

Italy from 1939

Alessandro Corsi, Eugenio Pomarici and Roberta Sardone

Italy's wine industry was not hurt greatly by World War II. Damage to vineyards was redeemable, but wine production fell due to the reduction of labour in agriculture and the reorganization of food production in favour of war needs (Bonardi 2014). Given also the uncertainties of statistics during these years, the following analysis will consider the postwar period, when wine production returned quickly back to a level around that of the 1937–1939 prewar period of just under 4,000 million litres (ML). It was in the following decades that the Italian wine industry underwent deep and radical changes. They can be summarized as:

- Strong growth of the volume of wine production, which doubled between 1946 and the 1980s, followed by a rapid decrease
- A major change in wine sales destination, from a negligible share to about half of production being exported
- A sizeable shift from the production and consumption of basic and cheap wines to higher-quality wines
- A change in the organization of the wine value chain, with emerging players and an increasing vertical integration

This evolution happened in different phases, marked by different drivers and characteristics. Although somewhat arbitrary, we subdivide our discussion of the industry's postwar evolution into four periods, and in each section of the chapter we focus on grape growing, wine making, domestic consumption, exports and policies affecting the industry. Table 6.1 summarizes the main trends over those four periods, and Figures 6.1, 6.2 and 6.3 depict key indicators for all years from 1939. Additional relevant data, related to the four periods, are shown in Tables A6.1, A6.2, A6.3 and A6.4 (see Appendix).

Table 6.1 *Trends of key wine industry variables, Italy, 1946 to 2014*

	1946–70	1970–86	1986–2000	2000–14
Change in specialized (single-crop) grapevine area	+	-	-	-
Yield per ha variation (specialized area)	++++	++	+	-
Wine production volume variation	++++	+	-	-
Wine export volume	low but increasing	booming	increasing rapidly	increasing
Wine consumption variation	++++	-	-	-
Per capita wine consm. variation	+++	-	-	-
Real export price variation (national currency)	-	-	+++	+++
Exports as % of wine prod'n volume	+	++	+++	+++

Source: Authors' compilation from official sources and Anderson and Pinilla (2017).

1946–1970: STRUCTURAL CHANGE AND DOMESTIC CONSUMPTION-DRIVEN EXPANSION

The main aspects of the first twenty-five years of Italy's postwar development are growth in the volume of wine production driven by technical changes in vineyards on the supply side and by domestic consumption growth on the demand side. Exports had a negligible, though gradually increasing, role.

During 1946 to 1970, Italian wine production increased by 94 percent, which was very similar to the pace of wine output growth in the rest of the world, which expanded 97 percent. Growth was especially rapid during the first postwar decade. It was not due to any increase in vine area (although intercropped vines diminished dramatically while specialized vineyards expanded), but rather to large increases in yields, from an average of 0.9 to more than 3 KL of wine per hectare (Figures 6.1 and 6.2).

The main reason for this transformation was a dramatic change in specialization. In the later 1940s, three-quarters of the national area under vine involved intercropping, especially in the northeast and central regions (see Federici and Martinelli 2018). Between 1946 and 1970, the specialised vineyards area rose by one-eighth and the area of intercropping vineyards decreased by two-thirds (Figure 6.1, Table A6.1 and Corsi, Pomarici and Sardone 2004). This was part of the dramatic changes taking place in Italian agriculture during that period, as part of the overall industrial

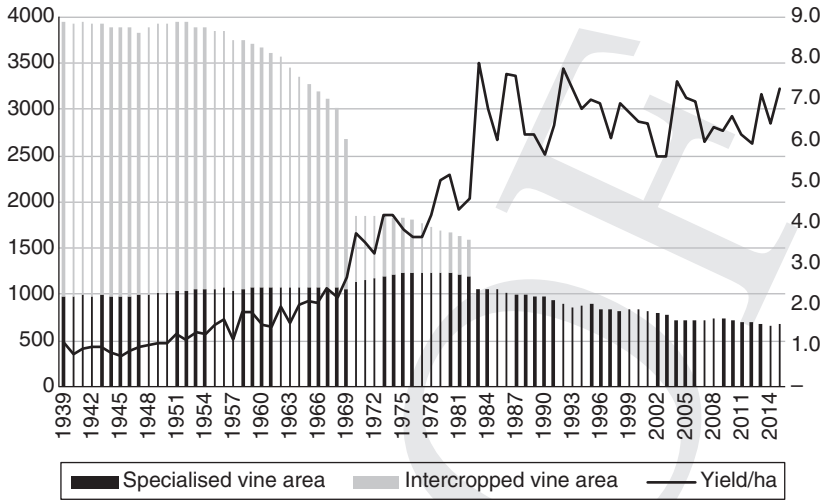


Figure 6.1 Winegrape bearing area and yield per hectare, Italy, 1939 to 2015 (ha and KL/ha)

Note: Figures about intercropped vine area show a sudden drop in 1970 and after 1982. In both cases, the drop is due to modifications in the statistical survey system. In 1970, data began to be extracted from the vineyard cadaster (*Catasto vinicolo*), which did not include surfaces with only scattered plants of grapevine. After 1982, the survey about intercropped vine area was interrupted, as it was at this point marginal.

Source: Anderson and Pinilla (2017).

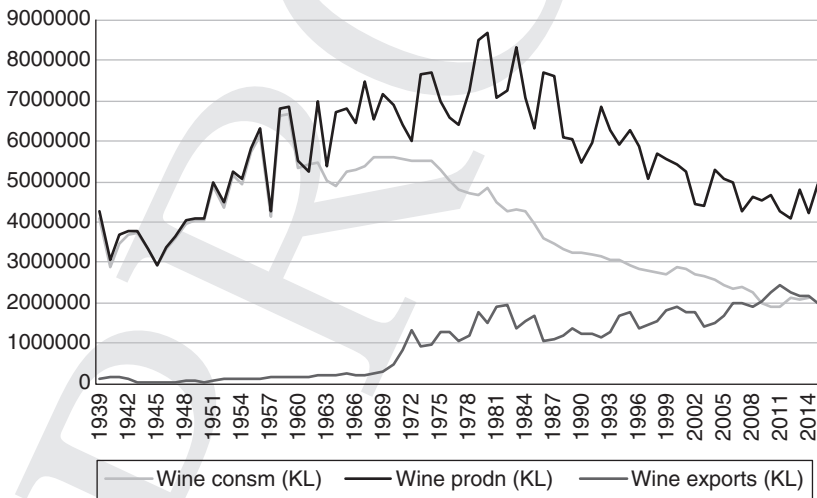



Figure 6.2. Volume of wine production, consumption^a and exports, Italy, 1939 to 2015 (KL)

^a Net of distillation.

Source: Anderson and Pinilla (2017).

development and rapid growth of the economy as real per capita income increased fourfold. It involved a huge exodus of rural labour, especially in the South, which eliminated most of the surplus labour that had long plagued the agricultural sector. That further pushed the sector away from production for self-consumption and towards a more commercial character. Accordingly, there was a dramatic reduction in the number of farms with vineyards: between the 1960 and 1970 agricultural censuses, the number of such farms decreased from 2.2 to 1.6 million (Table A6.1).

Wine was traditionally produced by farmers themselves, pressing together grapes of many different varieties. Less than 20 percent of grapes were processed in dedicated wineries, and few of them were oriented towards wines of premium quality.

There were 148 cooperatives in 1950, producing 140 ML of wine (3 percent of total production), only some of which were well reputed (Casalini 1953). Then a process of reorganization and concentration started, supported by a growing Italian equipment industry, as witnessed by the beginning of the international exposition SIMEI in 1963. The role of cooperatives grew and, in 1970, there were 690 of them, producing 1200 ML of wine (18 percent of total production). Among private companies, Credit Suisse financed the  & Food Company, pooling about ten wineries and creating an integrated firm.

The increase in wine production was driven mainly by growth in domestic demand, which rose by 72 percent over this period (Figure 6.2 and Table A6.1). This trend was due to the increase in both population (up 16 percent) and per capita consumption (up 47 percent). Those workers who moved out of agriculture kept their consumption habits initially, and their higher income allowed more consumption (Table A6.4). But that trend changed in the 1960s, signalling that basic (nonpremium) wine was moving from being a necessity to being an inferior good. Wine was mainly sold in bulk in small shops in the first postwar decade, when the role of supermarkets was very small: the first supermarket opened in 1957, and by 1970 there were still only 400 of them in Italy, accounting for just 17 percent of national grocery turnover (Tassinari 2015).

The traditional distribution structure did not favour quality improvement. Nevertheless, a process of repositioning started. In particular, two private wineries, Folonari and Ferrari, tried to develop a true branding strategy for commercial premium wines with intensive advertising. That modernization process was interrupted in 1968 by a case of adulteration, however, which discouraged consumers from trusting branded wines. Nevertheless, sales of traditional premium wines from Chianti, Barolo and

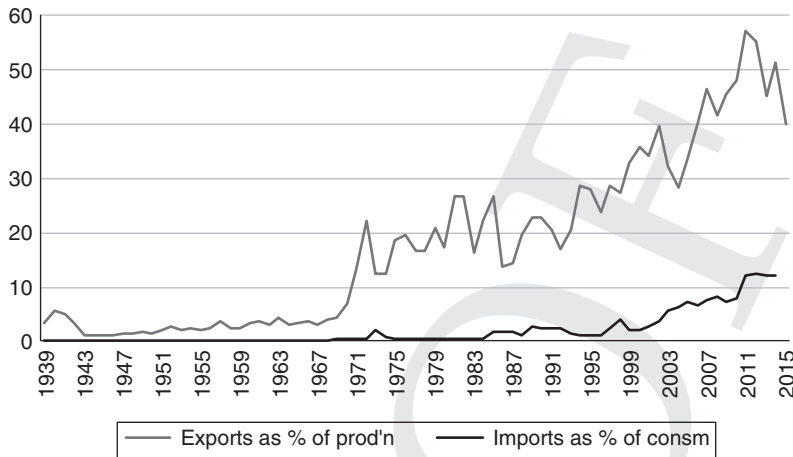


Figure 6.3 Wine exports as a share of production and imports as a share of consumption, Italy, 1939 to 2015 (%)

Source: Anderson and Pinilla (2017).

Barbaresco increased. As well, some new prestigious wines appeared, such as Amarone (proposed by Bertani in Veneto) and Sassicaia, which paved the way for what became known as the Super Tuscans. To help promote premium wines, the first wine show in Verona (*Giornate del vino italiano*) was organized in 1967, and forty-two wineries participated.

The role of international trade in wine was secondary for Italy in this postwar quarter-century, despite a rapid percentage increase in its exports. Wine imports were almost negligible, and increasingly composed of expensive wines (mostly French Champagne), as shown by a 143 percent increase in their real import unit value. The share of wine production exported grew from 1 percent to 8 percent (Figure 6.3 and Table A6.2).

Besides shipping cheap bulk wine, traditional Italian premium wineries increased their exports, while Cantine Riunite started shipping cheap bottled Lambrusco to Germany and the United States. Overall, the positioning of Italian export wines was in the low-priced segment, and only a little above the average price of the world's wine exports (Table A6.3).

The trends in grape and wine production in this first quarter-century were therefore mainly driven by the increasing domestic demand and by the technical changes in grape production. The latter was supported by two national intervention. The so-called *Piani Verdi* (Green Plans), which aimed at fostering the modernization of the Italian agriculture, supported the transition towards more specialized vineyards, the introduction of

high-quality varieties and the development of cooperatives. They did so by financing up to 70 percent of the investments for new vineyards (Chiatti 2014). As of the mid-1960s, the industry also was assisted by financial support from the new European Economic Community (EEC). That helped finance the replacement of old intercropped grapevines with specialized ones, especially in appellation areas; and it subsidized cooperatives, which led to an increase in their influence in the sector.

The priority given to wines with a designation of origin and to those with a higher value was consistent with the introduction (in 1962) in the EEC of the category of the Quality Wines Produced in Specified Regions (QWPSR). The following year, Italy approved the long-awaited national law (Presidential Decree 930/63), which introduced two categories of wines with a designation of origin: *denominazione di origine controllata* (DOC) and *denominazione di origine controllata e garantita* (DOCG). The designation system developed quickly, from the first twelve designations approved in 1966, representing different territories from the Alps to Sicily, to seventy-six by 1970, nearly half of which are, anyway, in just three regions (Piedmont, Veneto and Tuscany). In terms of production too, wines with a designation of origin rapidly increased their share of total national production, from 1.5 percent in 1967 to nearly 5 percent in 1970 (Table A6.1).

1970–1985: ITALY IN THE EEC WINE SINGLE MARKET: CHEAP WINE EXPORTS AND OVERPRODUCTION

The second period is characterized by a transformation of the Italian system from one mainly directed to domestic consumption to one increasingly structurally oriented towards exports. This was mainly due to the implementation of the Common Market within the EEC, and to increased demand in foreign countries aided by movements in the Italian currency's exchange rate. This fifteen-year period ends with a peak in Italian exports, to be followed by a sharp drop due to the methanol scandal in 1986 that is a turning point in the evolution of the Italian wine sector.

In the 1970s, wine production continued to increase, reaching a peak in 1980 and then starting to decline, so that in 1986 it was about 11 percent less than in 1980 (Figure 6.2). Both the increase up to 1980 and the following decline were faster than the rest of the world's. The increase in production was initially ascribable to an increase in vineyard area, but from the mid-1970s the vine bearing area decreased. At the same time, yields increased sharply, from about 3–3.5 KL/ha at the beginning of the period to roughly 6–7 KL/ha by the mid-1980s (Figure 6.1).

The increase in production affected all wine categories, but DOCG wines were boosted by an EEC special regime that exempted them from a planting ban after 1977. The number of DOCGs more than doubled over the period, reaching 225 in 1985, when they represented over 10 percent of Italy's total wine production. DOCGs spread in almost all regions, but the production was concentrated in a few designations (D'Angelo 1974): fourteen designations accounted for two-thirds of national production, with Chianti alone producing nearly one-fifth. The increase in production of DOCGs wines was also sustained by cooperatives, which in 1985 produced half of the DOCG wine (Table A6.1).

Domestic sales started levelling off as per capita consumption began a long-term decline (Figure 6.2). The driving factor was the changes in lifestyles and workstyles. The reduction of physical effort in many work situations and the increase of white-collar jobs induced a reduction of basic wine consumption. Meanwhile, writers and journalists such as Soldati and Veronelli created a demand for hedonistic premium wines. That was assisted by the further growth of wine fairs, with Verona's wine fair becoming Vinitaly in 1971 and Vinitaly International in 1978. Besides DOCGs, new Super Tuscan wines in addition to Sassicaia, such as Tignanello and Ornellaia, had great success, while Galestro, an easy-to-drink, affordable Tuscan white wine, proved that the market was open to new wines in a modern style.

The domestic market in this period was still characterized by a minor role for supermarket chains (25 percent of grocery sales in 1980). Despite this, some cooperatives experimented with new containers and wine concepts to exploit opportunities developing in modern retail environment (Giacomini 2010; Williams 2014).

The decline in domestic consumption was partly accommodated by export growth, and partly by distilling an increasing share of nonpremium wine. Exports boomed over this period, moving from about 500 ML in 1970 to 1700 ML in 1985, or from 7 percent to 27 percent of production, with a peak of 1940 ML in 1982 (Figure 6.2 and Table A6.2).

The growth in exports involved several components. In 1970, wine in bulk represented the largest share of export, accounting for 82 percent in volume and 61 percent in value. Its success was mainly due to price competition, helped by exchange rate movements. The main destination in volume was France (accounting for 30 percent of Italy's wine exports in 1970 and 36 percent in 1985). Those wines substituted for France's imports of bulk wine from Algeria, following the implementation of the EEC's wine single market in 1970. Indeed, the increase in Italy's share of global wine exports mirrors the decline of Algeria's (see Chevet et al. 2018; Meloni and

Swinnen 2018). By 1982, Italy's share was 39 percent in volume and 20 percent in value terms – shares that have not been exceeded in the subsequent thirty-five years.

The increase in Italy's average export price was lower than for the rest of the world's, suggesting that Italy was mainly expanding exports of low-end wines over this period. Wine exports to France, mainly bulk high-alcohol wine destined to reinforce French wines, were favoured by the devaluation of the Italian Lira over the decade to 1985 (Tables A6.3 and A6.4). Exports to Germany suffered a smaller drop of price while US dollar prices of exports to the United States rose, despite greater devaluations of the Lira against their currencies.

Italy was increasing its shipments of bottled wine in this period, both still and sparkling, as Italian wine was enjoying an increasing reputation and a favourable price/quality ratio relative to French wines. Between 1980 and 1985, Cantine Riunite exported to the United States nearly 11 million cases of Lambrusco wine per year. The importer Villa Banfi (by John and Henry Mariani) reinvested part of profits in the Castello Banfi winery, which subsequently became one of the greatest producers of Brunello di Montalcino with a leading role in promoting the international success of this wine. The quality change is shown by the fact that in 1985, bottled wines, still and sparkling, represented 42 percent of Italy's export volume but 73 percent of its value.

Wine imports remained tiny over this period. They stagnated during the 1970s, as the macroeconomic situation and the devaluation of the Italian Lira discouraged Champagne consumption. However, they increased four-fold over the decade to 1986, thanks to the shift in relative prices. But that represented a rise only to 2 percent of the volume of wine consumption in Italy (Figure 6.3 and Table A6.2).

Another important driver of wine production trends in this period was the EEC's Common Agricultural Policy (CAP) (Scoppola and Zezza 1997; Munsie 2002). Market interventions (long- and short-term storage and distillation) were reserved for table wine and activated exceptionally in case of market disequilibria. Since production growth resulted in repeated years of surplus in both France and Italy, tension culminated and erupted as a "wine war" (1974–1981), when the vignerons of Languedoc-Roussillon repeatedly protested against 'unfair' imports from Italy, blocking the arrival of Italian ships.

As a reaction to frequent market imbalances, some measures for containing the production were implemented. They included a ban on establishing new vineyards for winegrapes except for vineyards located in areas with

designation of origin (they were included in the ban only later, after the mid-1980s). Also, a voluntary program of (temporary or permanent) abandonment of winegrape growing was launched. In the second half of the 1970s that led to the grubbing up of at least 40,000 ha of Italian vineyards (50 percent of which were located in Puglia), which explains the one-third reduction in the national area under grapevines shown in Figure 6.1.

The attempt to contain production was strengthened in 1980 by some structural measures aimed at a tighter control on production, both in quantity and quality terms. Those measures included limiting the winegrape varieties allowed in each region, regulating replanting and the abandonment of lower-quality wines and restructuring vineyards within the framework of collective operations (Idda 1980).

Despite these attempts, at the beginning of the 1980s Italy, with over 7 million KL of wine produced, largely contributed to the peak of the EEC's production. It is in this period that the long season of distillations began (Table A6.1). The measures for voluntary and compulsory distillation granted to producers a minimum retirement price, which was nevertheless high enough to encourage production 'for distillation', especially in the southern regions of Italy, where high yields and high alcohol content were able to be produced at low cost. The result was the persistence of strong market imbalances and distillation of about 8 million KL of Italian wine (corresponding to 18 percent of national production) during the first half of the 1980s.

Overall, the preceding data suggest that the growth of production in this period, unlike the previous one, was driven by two main components. One was exports, mainly represented by very cheap basic wine but with an increasing share of higher-priced premium wines. The other was distillation, stimulated by the EEC's CAP measures that supported the production of low-quality wines from high-yielding vineyards.

1985–2000: SECTOR REORGANIZATION AND EXPORT BOOM

The final fifteen years of the century are characterized by a dramatic drop in production but a marked shift towards higher-quality wines and a strong increase in exports, stimulated by important EC interventions to clear the market and by a reorganization of the industry.

In 1986, Italy faced the greatest shock in its wine sector during the second half of the twentieth century: a methanol scandal. Some cases of wine adulteration were discovered when poisonous and cheap methanol was added to cheap wine to raise its alcoholic content. The scandal received

worldwide media coverage and produced a large fall in both domestic consumption and exports of Italian wines. Thus it became a symbolic turning point for Italian wine production. Until then, even though production of high-quality wine was growing, most wines produced were low quality, many of them destined for distillation. Payments for grapes by both cooperatives and private processors were mostly based on volume rather than on quality parameters, and there was the possibility, due to an inadequate control system, to compensate for defects in wine must in the cellar by adopting legal and even illegal methods such as methyl alcohol or sucrose (Desana 1976; Fregoni 1986).

Following that scandal, a substantial improvement in food safety control in the whole Italian food sector occurred, and the Italian wine sector progressively got rid of those improper methods. Slowly but consistently, the quality of winemaking improved, allowing Italy to capture some of the increasing international demand for premium wines at higher average prices.

Wine production dropped so that in 2000 it was 23 percent lower than in 1985, a much larger decrease than in the rest of the world's 5 percent (Figure 6.2 and Table A6.1). The fall was in large part due to a decrease in vine area (20 percent, incentivized by the European Union (EU), as discussed later in this chapter), but also wine yields fell slightly (−4 percent). These are signs of the abandonment of marginal winegrape areas and of progressive limitations on yields in many areas to comply with appellation regulations. The number of grapegrowers also halved, to 790,000 in 2000, and the viticulture specialization process was essentially completed. The end result was a structure in which a minority of large commercial firms controlled over 85 percent of the vine area, though there were still 480,000 small firms (two-thirds of the total; see Table A6.1).

Several vertical integration moves accompanied this restructuring. As qualified wines fetched profitable prices, the most innovative grapegrowers extended their activity to processing and bottling. Historical private firms also started new investments in the most promising areas, integrating grape production or enlarging their existing vine area. This process benefited from the structural supports from the CAP, and was also incentivized by the market appreciation of designation wines and by other supportive activities, such as wine guides and wine fairs.

The cooperative sector underwent a strong consolidation process in this period, to exploit economies of scale and improve the management of innovation. The number of wine cooperatives dropped from 1,000 in the first half of the 1980s to roughly 750 at the end of the century, while

maintaining the same total production (40–50 percent of the national total), and their turnover increased because they were bottling a larger share of their wine. In 1986, some cooperatives bought **Vite & Food** from Credit Suisse, thereby establishing Gruppo Italiano Vini (GIV), which was destined to become the top Italian group in terms of turnover. Cooperatives were intensively engaged in production of premium wines, but also in modernizing basic wines, improving their organoleptic stability and price-quality ratio. Among basic wines, Tavernello, a wine in cartons produced by Caviro, was a big success, sustained by intensive television advertising. During the 1990s, its sales almost reached 100 ML per year, involving 30,000 winegrowers in more than three regions and five processing installations all delivering to a single packaging plant.

Despite the qualitative evolution of supply consistent with changing demand patterns, domestic consumption decreased (by 19 percent, net of distillation) (Figure 6.2 and Table A6.1). Indeed, this is the period of most rapid change in domestic wine consumption habits. Wine was no longer seen as a key component of the diet by providing energy. The strong decrease of basic wine consumption was thus not offset by an increase of premium wine. Meanwhile, there was an increase in beer consumption (by 23 percent), which was consistent with an international convergence in alcohol consumption patterns (see, e.g., Mitchell 2016).

The reorientation towards lower yields and the drastic reduction in the total vine area were not enough to deal with the decline in domestic consumption. Therefore, this period was characterized by both a wider use of distillation and rapid growth in exports (Figure 6.2 and Table A6.1). Exports fell to 14 percent of production in 1986–1987 due to the methanol scandal, down from 27 percent in 1981–1982. But in 2000 they were up to 34 percent of production (Figure 6.3), since they had grown by 84 percent in volume between the lowest level in 1986 and 2000, which was faster than in the rest of the world. The value of those exports almost trebled in US dollar terms, an outstanding achievement at a time of low inflation; and their unit value also rose faster than in the rest of the world (Tables A6.3 and A6.4).

That success of Italian exports was due to an upgrading of its products. The share of wine in bulk decreased over the period from 58 percent to 49 percent, while the share in bottled still wines rose from 36 percent in 1984–1986 to 46 percent by 2000 in volume terms and from 57 percent to 78 percent in value terms (Table A6.2).

The destination of exports changed accordingly. The French share dropped from 36 percent to 20 percent in volume and from 17 percent to

3 percent in value, a sign of the declining importance of exports of high-alcohol wine for blending. By contrast, the shares of Germany rose from 27 percent to 35 percent in volume and from 23 percent to 31 percent in value. Exports to the United States grew less rapidly and its share decreased to 10 percent in volume and 22 percent in value terms, but it remained the highest-priced market for Italian wines.

The reasons for these changing trends were different from the previous period. The role of the devaluation of the national currency in pushing exports was much weaker (Table A6.4); and the share of total exports with appellations or geographical indications grew substantially. This was supported by increasing marketing efforts of private companies and cooperatives. Large cooperatives invested substantially in advertising, and many entrepreneurs personally and intensively promoted their wines. The magazine *Decanter* awarded its *Decanter's* Man of the Year to Piero Antinori in 1986 and Angelo Gaja in 1998. The interest in Italian wines led to multifaceted cooperation of the Californian company Mondavi with the Tuscan producer Frescobaldi (Super Tuscan Luce and popular premium Danzante), the acquisition by Mondavi of the Super Tuscan winery Ornellaia (later again of Italian ownership), the expansion of Italian activities of Castello Banfi (owned by US brothers Mariani) and Brown Forman's acquisition of Bolla.

Imports were highly volatile in this period, but their share of national availability (production less exports) generally remained well below 4 percent (Figure 6.3), and their unit value decreased (Table A6.3).

In this period, the CAP became even more crucial, with a more structured system of market measures (voluntary and mandatory distillations) combined with interventions for the containment of production potential. The huge quantities of distilled wine were a heavy burden for the EC budget and led to the introduction of stabilization mechanisms aimed at discouraging the production of low-quality wines in vineyards with very high yields (ISMEA 2000). Despite the ever-stricter constraints, during these years Italy distilled over 14,000 ML of wine (about one-sixth of the total volume of wine produced), although on a decreasing trend after mandatory distillation was no longer activated (1995). Italian distillation was concentrated in Puglia, Sicily and Emilia.

If distillation represented the short-term answer to surplus production, the long-run structural answer was the permanent abandonment of wine-grape vineyards. A program of encouraging that entered into force in 1988–1989 and remained operative until 1997–1998. Italy participated actively in this program, and about 100,000 out of a total of 160,000 ha of vineyards

were grubbed up under this program (ISMEA 1999). Most of the uprooting was in the south, mainly Puglia (about one-quarter), followed by Sicily and Sardinia.

The regulatory changes adopted within the CAP were of great importance to Italy (Pomarici and Sardone 2001). They allowed a more structured regulation of 'table wines with a geographical indication', whose importance was increasing in part as a response to the popular premium wines and the premium wines being exported from New World countries. A reform of the Italian legislation (Law 164/1992) introduced a new category of table wines (*indicazione geografica tipica*, or IGT) that had to comply with the same procedure as the wines with a designation. Furthermore, Law 164/92 allowed the overlapping of production areas recognized for wines of different categories: DOCG, DOC and IGT. As a result, a vineyard could be eligible for the production of wines belonging to all three categories, thus allowing winemakers to decide, year by year, the best category to choose.

However, the structural policy of the CAP also played a relevant role in the development of higher-quality production. It supported the restructuring of vineyards and the investments in processing and bottling, and it made possible the spread of better techniques such as the temperature control, the perfecting of oenological practices and the use of barriques, as well as the development of promotional activities.

2000–2014: ITALY AMONG THE LEADERS IN GLOBALIZED WINE MARKETS

The most recent period has seen the reinforcement of developments in the Italian wine industry as it competes successfully in international market, showing a capacity to keep up with the competition from New World producers. This has been possible because of further reorganization both of the grapegrowing sector and the winemaking industry, an evolution driven mostly by changes in (declining) domestic and (increasing) international demand.

At the beginning of the twenty-first century, wine production still tended to decrease, falling by one-fifth between 2000 and 2014. The drop was mainly due to a shrinking vine area while the wine yields remained almost stable (Figure 6.1). This trend was driven by market forces in the period 2000–2008, as in these years Italy did not implement CAP measures for subsidizing grubbing up of vines; but later the CAP measures gave again a drastic stimulus to reducing the area under vine. The decrease in production mainly concerned wines without origin, as by contrast DOCG and IGT

supplies increased, their share of total output reaching 38 and 32 percent, respectively, by 2014 (Table A6.1).

The decrease in national vine area between 2000 and 2014 hides deep regional differences. There was a drastic drop in the southern and north-western areas, a reduction similar to the national average in the central regions and in the islands, but a quite significant increase in three north-eastern regions. The change in the distribution of vine areas was facilitated by the possibility of exchanging planting rights (until the end of 2015), which allowed a relocation of vineyards over the Italian peninsula, but it mainly reflects the differences among regions in effectively coping with the changes in global markets. Northeastern regions enjoyed great national and international success with two varieties, Pinot Grigio and Glera, the latter being the base of Prosecco sparkling wine.

The increase in production of DOCG and IGT wines did not change the concentration of supply in a few areas. Despite 405 designations (including seventy-three with a higher level of certification) and 119 indications recognized, Italy's production remains strongly based on a small number of well-known wines, which play a leading role in terms of both volume and value. The ten most relevant Protected Designation of Origin (PDO) wines represent 50 percent of the PDO global volume, while the weight of the top ten Protected Geographical Indication (PGI) wines accounts for 85 percent of the volumes produced (ISMEA 2014).

The reduction in wine production went along with a decrease in consumption until 2009, followed by a stabilization (Figure 6.2). Italy's per capita consumption at the end of the period was about 35 litres, although there are large differences in individual behavior: 48 percent of Italians of drinking age are not wine drinkers (42 percent in 2003), and the share of regular drinkers is just 21 percent, down from 30 percent in 2003 (ISTAT 2015).

This period is characterized by a remarkable evolution of the Italian wine industry, aimed at challenging a fully globalized wine market. Many Italian wine companies enlarged their supply in the higher-quality segments, but a relatively small group of large suppliers, some of them pure bottlers, successfully targeted the lower-priced commercial premium segment, exploiting economies of scale and effective quality control. The cooperatives experienced a further consolidation (in 2014, there were only 441, 40 percent less than in 2000), and seven of them are among the sixteen companies with a turnover larger than €100 million (Table A6.1). The largest one, Cantine Riunite & CIV, with a turnover of about €550 million, is one of the largest wine groups in the world.

The economic size of all types of Italian wine companies is increasing. In 2014, forty-two companies had an invested capital larger than €50 million, and thirty-four had capital between €25 and 50 million; in 2003, the numbers were, respectively, fourteen and sixteen (Mediobanca, various years). The increasing size of top wineries drove an enlargement of the area under vine held by large farms: vineyards larger than 20 ha in 2010 had a share of 33 percent, ten points more than in 2000. In this period, only a few Italian companies were acquired by foreign shareholder: Ruffino by Costellation Brands, Gancia by Russkij Standard and Mionetto by Henkell. Italian investments abroad were also few (Antinori, Zonin, Masi). Italian wine companies also kept away from the stock exchange, but the first two, Masi and Giordano (renamed Italian Wine Brands), are exceptions: they were listed in 2015.

Over this most recent period, the Italian wine industry's growth seems to have stabilized. It is characterized by the contemporaneous presence of integrated supply chains (private and cooperative) and of unintegrated supply chains with actors specialized in just one or two of the stages of production (grape growing, grape processing, bottling). A large part of Italy's production is now integrated: 41 percent of winegrapes (42 percent for PDO grapes, 47 percent for PGI grapes) are crushed by cooperatives and another 28 percent (37 percent for PDO grapes, 29 percent for PGI grapes) are crushed directly by winegrowers (Mazzarino and Corsi 2015). The remainder is either exchanged on the spot market or (especially for appellation wines) sold on a contractual basis. In terms of size, two groups compose the winemaking industry (2014): 136 companies with a turnover over €25 million (four over €200 million) generating 60 percent of Italy's wine turnover; and a galaxy of small quality-oriented integrated wineries, most of them exploiting the opportunities for wine tourism or challenging the international market (Mediobanca 2016). Such wineries, about 8,000 of them, boomed in the previous period and seem to have now stabilized (European Parliament 2012).

The progressive strengthening of the Italian wine industry allowed a continuous increase in exports, from over 1,800 ML in 2000 to a high of 2,400 ML in 2011, followed by a small decrease to 2,000 ML in 2015. In value terms, that growth was from 2.4 to 6 billion nominal US dollars. This is reflected in the unit value of exports, which rose from an average of \$1.30 to \$3 (Tables A6.2 and A6.3).

This favourable trend in Italian wine exports happened in a period of rapid change in the international wine market. In the first decade of the century, international wine trade increased markedly, but more so for bulk

and sparkling wines than for bottled wines (Mariani, Pomarici and Boatto 2012). Italy decreased its share on world exports in volume, but increased slightly its share in value, thanks to different trends for various wine typologies. Its shares increased slightly for bottled wines; it also increased its share for sparkling wines and, contrary to the general tendency, at growing prices. Indeed, during recent years Italian dry sparkling wines have enjoyed remarkable success, particularly Prosecco, which has succeeded in building a good image and a market space completely independent of traditional sparkling wines, most notably Champagne. Only in the case of bulk wines is the share declining, but more so in volume than in value.

In short, everything suggests Italy became increasingly competitive in commercial and superpremium segments of the market rather than competing on price in the nonpremium segment. While expanding its share of traditional large and small importing countries, Italy has been particularly successful in its exports to eastern Europe (Mariani et al. 2012). By contrast, its share remains much lower relative to France and Australia in Asian markets (see Anderson 2018).

Some important trends also appear for imports, which quadrupled in volume over the period. The share of imports in domestic consumption rose from 2 percent in 2000 to 12 percent in 2014 (Figure 6.3). The growth in value terms was smaller, the difference being partly attributed to the devaluation of the dollar versus the Euro in this period (Tables A6.2, A6.3 and A6.4). But it is also due to the change in the import mix: not only expensive wines such as Champagne but also increasingly cheap bulk wine to satisfy the domestic demand for basic wine not fully satisfied by local production (following the decline in production in the South).

In this period, also the CAP had a significant impact on the evolution of the Italian winegrape growing sector, with the implementation of three different reforms (in 1999, 2008 and 2013). Overall, the main objective of the EU policy for wine changed from the simple control of the quantity of production to a greater emphasis on quality and on the improvement of competitiveness of EU wines in the global markets (European Parliament 2012). Despite the confirmation of a regime for the control of the production potential, some elements of flexibility were progressively introduced (e.g., new planting rights for QWPSR or table wines with a geographical indication, of which 13,000 ha were assigned to Italy).

The 2008 policy reform also established National Support Programs (NSPs), specific budgetary envelopes assigned to member states to finance actions from a given menu of eleven measures. In the selection of the

measures, Italy decided to give greater importance to those with a potential impact on the competitiveness of the national wine sector: restructuring of vineyards and promotion on third markets (Pomarici and Sardone 2009). A further triennial abandonment program (2009–2011) financed the grubbing up of about 28,500 ha of Italian vineyards (4 percent of the total area planted to vines).

Important changes also occurred because of the new EU norms about appellations and geographical indications, based on the concepts of PDO and PGI. The new framework led to a new national regulation (Legislative decree 61/2010) that resettled the traditional Italian categories of DOC and DOCG in the PDO scheme and the traditional category IGT in the PGI scheme, and it defined how to comply with the obligation for a systematic control by third parties.

In addition, the Legislative decree 61/2010 renewed the regulation of Consorzi di Tutela (Syndicat d'Appellation) to comply with the EU concept of interbranch organization, and it defined the rules and constraints in supply control. Most of the larger Consorzi utilized the possibility to control supply to stabilize prices.

The implementation of measures concerning restructuring and conversion allowed the quality improvements and the adjustment of production to changing market demands. They also facilitated the reduction of production costs as well as the modernization of agricultural practices (European Parliament 2012). Since 2000, over 220,000 ha of Italian vineyards, about one-third of the total area, were restructured thanks to the financial support of the NSP (Rete Rurale Nazionale 2012). The linkage between NSP measures and the increase of certified wines (DOCG and IGT) is not direct, but the role played by the measures of restructuring and conversion and also of promotion in this direction has been critical. The grants for restructuring and conversion were limited to vineyards destined for DOCGs and IGTs wines, and the support for promotion also required programs promoting DOCGs and IGTs or varietal wines.

FINAL REMARKS

Over the seven decades considered in this chapter, the Italian wine industry has changed dramatically, from a dispersed production system mainly oriented to self-consumption of supply and the local market with low-value wines, to a modern industry able to satisfy an increasingly demanding domestic supply and very competitive international markets with a wide range of wines. The current situation is the result of a long process driven by

many factors, acting inside and outside the sector. National policies, interacting with the EU's CAP, have since 1960 pushed the sector towards the production of premium wines and, after the methanol scandal, have stimulated the adoption of a new attitude towards quality in process management. A further and probably stronger stimulus in this direction came from the changing domestic and – more importantly – international demand, to which the Italian industry was able to react positively. In this context, different types of firms found room to thrive: wine producers deeply rooted in agriculture, mostly small- and medium-sized, but some quite big cooperatives and bottlers. All have been able to react successfully to the evolution of various markets, adapting their supply in terms of products and destinations. The wine industry is now the leader among national agribusinesses in Italy. Indeed, despite the wine industry being ranked third in turnover in Italy's agrofood sector, wine is the true food icon in the 'Made in Italy' campaign and the largest contributor to Italian agrofood exports. The share of wine in the value of all merchandise exported by Italy grew to a remarkable 1.3 percent, which is not much lower than in France (1.8 percent) and far higher than the 0.2 percent for the world as a whole in 2014 (Anderson and Pinilla 2017).

The progressive evolution of Italy's wine sector did not change uniformly across regions of course. Many excellent premium wines, mostly DOCG wines, are produced in all Italian regions, but it involved a much larger supply reduction in the relatively warm South, where a mix of factors intervened, including entrepreneurial vision and policy orientation towards nonpremium and commercial premium wines, ecophysiological conditions and logistic difficulties.

Over the four periods considered, the Italian wine sector kept its 'national character', as the Italian wine industry evolved without being really involved in the intensive internationalization processes of large companies – specializing in wine or not – that occurred in other countries (Green, Rodríguez Zúñiga and Seabra Pinto 2006). Reasons for this could be the high prices of Italian wineries located in attractive areas and an institutional environment considered uncomfortable by foreign investors (Mariani and Pomarici 2011).¹ The 'national character' was preserved also in terms of grape varieties grown. Despite an absolute and relative increase of some French (international) varieties, a rich array of Italian traditional grapes

¹ Recently (2016–2017), some new acquisitions of small- and medium-sized Italian wineries occurred, including the case of Biondi-Santi (Brunello di Montalcino), now controlled by French group EPI. However, at least at this point, this doesn't appear to be a change of tendency.

(most notably the red Sangiovese and the white Trebbiano) still characterize Italian wine supplies (D'Agata 2014; Anderson 2013).

The Italian wine industry has evolved to cover a wide product range, with success in both the basic segment with products mainly destined to the domestic market, and in the commercial premium and superpremium segments. In terms of the value of world production, Italy in 2009 had the largest shares of nonpremium and commercial premium wines, and in terms of the value of world exports Italy had the largest share of commercial premium wines (22 percent) and the second-largest, after France, of superpremium wines (17 percent), according to Anderson and Nelgen (2011). Italy is trying to challenge France also in the iconic segments of the wine market, searching for space in the most elitist distribution channels. In so doing, quite paradoxically, the Super Tuscan Masseto is distributed also by some Bordeaux *negociants* (Rosen 2008).

After World War II, the Italian wine sector evolved differently from other countries, modifying its profile in the world's wine markets. Italy's shares of world production and consumption have decreased since the 1970s, while its share of export value has increased steadily and its share of export volume increased to the end of the century, becoming ranked as the second in the world and close behind Spain (Table 6.2). The dramatic increase in exports of bulk wine from 1970 reduced the ratio of Italian to world average prices to near 0.5, and it took four decades to bring it back to near 1.0, thanks to a progressive upgrade of shipped wine (Figure 6.4). The dramatic decrease in per capita consumption drove the reduction in Italy's share of world wine consumption and also of the world alcohol consumption (which dropped from 10 percent in 1961 to below 2 percent since 2009 as wine was only partially substituted by beer and spirits). The change in the Italian pattern of alcohol assumption shows some similarities with the global one, as wine's share of global alcohol consumption has decreased and beer's share has increased (Anderson and Pinilla 2017).

Looking at the future, the Italian wine industry seems capable of responding to challenges as they come along in the market, at home and abroad, but it has to deal with some critical issues. On the production side, effective strategies to mitigate climate change and to achieve substantial progress in environmental sustainability are urgent. On the demand side, current consumption levels may fall further. At the industry level, there are problems of coordination among the different players along the value chain (winegrowers, winemakers, cooperatives, industrial bottlers) that cause inefficiencies to persist, which need to be resolved to compensate for the disadvantages of the still relative small average size of Italian wine companies.

Table 6.2 *Italy's shares of global wine markets, 1946 to 2014*
(%, three-year averages centred on year shown)

	1947 ^a	1970	1985	2000	2014
Area under vine ^b	34.3	20.1	11.9	11.2	9.3
Wine production volume	22.1	24.2	22.9	19.6	16.0
Wine consumption volume	22.2	21.1	15.1	12.6	8.6
Wine export value	17.2	13.8	17.3	18.4	19.5
Wine export volume	9.4	16.6	29.6	29.2	21.0
Wine import value	0.04	1.9	1.0	1.4	1.2
Wine import volume	0.01	0.7	1.4	1.1	2.5
Alcohol consumption volume	n.a.	7.5	4.4	2.8	1.9
Beer consumption volume	n.a.	0.9	1.3	1.2	1.1
Spirit consumption volume	n.a.	2.2	1.2	0.6	0.5

^a Refers to average for just 1946 and 1947.

^b Figures for 1947 and 1970 include Italy's intercropped area, whereas in subsequent years only the specialized areas are included.

Source: Anderson and Pinilla (2017).

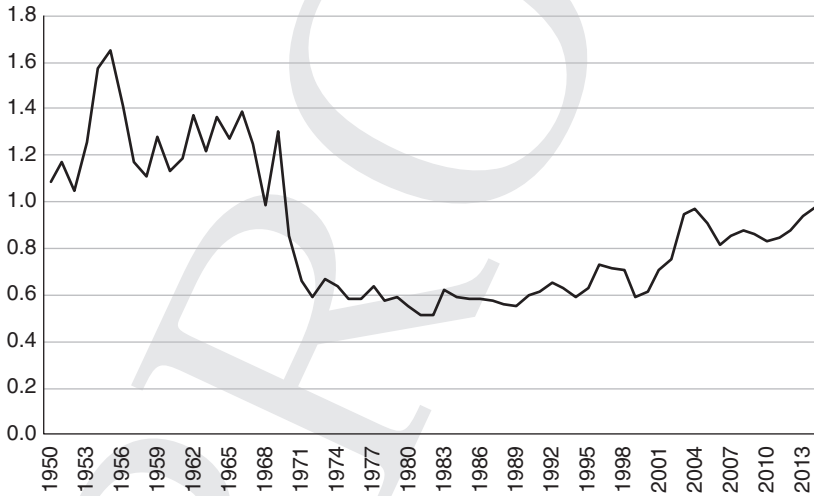


Figure 6.4 Average price of wine exports from Italy relative to world average, 1950 to 2014

Source: Anderson and Pinilla (2017).

APPENDIX

Table A6.1 *Evolution of wine market structure, Italy, 1946 to 2014*
(three-year averages centred on year shown)

	1947 ^a	1970	1985	2000	2014
<i>Supply</i>					
<i>Grape area and yield</i>					
Area under vine: single crop ('000 ha)	989	1,118	1,036	830	671
Area under vine: intercropped ('000 ha)	2,865	1,004	–	–	–
Grape yield: single crop (t/ha)	2.4	7.7	9.4	10.4	10.5
Grape yield: intercropped (t/ha)	1.0	1.5	–	–	–
<i>Grapegrowers^b</i>					
Total ('000)	–	1,619	1,483	791	388
Professional ('000)	–	–	–	300	197
<i>Wine production</i>					
Total (ML)	3,510	6,825	7,033	5,402	4,652
DOC + DOCG (ML)	–	331	774	1,155	1,756
IGT (ML)	–	–	–	1,413	1,489
DOCG+DOC wines (number)	–	70	225	332	405
IGT wines (n.)	–	–	–	113	118
Wine yield (KL/ha) ^c	0.9	3.2	6.8	6.5	6.9
<i>Cooperatives^b</i>					
Number	–	690	1,000	748	441
Members ('000)	–	–	380	338	170
Share of total production volume (%)	–	18	47	44	50
Share of PDO/PGI production (%)	–	–	45	–	49
<i>Demand/use</i>					
Apparent consumption (ML) ^d	3,469	5,979	3,898	3,152	2,727
Per capita consumption (litres/year)	76	104	69	50	34
Distillation (ML)	–	326	1,746	463	117
Export as % of total sales	1	8	20	34	45
Self sufficiency (%)	101	122	179	191	220

^a Refers to average for just 1946 and 1947.

^b Single year.

^c Based on total area under vine.

^d Net of distillation.

Sources: Official sources (ISTAT, INEA, CREA, ISMEA) and Anderson and Pinilla (2017).

Table A6.2. Destination and composition of wine exports and imports, Italy, 1946 to 2014 (three-year averages centred on year shown)

	Value (current US\$ million)										Volume (ML)				
	1947 ^a	1970	1985	2000	2014	1947 ^a	1970	1985	2000	2014	1947	1970	1985	2000	2014
Exports	0	126	765	2,419	6,570	0	544	1,437	1,852	2,105					
Destinations (%)															
France	-	24	17	6	3	-	30	36	20	4					
Germany	-	30	23	31	19	-	34	27	35	29					
United Kingdom	-	3	9	9	13	-	1	5	7	15					
United States	-	14	34	22	22	-	4	17	10	15					
Other countries	-	29	17	32	43	-	31	15	28	37					
Composition (%)															
Bottled	24	32	57	78	75	11	16	36	46	61					
Bulk	73	61	27	14	8	87	82	58	49	27					
Sparkling	3	7	16	8	17	2	2	6	5	12					
Imports	0	20	74	183	386	0	24	48	64	262					
Composition (%)															
Bottled	-	-	-	22	18	-	-	-	22	8					
Bulk	-	-	-	10	42	-	-	-	61	89					
Sparkling	-	-	-	68	40	-	-	-	17	3					

^a Refers to average for just 1946 and 1947.

Source: Official sources (ISTAT) and Anderson and Pinilla (2017).

Table A6.3. *Unit value of wine exports and imports, Italy, 1946 to 2014 (current US\$/litre, three-year averages centred on year shown)*

	1947 ^a	1970	1985	2000	2014
Exports	0.31	0.23	0.53	1.31	2.57
Bottled	0.55	0.50	0.86	2.52	3.18
Bulk	0.22	0.18	0.25	0.50	0.76
Sparkling	0.71	0.80	1.45	2.61	3.56
Imports	0.31	0.84	1.54	2.84	1.18
Exports/imports	1.00	0.31	0.34	0.47	2.19

^a Refers to average for just 1946 and 1947.

Source: Official sources (ISTAT) and Anderson and Pinilla (2017).

Table A6.4 *Basic economic statistics, Italy, 1947 to 2014 (three-year averages centred on year shown)*

	1947 ^a	1970	1985	2000	2014
Real GDP (gk\$ mill.)	124,434	520,981	799,981	1,077,572	1,078,175
Real GDP pc (gk\$)	2,359	9,706	14,138	18,928	17,466
POP (x 1.000)	45,725	53,678	56,584	56,931	61,725
Nom. exch rate (€/US\$)	0.13	0.32	0.89	1.05	0.80
CPI (2015=100)	1.9	5.7	40.1	76.3	100.0
All exp (mill. US\$)	656 ^b	13,346	82,828	240,190	502,025
All imp (mill. US\$)	1,429 ^b	14,471	90,743	231,871	453,856

^a Refers to average for just 1946 and 1947.

^b Single year (1947)

Source: Anderson and Pinilla (2017).

REFERENCES

- Anderson, K. (2013), *Which Winegrape Varieties Are Grown Where? A Global Empirical Picture*, Adelaide: University of Adelaide Press.
- (2018), 'Asia and Other Emerging Regions', ch. 17 in *Wine Globalization: A New Comparative History*, edited by K. Anderson and V. Pinilla, Cambridge and New York: Cambridge University Press.
- Anderson, K. and S. Nelgen (2011), *Global Wine Markets, 1961 to 2009*, Adelaide: University of Adelaide Press.
- Anderson, K. and V. Pinilla (with the assistance of A. J. Holmes) (2017), *Annual Database of Global Wine Markets, 1835 to 2016*, freely available in Excel at the University of Adelaide's Wine Economics Research Centre, www.adelaide.edu.au/wine-econ/databases

- Bonardi, L. (2014), 'Spazio e produzione vitivinicola in Italia dall'Unità a oggi. Tendenze e tappe principali', *Territori del vino in Italia* 5. Available at revueshs.u-bourgogne.fr/territoiresduvin/document.php?id=1621
- Casalini, M. (1953), *Le cantine sociali cooperative*, Rome: Centro tecnico per la cooperazione agricola.
- Chevet, J.-M., E. Fernandez, E. Giraud-Héraud and V. Pinilla (2018), 'France', ch. 3 in *Wine Globalization: A New Comparative History*, edited by K. Anderson and V. Pinilla, Cambridge and New York: Cambridge University Press.
- Chiatti, R. (2014), *L'agricoltura italiana tra sviluppo economico e fallimento ambientale. Il caso dell'Italia centrale. Toscana, Marche e Umbria dal secondo dopoguerra alla fine degli anni Ottanta*, Tesi di dottorato in 'Società, politica e culture dal tardo medioevo all'età contemporanea' (XXV ciclo), Facoltà di Lettere e Filosofia, Università degli Studi di Roma 'La Sapienza'.
- Corsi, A., E. Pomarici and R. Sardone (2004), 'Italy', pp. 73–97 in *The World's Wine Markets: Globalization at Work*, edited by K. Anderson, London: Edward Elgar.
- D'Agata, I. (2014), *Native Wine Grapes of Italy*, Berkeley: University of California Press.
- D'Angelo, M. (1974), 'Il punto sulla situazione della D.O.C. attraverso interessanti tabelle di raffronto', *Politica ed economia vitivinicola* 9: 41–4.
- Desana, P. (1976), 'Esigenze di coordinamento per porre in atto una valida politica vitivinicola', *VigneVini*, 9(3): 5.
- European Parliament (2012), *The Liberalisation of Planting Rights in the EU Wine Sector*, Study for the Directorate-General for Internal Policies, Policy Department Structural and Cohesion Policies, Brussels: European Parliament.
- Federico, G. and P. Martinelli (2018), 'Italy Before World War II', ch. 5 in *Wine Globalization: A New Comparative History*, edited by K. Anderson and V. Pinilla, Cambridge and New York: Cambridge University Press.
- Fregoni, M. (1986), 'Alcol metilico: la punta di un iceberg', *VigneVini* 3: 17–18.
- Giacomini, C. (2010), 'Tavernello' il vino più bevuto nelle famiglie italiane: un caso di successo', *Mercati e competitività* 2: 143–55.
- Green, R., M. Rodríguez Zúñiga and A. Seabra Pinto (2006), pp. 74–114 in 'Imprese del vino: un sistema in continua evoluzione', *Il mercato del vino: tendenze strutturali e strategie dei concorrenti*, edited G. P. Cesaretti, R. Green, A. Mariani and E. Pomarici, Milan: Franco Angeli.
- Idda, L. (1980), 'La Nuova strada indicata dalla CEE per il settore vitivinicolo', *Agricoltura informazioni* 3(14/15): 3–7.
- INEA (various years), *Annuario dell'agricoltura italiana*, Rome.
- ISMEA (various years), *La filiera Vino*, Milan: Agrisole – Il Sole 24 Ore.
- ISMEA (2014), *Vini a denominazione di origine. Struttura, produzione e mercato*, Report, Rome: ISMEA.
- ISTAT (2015), *Aspetti della vita quotidiana 2013*, Rome: ISTAT.
- Mariani, A. and E. Pomarici (2011), *Strategie per il vino italiano*, Naples: Edizioni Scientifiche Italiane.
- Mariani, A., E. Pomarici and V. Boatto (2012), 'The International Wine Trade: Recent Trends and Critical Issues', *Wine Economics and Policy* 1(1): 24–40.
- Mazzarino, S. and A. Corsi (2015), 'I flussi dell'uva verso la vinificazione: un'analisi comparata per regioni e macroaree', *Economia agro-alimentare*, 20(1): 29–58.
- Mediobanca (various years), *Indagine sul settore vincolo*, Milan: Ufficio studi – MBRES.

- Meloni, G. and J. Swinnen (2018), 'Algeria, Morocco and Tunisia', ch. 16 in *Wine Globalization: A New Comparative History*, edited by K. Anderson and V. Pinilla, Cambridge and New York: Cambridge University Press.
- Mitchell, L. (2016), 'Demand for Wine and Alcoholic Beverages in the European Union: A Monolithic Market?' *Journal of Wine Economics* 11(3): 414–35.
- Munsie, J. A. (2002), *A Brief History of the International Regulation of Wine Production*, Third-Year Undergraduate Paper), available at nrs.harvard.edu/urn-3:HUL.InstRepos:8944668
- Pomarici, E. and R. Sardone (eds.) (2001), *Il settore vitivinicolo in Italia. Strutture produttive, mercati e competitività alla luce della nuova Organizzazione Comune di Mercato*, Rome: Studi & Ricerche, INEA.
- (eds.) (2009), *L'OCM vino. La difficile transizione verso una strategia di comparto*, Rome: Rapporto dell'Osservatorio sulle politiche agricole dell'UE, INEA.
- Rete Rurale Nazionale (2012), *Il programma di sostegno del vino: bilancio del primo triennio di applicazione e prospettive future*, Rome: Piano strategico dello sviluppo rurale, MIPAAF.
- Rosen, M. (2008), 'Ornellaia's Masseto: first Italian wine to be sold through the Place de Bordeaux', *Decanter.com* (accessed 18 November 2008) Available at www.decanter.com/wine-news/ornellaia-masseto-first-italian-wine-to-be-sold-through-the-place-de-bordeaux-76165/.
- Scoppola, M. and A. Zezza (eds.) (1997), *La riforma dell'Organizzazione Comune di Mercato e la vitivinicoltura italiana*, Rome: Studi & Ricerche, INEA.
- Tassinari, V. (2015), *Noi, le Coop rosse, tra supermercati e riforme mancate*, Soveria Mannelli, CZ: Rubbettino
- Williams, S. (2014), *Il caso Tavernello: Un successo del modello imprenditoriale cooperativo*, Faenza, RA: Homeless Book.