports were destined to the North American market. In 2008, this figure had reached the top ceiling of 37 percent. At present, the US market alone absorbs almost 30 percent of all Argentine wine exports, driven by an increasing number of US consumers seeking diversity and expressing a clear preference for well-identifiable varietal wines (Stein, 2008). Contrary to Chile, though, the percentage of wine exports destined to the Latin American market has continued to increase over time, and has now reached a ceiling of 10.2 percent.

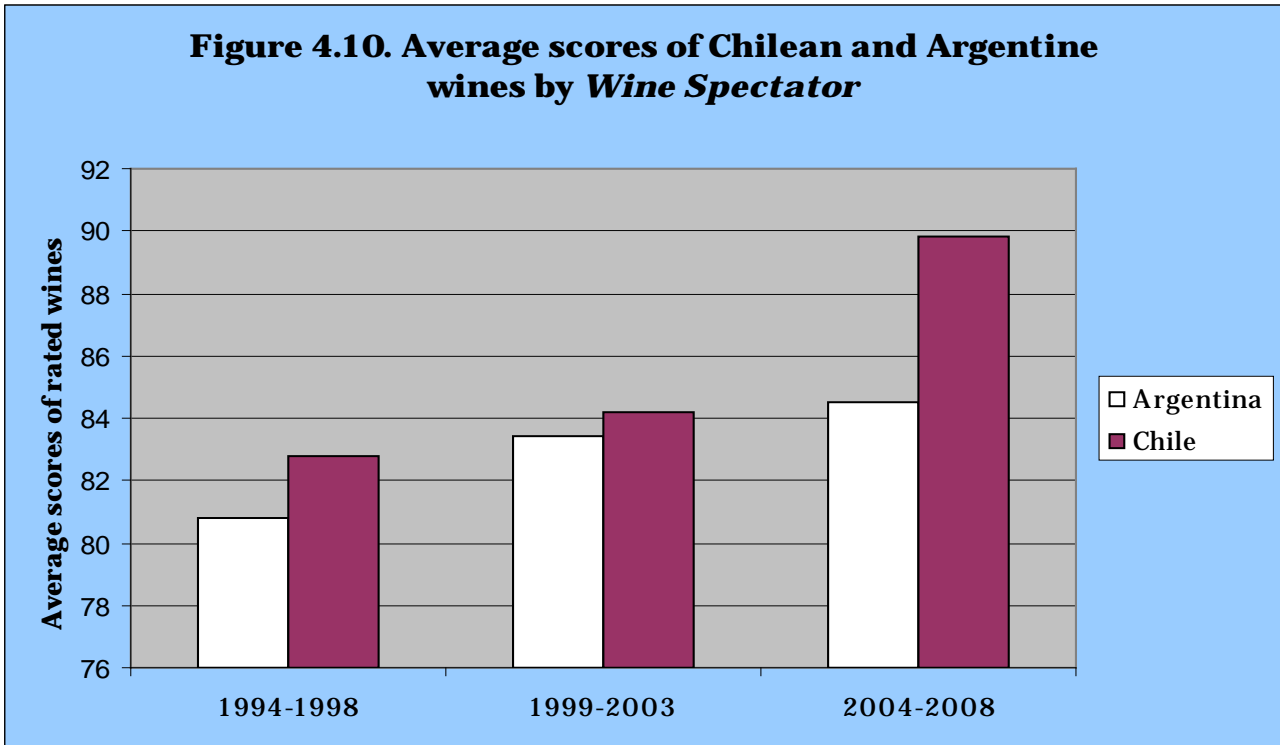


Source: Comtrade

5.3 Better international ranking over time

Data show that the capacity of Chile and Argentina to produce premium and super-premium wine is gradually being recognized at the international level. Their average scores by *Wine Spectator*, for example, have improved substantially over time (see Figure 4.10). In this respect, Agosin, Alvarez and Bravo-Ortega (20102) argue that the wine-country image is fundamental, and that there are important externalities affecting it, either positively or negatively. Chile has certainly benefitted from its reputation as a reliable, organized and stable country, as well from the popularity of other agro-industrial exports such as salmon or table fruits. Compared to Chile, though, Argentina possesses a better country image, and can count on the international popularity of tango, Patagonia and football, as well as on the charm of its capital, Buenos Aires, as symbols of beauty, entertainment and passion. These assets have certainly contributed to mark the positive image of Argentina and to increase the international recognition of its wines.

Figure 4.10. Average scores of Chilean and Argentine wines by *Wine Spectator*



Source: Author's elaboration based on *Wine Spectator* database, 2009

A sign of the growing stature of Chile on the wine world stage is the increased number of not only reserve wines, but also of cabernet-based premium and ultra-premium wines for which international consumers are starting to pay prices normally associated to class Bordeaux bottles. Almaviva, Clos Apalta, Don Melchor, Don Maximiano and Montes Alpha M., are some of the wines that are reputed to justify the price (over 50 US\$), and are identifying Chile as prime-wine producing land, as was the case with California a decade or two ago. The clear sign of this breakthrough is that in 2008, for the first time in history, a Chilean wine, the *Clos Apalta* from Casa Lapostolle, ranked first in the list of the Top 100 wines by *Wine Spectator*, with 96 points (which, as previously explained, are computed based on four criteria: quality, value, availability and passion). *Clos Apalta*, which represents one of the few Chilean super-premium, icon wines, was selected among 19,500 wines reviewed in blind tastings from 14 countries around the world.

Analogously, Argentina is now producing icon and super-premium wines. The top scoring Argentine wines are generally Malbecs. The Achaval-Ferrer Malbec Finca Altamira, for example, produced from old, low-yielding vines located in a cool, high-elevation area of southern Mendoza, received 97 points for several consecutive years and is now valued in the international market at more than 112 US\$. Achaval-Ferrer was also appointed winery of the year by *Wine Spectator* in 2009. This is not an isolated case. Malbecs by Catena Zapata, La Consulta, Bodega Mendel and Viña Cobos, scored above 90 points and are valued on the market at more than 100 US\$ as well. Comparative data related to the ratings of *Wine Spectator* in 2010 show that the international performance of Argentina can now be fully compared to that of Chile (see Table 10) – but also and especially that Argentina is challenging the New World wine producer “trap” by targeting a higher segment of the international market, rather than being caught at its lowest end. The specialized literature, however, suggests that, in order to get to the next level, Argentine

wines should aim to reach the same international recognition of Malbec with other varieties, such as Cabernet Sauvignon, Torrontés or Syrah (*Wine Spectator*, June 2010).

Table 10. Wine ratings by *Wine Spectator*, 2010

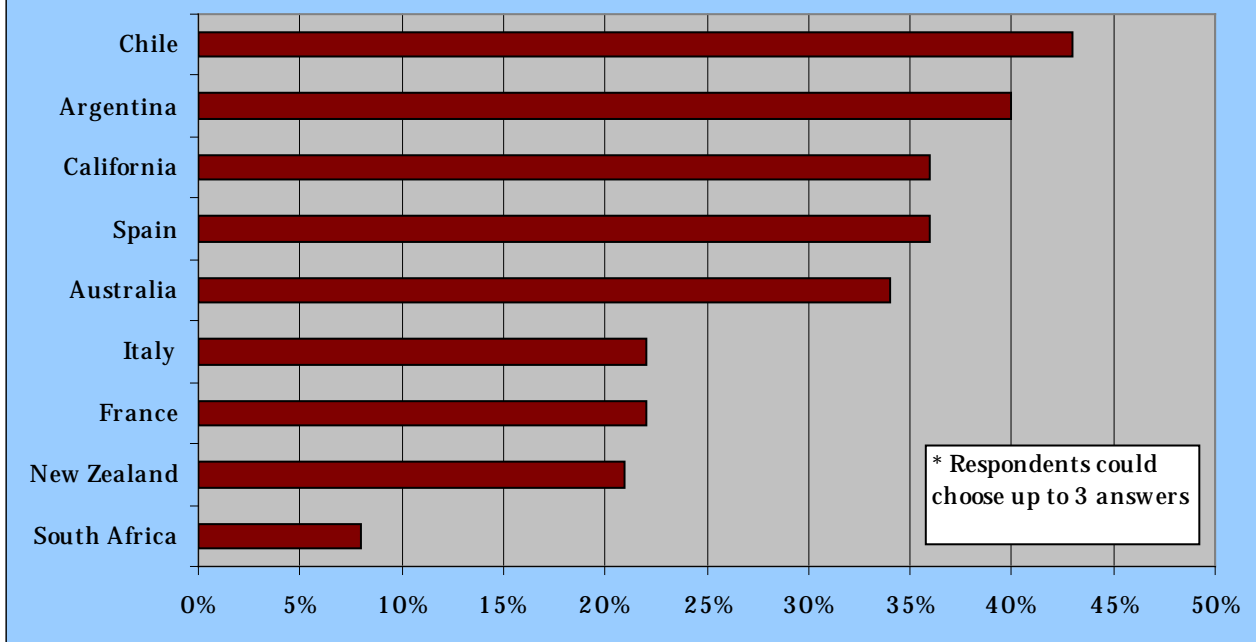
	Number of observations/ Average price	95-100 points	90-94 points	85-89 points	80-84 points	50-79 points
Argentina	624/ 53 US\$	1%	13%	45%	33%	8%
Chile	576/ 42 US\$	0%	12%	52%	31%	5%
Australia	512/ 50 US\$	1%	24%	63%	10%	2%
California	2,758/ 74 US\$	3%	26%	51%	18%	2%
New Zealand	223/ 29 US\$	1%	27%	62%	8%	2%
South Africa	450/ 28 US\$	1%	28%	46%	20%	5%
France	4,084/ 96 US\$	2%	39%	49%	9%	1%
Italy	1,737/ 55 US\$	3%	32%	51%	12%	2%
Spain	932/ 69 US\$	1%	16%	48%	29%	6%

Source: *Wine Spectator*, Jan.-Feb. 2011

The table above reveals, that a large gap still exists between the perceived “quality” of Argentine and Chilean wines as reflected in *Wine Spectator* ratings, compared to other New World and Old World producers, especially in the range of good wines, valued by *Wine Spectator* with 90-94 and 85-89 points. If this represents a weakness of the Chilean and Argentine wine industries that is certainly not easy to overcome, it should be considered that the emergence of élite super-premium Chilean and Argentine wines hardly was a less ambitious challenge, and might well function as a triggering factor to increase the number wines rated in the most valued categories after the top one.

This expectation is reinforced by the results of the periodic survey carried out by *Wine Spectator* in early 2010, with the aim of detecting main trends in wine preferences and buying habits of wine lovers (*Wine Spectator*, October 2010). Quite interestingly, when asked to identify the top three states or countries viewed as the most reliable source of value, South America came out particularly high. As top source for reliable value, 43 percent of respondents chose Chile, while 40 percent of respondents chose Argentina, closely followed by other New World producers such as California (36 percent) and Australia (34 percent). Remarkably, Chile has taken over from Australia the role of provider of reliable and affordable red wines and of fresh and fruity white wines. Among Old World producers, Spain is the only producer who could compete with New World producers, with 36 percent of preferences, followed very distantly by Italy and France, with 22 percent of preferences each (see Figure 4.11). This confirms the rising reputation of wines from Chile and Argentina, and in particular the appreciation of international consumers for good quality, relatively low-priced wines.

Figure 4.11 States or countries considered as most reliable sources for value wines, Wine Spectator Survey, 2010*



Source: *Wine Spectator*, October 2010

In summary, the data presented in this section show that in the last few decades both Chile and Argentina have performed well not only in terms of export growth, but also in terms of quality upgrading and of positioning in the international market. This means that Chilean and Argentine wine production has become increasingly adapted to international taste, and that several improvements occurred in all areas under examination (see Table 11). In the case of Chile, strong progress took place in three areas: the considerable uprooting and replacement of low oenological quality grapes with high oenological quality grapes; the rising trends of export unit values; the increasingly better international ranking achieved by Chilean wines over time. Good improvements were detected in another two areas, namely: the introduction of zoning practices and denomination of origin regulations; and the shift of Chilean wine exports towards more demanding market destinations. Moderate but valuable progress was detected in the identification of a typical variety (Carmenère).

In the case of Argentina, strong improvements were detected in two areas: the identification of Malbec as a typical variety and the shift of Argentine wine exports towards more demanding market destinations, such as the United States. Good improvements were detected in two other areas: rising export unit values and the increasingly better international ranking achieved by Argentine wines over time. Moderate but still valuable progress was detected the remaining two areas, namely the gradual uprooting and replacement of low oenological quality grapes with high oenological quality grapes and the introduction (still at embryonic stage) of zoning practices and denomination or origin regulations, which are very important to penetrate the European market, with the latter lying substantially behind the requirements of the international market.

Table 11. Assessing quality improvements of Chilean and Argentine wine production and exports over time

Area	Quality indicators	Chile	Argentina
Product quality and differentiation:	Replacement of low-quality grapes with high-quality grapes	++	+-
	Identification and valorization of a typical, emblematic variety	+-	++
	Introduction of zoning practices and designation of origin regulations	+	+-
Positioning in the international market:	Rising export unit values	++	+
	Increased exports to more demanding markets of destinations	+	++
	Better international ranking over time	++	+

Source: Author's elaboration

It should also be noted that in none of the six areas under consideration were found truly negative results, even though a few areas were identified where a need for further improvement clearly emerged. In particular, in the case of Chile, these relate to the insufficient valorization of Carmenère as an emblematic variety and, in the case of Argentina, to the still too embryonic adoption of zoning practices and designation of origin regulations and to the slow replacement of the País low quality variety with higher quality grapes. The presence of such persistent weaknesses further validates the hypothesis that, for developing countries, taking advantage of entry opportunities in the wine industry such as wine is increasingly difficult and is mainly based on a continuous process of innovation and quality upgrading (Farinelli, 2013).

6. Conclusions

In this study, the reasons for the belated entry of the Chilean and Argentine wine industries into the global market have been explored, as well as the patterns of the quality upgrading process lying behind it. Solid evidence has been provided to show that increased quality is what allowed Chilean and Argentine wines to get closer to international consumer tastes. It should be noted that this was far from predictable. As a consequence of the deep crisis that occurred in the 1970s in Chile and in the 1980s in Argentina, the quality of their wines had fallen substantially behind the requirements brought about by the evolution of international demand, and exports were concentrated in markets where quality was not important (i.e., other Latin American countries). All this radically changed in the 1980s in Chile and in the 1990s in Argentina, when a huge process of technological upgrading and innovation, with renewed plantations and vast incorporation of new technologies, led to substantial quality improvements, both in terms of product characteristics *per se* and of market positioning.

In particular, this study has revealed that large improvements characterized both the Chilean and Argentine wines, even though to a different extent, as shown in their increased quality, enhanced international ranking and rising export unit value over time. In the case of Chile, the strongest points detected were the considerable uprooting and replacement of low-quality grapes with high-quality grapes and the introduction of zoning practices and denomination of origin regulations. In the case of Argentina, the strongest points detected were the identification of Malbec as a typical variety and the shift of Argentine wine exports towards more demanding market destinations – especially the US. In none of the selected indicators – related to both wine characteristics *per se* and its positioning in the international market – were found truly negative results. From an in-depth analysis, therefore, it appears that the wine export boom in Chile and Argentina has been characterized by three emerging features, signalling a potential discontinuity with other natural resource-related export booms that have occurred in the past:

- Chile and Argentina have managed to penetrate a non-traditional export market largely dominated by well-established and highly competitive producers in advanced countries;
- Wine exports have become highly diversified, their quality has increased remarkably and prices have become more elastic; and
- Local producers have been able to capture increasing rents by climbing the value-added ladder of more sophisticated processing stages.

The key issue addressed in another study carried out by the author (Farinelli, 2013) is related to the long term sustainability of the Chilean and Argentine wine export boom, and to the capacity of these producers to continuously innovate and incorporate new technologies. From an economic development perspective, the ultimate question is whether the wine industry can become a spur to development and a platform for creating deeper competencies and increased knowledge and innovation capacity. Should this be found to be possible, interesting prospects might open up for emerging producers locked in the cheap end of the wine market.