

CORNELL  
AGRICULTURAL ECONOMICS  
STAFF PAPER

SOME ASPECTS OF ITALIAN WINE ECONOMICS

AN OVERVIEW OF THE 1980'S

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August 1988

No. 88-18

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## **ACKNOWLEDGEMENTS**

Funds for this research were provided by the Italian National Research Council (C.N.R.) under Agreement 203-06-4. This publication is the first report of the work accomplished under this project.

Appreciation is expressed to Prof. Gerald B. White for his helpful review comments.

Appreciation is also expressed to the Department of Agricultural Economics of Cornell University for the hospitality and the institutional support provided me while I worked on this paper.

Members of the faculty of the Institute of Agricultural Economics and Policy at the University of Bologna (Italy) were also very helpful in giving direction to the study as well as in providing the data used in this paper.

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Initials used to indicate table data sources are:

FEDERVINI = Italian Federation of Wines  
ICE = Italian Trade Commission  
IRVAM = Institute for Research and Marketing Information  
ISMEA = Institute for Study of Agricultural Markets  
ISTAT = Italian Institute of Statistics  
OIV = International Vine and Wine Office

# **Some Aspects of Italian Wine Economics**

## **An Overview of the 1980's**

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### **Introduction**

This paper reviews some aspects of Italian wine economics during the 1980's, in a national and international perspective. Its purpose is primarily to provide a regional frame of reference and some up-to-date background information concerning the wine industry, which constitutes about 9% of the agricultural gross saleable production and accounts for 12-14% of food exports. In this sector 11,000 firms, employing almost 38,000 people, produce over 74 million hectolitres of wine per year. The paper also considers the influence of three negative factors which have recently affected the Italian wine sector: the sharply declining U.S. dollar, the dramatic loss of sales in Lambrusco-type wines, and the adverse reaction to contamination-related scandals.

The paper is divided into six sections. The first reports international statistics on grapes and wine, and on world wine consumption as well. The second section describes the structure of Italian winemaking production. Section III focuses on the role of the wine industry in the Italian agricultural economy. The fourth section examines recent trends in Italian wine

consumption. Section V details the market for Italian wine exports, considering in particular the 1985-86 downturn caused by the diethylene glycol and the methyl alcohol scandals; in this section are also shipment tabulations of Italian wines for the first half of 1987. The final section reports the latest measures of winemaking policy undertaken by the Italian Government.

### I. The Place of Italy in the World Wine Sector

Wine is the most ancient beverage in the world; there is some indication that the genus *vitis* was already in existence in the Pliocene epoch, from ten to one million years B.C. Wine today is one of the most widely consumed beverages; world production of wine has been more than 300 million hectolitres a year for the last decade. Because of its popularity, it is also an important source of employment and of farm, industrial, and commercial income. Finally it is a primary product for exportation for the major producing countries. In recent years, 15 to 17% of the world production has been exported from the country of production.

With a share of 23.2% of the global market, which is now 331 million hectolitres a year, Italy is the major wine producer in the world today. In 1986, the 77 million hectolitres produced in Italy represented 30% of the European market (269 million hectolitres), compared to 27% for France, the strongest competitor with over 72 million hectolitres (see Table1).

Italy also has one of the largest land areas planted for growing grapevines in the world. On average, during the period 1981-1985, in fact, the hectarage devoted to vines accounted for 12.4% of the world total (9.8 million hectares), and 17.5% of the European total (6.7 million hectares). Europe, however, had more than 70% of the total vineyard area, and its



wine production was roughly 80% of the world total (see Table 2).

Italy's position of leadership in production and planted area does not correspond to its rank among world exporters. In 1986 France was in first place with over 13 million hectolitres (28.6% of world exports), compared to Italy with 10.5 million (22.9% of world exports) 1/. To be sure, 1986 was a bad year for other wine exporters: Spain suffered a 18.8% decline, Germany 13.1% (on a volume basis). However, the decline may have seemed especially dramatic for Italian vintners, who over the previous two decades had grown accustomed to uninterrupted increases, while other nations showed much more modest growth interrupted by occasional declines (see Table 3).

Despite the general improvement in grape yields and the increase in wine production brought by changes in production technology 2/ the trend of world wine consumption has suffered a 13.6% decline in the last ten years. A drop in per capita consumption has touched all the countries that can be considered large consumers (over 50 litres per year), with the single exception of Portugal (see Table 4). This phenomenon is confirmed in France, Spain, and Argentina, as well as in Italy. In contrast, increases have been registered, at times to a considerable degree, in those countries where consumption is moderate (less than 15 litres per year) and/or characterized by high or very high levels of per capita income, such as Switzerland, the USA, Canada, Australia, and the United Kingdom.

1/ During the early 1980's, however, Italy was first in world wine exports, with a share of 32-33%, compared with France's 21-22%.

2/ In recent years the EEC has adopted a series of abandonment measures aimed at reducing the area under vines and thus correcting the market imbalance. The outcome of these measures will be a drop in production of table wine by 1992 to 90-95 million hectolitres, a slight rise in production of quality wine to around 45 million hectolitres and stabilization of production of other wines at a level of 10 million hectolitres, giving an estimated total production figure of 145 to 150 million hectolitres in 1992.

To some extent these trends can be explained by various social, political, and cultural factors (see also section IV). However, the figures, even though not supported by a sociological behavior analysis, seem to give credence to an interpretation based on a generalized convergence in the models of behavior. If so, then possible causes of Italy's drop in consumption could be extended to most of the traditional wine producing countries.

From this outline of worldwide consumption trends it seems that large changes in consumption can occur (albeit over long periods of time) with major consequences for the viticultural economy of the countries concerned. These consequences are especially critical when viticulture is of primary importance in the country's agriculture, as it is in Italy.

## **II. The Structure and the Management of Italian Winemaking Production**

The productive structure of the Italian wine sector is very diffuse and the management of the grape farms is organized in different ways according to the region and the type of product.

Italian wine production is spread throughout the country (see Figure 1). The Agricultural Census of 1982 reported almost 3.2 million agricultural firms. More than 50% cultivate vines and, of these, 106,000 produce D.O.C. wines <sup>1/</sup>.

<sup>1/</sup> D.O.C. and D.O.C.G. wines ("Denominazione di Origine Controllata e Garantita") mean "quality wines produced in specified regions" (psr), and meeting the requirements of Regulation EEC n. 823/87.

Most of Italy's wine is produced on small or very small farms, 55% of which are located on hills and 26% on plains. The average size is only 0.82 hectares (see Table 5). The Industrial Census, moreover, indicates more than 11,000 wine producing firms, of which about 85% are organized in conjunction with agricultural production <sup>1/</sup>. The remaining firms are industries with no agricultural component and produce only wine. Total employment in the viticultural wine sector is about 38,000 (see Table 6).

The land surface involved in viticulture was just 7% of the total agricultural area in 1982, and for the D.O.C. production only 1.3% (or 18.2% of the viticultural land surface). Since 1982, however, the area for production has decreased in response to declining prices. In 1986, the total viticultural surface was 1,070 million hectares, 982 thousand of which was in wine grapes and 85,000 in table grapes. In contrast, the area designated for D.O.C. wines was well over 250,000 hectares, with an increase of 102% over 1982.

These figures, however, do not accurately represent the real situation. Because of the number of small or very small operations whose activities escape the notice of the census, the characteristics of the sector are not precisely definable and quantifiable. In other words, there is good reason to believe that in the wine sector there is a significant percentage of productive units and of labor forces engaged in "submerged" activity, for the most part characterized by the model of small-scale production which is consumed at home or outside normal marketing channels. Nevertheless, the data described so far on one hand reveal the degree of organization of the productive activity, and on the other usually reflect the different qualitative characteristics in any one locality.

<sup>1/</sup> Grape production and winemaking (transformation and conservation) as well.

Another interesting way to look at Italian wine production is to consider the forms of management. The organization of the productive activity varies according to the type of product and the area of production. Approximately 30% of all wine is produced by privately owned wineries which produce most of the country's higher quality wines. The areas with the oldest wine tradition and having limited and high quality output such as Piedmont, Friuli-Venezia Giulia, and Tuscany are organized on a firm by firm basis. They tend, moreover, to increase the value of their cultivation through direct marketing.

In contrast, cooperative organizations are an important presence in Italian common table wine production (see Table 7) <sup>1/</sup>. During the wine season 1985/86 there were 938 cooperative wineries having almost 400,000 members and a total cellar capacity of 60 million hectolitres, amounting to over 78% of the total Italian wine production. In the same period, 38.7% of Italy's wine grapes and 66% of the total wine were produced by members of cooperative wineries.

The number of cooperatives varies, however, according to the geographical area with Puglia and Sicily in the south having the most cooperatives. In northern Italy cooperative wineries are relatively strong in two exporting regions, Veneto and Emilia-Romagna. In this last region, cooperatives account for more than one half of the total wine production

<sup>1/</sup> In Italy, cooperative wineries generally belong to one of 3 federations:

- a) The "Lega Nazionale delle Cooperative" (the "red" coop because it's linked with the Communist or Socialist Party).
- b) The "Federazione Italiana delle Cantine Sociali" (the "white" coop because it's linked with the Christian-Democratic Party).
- c) The "Associazione Generale delle Cooperative".

with 84 cooperative wineries, 51,000 members, and a total cellar capacity of over 8 million hectolitres. This is the region where Cantine Riunite, the world's largest cooperative group and probably also the world's largest wine exporting firm, is located.

### **III. Grape And Wine Production in the Italian Agricultural Economy**

The role of the wine sector in the Italian agricultural economy varies remarkably according to the kind of production, the region, and the year as well. For the most part, regional specialization - both in viticulture and in wine production - does not correspond to the quantity of grape and wine production.

Between 1980 and 1986, the proportion of the viticultural gross saleable production (G.S.P.) <sup>1/</sup> to the total G.S.P. of the agricultural sector was 8.6% on the average, varying in a range from a maximum of 10% to a minimum of 7.6%. A strong increase in value was recorded in 1982, 1983, and 1986 and a weakening in 1981, 1984, and 1985 (see Table 8).

In 1986, the last year for which data is available, the territorial distribution of the wine producing saleable production shows a strong degree of concentration (see Table 9 and Figure 2).

<sup>1/</sup> The gross saleable production is calculated by multiplying total domestic agricultural production times sale prices.

Five regions: Emilia-Romagna, Lombardy, Apulia and Sicily furnished over 60% of the value of the gross national saleable production. The coefficient of specialization in viticulture <sup>1/</sup> reveals that among the bigger producers Friuli-Venezia Giulia is in first place with a value of 5.3, followed by Veneto (5.2), Liguria (5.0), and Trentino Alto Adige (4.7).

An analysis of the type of grape produced and utilized in 1986 shows a drop in grape production of over 12% respect 1980. This decrease was entirely due to a 15.9% fall in numbers of wine grapes from 13.2 million tons to 11.6 million, while the table grapes increased over 19.1% (see Table 10). In 1986 over 70% of table grapes was destined for direct consumption, while the rest (466,000 tons) was made into wine (with the exclusion of small quantities for raisins). The grapes used for wine in 1986 were over 10.2 million tons, with a decline of 15.1% since 1980.

The latest figures for 1987 confirm a decline since 1986, both for vinification (-3.3%) and wine produced (-5.4%). The yield (the ratio of grape to wine), 0.75 in 1986, had increased by over 5% since 1980, but dropped by 2.6% from 1986 to 1987.

An examination by territory shows a concentration of grape production. Four regions, in fact, furnish almost 60% of all the total Italian grapes. These are: Apulia with 2.6 million tons, Sicily 1.9, Veneto 1.2 and Emilia Romagna 1.0. These regions differ, however, in the proportion of wine to table grapes. The latter represents an extremely significant part of total table grape production in Apulia, Abruzzi and Sicily. In Apulia table grapes make up 40% of total grape production, while Abruzzi and Sicily comprise 28.9 and 21.6 of this production respectively (see Table 11 and Figure 2).

<sup>1/</sup> Ratio between gross saleable production with respect to regional gross saleable production, and with respect to the national total.

Italian wine production in the 1980's has averaged around 74 million hectolitres per year with a high point of over 86.5 million in 1980. During the period of observation (1980-1987) overall wine production dropped by 15.9%, and by 6.4% for the D.O.C wines. The latter represented for the same period 11% of total wine production averaging 5.1 millions hectoliters per year (see Table 12). The regions which furnish the greatest contribution to total wine production are both in southern and in northern Italy. In the south Apulia has an 18.7% share and Sicily has a share of 16%. In the north Veneto's share is 11.9% and Emilia-Romagna has a 10.6% share (see Table 13).

The situation is very different taking in account the D.O.C. production, which is concentrated in north-central Italy (89.6%). In this case, about one half of the production involves only three regions: Veneto with 21.8%, Tuscany 13.9%, and Piedmont 13.2%. The concentration of D.O.C. wine production, calculated on the coefficient of specialization in D.O.C. production 1/, reaches the higher values also in this case for Friuli-Venezia Giulia and Umbria with 7.9, followed by Trentino Alto Adige 5.7 (see Table 13).

An indication of the tendency toward specialization of D.O.C. wine production comes, moreover, from the number of D.O.C. wines recognized by law, rising from 619 in 1980 to 797 in 1985, and for sparkling D.O.C. wines from 52 to 71 (see Table 14). However, these increases seem to have no effect on the amount of D.O.C. wines produced 2/. This fact emerges indirectly from the figures presented in Table 15, which reports

1/ Ratio between the proportion of D.O.C. on total regional wine production, and the proportion of D.O.C. on total Italian wine production.

2/ This phenomenon could be explained by the limited quantity of each D.O.C. area's production, even including those most recently recognized.

those qualities of D.O.C. wines having a production of over 100,000 hectolitres. This is the case of only 18 D.O.C. wines of the 216 recognized and, together, they represent 62.1% of the total. The remaining 37.9% is divided among the other 198 qualities. None of these is produced in high producing regions like Apulia or Sicily. Among the wines that account for a greater part of the total volume is Chianti with 894,100 hectolitres, corresponding to 11.4% of the total of D.O.C. wines in 1985, Moscato d'Asti, 8.1%, Valpolicella, 5.4%, and Soave 4.5%.

#### IV. Recent Trends in Italian Wine Consumption

Although consumption differs according to type of wine and the sex, age, and geographical location of the consumer, wine is still the beverage in highest demand for a large part of the Italian population. Over the course of the time, however, the trend of wine consumption has been in decline.

In the 1986-87 wine supply balance, the relative share of domestic consumption was equal to 61% of available supplies, exports accounted for 12.6%, and for the first time the stock variation was positive <sup>1/</sup> (see Table 16).

In contrast to 1983-84, the data for 1986/87 show a significant decrease of 23.6% in the share of direct consumption, as well as the drop of 18.5% in

<sup>1/</sup> Difference between the beginning of year stock and the end of year stock (both calculated on August 31).



exports 1/. Between 1983 and 1986 the quantities distilled under the EEC regulation, which accounted for 23 to 32% of the domestic wine consumption, dropped from 22 to 12 million hectolitres. The trend of the self-sufficiency degree was declining (-23.4% between 1983 and 1987), but the index is always well over 1.

The decrease in direct consumption of over 16 million hectolitres is due to a significant 11% reduction in per capita consumption: from 91 litres per capita in 1983, to 81 litres in 1986 (see Table 17).

Many important reasons explain this declining trend in Italian wine consumption and wine consumption in other countries as well (see also Section I). In summary these reasons are:

- the exodus of the rural and agricultural populations into urban areas;
- the consequent change in life style supported by improved incomes;
- misleading information about the authenticity of wine or its effect on health;
- the competition with other beverage products such as soft drinks and beer resulting at least in part due to extensive advertising 2/; and
- a greater propensity of consumers to spend their money on other goods.

1/ Since Italy has traditionally been one of the world's greatest wine producers, in both quantity and variety of types, wine imports have contributed only a small part (0.8%) of the total available wine. However, between 1980 and 1987, while production declined by 11%, Italian wine imports increased.

2/ Competing beverages are much better advertised than wine products. For example, the investment in advertising for soft drinks is over three times higher than wine (See Table 18).

In terms of per capita purchase, however, wine still represents the preferred beverage in the Italian family budget, with a ratio of almost 3:1 over mineral water, and 5:1 over beer (see Table 19).

The distribution of this beverage throughout a large part of the population is shown in Table 20, which reports the results of a recent marketing analysis on daily wine consumption sponsored by the Italian Federation of Wines (FEDERVINI). Almost 65% of the population drink wine, with an average daily consumption of 0.38 litres by those who drink it.

Consumption varies significantly according to sex, age, and geographical location of the consumers. Over 76% of men consume wine compared to 53.5% of women. Older consumers (population over 55) drink more wine than younger consumers (age group 18-24). The greatest amounts are consumed in central and north-eastern Italy (0.28-0.30 litres per capita daily), while the lowest amount (0.22 litres) is consumed in southern Italy.

Wine consumption also differs according to type. The Italian consumer prefers red wine (62%, over 1.2 million litres), rather than white (29%) or rosé (only 9%) (see Table 21). Fifty four percent of wine is sold, moreover, in demijahn (bulk), 43.4% in bottles (especially 1.5 and 2.0 litres), and only 1.9% in cartons or cans in spite of strong mass media advertising by large companies especially aimed at younger people, who have been turning to other beverages (see Table 22).

## V. Italian Wine Trade

Italian wine trade experienced a downturn in 1985/86 because of the combination of the well-known contamination scandals and the depreciation of the U.S. dollar against the Italian lira. The drop in Italian wine exports affected all the export markets as well as all types of wines to the same extent (it was less severe only for the vermouths). However, the performances of the Italian wines during the first half of 1987 indicate that their decline has been arrested.

Most export wine originates in four of Italy's 22 regions (see Figures 1 and 2). Veneto and Emilia-Romagna located in the north and Apulia and Sicily in the south. Together these regions produced 57.2% of the total 1986 production. The two southern regions export mostly high alcohol content, bulk wine for blending, while the north accounts for most of Italy's bottled wine exports 1/.

During the first half of the 1980's, Italian wine exports grew moderately until 1985, when the proportion of wine to total food exports reached 14.2% (on a value basis) (see Table 23). 1986 represented, however, a year of change with a reduction of 27.6% in volume and 25.8% in value (from 16.8 to 10.5 million hectolitres, and from 1.5 to 1.1 billion lire) (see Table 24) 2/.

The slide in export figures can be directly attributed to the scandals of wine contamination with diethylene glycol (autumn 1985) and with methyl alcohol (beginning of 1986), which for some months completely blocked

1/ Northern producers often utilize some southern wines, especially from Apulia, for blending into their own wines.

2/ The loss in value was lower than this in quantity because of the general increase of prices (18.9% on the average) and the relatively minor decrease registered by the premium wine.

exportation and consequently reduced the total flow to a large extent. However, the decrease in sales of all imports must be blamed in part on the weak dollar. When imports are more expensive, demand for them usually slackens.

Between 1984 and 1986, Italian wine exports recorded a drop in quantity of 30.4% in the EEC market (which covers 72.7% of the export market), and of almost 40% outside the EEC area (see Table 25). Within the EEC, wine exports to France (44% of the total market in 1986) dropped by 38.3% and wine exports to Germany (39% of the market in 1986) decreased by 25%. The only exception to this were the flows to the United Kingdom, which increased over 30% between 1984 and 1986. Within the non-EEC countries, apart from the almost complete cancellation of the flows to the USSR, the drop of 40% in exports to the USA was the most dramatic (over 50% of the Italian exportation outside the EEC area).

The decline in sales of Italian wines in the U.S. began in 1984, but it was not until 1985/86 that significant movement occurred, with sales down by 32% on a volume basis. Then, in 1986/87 the disaster: buffeted by a declining dollar, by adverse publicity surrounding contamination scandals, and by a loss of sales of semi-sparkling wines - principally Lambrusco and its white and rosé counterparts from Emilia Romagna 1/ - to American produced coolers, sales of Italian wines declined by 23.6%. For the first time since the late 1970's Lambrusco boom, Italy failed to account for more than 50 percent of the total wine imports into the U.S. (see Table 26). In 1986 Lambrusco-type wine plunged 46.3%, with the white wine segment dropping 37.3% and the reds all but collapsing with a 58% decrease.

1/ U.S. import statistics consider Lambrusco as a still "table wine" whereas Italian export statistics class it as "semi-sparkling" or effervescent wine.

The non-Lambruscos suffered as well, but the decline was less steep (12.1% of their volume) and for the first time they outdistanced the Lambrusco (8.7 million cases to 7.9 million) (see Table 27).

Finally, even looking at the alcohol content, the Italian export recorded in quantitative terms drops which ranged from a minimum of 10.6% for wines with a high alcohol content (over 15%) to a maximum for wine between 13 and 15% (59.5 percent) and non-concentrated musts (43.9 percent), see Table 28. Only the D.O.C. wines and in general the bottled wines (cases less than 2 litres) were less affected by the reduction in export (see Table 29) 1/.

If 1985 marked a downturn in Italian wine export, 1986 accentuated it. Unfortunately the trend also carried over to the first half of 1987. The trade remained lower than that of the same period in 1984, and very far from the figures of 1985. However, there was a general improvement (1.8% on a volume basis) compared to the first six months of 1986, in particular for the D.O.C. wines, both regular and sparkling, which recorded an increase of 6.9% and 12.9%, respectively.

1/ The analysis of the average prices (valued in terms of the ratio value:quantity), though they are approximate, explains the differences between the figures expressed in monetary terms and those expressed in quantity. Observing the data reported in Table 29, it is possible to understand the complex mechanism of the 1986/87 season for the various types of wine in terms of volume, value, and average price.

## VI. How to Escape a Crisis: Winemaking Policy in Italy

The recent reduction in Italian wine exports, resulting from the adulteration scandals and the steep decline in domestic consumption, raises anew the need to assure both the purity and the quality of the product destined for domestic and foreign markets.

Although wine is still the beverage in highest demand, there is an increasing necessity for a quality product, capable not only of meeting new tastes on the market, but also of dispelling residual doubts left by the adulteration scandal. The Italian wine industry is attempting to confront this situation with imaginative marketing techniques like bottling wine in cans, new products such as flavored wines, export promotions (in 1986 the Italian Trade Commission spent \$1,991,300 advertising wine in the U.S.'s mass media), as well as efforts to obtain reductions in consumption taxes on wine in other countries 1/. The Italian Ministry of Agriculture and Forest (MAF) 2/ and the Union of the Italian Chamber of Commerce (Unioncamere) 3/ are also engaged in this effort, assuring careful control over production and prevention of contamination.

1/ Many countries, especially European nations such as United Kingdom, Ireland and Denmark place heavy taxes on wine consumption. These taxes bring the price of wine up to two to five times as high as the Italian price.

2/ The MAF has, among its institutional duties, the coordination of the service of the repression of contamination for musts, wines and vinegars (both preparation and trade), as well as the protection of the "quality wine psr".

3/ The Unioncamere keeps the register of high - quality oenological lands, those of the tasters (sommeliers), and the National Register of Vineyards.

The three main measures of winemaking policy recently undertaken are as follows:

1. The Revision of the National Register of Vineyards

The National Register of Vineyards, instituted in 1967, requires the reporting of those grapes destined for the production of wines with a denomination of origin "controlled" or "controlled and guaranteed" (D.O.C. and D.O.C.G.). The importance and the relevance of the problems of Italian winemaking have revealed the necessity for more frequent and accurate verification of the National Register in order to make it an efficient instrument of control for the marketing of high-quality wines. In this regard, the Unioncamere considers indispensable the extension of the national computer network of the Chambers of Commerce already established for keeping these registers. A revision of the Register of Vineyards seems to be necessary, however, to adopt new criteria for classification of quality wine. This revision is necessary to permit a clearer knowledge of the elements which differentiate the products, both for the producers and the consumers.

2. The Modification of the Service for the Repression of Adulteration

The action undertaken by the Commission and by the Technical Committee for Winemaking of the Unioncamere, following the episode of methyl alcohol, merits special consideration. The relevant draft document contains a series of proposals of normative and technical character, and follows the developments of the Law Decree n. 282/1986 on the urgent measures of prevention and control of food adulteration coordinated with

conversion law n. 482/1986. This law, in particular, makes use of an amendment proposed by the Commission of Unioncamere and adopted by the legislative office of the Italian Ministry of Agriculture, under which (art. 8) the chemical commercial laboratories of the Chambers of Commerce were included among those authorized to conduct routine analyses of wine.

### 3. The Institution of a Computerized System

The computerized data firm of the Chamber of Commerce (CERVED), has already released software which allow a mechanized management of the National Register of Vineyards and of production of D.O.C. and D.O.C.G. wines 1/. Presently, this system is utilized by 10 Chambers of Commerce 2/ for a total of nearly 55,000 winemaking firms.

The computerized system permits the management of the registration lists, management of grape reporting, and control of information concerning the wine in storage. The short-term objective of the CERVED is to extend the application of the "subsystem for D.O.C." wines to all the Italian Chambers of Commerce, covering thus all the approximately 200,000 winemaking firms registered in the D.O.C. lists. Wines with a denomination of origin presently represent only 10-12% of the entire domestic wine production. As a result, the greater part of common wine production escapes any systematic survey. CERVED's computerized system allows the reporting of total area of vineyards, the reporting of grape production, of

1/The name of this data bank is SDOC, the acronym for subsystem for D.O.C. wines.

2/ Alessandria, Asti, Cuneo, Florence, Pavia, Reggio, Turin, Treviso, Venice, Vicenza.



wine production, and of transports, sales, and warehousing of the finished product. A system of this kind would permit access to precise and up-to-date information at all times and in all parts of Italy, as well as verification of the various steps that are taken from the vineyard to the consumer.

### Conclusion

With a share of almost one fourth of the global market, Italy is the leading wine producer in the world today. However, the continually increasing production due to increasing yields in the face of a steep decline in domestic consumption, and the recent decrease in exportation resulting from adulteration scandals and from the depreciation of the U.S. dollar, reveal the deep crisis in this sector.

In recent years the Italian wine industry has in fact shown many elements of weakness and fragility, which can be summarized as:

- a grape farming structure which, although dynamic, is still responding slowly to European directives aimed at having larger farm sizes to accommodate the increasing cost of machinery and inputs;
- skewed regional production which brings about problems of regional difference that hamper and prevent the employment by the government of the same policy tools throughout Italy;
- a high concentration of vineyards on the plains where climatic factors make it difficult to produce quality wines;

Countries	Grapes (1) (1,000 tons)		Composition (%)		Wine (1,000 hectolitres)		Composition (%)	
	1979-81	(2) 1985	1986	1986	1979-81	(2) 1985	1986	1986
Europe	38,929	32,627	38,857	58.0	277,650	242,368	269,584	81.3
of which:								
Italy (3)	12,396	9,748	11,662	17.4	80,300	62,340	76,987	23.2
France	10,470	10,000	10,650	15.9	70,630	70,055	72,020	21.7
Spain	6,588	5,345	5,788	8.6	41,420	33,103	35,556	10.7
Portugal	1,570	1,150	1,100	1.6	11,700	9,893	7,715	2.3
USSR	6,648	5,744	5,077	7.6	32,000	26,500	30,000	9.0
America	10,179	10,089	10,337	15.4	50,780	47,403	42,907	12.9
of which:								
USA	4,549	5,127	5,077	7.6	16,780	18,100	17,700	5.3
Argentina	3,230	2,279	2,750	4.1	23,640	18,463	21,767	6.6
Africa	2,260	2,465	2,634	3.9	11,410	12,329	12,460	3.8
of which:								
Algeria	398	469	465	0.7	2,740	1,800	1,800	0.5
Asia	7,308	7,927	8,018	12.0	370	2,830	2,861	0.9
of which:								
Turkey	3,600	3,300	3,300	4.9	4,190	380	380	0.1
Oceania	814	932	903	1.3	3,750	3,986	3,856	1.2
of which:								
Australia	775	890	865	1.3	3,750	3,363	3,292	1.0
Total World	66,192	59,665	66,990	100.0	346,280	308,916	331,668	100.0

Source: FAO Production Yearbook.

(1) Table Grapes and Wine Grapes.

(2) Averages.

(3) ISTAT.

Table 2 Area Planted in Vines. World, 1971-1985 (1), 1986.

Countries	Hectares (1,000)			Composition (%)				
	1971-75	1976-80	1981-85	1986	1971-75	1976-80	1981-85	1986
Europe	7,108	7,304	6,944	6,687	71.4	71.5	70.7	70.9
of which:								
Italy	1,369	1,389	1,215	1,048	13.7	13.6	12.4	11.1
France	1,317	1,230	1,099	1,062	13.2	12.0	11.2	11.3
Spain	1,551	1,717	1,629	1,574	15.6	16.8	16.6	16.7
Portugal	354	364	369	245	3.6	3.6	3.8	2.6
USSR	1,122	1,268	1,355	1,200	11.3	12.4	13.8	12.7
America	876	944	925	840	8.8	9.3	9.4	8.9
of which:								
USA	280	303	337	320	2.8	3.0	3.4	3.4
Argentina	323	350	314	265	3.2	3.4	3.2	2.8
Africa	490	443	423	346	4.9	4.3	4.3	3.7
of which:								
Algeria	257	211	195	172	2.6	2.1	2.0	1.8
Asia	1,418	1,451	1,465	1,486	14.2	14.2	14.9	15.8
of which:								
Turkey	838	794	794	630	8.4	7.8	8.1	6.7
Oceania	69	71	73	75	0.7	0.7	0.7	0.7
of which:								
Australia	68	68	67	62	0.7	0.7	0.7	0.7
Total World	9,961	10,213	9,830	9,428	100.0	100.0	100.0	100.0

Source: OIV Bulletin, FAO Production Yearbook, and EUROSTAT.

(1) Averages.

Table 3 World Wine Trade, 1984-1986.

Countries	Import (1,000 hectolitres)			Composition (%)			Export (1,000 hectolitres)			Composition (%)		
	1984	1985	1986	1986	1986	1986	1984	1985	1986	1986	1986	1986
Italy (1)	146	719	596			1.3	15,751	16,847	10,513			22.9
France	5,912	6,977	4,141			9.4	11,401	11,892	13,082			28.6
Spain	19	41	16			0.0	6,641	6,810	5,529			12.1
Portugal	1	1	3			0.0	1,481	1,417	1,501			3.3
Germany	9,239	9,568	8,695			19.7	3,143	2,920	2,538			5.5
United Kingdom	5,658	5,835	6,154			13.9	81	86	74			0.2
USSR	7,257	6,786	2,345			5.3	170	140	645			1.4
USA	5,313	5,080	3,874			8.8	234	226	272			0.6
Canada	1,680	1,421	1,382			3.1	..	..	..			..
Algeria	..	..	..			..	..	..	..			..
Japan	560	508	364			0.8	1,630	1,681	1,600			3.5
Australia	145	189	194			0.4	1	1	1			0.0
Total World	51,190	53,127	44,245	100.0	100.0	100.0	53,001	55,005	45,819	110	0.2	100.0

Source: FAO Trade Yearbook.

(1) ISTAT.

Table 4 Per Capita Wine Consumption (1) World, 1976-1986.

Countries	1976-1980	1983	1984	1985	1986
<u>West Europe</u>					
Italy	93.4	91.1	85.5	81.7	81.0
France	98.2	85.0	83.0	79.9	78.4
Spain	59.9	49.5	50.1	48.8	45.0
Portugal	77.1	82.1	81.0	81.5	..
Germany	24.4	26.5	25.7	25.5	23.3
United Kingdom	6.1	8.0	9.4	10.0	9.9
Greece	44.5	36.9	33.6	31.3	37.9
Danemark	12.1	16.7	18.1	20.0	19.5
Switzerland	47.0	48.0	49.0	52.0	47.8
<u>East Europe</u>					
USSR	13.6	13.3	14.5	15.0	..
Romania	31.4	35.0	35.1	35.5	..
Ungheria	33.6	35.0	25.6	23.0	23.2
<u>America</u>					
USA	7.3	8.6	9.0	9.2	9.3
Canada	7.2	9.5	9.8	9.5	9.3
Argentina	81.4	71.1	66.3	60.0	59.7
Chile	47.0	43.2	40.0	39.0	35.0
Uruguay	29.2	30.1	29.6	29.2	..
<u>Oceania</u>					
Australia	16.3	20.2	21.5	21.9	21.3
Total World	6.6	6.0	5.9	5.7	..

Source: Wine Institute, EUROSTAT, and ISTAT.

(1) Litres/Year

Figure 1 The Regions of Italy



Table 5 Agricultural Firms and Land Surface Involved in the Wine Sector.  
Italy, 1982.

	Total (1,000)	Firms with Viticultural Land Surface			
		Total (1,000)	%	DOC Wines (1,000)	%
Agricultural Firms (number)	3,197	1,628	50.9	106	6.5
Land Surface (hectares)	15,989	1,133	7.1	206	18.2
Average Size (hectares)	5.00	0.70	-	1.94	-

Source: ISTAT, 2 Agricultural Census, 1983.

Table 6 Viticultural and Wine Industrial Firms.  
Italy, 1981.

	Firms	
	number	employees
Wine Production & Storage:		
- in conjunction with agricultural	9,836	23,226
- industrial	1,611	9,222
Sparkling Wines Production:		
- in conjunction with agricultural	165	697
- industrial	284	4,766
Total	11,896	37,893

Source: ISTAT, 6 Industrial & Commerce Census, 1982.

Table 7 Cooperative and Private Production in Winemaking. Italy, wine season 1985-86.

Regions	Private Producers		Cooperative Wineries		Total Cellar Capacity		Grape Utilized	
	(number)	(number)	(number)	(members)	(hectolitres)	Total	of which produced by members	(tons)
Piemonte	25,198	81	18,700	2,731,100	151,390	145,430		
Valle d'Aosta	3,533	4						
Lombardia	8,081	25	6,500	998,100	44,930	35,810		
Trentino A. A.	529	34	8,900	1,852,100	133,290	128,360		
Veneto	15,986	72	42,100	7,731,600	528,880	501,090		
Friuli V. G.	6,116	13	5,100	779,800	44,750	41,400		
Liguria	2,448	4						
Emilia Romagna	18,820	84	51,100	8,693,300	347,690	344,780		
<b>North</b>	<b>74,730</b>	<b>309</b>	<b>132,400</b>	<b>22,786,000</b>	<b>1,250,930</b>	<b>1,196,870</b>		
Toscana	23,854	31	10,800	1,931,900	68,800	68,510		
Umbria	10,652	13	6,400	798,000	59,040	54,790		
Marche	17,960	31	11,400	1,867,500	143,990	141,540		
Lazio	10,834	46	13,500	3,464,500	233,840	230,270		
<b>Central</b>	<b>63,300</b>	<b>121</b>	<b>42,100</b>	<b>8,061,900</b>	<b>505,670</b>	<b>495,110</b>		
Abruzzi	4,315	37	17,100	3,687,800	356,350	355,950		
Molise	412	6	2,100	424,800	37,190	36,190		
Campania	4,530	9	3,500	559,500	32,940	32,680		
Puglia	7,883	212	89,000	9,138,900	718,540	702,590		
Basilicata	1,410	5						
Calabria	1,451	12	1,400	423,100	20,040	4,530		
Sicilia	7,418	200	67,200	11,787,900	919,530	916,470		
Sardegna	5,530	32	24,100	3,156,700	171,340	171,100		
<b>South &amp; Islands</b>	<b>31,539</b>	<b>508</b>	<b>204,400</b>	<b>29,178,700</b>	<b>2,255,930</b>	<b>2,219,510</b>		
<b>Italy</b>	<b>169,569</b>	<b>938</b>	<b>378,900</b>	<b>60,026,600</b>	<b>4,012,530</b>	<b>3,911,490</b>		

Source: Elaborations of data from ISTAT.

(continued on next page)



Table 7 cont.

Production (1,000 hectolitres)				
Total	Private Producers (1)	Percentage of Total	Cooperative Wineries	Percentage of Total
3,630	2,496	68.8	1,134	31.2
34	32	94.1	2	5.9
1,446	1,090	75.4	356	24.6
1,398	477	34.1	421	65.9
6,766	2,997	44.3	3,769	55.7
915	602	65.8	313	34.2
65	63	96.9	2	3.1
5,206	2,559	49.2	2,647	50.8
19,361	10,221	52.8	8,640	47.2
2,560	2,177	85.0	383	15.0
918	385	41.9	533	58.1
1,983	1,010	50.9	973	49.1
2,606	1,121	43.0	1,485	57.0
8,067	4,693	58.2	3,374	41.8
2,868	485	16.9	2,383	83.1
192	10	5.2	182	94.8
478	180	37.7	298	62.3
9,563	4,072	42.6	5,491	57.4
104	68	65.4	36	34.6
224	70	31.3	154	68.7
9,146	1,993	21.8	7,153	78.2
1,446	284	19.6	1,182	80.4
23,917	7,162	29.9	16,843	70.1
51,345	17,393	33.9	28,857	66.1

Figure 2 Italy. Principal producing and exporting areas.

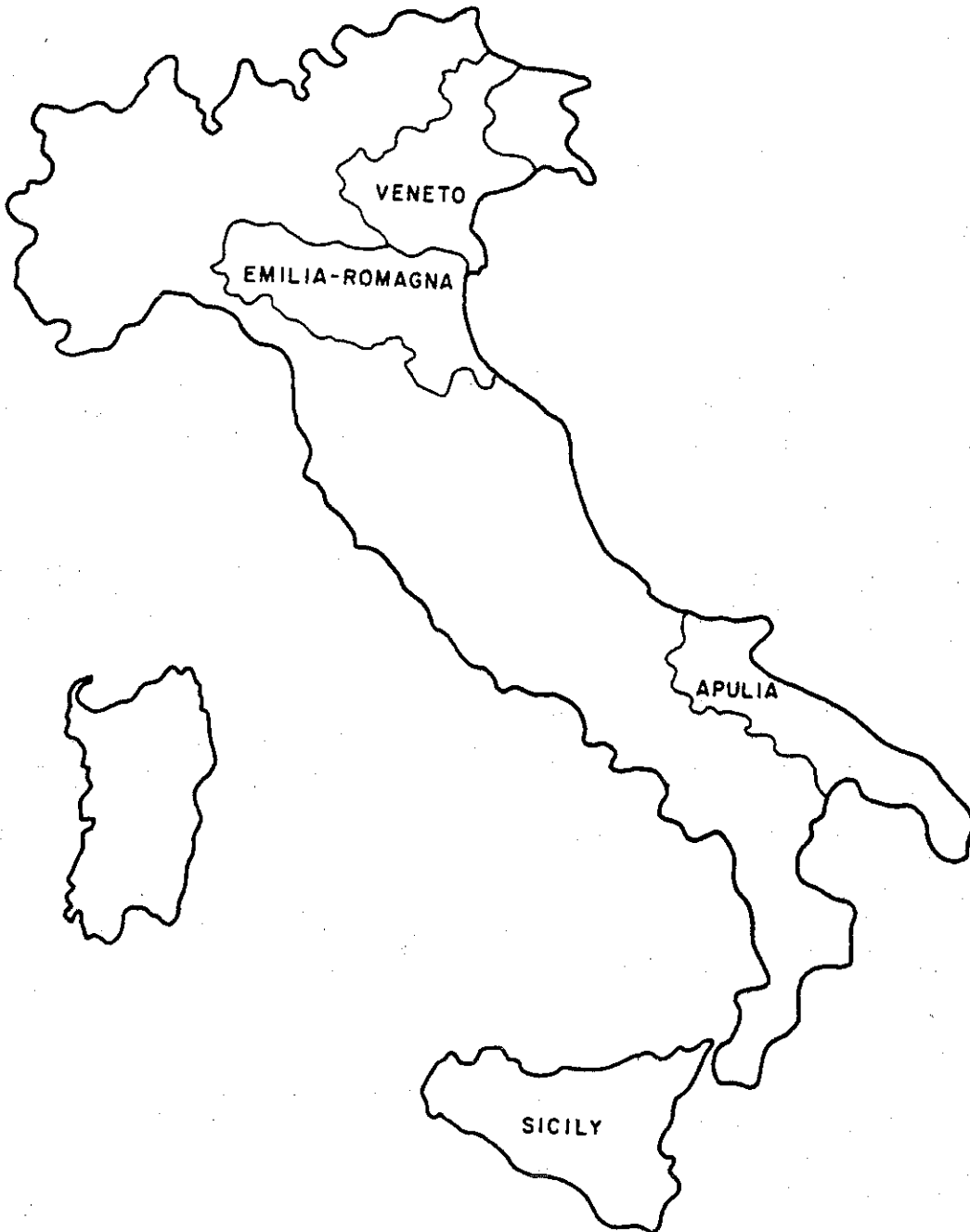


Table 8 Gross Saleable Production. Italy, 1980-1986.

Years	Agricultural GSP		Viticultural GSP
	Lire (billion)	Lire (billion)	Percentage of the total AGSP
1980	29,701.3	2,962.7	10.0
1981	33,744.4	2,480.5	7.4
1982	38,049.7	3,295.2	8.7
1983	44,785.6	4,237.3	9.5
1984	46,219.5	3,524.6	7.6
1985	48,837.8	3,725.8	7.6
1986	48,789.4	4,678.8	9.6
Average (1980-86)	41,447	3,558	8.6
% Change (1980-86)	64.3	57.9	-

Source: Elaboration of data from ISTAT.

Table 9 Territorial Distribution of Gross Saleable Production and Regional Specialization in Viticulture. Italy, 1986.

Regions	Total AGSP (1)		Viticultural GSP		Coefficient of Specialization (2)
	Lire (billion)	Percentage of Italian GSP	Lire (billion)	Percentage of Italian GSP	
Piemonte	3,804.3	7.8	272.	5.8	7.1
Valle d'Aosta	60.	0.1	1.8	0.0	3.0
Lombardia	6,225.5	12.8	127.2	2.7	2.0
Trentino Alto Adige	1,011.6	2.1	109.4	2.3	10.8
Veneto	5,057.1	10.4	521.5	11.1	10.3
Friuli Venezia Giulia	906.3	1.9	76.3	1.6	8.4
Liguria	858.8	1.8	17.4	0.4	2.0
Emilia Romagna	6,780.2	13.9	405.1	8.7	6.0
North	23,785.	48.8	1,511.5	32.3	6.4
Toscana	2,287.6	4.7	271.5	5.8	11.9
Umbria	894.5	1.8	55.5	1.2	6.2
Marche	1,485.4	3.0	141.	3.0	9.5
Lazio	2,844.6	5.8	329.2	7.0	11.6
Central	7,512.1	15.4	797.2	17.0	10.6
Abruzzi	1,293.8	2.7	225.6	4.8	17.4
Molise	398.8	0.8	24.3	0.5	6.1
Campania	3,630.	7.4	141.1	3.0	3.9
Puglia	4,270.1	8.8	1,014.4	21.7	23.8
Basilicata	746.2	1.5	51.7	1.1	6.9
Calabria	1,614.4	3.3	76.	1.6	4.7
Sicilia	4,842.4	9.9	768.2	16.4	15.9
Sardegna	1,442.8	3.0	120.5	2.6	8.4
South & Islands	17,492.3	35.9	2,370.1	50.7	13.5
Italy	48,789.4	100.0	4,678.8	100.0	9.6

Source: Elaboration of data from ISTAT.

(1) Agricultural Gross Saleable Production.

(2) Ratio between GSP with respect to Regional GSP, and GSP with respect to the National GSP.

Table 10 Grape Production and Utilization. Italy, 1980, 1986-1987.

	1980		1986		1987 (1)	
	Tons	Composition (%)	Tons	Composition (%)	Tons	% Change 1986/87
<b>Production</b>						
of which:						
a) Table Grapes	1,493,530	12.7	1,779,300	15.3	..	..
b) Wine Grapes	11,751,000	87.3	9,882,200	84.7	9,955,000	..
<b>Total</b>	13,244,530	100.0	11,661,500	100.0	..	..
<b>Utilization</b>						
a) Table Grapes		100.0		100.0		
- Direct Consumption	1,003,800	67.2	1,732,500	73.1	..	..
- Vinification	489,600	32.8	466,800	26.9	450,000	..
b) Wine Grapes		100.0		100.0		
- Direct Consumption	121,200	1.0	59,180	0.6	57,000	..
- Vinification	11,629,800	99.0	9,823,020	99.4	..	..
<b>Total Production</b>						
- Vinification (a+b)	12,119,400		10,289,820		9,950,000	-3.3
- Wine Produced (1,000 hl)	86,545		76,987		72,800	-5.4
<b>Yield</b>		(%)				
	0.71		0.75		0.73	-2.6

Source: Elaboration of data from ISTAT and ISMEA.

(1) Preliminary (ISMEA)

Table 11 Territorial Grape Production and Utilization. Italy, 1986.

Regions	Production (tons)				Utilization (tons)		
	Total				Table Grapes for Winemaking	Direct Consumption of Wine Grapes	Total Grapes for Winemaking
	Table Grapes	Wine Grapes	Table Grapes for Winemaking	Direct Consumption of Wine Grapes			
Piemonte	567,780	2,900	564,880	920	930	564,870	
Valle d'Aosta	6,100	-	6,100	-	300	6,070	
Lombardia	278,540	600	277,940	-	360	277,580	
Trentino Alto Adige	201,870	200	201,670	-	1,070	260,600	
Veneto	1,236,300	500	1,235,800	-	6,430	1,229,370	
Friuli Venezia Giulia	149,310	-	149,310	-	90	149,220	
Liguria	48,590	200	48,390	-	1,540	46,850	
Emilia Romagna	1,086,270	1,100	1,085,170	780	3,560	1,082,390	
North	3,574,760	5,500	3,569,260	1,700	14,190	3,616,950	
Toscana	542,880	2,300	540,580	30	5,920	534,690	
Umbria	140,570	100	140,470	-	1,040	139,430	
Marche	338,290	700	337,590	210	9,500	328,300	
Lazio	789,010	48,600	740,410	2,650	6,600	736,460	
Central	1,810,750	51,700	1,759,050	2,890	23,060	1,738,880	
Abruzzi	588,910	170,300	418,610	111,570	600	529,580	
Molise	78,390	2,200	76,190	210	30	76,370	
Campania	392,350	6,400	385,950	2,010	4,080	383,880	
Puglia	2,611,150	1,049,300	1,561,850	289,030	8,390	1,842,490	
Basilicata	126,450	52,400	74,050	1,520	890	76,080	
Calabria	201,720	17,100	184,620	250	1,790	183,080	
Sicilia	1,938,280	410,900	1,527,380	57,470	4,550	1,583,000	
Sardegna	338,740	13,500	325,240	150	1,600	323,790	
South & Islands	6,275,990	1,722,100	4,553,890	462,210	21,930	4,998,270	
Italy	11,661,500	1,779,300	9,882,200	466,800	59,180	10,354,100	

Source: ISTAT and ISMEA.

Table 12 Wine Production. Italy, 1980-1987.

Years	Total	DOC	
	(1,000 hl)	(1,000 hl)	Percentage of total wine
1980	86,545	8,547	9.9
1981	70,500	7,137	10.1
1982	72,500	8,883	12.2
1983	82,200	9,071	11.0
1984	70,900	7,205	10.2
1985	62,340	7,871	12.6
1986	76,987	8,151	10.6
1987 (1)	72,800	8,000	11.0
annual average			
1980-87	74,347	8,108	11.0
% change			
1980-87	-15.9	-6.4	-

Source: Elaboration of data from ISTAT, IRVAM, and ISMEA.

(1) Preliminary (ISMEA).

Table 13 Territorial Distribution of Wine Production and Regional Specialization in DOC Production. Italy, 1986.

Regions	Total Wine Production		DOC		Coefficient of Specialization (1)
	(hectolitres)	Percentage of Total Italian Wine Production	Total (hectolitres)	Percentage of Total Italian DOC Production	
Piemonte	4,005,300	5.2	1,074,000	13.2	2.0
Valle d'Aosta	39,400	0.1	2,000	0.0	-
Lombardia	1,990,400	2.6	412,000	5.1	4.1
Trentino Alto Adige	1,428,500	1.9	720,000	8.8	5.7
Veneto	9,116,700	11.8	1,780,000	21.8	0.9
Friuli Venezia Giulia	1,036,900	1.3	436,000	5.3	7.9
Liguria	324,600	0.4	7,000	0.1	22.0
Emilia Romagna	8,168,700	10.6	684,000	8.4	1.0
North	26,110,500	33.9	5,115,000	62.8	19.6
Toscana	3,834,800	5.0	1,134,000	13.9	2.1
Umbria	1,010,400	1.3	160,000	2.0	7.9
Marche	2,394,800	3.1	284,000	3.5	3.5
Lazio	5,335,100	6.9	588,000	7.2	1.5
Central	12,575,100	16.3	2,166,000	26.6	17.3
Abruzzi	4,173,500	5.4	291,000	3.6	1.9
Molise	564,600	0.7	3,000	0.0	-
Campania	2,659,500	3.5	18,000	0.2	3.5
Puglia	14,380,000	18.7	183,000	2.2	0.6
Basilicata	476,500	0.6	9,000	0.1	19.0
Calabria	1,275,900	1.7	44,000	0.5	6.8
Sicilia	12,312,300	16.0	195,000	2.4	0.7
Sardegna	2,459,100	3.2	127,000	1.6	3.3
South & Islands	38,301,400	49.8	870,000	10.7	2.3
Italy	76,987,000	100.0	8,151,000	100.0	10.6

Source: Elaboration of data from ISTAT, and IRVAM.

(1) Ratio between the incidence of DOC production with respect to the total regional wine production, and with respect to the total Italian DOC production.



Table 14 Number of D.O.C. Wines Recognized by Law.  
Italy, 1980-1985.

years	Total	Sparkling Wines
1980	619	52
1981	627	56
1982	651	57
1983	693	59
1984	718	70
1985	797	71

Source: Italian Ministry of Agriculture and Forests  
(National Wine Committee).

Table 15 Qualities of D.O.C. Wines Having a Production  
of over 100,000 Hectolitres. Italy, 1985.

Wines	Hectolitres	Percentage of Total
Chianti	894,100	11.4
Mocato d'Asti	636,300	8.1
Valpolicella	423,100	5.4
Soave	351,600	4.5
Bardolino	260,300	3.3
Plave	246,600	3.1
Oltrepo'Pavese	243,400	3.1
Caldaro	229,500	2.9
Grave del Friuli	219,500	2.8
Montepulciano d'Abruz	183,200	2.3
Valdadige	183,200	2.3
Frascati	175,400	2.2
Verdicchio	175,400	2.2
Marsala	154,800	2.0
Alto Adige	147,700	1.9
Barbera d'Asti	145,300	1.8
Orvieto	109,000	1.4
Lambrusco Reggiano	106,800	1.4
Others	2,987,700	37.9
Total	7,872,900	100.0

Source: Italian Ministry of Agriculture and Forests  
(National Wine Committee).

Table 16 Wine Supply Balance. Italy, 1983-1987.  
(1,000 hectolitres)

	1983-84	1984-85	1985-86	1986-87 (1)	% change 1983-87
Beginning of Year Stock (2)	24,824	24,304	20,194	15,421	-37.9
Total Production	82,200	72,250	62,577	71,200	-13.4
Imports	130	130	550	400	207.7
<u>Total Available</u>	<u>107,154</u>	<u>96,684</u>	<u>83,321</u>	<u>87,021</u>	<u>-18.8</u>
Domestic Consumption (3)	69,350	59,490	55,100	53,000	-23.6
- Distilled (total)	22,479	16,634	12,228	-	-45.6
Exports (4)	13,500	17,000	12,800	11,000	-18.5
End of Year Stock (2)	24,304	20,194	15,421	23,021	-5.3
Stock Variation	-520	-4,110	-4,773	7,600	-1561.5
<u>Self-Sufficiency</u>	<u>1.75</u>	<u>1.69</u>	<u>1.46</u>	<u>1.34</u>	<u>-23.4</u>

Source: Elaboration from data of IRVAM, and EUROSTAT.

(1) Estimate

(2) 31 August

(3) Human, Processed, Distilled, Losses.

(4) 1 September - 31 August

Table 17 Per Capita Wine Consumption.  
Italy, 1975,1980-1986.

years	Litres
1975	103.0
1980	92.9
1981	91.9
1982	91.4
1983	91.1
1984	85.5
1985	81.7
1986	81.0
difference (1975-86)	22.0
% change (1975-86)	-21.4

Source: ISTAT, and Federvini.

Table 18 Consumption and Advertising Expenditure in the Beverage Sector. Italy, 1985.

Beverages	Consumption		Advertising Expenditure	
	Litres (million)	Proportion of Total	Lire (billion)	Proportion of Total
Wine	4,460	40.7	32	6.7
Mineral Water	3,440	31.4	30	6.3
Soft Drinks	1,320	12.1	107	22.3
Beer	1,200	11.0	70	14.6
Juices	240	2.2	9	1.9
Alcohols	205	1.9	196	40.8
Sparkling Wines	85	0.8	36	7.5
Total	10,950	100.0	480	100.0

Source: IRVAM.

Table 19 Per Capita Purchases of Beverages. Italy, 1986.

Beverages	Lire	Index Number (Wine=100)
Wine	89,064	100
Mineral Water	32,280	36
Liquors	24,420	27
Beer	18,528	21
Juices	3,468	3
Others	9,672	9

Source: Elaboration of data from ISTAT.

Table 20 Daily Wine Consumption. Italy.

	% of persons who drink wine	Daily Consumption (Litres)	
		All Adults	Wine Consumers Only
<b>Sex</b>			
Males	76.2	0.38	0.50
Females	53.5	0.13	0.25
Total	64.8	0.25	0.38
<b>Age</b>			
18-24	43.4	0.13	0.31
25-34	60.7	0.21	0.35
35-54	67.8	0.28	0.41
55-64	72.6	0.33	0.45
65 >	72.3	0.27	0.38
<b>Territorial Diffusion</b>			
North-West	63.8	0.26	0.40
North-East	70.5	0.28	0.39
Central	71.2	0.30	0.42
South	58.8	0.22	0.37

Source: FEDERVINI.

Table 21 Wine Consumption by Type. Italy, 1985.

Type	Litres (million)	Proportion of Total
Red	1,252	62.0
White	586	29.0
Rosé	182	9.0
Total	2,020	100.0

Source: IRVAM.

Table 22 Wine Consumption by Type of Case. Italy, 1985.

Type	Liters (million)	Proportion of Total
Carton & Can	85	1.9
Bottle:		
0.75 Litres	256	5.7
1.00 Litres	418	9.4
1.50 Litres	541	12.1
2.00 Litres	560	12.6
5.00 Litres	160	3.6
Bulk	2,440	54.7
Total	4,460	100.0

Source: IRVAM.

Table 23 Food and Beverages Trade. Italy, 1985-1986

	Imports		Exports		Balance		% Change 1985/86
	1985	1986	1985	1986	1985	1986	
	Value (million Lire)						
Food	21,145,300	19,822,300	8,922,400	7,986,500	-12,222,900	-11,835,800	-3.2
Beverages	642,800	634,600	1,859,000	1,450,800	1,216,200	816,200	-32.9
of which:							
Wine	144,700	151,900	1,532,200	1,137,100	1,387,500	985,200	-29.0
Total	21,788,100	20,456,900	10,781,400	9,437,300	-11,006,700	-11,019,600	0.1
	Proportion of Total (%)						
Food	97.0	96.9	82.8	84.6			
Beverages	3.0	3.1	17.2	15.4			
of which:							
Wine	0.7	0.7	14.2	12.0			
Total	100.0	100.0	100.0	100.0			

Source: Elaboration from data of ISTAT and ICE.

Table 24 Wine (1) Trade. Italy, 1980, 1984-1986.

years	Imports		Exports	
	(hectolitres)	(billion Lire)	(hectolitres)	(billion Lire)
1980	194,500	77.2	15,064,700	710.3
1984	146,100	77.2	15,751,400	1,283.
1985	718,900	143.7	16,847,400	1,532.2
1986	596,300	151.9	10,512,800	1,137.1
% Change				
1980-84	-33.1	0.0	4.6	80.6
% Change				
1985-86	-17.1	5.7	-37.6	-25.8

Source: Elaboration of data from ISTAT.

(1) Musts and Sparkling Wines included.

Table 25 Wine (1) Export Markets. Italy, 1984-1987.

Countries	Value (billion Lire )			Proportion of Total 1986	% Change 1984/86
	1984	1985	1986		
EEC	640,648	819,512	627,938	55.2	-2.0
of which:					
France	229,505	282,072	166,175	26.5	-27.6
Germany	279,561	355,110	270,555	43.1	-3.2
United Kingdom	83,604	121,136	138,984	22.1	66.2
Others	642,302	712,728	509,130	44.8	-20.7
of which:					
USA	480,724	525,742	345,384	67.8	-28.2
Canada	42,810	42,006	34,442	6.8	-19.5
URSS	6,647	1,447	135	0.0	-98.0
Total	1,282,950	1,532,240	1,137,068	100.0	-11.4
Countries	Quantity (hectolitres)			Proportion of Total 1986	% Change 1984/86
	1984	1985	1986		
EEC	10,981,460	12,489,738	7,646,508	72.7	-30.4
of which:					
France	5,838,360	6,402,848	3,384,293	44.3	-38.3
Germany	3,983,360	4,662,954	2,980,007	39.0	-25.2
United Kingdom	659,927	848,195	870,564	11.4	31.9
Others	4,769,152	4,357,615	2,866,264	27.3	-39.9
of which:					
USA	2,811,091	2,657,157	1,666,907	58.2	-40.7
Canada	268,582	259,893	205,442	7.2	-23.5
URSS	573,328	130,308	878	0.0	-99.8
Total	15,750,612	16,847,353	10,512,772	100.0	-33.3

Source: Elaboration of data from ISTAT and ICE.

- (1) Included Mustes, and Sparklings Wines  
(2) Firsts seven months of 1986 and 1987

(continued on next page)



Table 25 cont.

1986 (2)	1987 (2)	% Change 1986/87	Average Price	
			1987 Lire/liter	% Change 1986/87
343,900	367,900	6.9	836	3.6
96,700	87,100	-9.9	476	-4.5
114,500	168,600	16.6	916	2.7
71,300	80,600	13.0	1,664	4.3
282,500	263,000	-6.9	1,648	
193,200	167,400	-13.3	1,892	-7.1
19,100	19,000	-0.5	1,820	8.2
..		-77.4	3,631	158.7
626,400	630,900	0.7	1,053	-1.0
4,262,915	4,398,367	3.1		
1,941,515	1,832,216	-5.6		
1,620,779	1,840,651	13.5		
447,140	484,471	8.3		
1,627,596	1,595,751	-1.9		
988,233	884,812	-6.6		
133,740	104,421	-8.1		
367	31	-91.2		
5,890,511	5,994,118	1.7		

Table 26 Total Italian Wine Exports into the U.S. Market.  
Selected years.

Year	Value million \$	Quantity (1,000 hl)	Share of Market Trend (%)
1975	44.3	450	27.7
1980	241.4	2,054	58.1
1982	238.8	2,385	54.6 (1)
1984	240.0	2,380	51.1
1985	229.5	2,213	50.5
1986	198.4	1,496	46.8
1987	180.3	1,143	-
% Change:			
1975/1987	307.0	154.0	69.0
1985/1986	-13.6	-32.4	-7.3
1986/1987	-9.1	-23.6	-

Source: Italian Wine & Food Institute; IMPACT DATABANK estimates.

(1) 1983.

Table 27 Exported Italian Table Wine into U.S. Market and Trend of Market Share, 1980-1986.

Type	Color	1980	1981	1982	1983	1984	1985	1986	% Change 1985/86
Volume (million of nine-litres cases-rounded)									
Lambrusco	Red	10.2	10.6	10.0	8.5	7.7	6.9	2.9	-58.0
	White	3.6	4.7	4.9	5.6	6.1	5.9	3.7	-37.0
	Rosé	2.1	2.4	2.4	2.5	2.4	1.9	1.3	-31.6
	Total	15.9	17.7	17.3	16.6	16.2	14.7	7.9	-46.3
non-Lambrusco	Red	2.3	2.3	2.6	3.2	2.9	2.9	2.5	-13.8
	White	4.5	4.8	6.0	6.1	6.1	5.9	5.3	-10.2
	Rosé	0.2	0.4	0.5	0.8	1.1	1.1	0.9	-18.2
	Total	6.9	7.5	9.2	10.1	10.2	9.9	8.7	-12.1
Share of market (%)									
Lambrusco	Red	64	60	58	51	48	47	37	-10
	White	23	26	28	34	38	40	47	7
	Rosé	13	14	14	15	15	13	16	4
	Total	100	100	100	100	100	100	100	-
non-Lambrusco	Red	33	31	29	32	28	29	29	-1
	White	64	64	26	60	60	60	61	1
	Rosé	3	5	5	8	11	11	10	-1
	Total	100	100	100	100	100	100	100	-

Source: IMPACT DATABANK estimates, 1988.



Table 29 Wine Exportation by Kind of Product and Case. Italy, 1985-1987.

Kind of Product & Case	Value (million Lire)				% Change 1985/1986	% Change 1986/1987
	1985	1986	1986 (1)	1987 (1)		
Total Wine	1,532,241	1,137,067	626,500	630,800	-25.8	0.7
of which:						
DOC	645,941	552,534	293,900	319,200	-14.5	8.6
Others	878,271	579,242	330,700	309,900	-34.0	-6.3
Mustes	8,029	5,291	1,900	1,700	-34.1	-10.5
Sparklings	277,060	172,578	104,000	85,000	-37.7	-18.0
Sparkling Wines	226,220	171,522	83,800	84,700	-24.2	1.1
of which:						
DOC	179,998	136,237	65,700	66,500	-24.3	1.2
Others	46,222	35,285	18,100	18,200	-23.7	0.6
> 2 Litres (2)	431,113	283,903	163,700	160,100	-34.1	-2.2
< 2 Litres (3)	589,818	503,764	273,000	229,100	-14.6	-16.1
	Quantity (hectolitres)					
Total Wine	16,847,353	10,512,772	5,890,511	5,994,118	-37.6	1.8
of which:						
DOC	3,484,420	2,768,091	1,516,878	1,622,006	-20.6	6.9
Others	13,209,864	7,658,776	4,348,722	4,358,394	-42.0	0.2
Mustes	153,069	85,905	24,911	13,718	-43.9	-44.9
Sparklings	2,044,455	1,265,143	740,124	688,586	-36.8	-6.9
Sparkling Wines	870,086	671,339	324,484	361,365	-22.8	11.4
of which:						
DOC	542,518	452,308	211,991	239,341	-16.6	12.9
Others	327,568	219,031	112,493	122,024	-33.1	8.5
> 2 Litres (2)	9,997,208	5,697,404	3,234,716	3,347,645	-43.0	3.5
< 2 Litres (3)	3,822,536	2,792,458	1,566,274	1,582,802	-26.9	1.1

Source: Elaboration of data from ISTAT, ICE, and IRVAM.

- (1) Firsts seven months of the year.  
 (2) Bulk.  
 (3) Bottled.

(continued on next page)

Table 29 cont.

Average Price			
1986 Lire/liter	% Change 1985/1986	1987 Lire/liter	% Change 1986/1987
1,082	18.9	1,053	-1.0
1,996	7.0	1,968	1.5
756	-13.7	711	-6.4
616	17.9	1,302	67.8
1,364	-1.3	1,238	-11.9
2,555	-1.7	2,344	-9.2
3,012	-9.2	2,779	-10.3
1,611	14.1	1,491	-7.5
498	15.5	478	-5.5
1,802	16.8	1,890	8.4

## Bibliography

Calo', A. "La vitivinicoltura italiana di fronte ai problemi della sua evoluzione". In Atti dell'Accademia Italiana della vite e del vino, Vol. XXXVII, 1985.

Commission of European Communities, Commission Report, COM (88) 127 final, Brussels, 1988.

Di Cocco, E. "La vite e il vino nell'economia agraria italiana". In ECONOMIA AGRARIA, n. 1, 1962.

Donadio, N. "The Italian Wine Industry and U.S. Wine Imports". M.S. Thesis, Department of Agricultural economics, Cornell University, 1987.

EUROSTAT "La vigne dans la Communit  europ enne". Luxembourg, 1985.

ICE (Italian Trade Commission) "L'esportazione vinicola italiana", 1987.

IMPACT, The "American Wine Market Review and Forecast", 1987 Edition. M. Shanken Communications, 1987.

IRVAM (Institute for Research and Marketing information) "Irvam Informazioni: VINO", Supp. n. 39, 1987.

ISTAT (Italian Institute of Statistics) "Censimento Generale dell'Industria e del Commercio, anno 1981". 1982.

ISTAT (Italian Institute of Statistics) "Censimento Generale dell'Agricoltura, anno 1982". 1983.

ISTAT (Italian Institute of Statistics) "Annuario di Statistica Agraria". 1987.

ISTAT (Italian Institute of Statistics) "Annuario di Contabilita' Nazionale". 1987.

OIV (International Vine and Wine Office) "Bulletin de l'OIV", Various Issues, Paris, 1986.

Niederbacher, A. "Wine in the European Community" (Second edition). European Documentation series - 1/1988.

Rosa, F. "Aspetti economico-istituzionali delle frodi alimentari: il caso del vino al metanolo". In VIGNEVINI, no 1, 1987.

Rosa, G. "Le vin dans les annees 80". EC, Service Information Agricole, Brussels, 1987.

Sorbini, M. "La crisi evolutiva della viticoltura italiana". In CCIAA Pesaro, 1983.

Sorbini, M. "Aspetti evolutivi del settore vitivinicolo in Emilia Romagna". In VITIVINICULTURA, no. 24, 1986.

Sorbini, M. "Condizionamenti economici nella trasformazione dell'uva". In VIGNEVINI, no 4, 1987.

United Nations, FAO Production Yearbook, Vol. 40, 1987.

United Nations, FAO Trade Yearbook, Vol. 40, 1987.

USDA "Government Assistance to Wine Production and Marketing in Italy". Trip Report, March 9, 1984.

Wine Institute, ERR, "International Grape and Wine Statistics". Special Report, April 1988.