



23

International Perspectives on Backwards Vertical Integration

Alfredo Coelho and Etienne Montaigne

23.1 Introduction

This chapter provides a broad understanding of the motivations and debates related to vertical integration backwards, through concrete examples or practical cases. Vertical integration backwards in the wine industry was extensively discussed in the literature (see, e.g. Sidlovits and Kator 2007). However, those contributions focus on one region or country or a particular type of firm (e.g. wine co-operatives).

Without pretending to cover all the dimensions of vertical integration, we introduce hereafter, through several examples, the causes or consequences that lead firms to practice vertical integration.

Conceptual approaches to vertical integration were already discussed elsewhere. Briefly, the literature on vertical integration of firms points out two main explanations for the adoption of such a strategy. Noneconomic theories—mainly institutional theory and the theory of the dependency of the resources (DiMaggio and Powell 1983; Pfeffer and Salancick 1978)—state that organizations engage on vertical integration without taking into account the efficiency criteria. By contrast, theories on economics argue that

A. Coelho (✉)

Bordeaux Sciences Agro, Gradignan, France

e-mail: alfredo.coelho@agro-bordeaux.fr

E. Montaigne

Department of Agricultural Economics, Montpellier Supagro, Montpellier, France

e-mail: etienne.montaigne@supagro.inra.fr

organizations adopt the structures maximizing firms' efficiency (Nelson and Winter 1982; Williamson 1975). As we will see hereafter, these contrasting views are also part of the debate on vertical integration backwards in the wine industry.

This chapter is structured in two parts. The first part discusses the different paths of vertical integration backwards among international wine firms. The second part highlights the constraints wine firms face in Europe, particularly in France, to vertically integrate the upstream of the wine chain. Those constraints are not directly related to the existence of a mechanism to regulate the grape-growing potential but more due to the way a particular country translated the European legislation on the vine planting rights scheme to the national environment.

23.2 Vertical Integration Backwards in the Top International Wine Firms

Vertical integration is a common practice among international wine firms. Integration strategies are not new phenomena in this industry because historically most wine firms always tried to control the production potential (sourcing of wines or grapes). For example, Geraci (2004) explains the trend toward vertical integration in Californian vineyards and wineries since the 1970s as a means to improve firms' efficiency—all sizes concerned—and firms' resilience toward production cycles.

This chapter will address only the strategies of vertical integration backwards concerning grape growing and other vineyard-related operations; however, vertical integration at the upstream of the value chain may involve other operations, substituting some of the activities involving suppliers and services outsourced. Among the most well-known examples, we can point out the case of E&J Gallo who built a glass factory at Modesto (California) to produce glass bottles close to the winemaking and bottling facilities. Other examples include wine firms acquiring shareholdings in oak barrels manufacturers, nurseries, or cork manufacturers.

The comprehension of vertical integration strategies backwards can be achieved through the analysis of the motivations for the restructuring of the leading wine firms in the last three years. Those motivations can be synthesized as follows (see, e.g. Coelho and Rastoin 2004):

- Securing wine or grapes in quantity and quality
- 'Scale' and 'scope' effects

- The acquisition of wine brands, namely, in the premium segments (popular premium, premium, super-premium, and ultra-premium)
- The access to distribution networks, particularly in the export markets

Securing wine or grapes procurement in quantity and quality is therefore one of the main motivations for restructuring the leading international wineries.

With respect to grape supply, it is first necessary to distinguish between firms practicing (partial or full) vertical integration from those who buy directly from third parties. Firms that do not practice full vertical integration backwards (i.e. firms do not directly own vineyards) may opt to buy grapes or wine in the spot market or, in alternative, to establish contracts with suppliers as grape growers and bulk wine providers (see, e.g. Montaigne et al. 2007).

Firms can buy grapes or wine through medium- to long-term contracts. The establishment of grape contracts is not so widespread in Europe but in some regions contracts may be a typical way of ensuring supplies (quality and volumes) (e.g. Alsace, Champagne, and Vin de Pays des Sables du Lion) (see, e.g. Goodhue et al. 2002; Franken 2012; Longbottom et al. 2013; Montaigne and Sidlovits 2003). Therefore, in some circumstances, grape contracts may be useful to reduce the risks and ensuring grape quality levels required by the buyers as those grapes may not be available in the spot or open markets. In Argentina, New Zealand, Hungary, and California, the wineries introduce alternative mechanisms of coordination to source quality grapes adapted to the segments of the market (super-premium, ultra-premium, etc.) (see Codron et al. 2013; Montaigne et al. 2005).

Most of the leading wineries across the world need to establish contracts with grape growers or other suppliers to meet their needs in terms of volume and quality. Grape contracts may range from informal (i.e. 'handshake') to formal and detailed agreements. Contracts may include more than 30 pages of clauses, including technical practices, supervision, bonuses, and penalties. Unfortunately for the growers, most of the formal contracts do not precise the prices to be paid for the grapes. Likewise, concentration of wine firms increases the power of the leading wineries and the dependency of the grape growers from those firms.

Other 'hybrid' agreements include the (total or partial) sale of vineyards owned by a major winery to a real estate investment trust (REIT) followed by a 'lease-back' agreement of the same vineyards. This strategy is convenient for wine firms planning to reduce the amount of tangible assets on their own balance sheets and benefiting from the leverage effect of the financial costs paid during the lease-back period. As an example, Diageo Château & Estate

Wines sold more than 800 hectares of vineyards in California in 2010 to the real estate investment firm Realty Income and then signed a 20-year lease-back deal (with an option to extend it to more 80 years).

Among the major wine firms, firms focus primarily on the management of the wine brands and establish long-term contracts with key and high quality wine suppliers in different geographies to ensure icon wine, variety and secure the sourcing. In the USA, E&J Gallo adopted this strategy for some of its core brands. Among the wines imported by E&J Gallo from third countries, it includes the following brands owned by Gallo: Italy (Ecco Domani, Bella Sera, Da Vinci, etc.), France (Red Bicycleette and Pont d'Avignon), Chile (Viña Chilcaya), Australia (Black Swan), and so on. This strategy provides more flexibility and a focus in the management of the brands as the companies do not need to ensure the management of the vineyards, which are managed by third parties (costs and risks related to the management of the vineyards are shared or transferred to partners).

Mergers and acquisitions are also a means for diversifying grape supplies beyond firms' home country. For example, when Foster's Group (Australia) bought Beringer in California (Château Saint Jean, Chateau Souverain, Meridian Vineyards, Beringer Vineyards, Stag's Leap, and St. Clement Vineyards) (2000), it became less dependent on the supplies of grapes and wine produced in Australia through its own wine branch (Mildara Blass). The new entity was renamed Beringer Blass and became the world's largest premium wine company. In an opposite move, Constellation Brands (USA) acquired BRL Hardy (Australia) in 2001 creating at the time the largest wine company in the world.

The supply of wines from third parties is a strategic choice helping firms to expand on emerging markets. For example, the case of a Chinese leading firm who has signed two partnerships: one in Canada for the export of ice wine to China and, in another case, in New Zealand for the export of wines to China. This strategy entails some constraints such as transportation costs and national or regional excise duties (e.g. in the case of the states of Karnataka and Maharashtra in India) which may reduce margins considerably.

Vertical integration upstream is an important issue in some protected designated areas (PDOs) (e.g. Champagne). The cases of the Lanson International and Taittinger illustrate this issue. Grapes in Champagne are a unique and relatively scarce resource. Initially, when the champagne house Lanson International was put on the market for sale in 2005, it attracted many potential bidders. However, Lanson International did not directly own any vineyards (grapes were sourced through contracts). At the same time, another champagne house was put on the market for sale—Taittinger—

which controlled more than 60% of the volume of grapes needed for its own production. Therefore, most potential buyers for Lanson International moved away as the size of the vineyard owned by the competitor Taittinger represented an exceptional and unique opportunity to control a vineyard in Champagne. Vineyard control in Champagne is of particular interest as beyond the constraints related to the scarcity of vineyards available for purchase, both the price of grapes (roughly around €5/kg) and the prices of land with vineyards (average prices reaching more than €1.2 million/hectare in 2016) are extremely high.

In the case of a champagne maker, the non-integration of grape production decreases investments (in vineyards) and ensures flexibility, but it becomes a risky strategy whenever harvests are low. Moreover, the absence of direct ownership over the grapes can prevent firms' expansion plans.

Buying wine from the vineyards of New World producing countries or from traditional producing countries and the transportation of those wines to major importing markets (USA, UK, Germany), supplying the main brands, particularly for the entry-level still wine ranges, translate into an emerging of international wine sourcing.

These two examples—vertical integration upstream and sourcing regionally and globally—illustrate two types of strategies, often interlinked, characterizing today's global wine industry:

- Strategies for controlling resources (focus on the vertical integration backwards)
- Strategies of flexibility (focalization on brands and distribution channels)

The first strategy is based on the acquisition of unique and irreversible physical assets (land, vineyards, farm equipment, winemaking, and storage facilities). Rather this pattern corresponds to an institutional and cultural environment typical of PDO wines; that is, firms are strongly embedded in the territories. In the second case, efforts are market-oriented with a focus on finding new customers and maintaining the customer/buyer basis. Therefore, this illustrates a dichotomy between, on the one hand, a strategy based primarily on tangible investments (i.e. a 'supply-driven strategy') and, in the second case, a strategy based on intangible investments (i.e. a 'marketing-driven strategy') (see Gereffi 1999).

Vertical integration lowers transaction costs and assures regular and constant supply of grapes. Coordination issues may encourage integration backwards. Vertical integration of the vineyards also protects against price increases. For example, in recent years grape growers in the South of France were

involved in strong protests (voiding tanks containing foreign wines in the facilities of French importers, stopping Spanish trucks in the highway carrying bulk wine, etc.) against the important price gap between French and Spanish entry-level wines. By integrating the vineyards, wineries may be able to avoid fluctuations on prices in the open market.

23.2.1 Backward Vertical Integration: Lessons from the Top 40 World Wine Firms

Among the top 40 world wineries (see Coelho and Rastoin 2004; Coelho 2013), we identified the top 12 vineyard owners. The top holders include a second-tier French co-operative (Vinadeis) and three Italian three-tier co-operatives (Caviro, Cavit, Riunite & Civ + GIV). Co-operatives are 'hybrid' organizations and their vineyards tend to be directly owned by members, not by the co-operatives themselves. However, in the last few years, the advanced average age and retirement of members (lack of successors and new young grape growers) and major grubbing-ups of vineyards in Southern European countries (France, Spain, and Italy) (shrinking of the sourcing potential) led these co-operatives to purchase or lease land with vineyards. The direct involvement of wine co-operatives in the control of vineyards is a growing movement, but at the very beginning. The vertical integration backwards by wine co-operatives is still influenced by strong legal, institutional, and financial constraints (Fig. 23.1).

Concerning other leading wine firms (i.e. non-co-operatives), the above table suggests a link between vineyard ownership and the internationalization of firms. At first, the internationalization of wine firms through the ownership of vineyards contributes to diversify the supply of wines from different geographies and origins. At the international level, Cavit (Italy) is the only wine co-operative owning wine-related assets outside the home country, which owns a major shareholding in the German sparkling wine producer Kessler (Württemberg).

International wine brands need to ensure a stable quality of wines and volumes to supply buyers. Most of the international wine firms are not completely autonomous as they need to purchase grapes or bulk wine through contracts or in the spot market.

Vertical integration backwards also allows companies to diversify the geographies of the vineyards through different varieties, soils, and microclimates. This strategy is particularly developed by the leading Chilean wine firms (Concha y Toro, Viña San Pedro Tarapacá Wine Group).

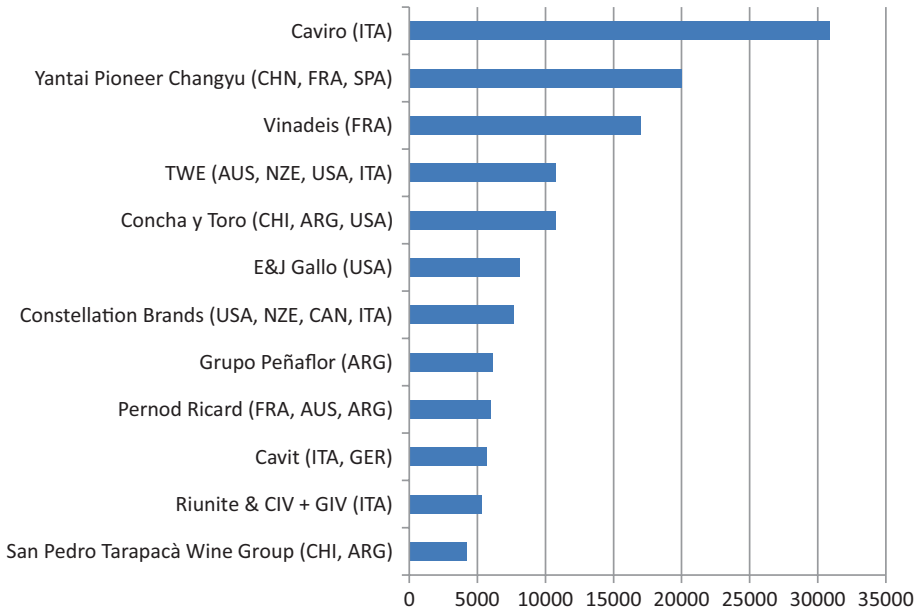


Fig. 23.1 The 12 leading world wine producers by vine surfaces in 2016 (ha). (Source: Annual Reports, International press)

23.2.2 Expanding Vertical Integration: Greenfield Investments or Mergers and Acquisitions?

International wine firms have the opportunity to integrate vertically the vineyards through two main strategies, either greenfield (ex nihilo) investments or mergers and acquisitions (brownfield investments). Both strategies are suitable and can be successful for the world leading wineries; however, mergers and acquisitions tend to be more expensive and risky. Among the top world wine firms, Constellation Brands (USA) and Treasury Wine Estates (TWE) (Australia) expanded their vineyard surfaces through major mergers and acquisitions of wineries in different locations (see hereafter).

Exhibit 23.1 Vertical Integration Backwards Through Mergers and Acquisitions: The Example of TWE (Australia)

2001: Southcorp (Australia) merges with Rosemount (Australia)

Southcorp owned 6070 hectares of vineyards and joint ventures in Languedoc (France) and California.

Rosemount held 2023 hectares of planted vineyards and a joint venture with Robert Mondavi Winery.

2005: Foster's Group (Australia) acquires with Southcorp (Australia)

Southcorp owned 8063 hectares of vineyards planted in Australia. The target main brands included: Penfolds, Rosemount Estate, Lindeman's, Wynns Coonawarra Estate.

2011: Demerger of the Foster's Brewing (Australia) beer and wine activities

The wine activities of the new 'pure player' were renamed Treasury Wine Estates (TWE).

2015: Treasury Wine Estates (Australia) acquires Diageo (UK) wine operations

The acquisition of Diageo Château and Estate operations from Diageo helped TWE to increase 'masstige' (i.e. wines positioned as prestigious and affordable in the mass-market segment) and 'luxury' supply of wines. Diageo Château and Estate operations include vineyards and wineries in the USA (Beaulieu Vineyards, Sterling Vineyards, Acacia, Provenance, and Hewitt) and the UK (Blossom Hill).

2016: Treasury Wine Estates (Australia)

TWE is one of the top 3 world wine multinationals and owns more than 14,000 hectares of vineyards (Australia, New Zealand, USA, and Italy). The last operations show a clear link between vineyard ownership and vineyard location/quality and brand building in the premium and luxury segments.

Due to the absence of vine planting rights schemes similar to the one in the European Union (EU), leading Chilean wine producers expanded their vineyard plantings through different investments in Chile and Argentina. Concha y Toro expanded in the home country and in Argentina mainly through the planting of new vineyards. This strategy enables to company to have a 'complete control of the productive process and supply chain' (Concha y Toro 2015) (cf. Exhibit 23.2).

Exhibit 23.2 Vertical Integration Backwards Through Greenfield Investments: The Example of Concha y Toro (2002–2018) (Chile)

Concha y Toro is the leader of wine production and exports in Chile. It is also one of the top three Argentinean wine exporters (Trivento subsidiary). Vineyard surfaces increased at an average growth superior to 9% year-on-year in the last 10 years.

'Our business model is to make Concha y Toro, the most vertically integrated company of the wine industry' (*in* Concha y Toro, Annual Report, 2015). The company sources grapes and bulk wine from third parties mainly for entry-level wines—such as Casillero del Diablo—(50% of the wines in the popular, varietal, and premium segments) and other low-priced wines (almost 76% of the volumes) (source: Concha y Toro, Annual Reports). Wine brands in the higher-end segments are exclusively from grapes sourced from the vineyards of the company.

Grapes represent approximately 30% of Concha y Toro's direct costs and the company buys 65% of its grapes or bulk wine from third parties. Therefore, the

company's gross margin is highly sensitive to fluctuations in the prices of the grapes during the harvesting period and of the bulk wine for the rest of the year.

The expansion of the company included a partnership with Baron Philippe de Rothschild (France) to produce Almaviva (US \$80/bottle).

In 2011, Concha y Toro acquired the vineyards and winemaking facilities of the main organic wine producer in the USA (Fetzer Vineyards and Bonterra). This acquisition was the first major investment of the company outside Latin America. In 2015, the company established an R&D center dedicated to viticulture and winemaking in Chile.

Chilean wine production is highly dependent on Cabernet Sauvignon. The diversification of vineyard plantings allows Concha y Toro to diversify the tasting profiles for this varietal but also to find the most suitable locations for new grape varieties (e.g. Gewürztraminer, Riesling, and Syrah) (Tables 23.1 and 23.2).

Table 23.1 Concha y Toro: expansion of vineyard surfaces 2002–2018 (ha)

Locations	New plantings		Vineyard surfaces (ha)			Change 2005–2018	Strategy for vertical integration
	2002–2005	2005	2010	2018			
Chile	1189	4545	8445	9717	10 valleys, 55 vineyards	113%	Greenfield
Argentina	349	433	1068	1140	3 valleys, 9 vineyards	164%	Greenfield
California	–	0	–	468	2 valleys, 14 vineyards		Acquisition

Source: Own elaboration based on annual reports

Table 23.2 Concha y Toro: expansion of vineyard surfaces in Chilean valleys 2005–2015 (ha)

Chilean valleys (ha)	2005	2010	2015	Change 2005–2015
Limarí	313	896	965	186.3%
Casablanca	339	415	424	22.4%
Leyda	–	130	130	–
Aconcagua	–	–	100	–
Maipo	620	974	853	57.1%
Cachapoal	611	1306	1463	113.7%
Colchagua	636	1757	2163	176.3%
Curicó	442	666	683	50.7%
Maule	1584	2300	2413	45.2%

Source: Own elaboration based on annual reports

The two examples above illustrate the main paths undertaken by leading wine firms around the world to expand vertical integration backwards.

In contrast with the Chilean example, the major wine firms in the EU, particularly in France (see Montaigne et al. 2012, about the restrictions of the mechanism for the distribution to structure the vine planting rights scheme in France), tend to expand dominantly through mergers and acquisitions in order to expand the vineyard basis.

23.3 The Planting Rights Scheme: A Look into the European Constraints to Vertical Integration Backwards

As we discussed in the previous part of the chapter, at the international level, the access to raw materials—wine grapes—is a key point for firms' success across the wine chain. However, over time firms need to redefine their boundaries through a proactive and intentional approach as a reaction to changes in the competition environment.

In the EU, vine planting rights were a means adopted by legislation to help industry to better manage the production potential (i.e. grape growing) and regulate the supply of wines. The wine common market organization (CMO) framework, established in 1970, introduced this policy measure in 1976 to better regulate the wine production by limitation of the potential, after two 'wine wars' between Italy and France. This legislation applies to the firms operating vineyards within the EU. However, even if the planting rights scheme concerns all vine-producing countries, the transposition of European rules into national legislations diverges across countries (see Montaigne et al. 2012).

The case of the transposition of European rules into French vineyards illustrates how the system blocked the distribution of sizeable areas of vine planting rights among vine producers. The transposition of the European rules of vine planting rights to France is unique. For example, in the last 30 years, in the Languedoc-Roussillon—the largest French vineyard region—there was not any greenfield investment to establish a single vineyard above 3 hectares. In contrast, many studies document many greenfield investments to establish large vineyards above 50 hectares in other European countries (e.g. in the Douro valley or Hungary) (see Delord et al. 2015). Those cases illustrate the influence of the French legislation, creating barriers preventing firms to increase vertical integration backwards. Firms planning to extend the vineyard

surfaces could only purchase each year a tiny amount of vine planting rights in the open ('spot') market. As an alternative, firms could vertically integrate vine production—at a significant cost—through mergers and acquisitions. In the most prestigious protected designated areas such as Champagne, Bordeaux, and Burgundy, land prices and the scarcity of the grape supply were two of the main barriers for investors.

23.3.1 The Vine Planting Scheme in France: An Atypical Case of Redistribution

Most often, vineyard extension in France requires grape growers use the most traditional approach, that is, the purchase of plots already planted (brownfield investment). The decision to acquire vineyards depends not only on vine planting rights but it also took into account the location (closeness to grape farms), the value of land in the land market, the value of the products into consumer markets, and the patrimonial approach characterizing the behavior of grape growers. The availability of vine plantings influenced the price but the French national reserve set up a common price for the planting rights sold through the reserve. In protected designation areas, the scarcity of land is the main factor explaining the price of vine planting rights.

In France, there was an important wine crisis at the early start of the twentieth century. As a consequence, France introduced a vine planting rights scheme in 1931. Six decades later, French legislation adapted to the most significant wine reform at the European level in 1999 by introducing the 'reserve' mechanism for vine planting rights. The national reserve for the management and distribution of vine planting rights became a tool of the public policy under the supervision of the Ministry of Agriculture.

By law, all vine plantings should be justified through proprietorship. Changes in the wine policy created two types of planting rights in France: those originated from the uprooting vine plots and those distributed through the national reserve. Growers who uprooted vine plots or the entire vine surfaces on a wine estate could sell the planting rights on the open market during eight years.

In this case, the national reserve was a tool to administer vine planting rights originated through the uprooting of vine planting rights not replanted within the eight-year lifespan. The reserve also hosted new planting rights, granted by the EU to each individual country within the framework established through the CMO for wine reform in 1999.

The national reserve provided free planting rights for young farmers. The remaining grape growers could acquire planting rights from the national reserve at a cost. In the spot market, transactions for vine planting rights could proceed directly, that is, between two grape growers or through the intermediation of a broker.

The price for the sale of vine planting rights derived from the national reserve was established at approximately €1750/ha in the first four campaigns (2002/2003–2005/2006). Prices decreased to €1500/ha in the following four campaigns and reached €1000/ha in the campaign of 2011/2012. As each grape grower could sell his planting rights to the national reserve, the main consequence was those prices became also the key reference for the prices of vine planting rights in the free market. The main outcome of this process was the complete disconnection between the amount paid for planting rights and market prices for land. Champagne was the most striking example, as the prices of vine planting rights were completely insignificant when compared to the price of land.

Therefore, whenever French grape grower plans to increase the vineyard surfaces of his own estate, he needed to acquire a planting right to plant vines in the free plot. In addition, the proprietorship of vine planting rights was not the only necessary condition to be allowed to plant a vine. The scheme also required an ‘authorization’ to plant vines. In practice, with the exception of wines without geographic indications (i.e. the former ‘table wines’) excluded from the planting rights scheme from 1999 to 2015, the two other European categories of wines (PDO and Protected Geographic Indications (PGI)) were able to control their production potential through a board—*Organisme de défense et de gestion (ODG)*, that is, *syndicats de cru*—governing each PDO and each PGI. The board (ODG) established an annual quota of authorization for each PDO or PGI in order to prevent excessive growth of the production potential not in line with the specific PDO or PGI market demand. The ODG (board) distributed the quota in proportion to the individual demands of grape growers. In addition, there was a maximal cap of three (five for collective programs) hectares/farmer/year for each area producing wines under PGI and one hectare/farmer/year for wines under PDO. This maximum annual expansion was the source of major controversies among the wineries wishing to establish ex nihilo vine projects. Major wineries recognized the planting rights scheme in France as a barrier to vertically integrate the vineyard. The greatest controversy concerned the American Mondavi company undertaking to create a 50-hectare vineyard in Aniane, a typical tiny village in Languedoc (Torres 2005).

What is the economic rationality behind the French scheme? The planting rights scheme involves three different levels among decision-makers. The first

level concerned is the national level of decision-makers. Decision-making is established in close relation with rules set up at the European level. Those rules consider the balance of the global wine market and no differentiation among vineyards. The main purpose of the regulation is to control the vine surfaces in each European country and limit their expansion. Therefore, the organization controls the European wine production potential and shares vine planting rights between all European countries, smoothing the competition between countries. The traditional objective of this regulation is to limit the overproduction (i.e. 'the wine lake') for a perennial plant and to reduce the King effect which leads to a collapse in prices and income.

The second level of decision-making concerns regions. Here, the main factor concerns the definition of the rules for the production of PDO and PGI wines. Those rules impact French vine plantings and other European countries. The purpose of those regulations is to differentiate the wines according to quality, originality, *terroir and tradition*. At the regional level, producers face reduced yields in vineyards and an increase in the costs of production due to supply constraints. This explains why the ODG is managing the scarcity preventing a potential oversupply crisis. This level-playing field creates a real motivation for investors and large firms to vertically integrate backwards.

The third level of decision-making concerns individuals. Following the expansion of the European vineyards, within the framework introduced in the European wine legislation (CMO) by 1999, appeared the global anticipated oversupply in 2014 with 50 million hectoliters above the average world production. All the vine-producing countries were impacted by the wine lake. A large part of wine estates and firms got into financial distress or went bankrupt. The wine lake also impacted New World wine producers, particularly Australia. EU implemented in 2007, a large subsidized uprooting program for 175,000 hectares. The new subsidized program impacted all the vine regions in Europe. The more significant share of the vines removed were located in wines without PDO and PGI regions. Those regions were the most impacted by the crisis. PDO and PGI regions were also impacted, but the grubbing-up scheme concerned mainly old vines or old grape growers.

The purpose of vertical integration backwards was to increase benefits in the long run through the construction of a set of rules, differentiation, increasing profitability, and reaching affordable prices for PDO and PGI. In the absence of vine planting rights, firms would have to pay only the cost of establishing of a new vineyard, independently of market prices for land (€30,000 on average in Bordeaux compared €1.2 million/ha in Champagne). The main political argument promoted by the tenants of the liberalization of vine planting rights of Europe relied on the possibility granted to large firms

reach economies of scale. This argument was clearly refuted in the literature (Delord et al. 2015). The planting rights scheme privileges already established vineyard owners and their successors. The scheme requires an authorization for extending the surfaces through a ‘democratic’ approach limiting the vine surfaces distributed to each individual.

The decision-making process for the allocation of vine planting rights was a major constraint for the establishment of ex nihilo vine projects among French vineyards. Major French wine firms (Castel, Grands Chais de France, Boisset, Baron Philippe de Rothschild, Advini, etc.) perceived the planting rights scheme as a barrier for expansion and for the integration of the upstream of the wine chain. A close look into the strategies of the leading French wine firms shows the expansion and progressive integration backwards of vineyards was achieved essentially through mergers and acquisitions.

23.4 Conclusion

This chapter discusses the motivations and strategies followed by the leading international wine firms to vertically integrate the vineyards. We compare the approaches used by the wineries in the New World—where there is no legal system or institutional system to manage the production potential—and the vine planting rights in Europe, particularly in France. These two contrasting situations explain how institutional rules may shape the strategies of firms to integrate the vineyards. The above reflection suggests how important it would be to integrate the different approaches and constraints into the public debate to raise the competitiveness of European vineyards.

References

- Codron, J.M., E. Montaigne, and S. Rousset. 2013. Quality management and contractual incompleteness: Grape procurement for high-end wines in Argentina. *Journal on Chain and Network Science* 13 (1): 11–35.
- Coelho, A. 2013. Concentration des grandes firmes vitivinicoles. *Le Progrès Agricole et Viticole* 12: 11–18.
- Coelho, A., and J.-L. Rastoin. 2004. Stratégie des grands groupes internationaux: vers l’émergence d’un oligopole mondial du vin? In *Bacchus 2005: enjeux, stratégies et pratiques dans la filière vitivinicole*, ed. F. D’Hauteville, J.-P. Couderc, H. Hannin, and E. Montaigne, 79–99. Paris: Dunod.
- Concha y Toro. 2015. Annual reports, several years.

- Delord, B., E. Montaigne, and A. Coelho. 2015. Vine planting rights, farm size, and economic performance: Do economies of scale matter in the French wine sector? *Wine Economics and Policy* 4 (1): 22–34.
- DiMaggio, P.J., and W.W. Powell. 1983. The Iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review* 48 (2): 147–160.
- Franken, J.R.V. 2012. *Quality considerations for coordination of the California wine-grape supply chain*, American Association of Wine Economists. AAWE Working Paper, No 99, February.
- Geraci, V.W. 2004. *Salud! The rise of Santa Barbara's wine industry*. Reno: University of Nevada Press.
- Gereffi, G. 1999. *A commodity chains framework for analyzing global industries*. Durham: Duke University.
- Goodhue, R.E., D.M. Hejen, H. Lee, and D. Sumner. 2002. Contract use in wine grape industry. *California Agriculture* 56 (3): 97–102.
- Longbottom, M., C. Simos, M. Krstic, and D. Johnson. 2013. Grape quality assessments: A survey of current practice. *Wine & Viticulture Journal* 28: 33–37.
- Montaigne, E., and D. Sidlovits. 2003. Long term contracts and quality in the wine supply chain: Case of the Appellation “Vins des Sables du Golfe du Lion”. In *Budapest, ISNIE, 7th Annual Conference of the International Society for New Institutional Economics*, September 11–13, 20p.
- Montaigne, E., D. Sidlovits, and G.G. Szabó. 2005. Examination of contracting relationships in the Hungarian Wine industry. In *Budapest, Hungary: 2nd International Conference on Economics and Management of Networks*, September 15–17, Corvinus University of Budapest, 27p.
- Montaigne, E., S. Rousset, and J.-B. Traversac. 2007. *Quelles perspectives pour les contrats en raisin entre production et négoce? in Bacchus 2008: enjeux, stratégies et pratiques dans la filière vitivinicole*. Paris: Dunod, Chap. 3.3.
- Montaigne, E., A. Coelho, B. Delord, and L. Kheffi. 2012. *Etude sur les impacts socio-économiques et territoriaux de la libéralisation des droits de plantations viticoles, Rapport d'étude*. Presented at the international board of the Association of European Vine and Wine Regions (AREV), Brussels.
- Nelson, R.R., and S.G. Winter. 1982. *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press.
- Pfeffer, J., and G.R. Salancik. 1978. *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Sidlovits, D., and Z. Kator. 2007. *Characteristics of vertical coordination in the Hungarian wine sector*. Paper presented at the joint IAAE – 104th EAAE Seminar Agricultural Economics and Transition: “What was expected, what we observed, the lessons learned.” Corvinus University of Budapest, Budapest, September 6–8, 28p.
- Torres, O. 2005. *La guerre des vins: L'affaire Mondavi. Mondialisation et terroirs*. Paris: Dunod.
- Williamson, O.E. 1975. *Markets and hierarchies: Analysis and antitrust implications*. New York: Free Press.