



8

The Chilean Wine Industry

G. Marcos Mora

8.1 Innovation, Production and Geographic Distribution of Chilean Viticulture and Wine

To successfully face the marketing of wines in the domestic and international markets, especially the latter, the Chilean wine industry has had to increase the quality of their products and conform to the requirements of target markets. This has involved major industry innovations, which occurred in the 1980s and 1990s (Alvarado 1999; Lima 2015). Some of the innovations were related to the use of stainless steel tanks and inert gases (Mora et al. 2014), pneumatic presses and oak barrels (French and American) for a limited number of years for the “aging” of the wines (Lima 2015). In this process, improving quality involved setting wines to market requirements. It needed high-quality grapes, which is consistent with that reported by Farinelli (2013) and Zago (2007), who stated that the quality is not only determined by the alcohol content of the grapes. In this sense, some vineyards are dedicated to producing super-premium wines and icons, usually made by their own production of grapes or on leased land, which can manage and/or select the grapes they use, in order to have quality control of the production. According to Farinelli (2013), from 1977 to 2011, most of the major vineyards in Chile incorporated the latest technology and a professionalization of the production process that allowed

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them to generate higher-quality wines for the international market. According to Lima (2015), this was mainly due to foreign direct investment (in the form of joint ventures), which enabled local producers to quickly incorporate technology and know-how in the production of quality wines in exchange for better access to international markets. The super-premium brands that are produced in the country for export are usually the result of these joint ventures, but also full domestic investments currently exist. Moreover, it should be noted that for both domestic and international markets, there is a major proportion of low-end wines or streams. For the domestic market, nearly 50% are wines sold in box (bag in box), and about 70% of exports correspond to wines in bulk and bottled with prices below \$30 a box.

Chile is a country with a great diversity of climates and soils allowing the development of a highly diversified viticulture. At the aggregate level, soils range from a basic in the north to more acid pH in the south; precipitation also increases from north to south, and thermal fluctuations are smoothed from east to west. Consequently, the situation described allows the expression of different varieties of grapes to reach the excellent potential if the variety-territory relationship is well chosen. Thus, the coastal areas of Chile are more appropriated for white grape varieties, such as Sauvignon Blanc and Chardonnay, and the inner areas favor red varieties, such as Cabernet Sauvignon. Below is a map with the different Chilean wine regions, which correspond to those indicated in the Agricultural Decree 464 of 1994, which established viticultural areas, and it provided rules for their use. Importantly, there are significant differences between the Chilean system designation of origin and employees in Europe. The Chilean system operates in an environment less regulated than the European. In Chile there is no figure of Regulatory Council with the powers it has in Europe; for example, Europe has the ability to set maximum production per hectare to ensure wine quality. In Chile, however, the responsibility for overseeing the procedure for granting certificates of designation of origin is carried out by private companies, previously the Agricultural and Livestock Service (AGS) has selected and authorized.

Of the 5.1 million hectares of arable land, viticulture represents approximately 137,000 hectares or 2.5% of the total. However, wine exports to 130 countries provide more than 1800 million dollars¹, and it generates more than 100,000 jobs, and it is expected that exports will reach 3 billion dollars in 2020 (ODEPA 2014), and if we add the domestic market, the wine sector would generate total sales of around 2500 million dollars. If you consider that the Chilean GDP, according to the World Bank, is around 277,200 million

¹ Exchange rate at 17 February 2016: 704.92 Chilean pesos per dollar. Source: Central Bank of Chile.

dollars, the share of the wine industry could be seen as marginal; however, it is necessary to take account of the contribution to GDP from other sectors involved in the wine business, such as transportation, logistics and communications, other manufacturing industries (glass, cardboard) and restaurants. Accordingly, it is an important sector for the Chilean economy for its capacity to generate productive linkages and its high added value, especially in the case of bottled wines.

According to Mora et al. (2014), the production of wine has an important impact on regional development, from the Coquimbo Region to the Araucania Region—it is one activity that takes place in much of the territory and has a strong impact on agricultural activities and labor employment as well as on demand of products and services. In recent times it has been extended to the regions of Atacama in the north and Lagos in the south. The wine industry is a cluster with a large capacity to generate added value, widely labor-intensive and of regional coverage; it involves a large number of industries related to suppliers and is involved in the exporting process, and it uses an extensive network of transport and communication for the development of its activities and has great potential to add value to their products.

Areas with vines intended for winemaking in the country are located between the regions of Atacama and Los Lagos, including the Metropolitan Region. According to the figures below, 74% of the vineyards correspond to red varieties and 26% of white varieties, mainly represented by Cabernet Sauvignon, Merlot and Carmenere for reds, and Sauvignon Blanc and Chardonnay for whites. Below is a chart with a greater number of varieties, highlighting Syrah and Carmenere, which have increased significantly in recent times.

Regarding the evolution of the vines, it is important to highlight the sustained growth of Carmenere, Syrah, Pinot noir, Cabernet Franc and Sauvignon Blanc (Table 8.1). However, it is necessary to pay attention to other grape varieties, which have also had a sustained and significant increase, and they approach 20,000 hectares. Behind this figure there is the incorporation of vines traditionally not produced in Chile such as Tempranillo, Viognier and Malbec.

In Chile, wine production is based mainly on a set of grape varieties of French origin and a local variety called Country (Pais), which currently accounts for about 5% of the total area of the Chilean vineyard. In 1985, the surface of this variety was nearly 30,000 hectares or approximately 25% of the current area, while Cabernet Sauvignon, the main cultivated variety at present, only reached just over 8000 hectares. Also, the first and largest change occurred between 1985 and 1994 with the increase from 245 to 4150 hectares

Table 8.1 Evolution of wine grape acreage by variety (ha)

	2010	2011	2012	2013	2014
Cabernet Sauvignon	38,425.7	40,837.0	41,521.9	42,195.4	44,176.4
Merlot	10,640.2	11,432.0	11,649.1	11,925.2	12,480.1
Chardonnay	10,834.0	10,970.4	10,570.9	10,693.9	11,633.8
Sauvignon Blanc	13,277.8	13,922.3	14,132.0	14,393.0	15,142.3
Chenin Blanc	55.8	55.8	55.8	55.8	56.0
Pinot noir	3306.8	3729.3	4012.5	4059.9	4195.9
Riesling	400.3	409.4	442.2	424.4	420.1
Semillón	929.7	959.0	920.9	902.5	968.1
País	5855.1	7079.2	7247.5	7338.7	7652.6
Carmenere	9502.0	10,040.0	10,418.1	10,732.5	11,319.5
Syrah	6886.8	7393.5	7744.6	7933.1	8432.2
Cabernet Franc	1345.0	1451.0	1533.3	1591.3	1661.5
Otros	15,371.7	17,667.6	18,389.1	18,116.2	19,453.9
Total	116,830.8	125,946.2	128,637.9	130,361.7	137,592.4

Source: Catastro vitícola de Chile 2014. SAG, 2014. División de Protección Agrícola y Forestal Subdepartamento de Viñas y Vinos, Inocuidad y Biotecnología Sección Viñas y Vinos

of Chardonnay, which was rigged to excellent commercial with the expansion of large vineyards near Aconcagua (Del Pozo 1998). Moreover, it should be noted that a number of hectares planted with vines still exist in the country that have not been declared to AGS because they correspond to micro farms (less than 0.5 hectares of planted vineyards), especially in the VIII region where Country is the main producing variety, also called Mission or Creole. However, according to vineyards registered by SAG 2014, there has been a sharp decline of this variety, which in 2006 approached 15,000 ha, and now it does not exceed 8000 ha.

In Chile the vast majority of wine grapes already use some irrigation system: 85% of cultivated hectares of white wine grapes and 90% of the hectares for wine grapes ink have some type of irrigation (micro-irrigation, drip, spray, gravitational, etc.) (Table 8.2). In the red varieties, the grape País is mainly grown in dry land. In this regard, rainfed vineyard is usually located in granitic and undulating topography, and soils show a marked water deficit, which translates into a vegetative weakening and low yield (1000–4000 kg per hectare). The variety País is a grape that records low prices, generally 50% less than the European varieties. However, in recent times there have been new products developed from this variety, and they are expected to contribute to added value; one of them is the foaming grapes and the other sour grapes, both having had the co-funding of the Foundation for Agrarian Innovation and the Ministry of Agriculture of Chile. Their yields are relatively low, on the order of 4000 kilos per hectare. The rest of white varieties and inks corresponding to fine strains are grown under some kind of irrigation.

Table 8.2 Cultivated area (ha) with grapevines in irrigated, rainfed and tended irrigation areas

Region	Water regime			Total
	Irrigated	Rainfed	Tended irrigation	
Tarapacá	5.00			5.00
Antofagasta	4.97			4.97
Atacama	117.42			117.42
Coquimbo	3371.67		11.90	3383.57
Valparaíso	10,137.29	18.40	6.50	10,162.19
Lib. Bdo. O'Higgins	46,610.97	679.20	91.90	47,382.07
Del Maule	46,385.52	6420.32	690.67	53,496.51
Del Bío Bío	2223.09	7052.06	292.90	9568.05
Araucanía	27.06	27.90		54.96
De los Lagos	19.00			19.00
Metropolitana	13,398.30	0.40		13,398.70
Total nacional	122,300.29	14,198.28	1093.87	137,592.44

Source: ODEPA

Regarding the vines-driven systems, it can be mentioned:

- In trellises: system was introduced in Chile in the second half of the nineteenth century by French technicians. Driving means consist of a frame and wires that support for lifting the vine at the approximate height of 1.2 to 1.5 meters, allowing better illumination of fruit and facilitating the work of care and harvesting. In addition, this technique allows the mechanization of vineyards, since it is currently one of the most commonly used forms of driving, mainly in vineyards intended for the production of preferably fine wines from the Central Valley (Table 8.3).
- In parronal: a driving system with heights of 1.8 to 2.0 meters, with horizontal trellis. It is widely used for the production of table grapes, although it is also used in some vineyards of Cabernet Sauvignon.
- In head or Gobelet: it was introduced by the Spaniards in the period of the conquest, so it is the oldest driving system; although this system is not suitable for the production of good-quality wines, it is still used in southern Chile and in dry vineyards.

8.2 Chilean Wine and Its Industrial Organization

Small vineyards in general are traditionally managed with low use of agrochemicals, facing greater technological backwardness, due to the lack of capital and poor access to financing, as well as other limitations related to soil fertility—low or excessive slope—and restricted access to water, thereby limit-

Table 8.3 Chile: surface area of vineyards according to conduction system (ha)

Region	Head	Double curtain	Conduction system							Total	
			High trellises	Low trellises	Lira	Others	Parron	Scott Henry	Smart Dyson		
Tarapacá			5.0								5.0
Antofagasta			5.0								5.0
Atacama				24.4							117.4
Coquimbo	1.5		757.6	1310.7	8.9	109.8		93.0			3383.6
Valparaíso	25.3		6627.1	3151.5	34.8	263.5		60.0			10,162.2
Lib. Bdo.	71.1	288.5	21,879.8	14,794.0	1116.6	988.7		8105.6		12.7	47,382.1
O'Higgins											
Del Maule	4753.1	668.9	15,604.5	23,107.4	610.5	853.2		7877.8		21.2	53,496.5
Del Bío Bío	6401.0		2053.7	782.1	69.4	97.7		16.4		147.9	9568.1
Araucanía	4.4		49.1	1.5							55.0
De los Lagos	0.2			18.8							19.0
Metropolitana	7.8	56.2	6849.5	5356.8	139.1	121.4		868.0			13,398.7
Total	11,264.4	1013.5	53,831.3	48,547.1	1979.3	2434.2		18,215.8		294.2	137,592.4

Source: Catastro vitícola 2014

ing opportunities for productive transformation. Its production is oriented to the local market of wine in bulk, and a significant percentage is marketed through informal channels. On the other hand, large traditional vineyards produce a wide range of wines for different consumers, both in domestic and foreign markets. They have large vineyards and have been pioneers in the opening and expansion of the export market. They achieve significant production and sales levels, and have a significant share of the domestic and foreign markets. In recent decades, there have emerged boutique vineyards and medium-sized export-oriented fine wines that have great capacity for innovation in the productive and commercial technology areas. They have generated direct distribution channels in different international markets, mainly, specialty shops and restaurants.

8.2.1 Investment Costs and Wine Grapes

According to Lima (2015), in the case of fine strains, the producer must incur a large initial investment to plant them (using a trellis system and drip irrigation). Also, you must wait at least two years to start production, which goes up to the fifth year just to achieve maximum production. When you consider the costs of planting and the first two years without production and fixed costs for the producer, who must incur mandatory cost to start production, which could eventually be recovered if he sells or leases the plantation to a third party, they represent between 16% and 21% of the total cost of production of the vineyard throughout their economic life (20 years).

Also, if you consider a return rate of 10% annually for the investment, which must be recovered in 20 years, the average total production cost per kg would rank between 0,15 and 0,33 dollars depending primarily on the level of production that can be achieved in the vineyard. Grape plantings, if properly maintained, can have a longer production than the usual 20 years (between 50 and 100 years); after recovering the initial investment, it becomes relevant to recover, at least, the annual costs of production, for which we take as a proxy for the average annual cost of production in the vineyard. This cost would be located between 0,12 and 0,27 dollars/kg produced.

Lima (2015) states that, with regard to the Country vine grape strain, whose production dates back to colonial times, it is important to know the average annual cost of production, which ranges between 0,10 and 0,21 dollar/kg, depending on the quantity produced. To estimate the average cost of production of the Country grape, as in the fine strains, yields are also important in the case of small winemakers (who have, on average, two hectares

planted with wine grapes in the Bío Bio and four hectares in the region of Maule) having a large dispersion in unit production costs: for example, for low yields of 4000 kg/ha, the declared average costs range between 0,13 and 0,30 dollars/kg.

8.2.2 Prices Paid to Producers

In general, a steady decline of prices paid to producers is evident, irrespective of the grape variety and quality. This has been most pronounced in red varieties, which on average between 2011 and 2015 show a reduction of 65%, with the largest decline between 2014 and 2015. A similar situation occurs with white varieties, although somewhat with smaller magnitudes. Between 2011 and 2015, the prices paid for Sauvignon Blanc, Chardonnay and Semillon were reduced by 41%, with only a reduction in the last season which meant a decrease of 32% of the amount paid per kg. For a glimpse of the margin that could be presented in a vineyard, costs and prices of different varieties of wine grapes are presented (Table 8.4).

Moreover, it should be noted that prices for the Country variety, grown mainly in the upland of southern Chile, are historically recorded at least 50% lower than costs.

8.2.3 Land Tenure: Family Versus Corporate Enterprises

In Chile, for many years the wine-producing companies were mostly of family environment; the conversion of the Chilean industry entailed the develop-

Table 8.4 Costs and prices of wine grapes at producer level (dollars)

Costs and prices of wine grapes at producer level	Variety			
	Cabernet Sauvignon	Merlot	Carmenere	Country
Cost range(2012)	0.15–0.33	0.15–0.33	0.15–0.33	0.10–0.21
Average price, high quality (2012)	0.44	0.44	0.44	0.23
Average price, low quality (2012)	0.31	0.31	0.31	0.21
Average price, high quality (2015)	0.19	0.18	0.19	0.13
Average price, low quality (2015)	0.16	0.16	0.16	0.13

Source: ODEPA; Central Bank of Chile

Note: Exchange rate at 17 February 2016: 704.92 Chilean pesos per dollar

ment of the Chilean export model (mid-1980s) and the appearance of other legal properties. This is related to the foundations of the economic model applied in Chile since 1974, which favored large wine companies (Gilbert 2014). In this business environment, one of the most important was, and remains to be, Concha y Toro winemaking that was transformed from a family business into a company of a corporation type, which means that the traded value is known and therefore is subject to business performance. This transformation involved a more professional way of operating the technical and administrative management of the company. Today, Concha y Toro is one of the largest companies in the world, and the wine business investments have exceeded the borders with investments in Argentina and the USA, through the Trivento and Fetzer Vineyards companies, respectively (www.conchaytoro.com).

8.2.4 The Average Size Businesses and Wine Processors Types of Wines Marketed

In general, according to Mora et al. (2014), the Chilean wine industry has a significant concentration, as it shows about 50% of exports in value are attributed to almost ten companies, and only one of them is responsible for nearly 20% of Chilean wine exports value. This occurs in a context of an industry where more than 400 wineries spread between the Coquimbo Region and Bío Bío but with a high concentration in the Maule and O'Higgins Regions involved. It is also important to note that out of the total Chilean production, more than 75% of domestic is exported (Table 8.5).

Table 8.6 shows clearly that ten countries account for approximately 75% of Chilean exports, with five of them exceeding \$100 million exported. In addition, it can be seen that there are countries from different continents, highlighting lately Asian countries like China and Japan.

With regard to the grape varieties used in the production of wines, the following are presented. The most important wines are blends, followed by monovarietal as Cabernet Sauvignon, Sauvignon Blanc, Chardonnay, Merlot and Carmenere, among others. It is important to relieve some unit values, such as wine with designation of origin, and some varieties such as Cabernet Franc and Pinot noir and sparkling wine. The latter wines have been an innovation in the field of exports, which have had a significant development in recent years.

Table 8.5 Chile: production of wines by type of wine and market (million liters)

Wine type and market	2013	2014
<i>Domestic market (million liters)</i>		
Popular wines (bag in box and others)	95.9	96.0
Low-end wines	7.3	6.7
Reserve wines	18.0	18.8
Great reserve wines	10.1	11.3
Sparkling wines	3.5	4.2
Others	81.7	91.9
Total domestic market	216.5	228.9
<i>Export market (million liters)</i>		
Bottled wines	435.8	451.8
0–20 dollars FOB/box	120.1	109.8
20–30 dollars FOB/box	169.4	186.4
30–40 dollars FOB/box	82.1	86.8
More than 40 dollars FOB/box	64.7	68.8
Others' packaging	26.5	26.7
Bulk	411.9	317.3
Sparkling wine	3.5	4.1
"Wine" with fruit	1.3	1.4
Total export market	879.0	801.3
Total	1095.4	1030.2

Source: ODEPA Y SAG, 2015

8.2.5 Types of Wineries: The Winegrowers' Farm Cooperatives and Industrial Enterprises

Chilean wineries generally are constituted as private companies, under different legal figures, the larger ones being open corporations and smaller companies with limited liability. There are more than 400 wineries in Chile. There are other types of legal constitution of the companies, but they are scarce, such as cooperatives, of which there is a record of 17 cooperatives with only 2 valid and active.

- Cooperative Wine Loncomilla was created on 14 January 1959, and it was formed by a group of visionary winemakers of San Javier and Villa Alegre. It acquired its legal personality by the Supreme Decree No. 13 dated 10 December 1959.
- Viña Lomas de Cauquenes was founded on 23 December 1939, under the name of Agricultural Cooperative Wine Cauquenes Ltda. (COVICA Ltda.), following the earthquake that destroyed most of the winemaking facilities owned by the winegrowers of the area. Today it is an important reference not only of the local economy but also of the regional economy. It currently has 240 members and a production of over 12 million liters of wine.

Table 8.6 Chile: exports of wines of denomination of origin in volume and FOB value

Countries	Volume (000 liters)										Value (000 USD FOB)					
	January–November					2015/2014 (%)					2015		January–November	2015	Var. 2015/2014 (%)	(%)
	2014	2014	2015	2015	2014	2014	2015	2015	2014	2014	2014	2015	2015	2015	2015	2015
United Kingdom	57,319	54,089	53,538	53,538	-1.0	177,486	168,122	152,840	152,840	152,840	168,122	152,840	152,840	152,840	152,840	11.7
China	31,880	28,599	43,755	43,755	53.0	110,577	99,451	144,533	144,533	144,533	99,451	144,533	144,533	144,533	144,533	45.3
USA	38,183	34,976	37,103	37,103	6.1	148,892	136,237	143,747	143,747	143,747	136,237	143,747	143,747	143,747	143,747	5.5
Japan	42,168	38,749	46,666	46,666	20.4	124,703	115,019	135,612	135,612	135,612	115,019	135,612	135,612	135,612	135,612	17.9
Brazil	33,852	31,944	34,806	34,806	9.0	109,207	102,721	103,736	103,736	103,736	102,721	103,736	103,736	103,736	103,736	1.0
The Netherlands	30,225	28,451	26,556	26,556	-6.7	98,637	93,215	76,786	76,786	76,786	93,215	76,786	76,786	76,786	76,786	-17.6
Canada	12,942	12,080	13,163	13,163	9.0	65,713	61,300	58,961	58,961	58,961	61,300	58,961	58,961	58,961	58,961	-3.8
Ireland	12,889	12,392	12,850	12,850	3.7	43,173	41,786	37,255	37,255	37,255	41,786	37,255	37,255	37,255	37,255	-10.8
Denmark	11,051	10,204	10,532	10,532	3.2	44,695	41,414	36,499	36,499	36,499	41,414	36,499	36,499	36,499	36,499	-11.9
Mexico	10,599	9,953	12,135	12,135	21.9	32,438	30,385	33,888	33,888	33,888	30,385	33,888	33,888	33,888	33,888	11.5
Subtotal	281,108	261,437	291,104	291,104	11.3	955,521	889,650	923,857	923,857	923,857	889,650	923,857	923,857	923,857	923,857	3.8
Other countries	132,461	121,763	110,596	110,596	-9.2	466,728	427,551	387,972	387,972	387,972	427,551	387,972	387,972	387,972	387,972	-9.3
Total	413,569	383,200	401,700	401,700	4.8	1,422,249	1,317,201	1,311,829	1,311,829	1,311,829	1,317,201	1,311,829	1,311,829	1,311,829	1,311,829	-0.4

Source: ODEPA with information from the National Customs Service. Figures subject to review by further reports

- The Cooperative wine Curicó (ViñaRobles) was purchased by Concha y Toro in 2008.

8.2.6 Contractual Arrangements Between Warehouses and Distribution

There are generally arrangements or commitments and not proper contracts. In this regard, there are agreements between wineries and restaurants to sell their wines, and something similar happens between warehouses and supermarkets. Large wineries sell their products through distributors, which can be divided between those who are responsible for the internal market or external market. Some of the major wineries have offices in other countries, where sellers are directly related to various retailers who contact customers, either in the retail market (off-trade market) or hotels, pubs and restaurants (on-trade market). Small wineries have vendors who contact directly with distributors or sell directly to restaurants or other consumption locations.

In general, the most common of the great vineyards Incoterms (relative to the price paid for export) is Free on Board (FOB). At this price the vineyard exporters are responsible to leave the wine on the cargo ship; thereafter the buyer is responsible for the costs and risks incurred to deliver the wines at the port of destination. Finally, as suggested by Gilbert (2014), exporters need to deepen their knowledge about new changes taking place in the distribution, in which, in most countries, the power of retailers has been increasing. Consequently, the Chilean industry needs to be more closely linked to the retail channel (supermarket) and the consumer.

8.2.7 Contractual Arrangements Between Growers and Winemakers

Historically it has not been a practice to formalize the sale of grapes from growers to wineries. This situation has created problems between the actors in the chain of wine, because it has created problems of information asymmetry—misunderstanding in some cases between the parties taking advantage some of the wineries to pay less and even some moments below the cost of production. Currently, it has been regulated but not for intervention but rather for business sustainability, as international demand is requiring better quality and the wineries do not have enough grapes to cope with the demand and are used to buy from third parties under the technical assistance of the winery encouraging to produce grapes that allows making the required wine.

According to Lima (2015), in the Chilean market, three types of contracting grapes are considered by the winery:

1. Long-term recruitment. In this arrangement, the production of wine undertaken by the winery establishes a fairly detailed contract with the producer, where rather strict conditions are established for the management of the plantation during the grapes growth, such as maximum yields and handling requirements for the harvest. For such contracts usually a high price is set per kilogram of grapes. These contracts are generally used by producers whose land has exceptional conditions to produce good-quality grapes that can be converted into wines of high quality. Currently these contracts are used increasingly in the Chilean market.
2. Annual procurement. In this manner, intermediaries or wineries sign contracts with a base and a maximum price. These contracts are generally offered during the time between the grapes growing period and the harvest, and they are not renewed every year. This type of contract is currently being used by some small and medium grapes producers, dedicated to cultivate both traditional and fine varieties. According to what has been observed, middlemen made this contract with small producers, and wineries do the same with large producers. One of the frequent complaints of such contracts is that they are not always respected by the producer if he can get a better price for its produce.
3. Spot market. It is the market that exists throughout the harvest time. In this market the producer sells to a broker or grape vineyard in kilo format, regardless of probable alcohol levels or receiving an award for probable alcohol degree. In some cases brokers offer an initial base price for the grapes, which is subsequently adjusted upwards depending on whether the kilo of grapes ended trading at a higher price with large vineyards, which is not a common practice among all intermediaries. The price offered by intermediaries on the spot market is the same for all grape growers who want to sell, without additional quality considerations.

Then, with a focus on the value chain, activities and actors involved in the chain are presented. In this regard, the logic of a traffic light (red, critical; yellow, to be improved; and green, in good condition) can mean that small companies are the ones with the largest shortcomings in general (yellow and red) in both specific chain activities and the overall support. In general, large wineries have few shortcomings to stay and grow in this competitive market (Fig. 8.1).

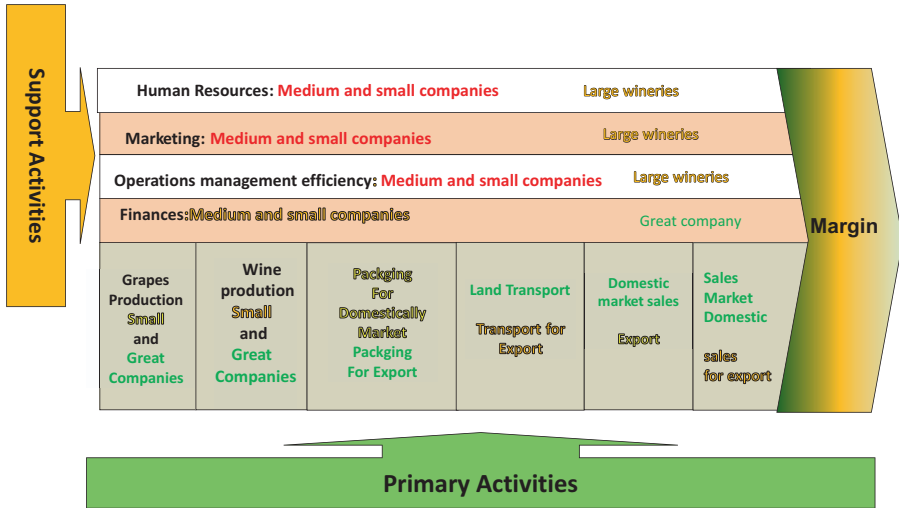


Fig. 8.1 Chile: value chain in the wine industry

8.3 Business Strategies for Marketing, Labeling and Communicating with Consumers

In the 1970s, buying wine in Chile was relatively simple, because it could be found in a liquor store or supermarket, bottled in 750 ml or 1 liter (at that time was the family wine) or larger format (5 liters of glass containers placed in a wicker mesh, which have now evolved to the package pet). There was no wine in boxes (bag in box), and the supply was very limited in terms of trademarks; there was no internet and promotion/advertising, which is why the source of information was the shop and talk to the clerk, something simple. Currently, the search for information is more complex, mainly due to the diversity of products both on shops and on virtual platforms. Moreover, the available supply has changed a lot, starting with the rapid development of supermarkets and high participation of food retailing (Reardon and Berdegue 2002). They have become the main shopping plaza wines. Along these lines, there are supermarkets oriented to sell differentiated products and others selling generic products. There are also specialty shops, which aimed at high-income segments of the market, where they offer a wide range of wines, including imported wines, and they are located in areas with residents who belong to a high socioeconomic status. With respect to the on-trade, the offer is available mainly at restaurants and hotels, which charge prices between 30% and 100% more than the off-trade channels (supermarket, specialty store, liquor stores).

In the past 30 years, the search systems of information have significantly changed not only for wine but for most food products, affecting especially younger consumers, who have a greater ability to master modern technology to obtain information on product characteristics. In this regard, the penetration rate of internet as a promotional space for wine or as a distribution channel is still small but steadily increasing with the passage of time. The internet is also widely used by wine consumers as a source of information. Other sources of information include journals, assistance from a salesperson at the shop and promotional events taking place at the end of the harvest and other events held throughout the year. However, a major source of information is the recommendations of friends and family.

8.3.1 Consumer Preferences

Undoubtedly, the scenario of purchase choice in the level of wine consumption in Chile has become more complex. In the 1970s, the choice was linked to the price, to the type (red or white) and to five existing commercial brands in the market at that time. The grape variety declared on the label, wines with lower alcohol content, the geographical area of production, prizes, carbon footprint and fair trade, among others, were not considered at that time. Today these attributes frequently appear in wines that are over \$10 a bottle. The above reflects that the wine market in Chile has changed drastically. The price and brand are the only two attributes that customers consider while choosing a current or cheap wine, and even in these wines, the grape variety is declared on the label. Today, the main retail agent, the supermarket has on its shelves predominantly Chilean wines but also has imported wines. In the same vein, the specialty stores in Chile have both domestic and imported sophisticated wines, but in much greater diversity than supermarkets (Mora et al. 2013). When switching to bottled wine, attributes that the consumer considers in buying extend to four or six, and the price, the brand, the strain, the type of wine (reserve or varietal), the year of harvest and valley origin of the grapes are the attributes considered specifically; price is one of the most relevant variables in analyzing the marketing of wines, and results in many studies show a direct correlation between price and quality (Gneezy and Gneezy 2011; Schnettler and Rivera 2003; Mora 2004). It is also considered an important element when choosing a wine variable (Lockshin et al. 2006, 2009). This variable has also been analyzed from the standpoint of the demand price elasticity. In Chile, the prices of wine range between 80 and 100 dollars a bottle and have an inelastic price behavior, while the generic wines have a more elastic behavior, similar to those reported

by Panzone (2012). The trademark has been analyzed as a choice criterion (Lockshin et al. 2006; Schnettler et al. 2012). In Chile, regarding the trademark, there have been established differences between supermarket own brands and trademarks, being this the last preference of consumers as they minimize the risk of dissatisfaction. As for grape varieties and geographical locations, the preferences are Cabernet Sauvignon in red wines produced in the valleys of Maipo, Colchagua and Maule (Mora et al. 2008). It is important to bear in mind that the Maule Valley is the largest in Chile (it comprises 40% of the total area of vineyards in Chile); however, it does not have the kind of national and international recognition that the Colchagua Valley has had. However, recently this valley has received some international awards and has developed a communication campaign, which have allowed it to position itself in the domestic and international markets. Moreover, in recent times other attributes involved in the decision buying process have begun to appear, such as alcohol, fair trade and carbon footprints. In this regard, Mora et al. (2012) identified the highest level of antioxidants (flavonols) for consumers' preferences in all segments analyzed of residents in Santiago de Chile tested. Some examples of "innovative" attributes observed in the Chilean market are presented.

Chilean consumer loyalty of wine in the off-trade channel is only expressed toward certain brands, such as wines with a strong position in the convenience segments (with bottled priced at \$3–10), for example, Santa Rita Three Medals, Misiones de Rengo gray sticker, Santa Emiliana, Casillero del Diablo from Concha y Toro, Black Cat San Pedro and Carmen Margaux vineyard, where consumers reduce their risk by buying well-known brands which is consistent with the results obtained by Schnettler et al. (2012). For many other brands, there is no loyalty, also evidenced in part by the rejection of traditional brands in favor of supermarket own brands. There are also wines sold in bag-in-box packaging priced between \$2 and 3 a liter. In this segment of wine, there is a loyalty linked to a low price and quality standard.

From the perspective of demand, linked to the attitudes and perceptions, the Chilean domestic market in several market segments are displayed, as described in Chile by Schnettler and Rivera (2003), Mora et al. (2010), Schnettler et al. (2012), Mora (2012a, b) and Mora et al. (2012). There are also some of them similar to those described in other countries like Spawton (1990) in Australia, Martínez-Carrasco (2002), Martínez-Carrasco et al. (2006) and Mora et al. (2004a, b) in Spain, Hollebeek et al. (2007) in New Zealand and Magistris et al. (2011) in the USA and Spain. Let us review the ones that are evident in Chile: "aspirational" tend to consume the same wines as those people who have a higher socioeconomic level; "ethnocentric" prefer their local products; "skeptical" see wine as an emblematic and different product but opt for healthy component of a

wine; “modern millennium” review the available supply and pay attention to package design and labeling; “involved” appreciate the wine and buy larger quantities of wine; “basic or essential” buy ordinary wine, for low price and higher-frequency purchase and consumption; and “traditional baby boomers” are now more affluent, interested in the product, and looking for differentiation when there are special occasions. However, even when it was found, the existence of these segments in the Chilean market segments “involved” and “basic or essential” are those that concentrate more than 70% of this market, especially the latter.

Chilean wine consumers that belong to the millennium generation are similar to that described by Magistris et al. (2011) for the US millennium generation consumers, as people who are interested to try first and then buy and consume. It can be achieved through tasting and evaluating the aroma and flavor attributes, similar to that reported by Schmidt et al. (2013), who points out that these are the most important when choosing wine attributes. In studies conducted by Mora et al. (2008), Mora et al. (2010), Adasme et al. (2012) and Mora et al. (2012b), it is a segment that is characterized by its skepticism about wine, which could be associated with the millennium generation, according to age, since the people described are relatively young. Currently the younger generations of Chilean wine consumers are more demanding in terms of information. Consequently, people are increasingly buying reviewed wines from the available supply, and if there is something that appeals to them, they buy it.

8.3.2 Number of Brands, Price Positioning and Volume Segment

Lima (2015) makes an estimate of the domestic market share of the three largest wineries in Chile (Concha y Toro, San Pedro and Santa Rita), considering all their brands and subsidiaries, according to the sales reported (for both current and premium wines) on their balance sheets and reports to the authorities. It is estimated that these three vineyards accounted for 87% of the domestic market in 2014 (85% in 2013) and sales focused mainly on bottling and packaging formats. It should be noted that those three main vineyards indicated virtually no wine in bulk format sold in the domestic and international markets. Then, the information and prices listed are shown.

For Concha y Toro, one can say that it is a company facing all segments of the market, since the icon wines, led by Carmín de Peumo satisfying the ultra-premium segment on the top, are much above Tocornal boxed wines, Clos de Pirque and Fresco Cooler, which are placed at the bottom segment of popular wines (Table 8.7).

Table 8.7 Concha y Toro Winery: segment, brand and price of their wines

Segment	Brand	Price in dollars
		2014
Ultra premium	Carmín de Peumo	133.3
	Gravas del Maipo	73.8
	Don Melchor	110.7
	Terrunyo	29.8
	Amelia	29.8
Super premium	Marqués de Casa Concha	16.3
	Gran Reserva Serie Riberas	10.3
Premium	Trío	7.4
	Casillero del Diablo	5.9
	Late Harvest	3.5
Sparkling	Subercaseaux	5.2
	Varietal	3.1
Bi-varietal	Santa Emiliana	2.8
	Frontera	2.8
Popular	Exportación	1.9
	Exportación Selecto	2.1
	Clos de Pirque	1.9
	Tocornal	1.6
	Fresco Cooler	1.6

Note: Exchange rate at 17 February 2016: 704.92 Chilean pesos per dollar
Source: Central Bank of Chile

In contrast with Concha y Toro, Santa Rita vineyard produces wines in box. The most basic level is the wine “Santa Rita Three Medals”, which is a varietal bottling wine (Table 8.8).

8.3.3 Commercial and Business Strategies of Chilean Wineries

According to a study undertaken by Lima (2015) for the Office of Agricultural Studies and Policies of the Ministry of Agriculture of Chile, some guidelines followed by the largest wine companies that supply the domestic market in Chile are presented.

In the “Premium” segment, it competes with large- and medium-sized wineries, mainly with Santa Rita, San Pedro Tarapaca, Santa Carolina, Undurraga, Errázuriz and Cousiño Macul wineries. It competes, albeit on a much smaller scale, with smaller wineries whose production and sales of wine in the “Premium” segment are focused mainly on exports. Sales in the “Popular” segment focus on packaged wine carton format (bag in box), which in 2014 represented approximately 45% of total sales volume in this segment. In this segment, Concha y Toro believes that foreign wineries find it very difficult to

Table 8.8 Santa Rita Winery: segment, brand and price

Winery	Segment	Brand	Price in dollars 2014
Santa Rita	Icono	Casa Real Santa Rita Reserva Especial Cabernet	132.4
		Bougainville Petite Sirah Santa Rita 2010	113.5
	Ultra premium	Pehuén Carménere Santa Rita	56.8
		Santa Rita Floresta Apalta Cabernet Sauvignon	43.8
		Santa Rita Floresta Cabernet Franc	43.8
		Santa Rita Triple C 2010	37.1
	Súper premium	Casa Real Carmenere Santa Rita	16.7
		Casa Real Cabernet Sauvignon Santa Rita	16.7
		Santa Rita Casa Real Cabernet Sauvignon	14.6
	Premium	Medalla Real Gran Reserva Cabernet Sauvignon	13.4
		Secret Reserve Red Blend Santa Rita	8.6
		Santa Rita Medalla Real Cabernet Sauvignon	7.9
	Varietal	Vino 120 3 Medallas Santa Rita	3.2

Note: Exchange rate at 17 February 2016: 704.92 Chilean pesos per dollar

Source: Central Bank of Chile

match the price-quality ratio that is offered by national wineries, especially in the “People” segment.

It is considered that Concha y Toro in order to remain competitive in the Chilean market has to keep their marketing in the “Popular” segment, which could be extrapolated to the dairy cows cell of the Boston consulting group matrix, that is, high share but low growth market.

Local market strategy. To increase the market share in the domestic market, Concha y Toro has focused its efforts on its strongest brands in terms of volume and acceptance. So they have sought to reinforce their participation in the “Popular” segment as well as an increasing presence in the “Premium” segment portfolio with Casillero del Diablo.

Concha y Toro considers that the distribution in Chile is essential. To increase growth in the domestic market, the company believes that it should distribute its wines in many retail locations with alcohol license sale, including bars, restaurants and wine shops, and also be leaders in the retail, especially given the growth experienced by sales of this channel in all territories.

Concha y Toro also indicates that it is constantly developing new formats and updating the presentation of the products that make up its portfolio. The methods of advertising and marketing strategies are different depending on

the type of clients and their respective preferred product segment. During 2014, the company claims to have made great efforts in advertising their great reserve brands, Clos de Pirque, Casillero del Diablo and Marques de Casa Concha, through campaigns on radio, television and press, that is, wines that are below \$12 a bottle.

8.3.4 Business Strategy

The strategy states that Concha y Toro seeks to sustain attractive growth rates and to achieve greater brand penetration and visibility in different markets. Therefore, it has developed a wide range of products seeking to participate in different market segments, offering good-quality wines at competitive prices. They have focused mainly on the growth of the “Premium” segment, which according to reports is attractive given its growth potential and prices, allowing them to improve their sales mix and increase its average sales price. Following this strategy, Concha y Toro has invested nearly \$407 billion pesos in the last ten years in land, vineyards, infrastructure and other businesses to increase their own production. They also have constantly developed new products, research into new varieties and incorporate new production valleys. As for the commercial area, Concha y Toro notes that it has strengthened its global distribution network with the help of new own regional offices in key markets. At the same time, they indicate that in Argentina they have followed the same business model they have used in Chile since the Trivento winery has grown steadily in exports, taking advantage of the penetration of Argentine wines in major markets. The budget for 2015 is around US \$50 million, which is planned to be allocated to support for future sales growth through the planting of new vineyards and expansion of productive capacity. Concha y Toro intends to continue planting new vineyards and the corresponding developing new infrastructure necessary on Chilean and the US grounds.

- Vineyards owned by the company. In 2014, approximately 46.8% (35% in 2013) of wine production corresponded to “Premium”, “Varietal” and “Bi-Varietal” categories. These wines are produced from grapes from their own plantations or leases. However, the companies consider that their own grape production provides greater ease for cost control and enables obtaining raw material of better quality and reliability of their offer.
- Grapes from other vineyards. To satisfy its demand for production, Concha y Toro buys grapes from about 828 independent producers in Chile. The quantities purchased and the identity of those producers do

not vary substantially from one year to the next, since the list of producers remains the same for years. The criteria used to choose the producers are the geographical location, the grape variety and the agricultural methods. To guarantee quality, Concha y Toro offers technical assistance based on criteria similar to those used at its own vineyards. The company also aims to make purchases in small wineries that produce wine.

The winery San Pedro Tarapaca (VSPT) believes that it competes primarily against Concha y Toro and Santa Rita, and their competitive strength is based on a broad product portfolio, well-known brands and well-established distribution networks. In 2014, Concha y Toro and Santa Rita had a market share of approximately 27% and 31%, respectively. Along with these competitors, San Pedro Tarapaca considers that it also competes with Santa Carolina and medium wineries, such as Undurraga and Cousiño Macul, and small wine producers that make up the informal market of wine in Chile.

8.4 Conclusions

Chile is a major player in the wine world trade occupying the fifth place on worldwide exports with more than 1800 million dollars. There are more than 137,000 hectares of mainly French varieties, including Cabernet Sauvignon and Sauvignon Blanc. There are over 400 wineries, but just 10% account for more than 50% of total exports. The domestic market accounts for approximately 20% of the total selling, and the rest (80%) is gone to exports. The main international markets are the UK, the USA, China, Japan and Brazil. Exports of bottled wines with designation of origin and sparkling wines have had successful economic performance over the last five years. The vineyard area stretches from north to south along 900 km, and the areas of greatest wine importance are in the regions of O'Higgins and Maule, both located in the Central Valley.

Chile has achieved worldwide significant recognition. Every day the entire industry searches ways to improve competitiveness and makes progress in the development of the various components of the value chain. This requires further research, development and innovation, which require support, commitment and assessment of applied research by companies that are directly or indirectly related to the wine industry and also from the State. The search for a better value chain and production chains necessarily involves the generation of an accurate multidimensional knowledge that responds effectively to the solution of the problems of this industry making it increasingly competitive.

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