The French Wine Industry

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2.1 Introduction

France is a historical wine-producing country, one of the first to have emerged on the wine market, together with Italy and Spain. These three countries define the basis of what is traditionally called the "Old World" in the wine world, including Portugal, Germany and Greece. Rich of a millenary history, wine is inseparable from the culture, heritage, terroirs and economy of France. The wine and spirit sector keeps its position as a large surplus in the French trade balance (11.51 billion Euros, 8.24 only for the wine in 2017) behind aeronautics (17.4 billion Euros) and above perfumes and cosmetics (10.6 billion Euros) (France AgriMer 2018a, b). The wine sector is therefore crucial for the French economy, representing the largest surplus in the French agri-food trade balance. It is known as a major asset for France as it generates not only

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growth and employment, often in rural areas where jobs are rare (Porter and Takeuchi 2013), but the wine industry also participates in the planning of the territory with an essential landscape function and is, in addition, a well-known supplier of local tax revenues (Cardebat 2017).

France is still one the first wine country in the world for the volumes produced, for the value of exports, for consumption and for the diversity of products. The French wine industry is therefore at a turning point in its history. The evolution of food consumption and lifestyle, the rising of public health and environmental concerns, climate change, but also the success of New Producing Countries and the reform of the Common Market Organization in Europe represent so many challenges for the wine industry in France. To succeed in meeting these challenges for the future, all the actors of the industry have to engage and bring together their efforts for a renewed dynamics based on all its successful assets like terroir, innovation, know-how, PDOs (*Protected Designations of Origin*) and its worldwide reputation.

This chapter seeks to describe the French wine industry and its actors following the process to obtain the final product (grape growing, wine processing and then distribution and commercialization). It begins with a presentation of the wine industry according to its place in the international trade. It then provides details of the winegrowing and winemaking sectors, before presenting the distribution channels. The final sections speculate on how that structure may change in the decades to come and provide a conclusion.

2.2 The French Wine Industry's State and Current Position in the Wine World

About 70% of the French wine production covers 83% of the wine consumption in France and the imported wines the rest. The national market is definitely the main one for French wines for years as only 30% in volumes are exported.

2.2.1 France in the International Wine Trade

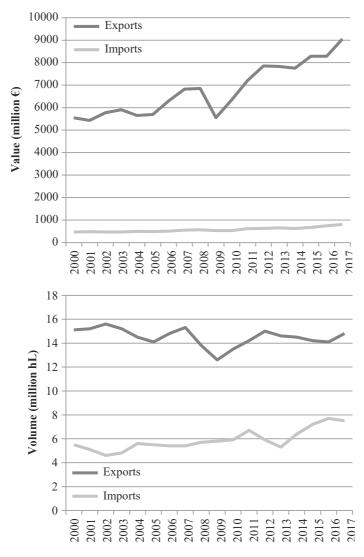
After a crisis in 2008, which had seen the collapse of the international market, growth came back in 2010 (+14% in volume and +17% in value) for the French wine industry. In the recent years, on one hand, French wine imports have decreased in 2017 after 3 years of increase (+5% in 2016, +12% in 2015, +23% in 2014) and represents 7.6 billion hectoliters in 2017 (OIV 2018). In

value, the imports register a new record with 810 billion Euros (+10%) in 2017. The main part of the wine imported is bulk wine (80%), mainly corresponding to wine without any geographic indication and not mentioning the cepage or the variety. This is the sign of the structural deficit of the French wine industry in low-price wines that the low harvest successions are unable to fill quantitatively. The search for bulk wines at moderate prices leads importers to import wine from Spain for the main part of the volumes imported.

On the other hand, wine trade is largely dominated by Spain, Italy and France, which account for 55% of world market volume in 2017. In value, France and Italy continue to dominate the market with 30% and 19%, respectively, of wine exports in the world (OIV 2018). French wine exports represent 30% of the volumes produced in France and present a steady rise in 2017, staying at a very high level, even being a historical result if considered together with the spirits sector (FranceAgriMer 2018a, b): +5% in volumes (15.4 billion hectoliters) and +9% in value (8.89 billion Euros) (Fig. 2.1). Fifty-four percent of the wines are exported to a European country. The main part (around 50% in volumes) of the wine exported is still bottled wine, mainly to Germany, China, the United Kingdom and the United States. Since 2005, although France has lost its status as the world's largest exporter by volume, it remains largely ahead in value (9.05 billion Euros in 2017 – FranceAgriMer 2018a, b). The prices of the wines exported by France are among the highest in the world, reflecting a positioning on well-valued products and even better and better-valued products considering the evolution of the average prices for 15 years (+9%), especially for PDO wines (+20%). These good results were partly pushed by specific plans set by the French government (for the 2008-2013 period, e.g., the plan aimed at increasing the volumes exported on the markets and reinforcing the image and the quality of French wines to increase the value of the products).

It is a little bit different for organic wines which are more exported than noncertified ones (46% of organic wines exported in 2016) (Agence BIO Stats 2017).

The link between wine production and the terroir is worldwide recognized, as AOC (*Appellation d'Origine Contrôlée*, French for PDO) wines account for 39% of French exported volumes and 51% of exported value. PGI (*Protected Geographical Indication*) wines account for 26% in volume and 10% in value. Champagne wines account for only 7% of exported volume, but it generates 29% of total value. The total AOC wines (still wines plus Champagne) account for 46% of export volume and generate 80% of export value.





2.2.2 French Wine Production and Consumption

After years of growth, during the nineteenth century, the area of the French vineyard reached its peak, with 2.465 million ha, in the middle of the 1870s. After this date and because of the *Phylloxera* crisis, the French vineyard has experienced a long period of deceleration. Initially slow, the decline accelerates

after World War II, and the surface was divided by two after a century. In the first half of the twentieth century, the production remained relatively stable thanks to an increase in yields. Then, from 1950 to 1990, it increased. Finally, since 1990, it has dropped considerably to fall below the most productive periods of the beginning of the century. Between 2000 and 2011, the vine-yard lost 13% of its area. The crisis in the viticultural sector in the 2000s led to major uprooting (together with EU policy). Since the end of the EU program to regulate the wine production potential (2011/2012 campaign), the rate of reduction of the vineyard in France has slowed significantly.¹ The latest available data showed a tendency toward stabilization of the overall area in France around 785,000 ha (OIV 2018), second position right after Spain, representing about 10% of the vines in the world.

France has been historically one of the leaders of wine production around the world. It represents 10% of the vineyards worldwide right after Spain and China and 15% of the wine production (36.7 million hl in 2017 – OIV (2018)). However, considering the volumes, wine production in France has fallen sharply in 2017 to the point that – according to OIV – it will be a historically low year but not representative because of extreme climatic events. The production fell by 19% in volume and reached 36.7 million hectoliters.

After the decline following the 2008/2009 economic crisis, world wine consumption has found a positive direction. This upward trend has been observed since 2014. While the United States confirm their position as the world's largest consuming country since 2011 (32.6 million hl), France is the second one (27 million hl in 2017, 11%), followed by Italy, Germany and China (OIV 2018). The decline in consumption in the historically consuming countries – France, Italy and Spain – seems stabilized while consumption in the United States, China and Australia continues to grow. Historically, the French wine market is supported by domestic consumption: France is still the leading wine-consuming country in Europe above Italy, Portugal and Spain, "absorbing" 14% of the wine produced worldwide. France is the first market for French wines (70% of the volumes produced in France, 83% of the wines purchased in France). The imported wines represent 17% of French consumption.

But wine consumption in France has decreased for the last 30 years: whereas in 1975 it was 100 liters per inhabitant per year, it has dropped to 42 liters per inhabitant per year. According to FranceAgriMer (2014), however, there is a decline in nonconsumers of wine for the first time since 1995. The occasional consumption (1–2 once a week or more rarely) takes precedence over regular

¹The annual growth of plantations is limited to 1% in Europe (OIV).

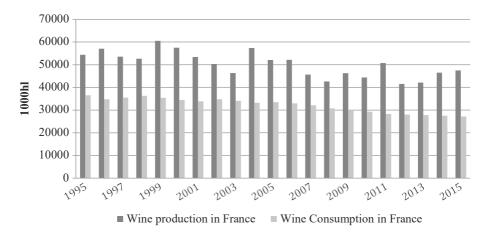


Fig. 2.2 Wine production and consumption in France. (Source: OIV stats, http://www.oiv.int/fr/bases-de-donnees-et-statistiques)

consumption (everyday or almost everyday). As for regular consumers, whose share decreases since 1980, they share stabilized since 2015 (16%). Nevertheless the consumption and the production of wine have been experiencing a long-term decline (since the 1970s) in France (Fig. 2.2).

According to the evolution of its position on wine international markets, France has to face a big challenge. Stuck up over the past ten years between the drop in consumption and the triumphant arrival of the New World wines on the market, French wine producers, as well as other actors in the French wine industry, are actually confronted with an unprecedented commercial context that seems to jeopardize their production practices inherited from the past. While some of them take the opportunity to transform their grape production, make wine and develop marketing practices, many others suffer from the effects of what they perceive as a radical questioning about the way they are making wine. In all cases, they have to perform in order to maintain their competitiveness and to benefit from the favorable global context of increasing demand. In this framework, the complexity of the industrial organization, the high fragmentation of the production and the length of the supply chain constitute real challenges to overcome for the French wine industry.

2.3 The Grape-Growing Sector in France

France is historically one of the leaders of wine production around the world and one of the biggest producers in volume on a surface equivalent to only 3% of the French agricultural area. It represents 85,000 farms dedicated to

grape production (20% of the total number of farms), the main part of them (99%) being devoted to wine production.

2.3.1 Ten French Wine Regions

The French wine industry is located in about ten specialized basins. These territories have a strong identity, and each one has its own policy to manage the local industry. For each wine production region, there is an Interprofessional Wine Council mainly in charge of marketing and communication. The marketing and communication department is dedicated to promote the wines in France and abroad. It designs and diffuses the messages to help wine marketing. Especially, it helps in training prescribers (wine merchants, restaurateurs, importers, etc.) and provides the information consumers need. It is also in charge of the registration of transaction contracts, such as the transaction contracts of bulk wine between on-farm winemaking properties and negociants.

They are different according to the type of wine produced and the marketing methods, as well as the size of the farms. Vines are cultivated in different regions, but always under temperate climates, which favor the growth of plants. Together with temperate climates, a large diversity of grape varieties and soils are also favorable to the cultivation of vines on the whole territory. Ten main wine regions have been defined in France, from north to south, or colder to warmer: Alsace-East, Champagne, Burgundy-Beaujolais-Savoie-Jura for continental climate; Loire Valley, Aquitaine, Charentes-Cognac, South-West for the Atlantic climate; Languedoc-Roussillon, Rhone Valley-Provence and Corsica are warmer, covered by Mediterranean climate. Table 2.1 presents the surface, the number and the average size of grape-growing farms for each region and shows that Languedoc-Roussillon, Provence-Alpes-Côte d'Azur and Aquitaine are the main wine regions according to the surface planted with vines and the number of grape-growing farms. The average surface of grapegrowing farms in France stands at 9.16 hectares. There are large disparities among wine regions in terms of average size: from the smallest - 2.44 hectares on average for Champagne to the largest - 25.38 hectares for Corsica. Note that three quarter of the vineyards are cultivated by one quarter of the farms with surfaces exceeding 12 hectares on average. The erosion of surfaces mentioned before has affected most basins (HCCA 2017): Languedoc-Roussillon (-19%), Corsica (-14%), Loire Valley Center (-11%), Rhône Valley and Provence (-11%), Bordeaux-Bergerac (-9%), Burgundy-Beaujolais-Savoie-

Wine regions	Grape- growing surface (ha)	Number of grape-growing farms	Average size of grape-growing farms (ha)
Languedoc-Roussillon	201,500	17,423	11.56
Provence-Alpes-Côte d'Azur	148,500	12,924	11.49
Aquitaine	137,600	9533	14.4
Charentes-Cognac	79,900	6047	13.21
Pays de la Loire-Centre	62,100	6289	9.87
Bourgogne-Beaujolais-Savoie-Jura	53,100	8368	6.34
Sud-Ouest	40,400	6037	6.69
Champagne	33,400	13,647	2.44
Alsace-Est	16,200	4462	3.63
Corsica	6600	260,000	25.38
France	779,300	84,990	9.16

Table 2.1 Surface, number and average size of grape-growing farms by region (in 2010)(The three top regions, with more than 100,000 ha are in bold)

Source: Agreste Primeur (2011) and FranceAgriMer (2014)

Jura (-9%) and South-West (-8%) Conversely, certain basins gained surfaces: Champagne (+10%), Alsace (+4%) and Charentes-Cognac (+4%). These are high-valuated wines.

The French vineyard is mainly composed of vines of more than ten years old. The choice for grapes varieties depends on wine production regions. Since the first implantation of the vine in the south of France, and its development in all Gaul by the Romans, the wine growers looked for the plants most adapted to the climate and to the ground to obtain always a better wine. Ranked by planting surface (FranceAgriMer 2014), the top 10 most planted red grape varieties are Merlot, Grenache, Syrah, Cabernet Sauvignon, Carignan, Cabernet Franc, Pinot Noir, Gamay, Cinsaut and Meunier (Table 2.2). For the whites, the top 10 are Ugni Blanc, Chardonnay, Sauvignon Blanc, Semillon, Melon, Chenin, Colombard, Muscat Petit Grain, Viognier and Grenache Blanc. Red varieties represent 72% of the vine area in 2014, and the share of international variety is increasing (42% in 2014).

2.3.2 A Production Segmented by AOCs and PGIs

French wines have an ancient and large reputation based on geographic indications, PDO, still called AOC in France, and PGI. AOC wines are produced in limited areas and subject to strict and precise regulations defined according to "local, loyal and consistent practices". AOC wines are identified with cultural products from a specific region, with its landscapes, history, winemakers and know-how. AOC wines have been very successful in France for a long

Table 2.2 Areas	according	to the	varietals	(%)
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Variety	Surface in %
Merlot	14
Grenache	11
Syrah	8
Cabernet Sauvignon	6
Carignan	5
Cabernet Franc	4
Pinot	4
Gamay	3
Ugni blanc	10
Chardonnay	6
Sauvignon	4

Source: CNIV/FranceAgriMer (2016)

time. The main part of the production comes from AOC wines, that is, 47% in volume (376 different AOCs in 2017) and from PGI wines, that is, 28% involume (75 different PGIs in 2017) (GraphAgri 2017), the rest being spirits or wines without any mention of origin. Each AOC or PGI is ruled by an organization called "a defense and management organization" (ODG). It is setup at the initiative of a group of producers and/or processors providing the same production who join forces within a structure to take the step of recognizing a sign of quality, from the elaboration of the specifications to the protection and the valorization of the product. The ODG develops and contributes to the implementation of the product specifications (specificity of the product, production area for AOC, PDO and PGI products whose characteristics are linked to a geographical location), the rules for wine production, wine processing and possibly packaging and labeling. It designates an organization, approved at national level by INAO,² to carry out the control of the specifications and gives its opinion on the control or inspection plan drawn up with the inspection body. It participates in the defense and protection of the name of the AOC or PGI, promotes the product and the terroir and develops actions and the economic knowledge of the sector (providing information on volumes, number of operators by category, means of production, product development and outlets).

Ninety percent of the specialized grape farms in France are producing wine under AOC or PGI systems, giving evidence to the importance of mentioning the origin to value the production of this country (Agreste Primeur 2011).

²INAO is an organization belonging to the French Ministry of Agriculture. It guarantees and protects the denominations of origin, supervises modifications and examines the applications for recognition under official geographical indication.

More than two third of the grape-growing farms are devoted to produce AOC wines, and this part covers around 62% of the vine areas. Alsace-East, Champagne and the Burgundy regions only produce wine under appellation systems (AOC). Great part of the production in Loire Valley (75%), Rhone Valley (67%) and Corsica (54%) is also produced in AOC systems. The production of South-West is more diversified with 41% with AOC (but nearly 100% for the Bordeaux wine region). In Languedoc-Roussillon, the production is mainly produced under PGI systems (59%), with only 26% in AOC. Besides, the regions in the south, Loire Valley, South-West, Languedoc-Roussillon, Rhone Valley and Corsica are characterized by mixed farms – they produce both AOC and other wines. Charentes-Cognac is specialized in grapes for spirits. The majority of wine farms producing AOC wines are bigger than the other ones and the wine farms producing PGI wines are rather small or middle farms compared to AOC ones (Table 2.3).

Producing under appellation system is synonymous of production constraints, the main ones being the limited wine yield per hectare together with a list of authorized varieties (only *Vitis vinifera* for AOCs). Each AOC/IGP area establishes, in contact with INAO, its production conditions. Besides, from an economic point of view, an early assessment of harvest volumes at regional level facilitates the management of the volumes available on the wine market. Some authors also claim for a link between yield limitation and better quality of wines (concentration), but the literature is still too weak on this topic to conclude. In France, vineyards are cultivated by rain-fed systems. Vine irrigation is forbidden but French regulations allow, under certain conditions, exceptional irrigation of vines. The irrigation is strictly forbidden for

		Percentage of farms						
	AOC	PGI	AOC and PGI	Other				
Economic size	wines	wines	wines	wines	Total			
Small farms	27	49	18	47	33			
(SGM<25,000€)								
Middle farms	29	35	42	16	29			
(25,000€ < SGM and > 10,000€)								
Big farms	44	16	40	37	38			
(SGM > 100,000€)								
Number of farms	46,600	12,100	3100	6700	68,500			

Table 2.3 Economic size according to the type of wine

Source: Agreste Primeur (2011)

Note 1: That the economic size of farms is determined thanks to the concept of standard gross margin (SGM) used in Farm Data Accountancy Network (FADN) at European level and expressed of ESU (economic size unit). The value of one ESU is defined as a fixed amount of euros of farm gross margin (FGM)

Note 2: The percentages have to be added up in columns

all wines between 15 August and the harvest. In the case of PGI and wines without any geographical indication, the irrigation is possible after the harvest until 15 August or the ripening (the moment when the color of the grape berries is changing). As for the AOC, by default, the irrigation of vines suitable for the production is forbidden from 1 May up to the harvest and authorized after the harvest until 1 May. However, the irrigation of vines can be authorized, exceptionally, maximum from 15 June at the earliest until 15 August at the latest. This finally explains the low rate of irrigated vineyards according to the importance of the appellation regime in France. These conditions on grape and wine production make a real difference to access natural resources and for production costs/ economies of scale.

2.3.3 Characteristics of Grape-Growing Farms

Beyond the size of the farms, the 85,000 French grape farms can be characterized from three important variables: the labor force, the age of the grape growers and the men/women ratio.

Wine farms are characterized by the use of a large wage labor force. Farm specialized in grape-growing use, on average, the equivalent of 1.9 full-time workers seasonal including workers (+0.4 up to other farms). This is why French viticulture is recognized as a sector supplying jobs in the countryside. Nonfamily permanent employees provide 30% of the workload and 18% for seasonal workers. Seasonal work is mainly present in Champagne and Burgundy-Beaujolais-Savoie-Jura because the grape growers harvest by hand more often (Agreste Primeur 2011).

In 2010 (RGA³ 2010), 6 out of 10 grape growers are 50 years old and over. Among the specialized farm owners of 50 years or older, the majority (60%) does not know who will take over after them or even think the farm will disappear. This could result in a potential loss of nearly 40% of French vineyards. This is a particularly big concern in Gironde, where the share of over 50s among wine growers continues to grow (54%). The demographic succession seems to be less and less easy. Fewer and fewer are generational farms when grape farms used to be family farms (they are dominant in France), and it is more and more difficult to transmit a grape-growing farm.

³The RGA, or General Agricultural Census, compiles statistics on the number of farms, on the technical and economic orientations, on the agricultural surfaces used, the productions and surfaces concerned, the areas still grassed, and the main grasslands. The RGA (or RA) is organized every 10 to 12 years. The first census took place in 1998, then in 2000 and finally in 2010. They constitute the main data source from the Ministry of Agriculture.

In 2010, 17% of owners are under 40 years of age, compared to 25% in 2000. Almost 61,000 hectares of vines are expected to be transmitted before 2020 (concerning 3000 grape growers over 50 years). For some of them the question of succession begins to arise. The first trends in the census confirm the results of previous surveys, namely, a deterioration in the response rates for the future of the farm but also the correlation between the size of the company and its eventual transmission. In fact, for one in three, the question no longer arises. He already knows his future successor (when it was 50% of them in 2000). Four times out of five, the buyer is part of the family. The farm is smaller (7 ha), when the transmission takes place outside the family because the future owner already owns another exploitation. Thirty thousand hectares are under uncertainty in this region. In 2010, for a future retiree on ten, the question seems resolved: the exploitation will disappear. Either it will be spread in different other companies or the agricultural use of this lands will be lost. For the others, the question has no answer, or they have not yet asked it, or they do not know.

The grape-growing profession is more feminized than in other agricultural professions, as 27% of farm managers are women (23%). This is even more true when we look at the older grape growers (37%) as they often take over from their husbands when they retire.

2.3.4 The Dynamics of Organic Farming

We can observe an interesting dynamics around environmental-friendly and sustainable ones in the French industry in the recent years (organic, biodynamic and natural wines). Official data are available only for organic wines, benefiting from the creation of a dedicated observatory. The organic vineyard has tripled in 10 years. In 2017, the organic viticultural sector in France comprises 5835 grape-growing farms and 78,665 hectares of organically grown vines, representing nearly 10% of the national vineyard in hectares (Table 2.4). The regions which are the most dynamic ones in terms of both volume and number of organic farms are (1) Languedoc-Roussillon as the leading area in France, (2) Provence-Alpes-Côte d'Azur and (3) Aquitaine with Bordeaux wines. Conversions to organic farming experienced a very strong increase between 2008 and 2012 (the conversion lasts three years) and slow down a little bit since then (Fig. 2.3 and Table 2.4).

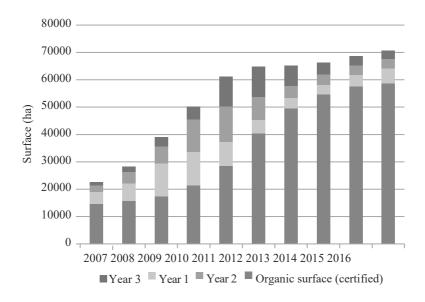


Fig. 2.3 Evolution of organic surfaces in France (ha). (Source: Agence BIO 2017)

2.4 The Winemaking Sector in France

Even if there are many ways for producing wine, the French models for wine production mainly rely on grape growers who are also winemakers, whether in a private cellar or in holding the shares of a co-operative processing and selling the wine. Then, in some French regions, negociants and brokers are very important intermediate actors in the industry.

2.4.1 Wine Production: Yield, Colors and AOC Wines

In France, the average yield is around 50 hl/ha, close to the European one (between 55 and 60 hL/ha depending on the vintage), but this number varies from year to year. For quality and AOC wines, the maximum authorized yield varies between 40 and 60 hl/ha. During the period 2003–2013, the annual yield of AOC was comprised between 42 hl/ha (2013) and 55.8 hl/ha (2005). For less qualified wines, the yield varies from 60 to 80 hl/ha. During 2003–2013, the annual yield of wines other than AOC (Cognac excluded) varied from 63 hl/ha in 2003, 2007 and 2011 to 79.5 in 2004 (France AgriMer 2014).⁴ There are strong yield differentials between regions, and on average

⁴See tables in page 38 and 39 of FranceAgriMer 2014.

	Num	per of	Organic s	urfaces	Orga	inic sur	faces (I	na, conv	version)	Total (ha, certified		
	far	ms	(ha, cer	tified)			2017	7		- + conversi	on)	Percentage of organic
		Evol.		Evol.	Year	Year	Year		Evol.		Evol.	surface in the whole
Regions	2017	/16	2017	/16	1	2	3	Total	/16	2017	/16	vineyard
Languedoc-	1466 1	3.6%	19,512	4%	3698	1757	1136	6591	67%	26,102	15%	11.2%
Roussillon												
Provence-Alpes-	994	8.9%	14,088	3%	1635	996	734	3366	30%	17,454	8%	19.1%
Côte d'Azur												
Aquitaine	826	12.2%	9097	4%	1299	735	533	2568	60%	11,665	13%	8.2%
Rhône-Alpes	615	6.8%	4641	6%	388	319	179	885	7%	5527	6%	11.4%
Midi-Pyrénées	333	8.1%	2071	3%	266	198	103	568	43%	2638	10%	7.0%
Bourgogne	322	6.6%	2054	2%	173	469	200	842	40%	2896	10%	8.8%
Alsace	309	6.9%	2203	1%	160	89	99	348	56%	2551	6%	15.9%
Pays de la Loire	264	15.8%	2374	8%	385	442	146	973	39%	3346	15%	10.5%
Centre Val-de-Loire	213	7.6%	2421	1%	224	105	81	410	24%	2831	4%	13.3%
Champagne- Ardenne	158	19.7%	411	15%	128	85	42	256	45%	667	25%	2.1%
Poitou- Charentes	116	20.8%	946	5%	62	153	53	268	18%	1213	8%	1.4%
Franche-Comté	74	8.8%	361	11%	16	56	18	90	-1%	452	9%	18.5%
Corsica	59	5.4%	675	13%	151	153	33	337	5%	1012	10%	15.1%
Auvergne	27	35%	75	4%	22	20	8	50	85%	125	26%	11.5%
Lorraine	25	38.9%	55	6%	43	7	1	52	285%	107	63%	31.5%
Picardie	16	6.7%	36	50%	5	1	2	9	-51%	45	5%	1.8%
Limousin	10	25%	29	160%	4	-	1	5	17%	34	117%	16.6%
Ile-de-France	4	-20%	1	42%	_	_	_	_	-100%	1	37%	2.6%
Haute- Normandie	2	2 100%	с	-	С	С	С	С	-	с	_	-

Table 2.4 Repartition of organic farms and surfaces by region

30

(continued)

Table 2.4 (continued)

	Num	ber of	Organic s	urfaces	Orga	nic sur	faces (ł	na, conve	ersion)	Total (ha, cer	tified	
	fa	rms	(ha, cer	tified)			2017	7		+ conversion)	Percentage of organic
Regions	2017	Evol. /16	2017	Evol. /16	Year 1	Year 2	Year 3	Total	Evol. /16	2017	Evol. /16	surface in the whole vineyard
Bretagne	1	-50%	С	-	С	С	С	С	-	С	-	_
Basse- Normandie	1	0%	С	-	C	C	C	С	-	С	-	-
Nord-Pas-de- Calais	-	-	-	-	-	-	-	-	-	-	-	-
Outre-Mer	-	-	_	-	-	-	_	-	-	_	_	_
Total France	5835	10.9%	61,048	4%	8660	5588	3369	17,617	46%	78,665	11%	10%

they are low compared to competing producing countries in the New World. It impacts production costs compared to countries benefiting from favorable production factors such as natural and human resources less costly. In addition, for many years, there has been a very significant increase in the mortality of vines, which weakens the yields and the productivity of the French vineyards, despite the notable efforts of restructuring and renovating the vineyards, not to mention the National Research Programs on the decline of vineyards in general and on trunk diseases in particular.

In 2010, farms produced 45% of red wines, a production that dominates in France, slightly higher than white wines (43%), far ahead from rosé wines (12%). A large proportion of white wines are detained to spirits (eaux de vie). Figure 2.4 demonstrates the evolution of wine harvest in France by wine region and color.

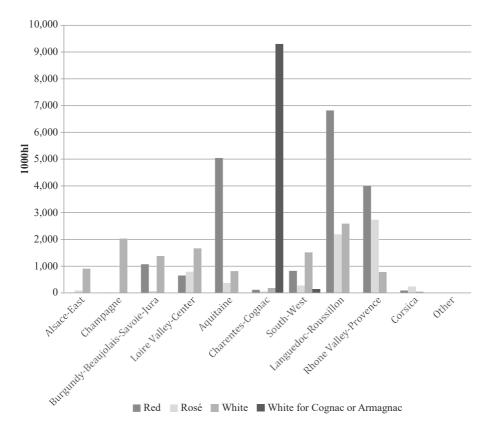


Fig. 2.4 Wine harvest in France by region and color (2015). (Source: DGDDI-CVI Harvest 2005–2015)

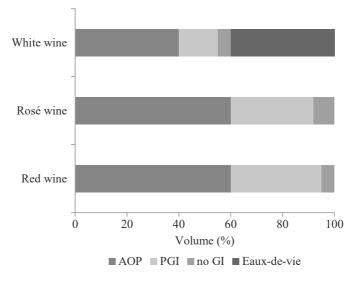


Fig. 2.5 AOC and PGI and wine color (2010). (Source: Agreste Primeur 2011)

AOC and PGI wines value French production since the majority of red and rosé wines are produced under AOC (60%) (Fig. 2.5).

Before 2012, it was not possible to produce "organic wine" but only "wine produced from organic grapes". A European regulation (2012) designed new production specifications defining what an organic wine is and how to produce it (n°203/2012). According to a study by AND-I, commissioned by Agence BIO, nearly 1.82 million hectoliters of organic wines have been sold in 2016. PDOs accounted for 68% of volumes of French organic wines marketed in 2015 and PGIs 25%.

2.4.2 Winemakers

In France, grape-growing farms can deal with their grape harvest in three different wine processing modes:

- (i) Using their harvest to make their own wine (on-farm winemakers) in a fully integrated way (from grape production to wine commercialization). In this case, the estates are managing both the grape growing and the wine processing.
- (ii) Being co-operative members and delivering the harvest to winemaking co-operatives that process and sell wine on their behalf. There is no contract to sell the grapes between co-operative members and wine co-

operatives (in this sense, it is different from Champagne where the "Maisons de Champagne" buy fresh grapes from grape growers and then process the wine). Grapes and wines remain the property of wine growers until they are sold.

(iii) Selling their fresh grape harvest (rare).

The majority of the grape harvest is processed by on-farm winemakers, representing 55% of the total French harvest, also called private cellars. About 37% of the total grape production is processed by winemaking co-operatives (48% of French wines in volume excluding Cognac in 2016 (FranceAgriMer 2018a, b)). The remaining 8% of the total grape harvest is sold as fresh grapes, grape juices or musts (Fig. 2.6).

In 2010, 53% of the grape-growing farms sent their grapes (partially or totally) to a wine co-operative (39% deliver their whole production to a wine co-operative). Wine co-operatives are typical French structures in the wine industry with a strong link to the terroir and origin of grapes. Their weight remains important in France (606 winemaking co-operatives in 2014). Over 310,000 hectares of vines are cultivated by co-operatives members (and sometimes by co-operatives themselves when they own a small vineyard). The average surface of vines of co-operative members is around six hectares (against nine hectares for the vertically integrated grape and winegrowing farms). Wine co-operatives directly owned by the grape growers on the principle "one man, one voice". They bring together more than 100,000 people, 85,000 associated co-operative partners and 17,353 employees. They achieve a turnover of 5.6 billion Euros and 18,317,022 hL (2014), which accounts for 48% of the total wine production in France (except Charentes-Cognac). More than 50% of the wine co-operatives producing still wines are located in the South-

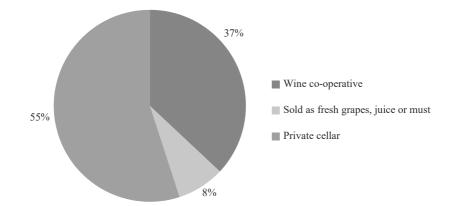


Fig. 2.6 Winemaking processing (volume, 2010). (Source: Agreste Primeur 2011)

	Turnover 2013 (million Euro	s) Wine region
Val d'Orbieu	274	Languedoc-Roussillon
CV Nicolas Feuillatte	210	Champagne
Alliance Champagne	105	Champagne
UDVCR Cellier des Dauphins	100	Rhône

Table 2.5 Four main French wine co-operatives

Source: CNIV/FranceAgriMer (2016)

East of France (Languedoc, Valley of the Rhone and Provence). The biggest ones are located in the same region, but also in Champagne (Table 2.5).

Twenty percent of the wine produced in co-operatives is organic wine (FranceAgriMer 2014), representing 27% of the organic wine processed in France. According to the 2015 notifications, 203 wine co-operatives produced wine from organic grapes, up from 70 in 2009 (Agence BIO). They are mainly mixed co-operatives producing both a range of organic and non-organic wines. Nevertheless, to date, wine co-operatives are small businesses or SMEs. Only one has a turnover exceeding 300 million Euros. While size is not in itself a guarantee of success, we must distinguish between what is relevant for the optimization of winemaking tools and what is the case with regard to packaging and marketing. As with other sectors of activity, the rapprochements between co-operatives continue. The number of wine co-operatives has decreased by 40% in the last 20 years.

2.5 Distribution Channels

2.5.1 The Main Distribution Channels Used by Winemakers

Once the wine has been processed, a wine farm (private cellar) or a wine cooperative can sell it through different distribution channels: negociants (also called wine merchants), producer groups, restaurants, wine stores, supermarkets and hypermarkets or directly to consumers (on-farm sale, online sale). An important share of the volumes goes through negociants (64% of the volumes), often via brokers (Fig. 2.7).

For organic wines, sales channels are highly diversified. Of the volumes, 73% are marketed by wine growers and 27% are by wine co-operatives. More than half of the volumes marketed by co-operatives go to negociants. In 2015, 41% of sales of organic wines (in value) concerned direct sales and 23% in wine stores dedicated to organic wines. Direct selling is therefore the main

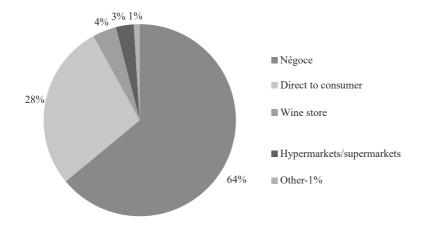


Fig. 2.7 On-farm winemakers' distribution channels by percentage of volume. (Source: RGA 2010)

channel for organic wines. Forty-six percent of organic wines (volume) have been sold abroad in 2015 (Europe, especially Germany). Fifteen percent of the volumes of organic wines sold in France in 2015 were sold in restaurants or catering services. In 2014, nearly one out of two restaurants had organic wine on their menu (compared with nearly two fifth in 2011). The restaurant owners who have organic wines offered, on average, five different references (CNIV – Panel CHD FACTS). According to Agence BIO, the value of purchases of organic wines by households in France was estimated around 792 million Euros in 2016 (+17% between 2015 and 2016). Purchases of organic wines more than tripled between 2005 and 2016. In 2015, organic wine accounted for 12% in value of purchases of organic products by households.

The wine can be sold in bulk, in bottle, or in bag-in-box. Figure 2.8 represents the different distribution channels in France and their share in volumes up to the type of packaging used at the moment of the sale. Bottled wine stands for the majority of direct sales. The main part of the wine sold to the negociants is bulk wine, which they bottle right after and before selling it. On the contrary, when they are selling the wine directly to the consumers, the winemakers bottle and label the main part of their wines.

While the organic wine distribution system appears to be diversified and mobilizes all the classic channels, direct sales and export appear to be of particular relevance. Organic wine growers have to face extra production costs, explained mainly by higher labor costs and partly justified by the higher quality of wines, and typically it results in higher prices for the final consumer. In this case, direct sales could be seen the most remunerative as a producer's

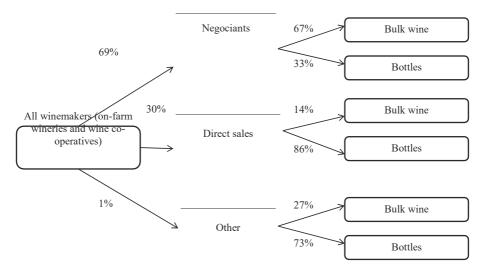


Fig. 2.8 Distribution channels (percentage of volume). (Source: Author's calculation based on RGA 2010)

margins are not squeezed in intermediate transactions. A closer relation between a producer and a consumer also adds value to the product: consumers perceive bio wine primarily as a wine, a cultural product which witnesses the diversity of terroirs (Bouzdine-Chameeva et al. 2013). It explains why the first distribution channel in value is direct sales (41% in value, 28% in volume), followed by organic stores (23% of the market value, 18% in volumes), then the HORECA and finally the large retailers (super and hypermarkets) even if they keep 27% of the volumes (Vignerons bio Nouvelle-Aquitaine 2017).

2.5.2 Negociants as Major Actors in the French Distribution Channels

Negociants play important roles along the wine industry chain from production through wine-maturation and commercialization. FranceAgriMerestimates the number of 1500 wine negociants in France even if it is difficult to identify them according to the diversity of their status and activities. They can buy fresh grapes or grape musts and process their wine (as in the Champagne region) and/or buy the wine in bulk or in bottles (selected via brokers). Then they bottle it if needed and process the distribution step to the final consumer. Growing grapes is the only part they do not manage or rarely. The negociants have a particularly strong position in the Bordeaux wine region. We can consider three types of negociants in the French wine sector:

- (i) Negociants who own as well wine estates, or the contrary: wine growers developing a négoce activity. In this case, the negociants can be the producer and distributor of their own wine. They are often big groups and their activities are highly vertically integrated. Such a negociant can also carry out the activities of the two next ones.
- (ii) Negociants who buy fresh grapes or grape musts from wine growers for making their own wine. They are in charge of the winemaking, aging, assembling and bottling, and then distributing the wine with their own labels. Such a negociant can also carry out the activities of the next one.
- (iii) Negociants only involved in the distribution process. They select wines produced by on-farm winemakers, in bulk or in bottle. If bulk, the negociants can undertake the bottling and labeling in accordance with the regulation at final destination.

In France, the Castel Group, Bordeaux-based international recognized name, dominates the French wine market (Table 2.6). It generates around 12% of the market in volume. Castel Group owns almost 1400 hectares of vinevards in France and another 1600 hectares in Africa. In France, Castel owns 21 winemaking estates in the Bordeaux region and Provence. Their brands occupy the top 3 in the ranking: Roche Mazet, Vieux Papes and Ormes de Cambras, which take a market share of over 2% in volume, followed by La Villageoise, Cambras, Baron de Lestac, Blaissac, Malesan and Boulaouane that stand at leading places in the French market. Les Grands Chais de France takes the second place in the French market with about 3% of the market in volume. Les Grands Chais de France, based at Petersbach in Alsace, is one of the top French wholesale wine and spirits merchants. Its brand JP Chenet, distributed in over 160 countries, claims the title of best-selling French wine in the world. JP Chenet occupies the top market share (0.4% in volume) in the French market as well. Other leading brands of still light grape wine are Cellier des Dauphins (0.5% of the market in volume) that belongs to Union des Vignerons des Côtes du Rhône, Billette and Listel from Domaines Listel,

Company	Turnover 2013 (million Euros)	Estimated number of bottles (million bottles)
Castel frères group	743	640
Johanes Boubées	743	400
(Carrefour group)		
Grands Chais de France	693	500

 Table 2.6 Turnover of the three main downstream companies—still wine

Source: CNIV/FranceAgriMer (2016)

Cramoisay of Maison Noémie Vernaux and Malesan from William Pitters International (MarketLine, Euromonitor and official company websites).

Winemaking firms and negociants are often put in touch thanks to brokers. Wine broker is a profession poorly known to the consumers but well known by experts. They have a great expertise upstream of the distribution channel (quantity produced, quality of the wine, prices on the market) allowing them to connect wine producers with negociants or wine importers. They also develop transaction activities from négoce to négoce. In this sense, they really play an intermediate role in the wine industry. They make each party aware of the conditions of the other. They advise the parties and attempt to reconcile their possibly divergent interests. Then they charge commissions for each transaction. In Bordeaux, they are part of 75% of the registered transactions (100% for the *Grands Crus*). In France, they are in charge of 80% of the AOC production, less for generic wines. Hypermarkets and supermarkets often have their own teams, operating in purchasing centers to deal with wine purchases.

2.5.3 Buying Wine

French consumers buy most of their wine in super and hypermarkets (70% of wine purchases, 9.5 million hl) (FranceAgriMer 2018a, b). Then come hard discount chains (14%), local wine stores (7%), wine stores (3%), direct sales (3%) and sales online (1%) in 2016 (volume) (FranceAgrimer 2017). France counts around 1700 wine stores, mostly owned by 3 chains: Nicolas (450), Inter Caves (224) and Cavavin (120). Gourmet stores and delicatessen remain residual. In terms of price (CNIV/FranceAgriMer 2016) in 2014:

- 29% of purchases of still wines were made at a price lower than 1.49€ per bottle and 7% at a higher price than 5€ per bottle.
- 52% of wines without any geographic indication from France, 55% of non-EU foreign wines (other origins) and 79% of wines without any geographic indication from Europe were purchased at a lower price than 1.49€ per bottle.
- 51% of purchases of AOC wines were made at less than 3€ per bottle and 16% of them at more than 5€ per bottle.

Even if red wines are still the top wines for consumption, the French consumers are more and more interested in rosé wines at the expense of red wines.

2.5.3.1 Mass Distribution (Super and Hypermarkets)

Hypermarkets and supermarkets play leading role in wine distribution. The wine market in these channels represents 4.6 billion Euros per year, or 3% of total store sales (2017). This weight goes up to 4.5% during the period of wine fairs (at least once or twice a year). For several years, wines have been valued by improving the quality of the offer in super and hypermarkets (also true for the other distribution channels). In three years, the number of still wine references has increased in hypermarkets (+39.5) despite a decline in the average linear. In these channels, still wine sales were -1.5% in volume and -0.1% in value compared to 2015. The average selling price (4.49€ per liter) rose by 2.9% compared to 2015. Supermarkets recorded 21.2 additional references of still wines over the last three years. Compared to 2015, sales of still wines in super and hypermarkets decreased by 1.3% in volume and increased by 1% in value, with an average price up by 3.6%, that is, 4.26€ per liter (FranceAgriMer 2017). Growth is better in local wine stores and drive-thru services, although market shares are much more confidential.

The volumes are divided between red wines (54% in value), rosé wines (26%) and white wines (20%) in 2016 according to the same source. Compared to the previous years, the decline in sales continues in volume and in value for red wines (-18% in volume over a ten years period). The market share of foreign wines in the total stills marketed in GD is up, and now stands at 7% in volume and 4% in value. In terms of formats, sales of still wine in bag-in-box continue their growth in supermarkets. These sales accounted for 35% oftotal sales of still wines in supermarkets in 2014 (CNIV/FranceAgriMer 2016).

2.5.3.2 Focus on Cybercommerce

Cybercommerce doesn't represent a lot in volume, but a huge progression in the recent years. In less than 20 years, wine sales via cybercommerce have become really significant. With 647 players (2/3 dedicated only to wine and spirits), the e-commerce of wines generated an estimated turnover of 430 million Euros in France in 2014. French people are more and more willing to purchase wine online, according to the SOWINE/SSI barometer. We can distinguish different type of cyber players (Table 2.7). Positioned on the diversity of the offer more than local wine merchants, the pioneers face several challenges: recruiting and engaging customers, including technological developments and financing wine storage (expensive). The private sales model is

Type of			
Cybercommerce	Examples	Number	Turnover
Pioneers or "pure players"	Millesima, Wine and Co, Vinatis	216 websites	180 million Euros
Private sales	Vente-privee.com, 1jour1vin.com	21 players	75–90 million Euros
Drive thru		13 chains	64 million Euros
Others	Distribution (web)	161 players	10–20 million
	Cross-canal winestores	203	Euros
	Box, subscriptions	websites	30 million Euros
		20 players	5–8 million
			Euros

Table 2.7 Cybercommerce in the French wine industry

Source: FranceAgriMer (2017)

driven by the advantages offered to consumers (discounts, famous wine brands, use of luxury codes, etc.). It requires high-tech logistics and specific management of the wine list. Drive-thru services from super and hypermarkets still have a big potential for further development. The type of wine purchased via cybercommerce depends on the player concerned, but it mainly concerns bottled red wine (75cL) priced between 10 and 25 Euros.

2.6 Conclusion and Synthesis: What About the Performance?

The organization of the French wine industry is characterized by the complexity and diversification among wine production regions concerning the actors and their relationship along the distribution chain.

The majority of the grape harvest is vinified by on-farm winemakers, about one third of the production is vinified in wine co-operatives and the selling of freshharvest takes only a small part of the market. This share varies depending on the region (Exhibit 2.1). The intermediate bodies play important roles in French wine industry. Negociants claim their leadership along the chain, and they can interfere at different steps (rarely for grape production, sometimes to process wine, very often to sell the wine). In addition, the transactions between grape or wine producers and negociants are often linked by brokers. Around 60–70% of the production is commercialized by negociants in the main wine regions. Supermarkets and hypermarkets are dominant channels for the distribution, and the on-trade (restaurants, bars, hotels, etc.) takes about one third of the market. Red wines are the most sold in terms of both volume and value. Whatever the region, wine co-operatives and negociants are the two arms of the French wine industry. They join in industry groups, either regionally for AOC and PGI wines or nationally for wines with no geographical indication. They fund efforts to promote their wines and monitor markets, finance research and development initiatives (FranceAgriMer 2018a, b). We present in Exhibit 2.1 the main actors and the way they are organized for four representative wine regions in France: Bordeaux, Burgundy, Champagne and Languedoc-Roussillon (Exhibit 2.1).

Exhibit 2.1 Focus on Four Wine Regions and Their Distribution Channels (Bordeaux, Burgundy, Champagne and Languedoc-Roussillon)

Bordeaux

Nearly 80% of the harvest is processed by on-farm winemakers. The transaction of fresh grapes or grape musts is negligible. In addition, this region is characterized by the dynamic and the power of negociants. Over 70% of the Bordeaux wine production is commercialized by negociants (51% for bulk wine and 49% for bottled wine), representing 83% of the wine estates. Brokers are important intermediaries in the Bordeaux wine region. 80% of the transactions between owner-seller and trader-buyer involve brokers.

Champagne

On-farm winemakers process less than one third of the harvest (30%), similar for wine co-operatives (28%), while selling fresh grapes or grape musts takes the most important part (42%). Different from other regions, most of the wine produced is sold by direct channels or exported abroad, which presents over 80% of the total transaction volume. Negociants or wholesalers distribute the rest.

Burgundy

55% of the harvest is vinified by on-farm winemakers. It is less than in the past due to the development of selling fresh harvest grapes or musts (16% of the crop in 2010 against 10% in 2000), while the proportion of harvest processed by wine co-operative remains stable (29%). The sale of fresh harvest grapes, which can meet the cash requirements, is now practiced by 47% of farms, which is rather rare in the other regions. This is also explained by the increase of sales contracts for the production of sparkling wines. Negociants and wholesalers remain the main destinations (59%). Still, half of the Burgundian wine growers are managing sales through direct selling (40%).

Languedoc-Roussillon

In this region, 47% of the farms are small estates, which bring the wine co-operatives to play an important role in winemaking. Nine out of ten operators send all or part of their harvest in wine co-operatives—over 70% of the total harvest. But big properties often process all or almost their whole harvest themselves. Two third of the wine production is commercialized via negociants. The direct sales represent the remaining one third of the total sales.

Source: Authors from the information published on the ODG websites and Agreste (2011a, b, 2012, 2013)

The production and consumption of wine are inseparable from its circulation and its international trade. We therefore end this chapter providing a synthesis of France's different strengths and weaknesses in relation to its performance on the wine market. Some analyses of the performance of the French wine industry have been published and nearly come to the same conclusions (Porter and Takeuchi 2013; HCCA 2017; CNIV/FranceAgriMer 2016) (Exhibit 2.2).

Strengths of the French Wine Industry

- The wine sector is crucial for the French economy as it represents France's leading sector of the agri-food balance, knowing that public subsidies represent only a small part of the turnover of the sector. Besides, it is worth noted that the Champagne contributes a tiny part in terms of volume but a significant share in this value. It is as well a job-creating sector in rural areas, while unemployment in France is still a major concern.
- At the international level, France is a highly reputed historical wine country. It is still the first wine exporter in the world (in value) and about 30% of the production goes abroad. The European Union is the first destination, and the US and Asian market are the main ones out of Europe. Among the exports, AOP wines account for nearly half of the volume and generate 80% of the value.
- The country is also one of the top producers for wine production (in volume), right after Spain. It offers a high diversity of products. The agroclimatic diversity ensures a high diversity in the combination of climates, grape varieties and soils.
- France, as an Old Wine country, benefits from the know-how of the grape and wine growers, who know the terroir very well. Its image of this industry is strongly linked to "tradition" and to the high quality of the wine produced. The terroir reference must not only be seen as an old traditional notion and policy, invented to protect the production in the Old World, but as a model which determines the life and the future of many producers and people in this industry. It is a collective and long-term construction, authentic by the respect it shows for tradition and local usages.
- With over 300 of AOCs in France, the term "appellation" dominates in grape growing as well as in winemaking. The vineyards devoted to produce AOC wines cover about two third of the areas under vines, and about half of the total wine production is produced in an AOC context. The corollary is that wine yield in the French appellation regime is restricted and submitted

to regulations. For regions such as Alsace-Est, Champagne, Burgundy and Aquitaine, nearly 100% of their production are AOP wines. In terms of economic size, the majority of AOP winegrowing farms or winemaking plants are relatively big compared to others. This segmentation of the market by AOCs and PGIs is an important asset especially since the appellations are well valued, especially for exports.

• It is possible to observe the progressive constitution of powerful private groups or wine co-operatives able to compete at the international level. Some co-operatives, grouped together in co-operative unions are as strong as some negociants. If the appellation regimes dominate the French wine industry, it benefits as well from strong brands integrated in international powerful groups, especially for Cognac (spirits) and Champagne (sparkling). The reputation of the French wine industry also relies on the success of top-end estates and the *Grands Crus* all over the world.

Weaknesses of the French Wine Industry

- However, the domestic wine production and consumption have been experiencing a long-term decline. Facing the challenges from New World wines, French producers need to maintain their competitiveness.
- Some estates are facing economic difficulties due to high production costs for some wines and commercial issues (CNIV/FranceAgriMer 2016).
- Few big French importers and wholesalers focused on emerging markets for wine consumption.
- Although leading brands account for an important market share and have advantages in marketing and communication, the perception of appellation prevails in the French market.
- No French brands in the top 10 of international brands but numerous regions, appellations, farms, brands and intermediaries, unclear for the consumers.
- An involvement for innovation and in research programs hardly recognized by the markets.

Starting from this observation, the stakes for the French wine industry are numerous. One of the main ones is to better adapt the offer to the demand, in particular for the low-end wines. The growth of growing segments is a way to offset the decline in demand. The French sector must also face another major challenge: maintaining its export position and position itself on the best markets. This is an important outlet for French wines, particularly in terms of value, especially when the domestic consumption is declining. The positioning of French wines in the domestic market has also to be the focus of attention, because it remains the major outlet (65% of volumes produced). In France, 75% of wines purchased in 2014 were less than 3€ per bottle. The French sector will therefore have to opt for profitable strategic routes for all its stakeholders. Whenever possible, it is more on valorizing wines with high yields, thanks to an important marketing support. It can also be to value wines produced with limited yields. Or it may be the choice to produce wines at low cost, so high yields, but this strategy is complex in France in the current context.

Exhibit 2.2 Porter and Takeuchi's Analysis About the Performance of the French Wine Industry (2013)

"France's competitiveness has also suffered as a result of changes in the global wine market. Historic price pressure as a result of overcapacity is going away as demand is growing stronger than production capacity. At the same time wine is moving from a regional towards a global product as international trade increases, leading to new competitive pressures for wine growers. France has taken this trend seriously as wine is a key national export for the economy and a key employer for the work force. Overall, performance of the French wine cluster over the past decade is mixed. France wine has a strong position in terms of export values and volumes driven by a higher percentage of exports to non-EU countries. France also has maintained a strong price premium on a per liter basis versus other countries. Despite these positive aspects, the cluster cannot ignore the fact that export growth has not kept pace with other wine-producing countries both in terms of volume and value. France faces particularly strong competition from "New World" producers outside of Europe. The question then begs, how can the French wine cluster remain competitive? The competing clusters in "new world" geographies like Australia, Chile and the United States have gained global export share by adopting the same strategies that made France so successful historically. IFCs that contributed to France's strong performance are now protecting uncompetitive producers and stifling innovation. Producers have been less able or willing to adapt to a changing marketplace, whether due to lack of scale and expertise or an unwillingness to alter owner and worker lifestyles. Going forward, ensuring that national industry organizations and other IFCs drive improvements in productivity will be critical in helping French firms remain globally competitive".

Source: Porter and Takeuchi (2013)

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