6

The Australian Wine Industry

Kym Anderson

6.1 Introduction

Vines were planted in Australia as soon as Europeans first settled in 1788, but for the next 50 years they were used to produce table grapes and wine mostly for family, friends, and neighbors. During that time rum and other spirits, plus beer, were the dominant alcoholic beverages. Commercial wine production only began in the 1840s, but it accelerated when a gold rush led to the trebling of Australia's non-aboriginal population in the 1850s.

Despite having favorable wine-growing conditions, Australian wine exports were insignificant before the mid-1860s, net export status was not achieved until the 1890s and it took until the 1970s before annual per capita domestic consumption of wine exceeded 10 liters. Even that represented only one-fifth of national alcohol consumption; and barely 2% of Australia's wine production was being exported in the 1970s and early 1980s. The country's index of revealed comparative advantage (the share of wine in the value of Australia's exports of all goods divided by wine's share of global merchandise exports) was always below 1 before 1990, but by 2005 it reached 11 (when it was

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exceeded only by Moldova and Georgia) before falling to less than 4 by 2014. By then, Australia's index was also below that of New Zealand, Chile, France, Portugal, Italy, Spain and South Africa (Anderson 2018).

Over that 150-year period of long-run growth, the industry went through four boom-slump cycles before beginning its fifth boom in the latter 1980s. During the next two decades per capita consumption trebled, wine production quadrupled, and the share of production exported rose to two-thirds—by which time Australia accounted for almost one-tenth of global wine exports. That latest boom peaked just as the global financial crisis hit in 2008, following which the industry saw profits slump once more for a decade. Considerable structural adjustments were made over that decade as wineries positioned themselves to a return to another growth phase.

This chapter seeks to explain why the industrial organization of Australia's wine industry has changed over those 17 decades of growth and cycles to what it is currently. It begins with a brief outline of the industry's emergence and how it has evolved through those past cycles around its long-run growth path. It then provides details of the industry's current structural organization and how it developed. The final sections speculate on how that structure may change in the decades to come and provide a synthesis.

6.2 The Australian Industry's Emergence and Cyclical Growth

Grapes are perishable, and vines are perennial; planting such a crop involves a large up-front investment with no yield for the first three years, and full production of quality fruit requires at least four more vintages. Furthermore, the future demand for winegrapes is uncertain. Hence the decision as to whether, when and how much to expand or contract the area and varieties of grapevines is a complex one, depending as it does on expected product prices, costs and capital appreciation or depreciation. Since producers vary in their expectations, if an expansion or contraction is to occur, it will tend to happen only gradually as more and more would-be investors become convinced that a change in profitability will persist long enough to be worth responding to (Dixit and Pindyck 1994). Meanwhile, in the open Australian economy, the market price of grapes will move away from its trend level while this slow supply adjustment is occurring, and then gradually move back to trend as the last of the adjustment occurs. Should there be excessive exuberance on the part of investors in response to a period of high grape prices, and if firms have incomplete information on the extent of new investments by other firms, there is a risk of overshooting in aggregate. If that happens, there will then be a sharper fall in grape prices three to five years later once that excessive planting transposes into excessive output ready for sale.

Vine-bearing area provides a better indicator of the trend supply of grapes than the actual quantity of grapes harvested, because the latter is influenced by seasonal yield fluctuations. Figure 6.1 reveals the five cycles in the expansion of Australian vineyards since the 1840s and also the dominance of the state of South Australia.

The price for grapes is a function of both supply and demand, the latter coming from various sources: As fresh table grapes, for drying or for making wine. Up to the latter 1920s, vine area and wine production expanded in parallel, but thereafter wine production grew considerably faster than the area of vines (see upper two lines in Fig. 6.2). The share of grape production used for winemaking grew from just 10% at the end of the 1930s to more than 90% from the turn of this century (Fig. 6.3). This reflected only partly a faster growth in demand for wine than for table or drying grapes; it also reflected an oversupply of grapes which would be wasted if not converted into wine. Since there was no growth in wine exports from Australia between the 1930s and 1980s (Fig. 6.2), half of that wine was subsequently distilled and a further

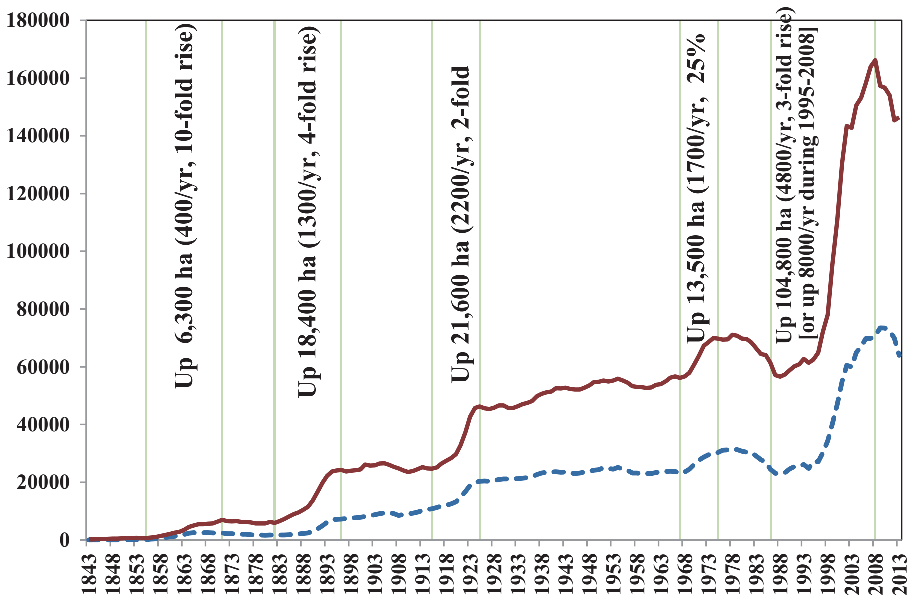

Fig. 6.1 Bearing area of vineyards, Australia (upper line) and South Australia (lower line), 1843 to 2013 (hectares). (Source: Anderson 2015, Chart 5)

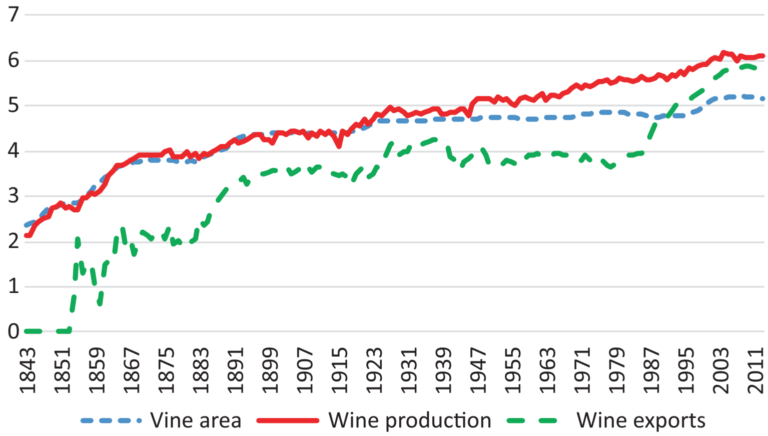

Fig. 6.2 Vine area, wine production and wine exports, Australia, 1843 to 2013 (log scale). (Source: Anderson 2015, Chart 9)

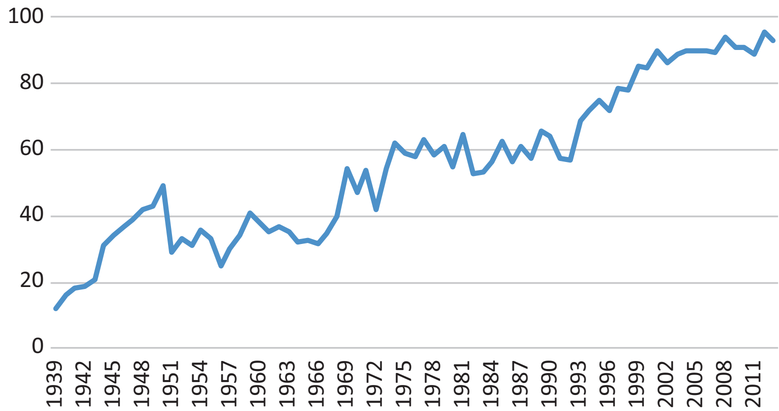

Fig. 6.3 Share of grape production used for winemaking, Australia, 1939 to 2013 (%). (Source: Anderson 2015, Table 8)

one-quarter was fortified (Fig. 6.4). Only since the 1980s has (mostly still) table wine regained the dominance it had in the nineteenth century.

The latest cycle began with the rise in the local price of exported wine when the Australian dollar slumped in the mid-1980s. That export price got reflected in the price of winegrapes, but it took until the mid-1990s before the area of bearing vineyards began to rise as potential investors adjusted their expectations—especially following the release of a 30-year strategic plan by the

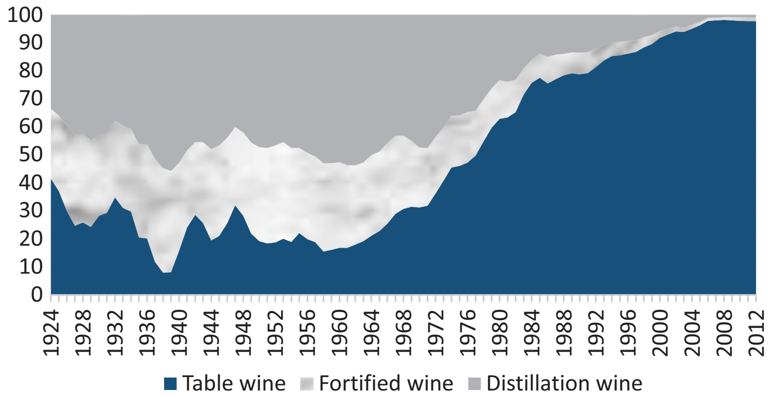

Fig. 6.4 Shares of table, fortified and distillation wine in total wine output, Australia, 1923 to 2013 (percentage, three-year moving average around year shown). (Source: Anderson 2015, Chart 31)

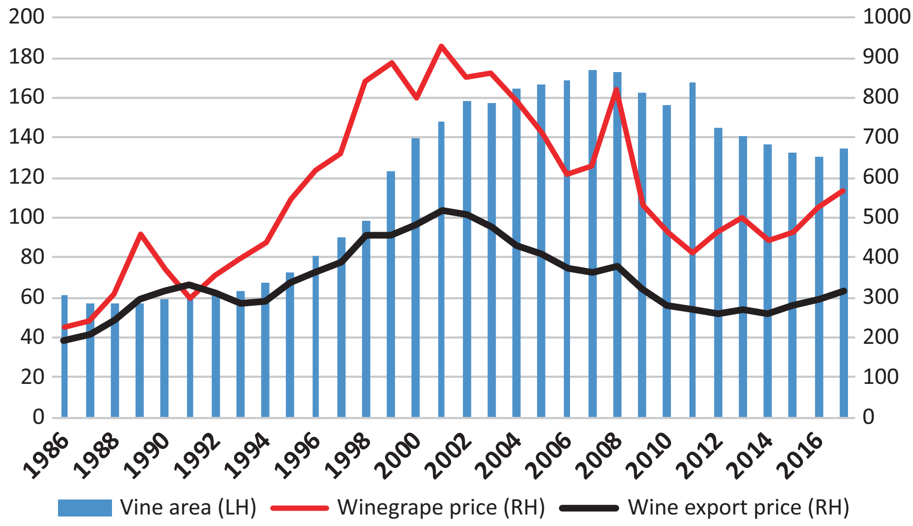

Fig. 6.5 Average price of winegrapes and of exports (RH axis), and vine area (LH axis), Australia, 1986 to 2017 (A$/tonne, A$/hectoliter, and '000 hectares). (Source: Anderson 2015, Chart 17)

industry (AWBC and WFA 2007). That bearing area continued to rise for a dozen vintages until 2008—even though the average prices of exported wine and of winegrapes peaked at the turn of the century (Fig. 6.5). Between 2001 and 2011, the export price halved and the winegrape average price fell by 60% in nominal Australian dollars, and they remained at those low levels through to the 2014 vintage.

A key reason for the slump of the past decade has been a boom in Australia's mining sector, thanks to China's rapid industrialization. That caused the Australian real exchange rate to double in value between 2001–02 and 2012–13. However, during the subsequent two years it returned halfway back to its 2001–02 level, which has enabled wine producers to sell much of their excess wine stocks. As a result, average winegrape prices rose slightly in 2015 and somewhat more in 2016 and 2017 (Fig. 6.5).

Many winegrape growers, unable to recover even their variable costs during recent years (WFA 2015), decided to replace their vines with more profitable crops. As a result, by 2015 Australia's total bearing area of grapes was one-fifth below the peak in 2008.

6.3 The Structure of Australia's Wine Industry

Just 2% of wine firms operating in Australia today began commercial life prior to 1900, only 6% began prior to 1970, and all but one-fifth have been operating for less than three decades (Table 6.1). The number kept growing every year until 2013 but fell in 2014 and remained lower the next two years (Fig. 6.6).

Most of those new wineries are very small though. During 2010–16, around one-fifth crushed less than 10 tonnes and another one-third or more crushed between 10 and 50 tonnes (Table 6.2). The proportion below 100 tonnes has fallen only slightly over the past two decades, and the proportion above 1000 tonnes has been below 5% since 1996—compared with more than 15% in 1978 (Fig. 6.7).

Table 6.1 Share of Australia's wine companies, by year of establishment, 2015

Period of establishment	Share (%)
Pre-1860	0.9
1860–79	0.6
1880–99	0.7
1900–19	0.2
1920–49	1.1
1950–69	2.5
1970–79	7.6
1980–89	14.0
1990–99	39.8
2000–14	32.5
	100.0

Source: Anderson (2015, Table 26)

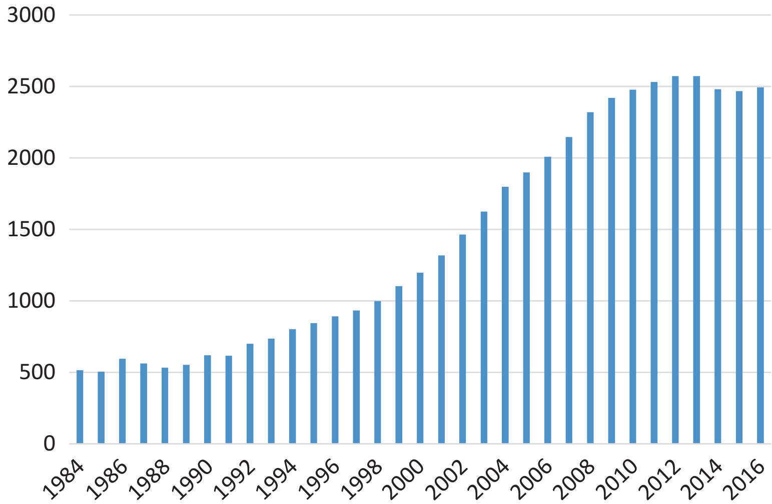

Fig. 6.6 Number of wineries in Australia, 1984 to 2016. (Source: Updated from Anderson 2015, Table 21)

Table 6.2 Number of Australian wineries by tonnes crushed, 1998 to 2016

	1998	2000	2002	2004	2006	2008	2010	2012	2014	2016
<10 tonnes					277	390	459	543	548	526
10 to 19 tonnes					324	376	412	449	391	365
<20 tonnes	293	337	418	582						
20 to 49 tonnes	211	259	331	414	481	512	527	553	506	472
50 to 99 tonnes	145	180	212	254	303	337	346	316	328	306
100 to 249 tonnes	142	157	189	211	242	257	259	235	229	235
250 to 499 tonnes	50	78	88	106	126	150	158	147	146	144
500 to 999 tonnes	31	40	61	72	74	76	85	85	81	85
1000–2499 tonnes	44	45	54	45	69	61	58	52	61	58
2500–4999 tonnes	19	29	36	40	27	37	38	36	27	29
5000–9999 tonnes	16	20	23	24	28	23	22	16	12	10
10,000+ tonnes	34	41	41	43	41	28	28	31	27	123
Unspecified	13	11	12	7	16	73	85	109	125	141
Total	998	1197	1465	1798	2008	2320	2477	2572	2481	2494

Source: Anderson (2015, Table 21), updated from http://winetitles.com.au/statistics/

In 2000, 80% of wineries had a 'cellar door' (meaning they sell direct to retail customers from the winery itself or a separate retail outlet they own), and 40% were exporting (though mostly to just four English-language destinations). By 2016, there were twice as many wineries, but only two-thirds had a cellar door, and the share exporting had already peaked and then fallen to 47%. While virtually all make table wines, a declining share is making fortified wines (less than 30% in 2016) and a rising share (42% by 2016) produces

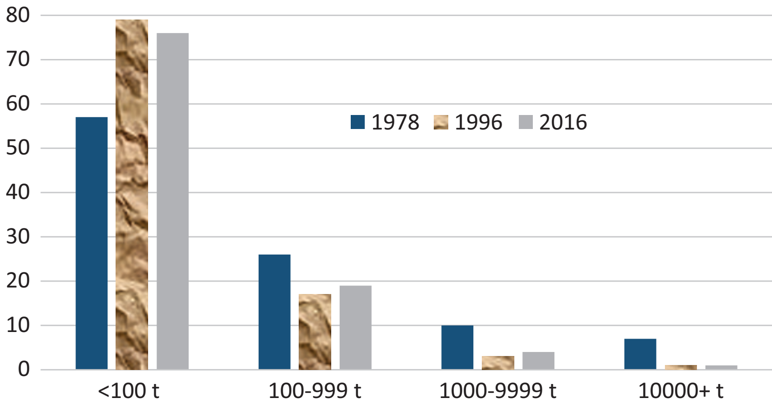

Fig. 6.7 Share of Australian wineries by crush, 1978, 1996 and 2016 (%). (Source: Updated from Anderson 2015, Table 21)

Table 6.3 Various attributes of Australian wineries, 2000, 2010 and 2016

	2000	2010	2016
Total no. of producers	1197	2420	2468
Share (%) of producers…			
Making table wine	99	99	98
Making fortified wine	33	29	29
Making sparkling wine	28	35	42
Making organic wine	na	5	4
Making wine on site	63	52	53
With a website	25	84	90
With a cellar door	78	68	66
Who export wine	41	51	47
Who export to the United Kingdom	28	27	21
Who export to the United States	26	27	18
Who export to Canada	11	24	19
Who export to NZ	14	8	8
Who export to Japan	12	12	13
Who export to Hong Kong	8	19	21
Who export to Singapore	7	25	22
Who export to China	2	23	30

Source: http://winetitles.com.au/statistics/wineries_numbers.asp

sparkling wines; 4% are making organic wines and only half are making wine on site (down from two-thirds prior to 2000). All but one-tenth now have a website. Around half export wine, but in 2016 only one in five or six exported to what had been Australia's two largest markets, the United Kingdom and the United States, with a larger proportion exporting to the fast-growing markets in Asia, especially China (Table 6.3).

The 1% of Australian wineries that crush more than 10,000 tonnes account for all but one-seventh of the national crush, with around half crushed by the three biggest wineries. By contrast, those firms crushing less than 1000 tonnes account for no more than 4% of the national crush and of the wine produced in Australia.

This very strong concentration of firms in Australia's wine production is not uncommon among New World wine-exporting countries. In 2009 Australia at 62% was second after Chile in the share of domestic sales accounted for by the country's four largest wineries. That share had fallen to 41% by 2015 though, as several large firms consciously moved away from producing large-volume but low-priced/low-profit lines. This compares with Chile at 91%, Argentina at 60% and the United States at 56% in 2015. By contrast, in Western Europe the highest national four-firm concentration in 2015 was 20% (Spain), followed by Italy (18%, up from 10% in 2009) and France (16% in 2009)—see Table 6.4.

Table 6.4 Shares of domestic wine sales volume by largest four wineries, Australia and other key wine-producing countries, 2009 and 2015(%)

	Largest firm		Largest four firms	
	2009	2015	2009	2015
Australia	23	16	62	41
Other New World				
New Zealand	24	23	48	53
Canada	21	12	42	34
United States	21	23	56	56
Argentina	29	27	61	60
Chile	33	31	>86	91
South Africa	34	31	37	36
Western Europe				
France	11	na	16	na
Italy	6	8	10	18
Portugal	8	3	25	10
Spain	12	11	21	20
Austria	5	6	13	10
Germany	1	1	4	4
C/Eastern Europe				
Bulgaria	13	12	40	38
Hungary	8	9	15	19
Romania	11	11	32	38
World	**13**	na	**28**	na

Source: Anderson and Nelgen (2013, Table 33), compiled and updated from Euromonitor International (2016)

While the biggest wineries in Europe tend to be producer cooperatives, in Australia (and most other New World countries) the largest ones are either listed on the stock exchange or are large family firms or private equity groups.

Certainly cooperatives operated in Australia in earlier decades, but they were either converted to or absorbed by other private companies. The country's biggest winery by volume today (Accolade) was purchased in 2003 as BRL Hardy, which was a merger of the Hardy family business (founded in 1853) with the former Berri and Renmano cooperatives (founded in 1922 and 1914, respectively).

Mergers and acquisitions tended to occur during boom periods or as 'fire sales' when the industry had been depressed for some time. A large number of multinational, multiproduct firms purchased Australian wineries during the 1965–76 boom, for example, but many of them soon divested of those assets once the boom subsided. The best of their brands have become part of what are now the country's three biggest wineries (Anderson 2015, Table 23). Each of those three firms depends on independent growers for the majority of their winegrapes in Australia, but they also now make wine in other (especially New World) countries. As a consequence, they are in a stronger bargaining position when they negotiate price and other supply conditions with those independent grapegrowers than was the case during the vineyard expansion boom in Australia in the 1990s.

The largest Australian wineries in terms of the value of wine sales in 2015 are listed along with various additional criteria in Table 6.5. What is clear from that table is the relatively low-rank correlations across those criteria. Some grow a large share of the grapes they crush, others a small share; some also buy wine from other processors; some have a single processing plant, others have several large or smaller plants (in different locations); some sell mostly in the domestic market, others mostly export; some export low-value wines, others high-priced ones. Only four of those 18 firms were not already operating by 1980.

The biggest exporting firms have been able to produce large volumes of low-end premium wines that use grapes from several regions, so as to ensure little variation from year to year in wine style and quality. That type of homogenous product suited perfectly the customers of large British supermarkets. By the mid-1980s, those supermarkets, dominated by Sainsbury's, Marks and Spencer, Waitrose and Tesco, accounted for more than half of all retail wine sales in the United Kingdom (Unwin 1991, p. 341).[1] Given also Australia's

[1] The introduction of commercial television in the 1980s strengthened the market power of large supermarkets. See the special issue on the history of commercial television in Europe in *VIEW Journal of European Television History and Culture,* Volume 6, Issue 11, 2017.

Table 6.5 Ranking of Australia's largest wine companies by wine sales value and other criteria, 2015

	Wine sales value	Wine prod'n volume	Owned or leased vine area	Owned or leased vines (ha)	Wine export value	Wine export volume	Earliest year of brands
Treasury Wine	1	3	1	9133	1	2	1843
Pernod Ricard	2	4	5	1662	3	4	1828
Accolade	3	1	9	1002	4	1	1836
Casella	4	2	2	2891	2	3	1969
Australian Vintage	5	5	3	2700	5	5	1938
McWilliam's	6	11	10	980	10	10	1877
De Bortoli	7	7	11	845	8	7	1928
Warburn	8	8	8	1017	14	13	1959
Brown Brothers	9	18	13	787	12	18	1889
Yalumba	10	13	12	820	7	8	1849
Tahbilk	11	19	21	421	17	15	1860
Angove	12	15	na	na	15	12	1889
Kingston Estate	13	6	6	1500	9	na	1979
Qualia	14	10	14	690	18	17	2009
Wine Insights	15	na	17	508	na	na	1930
Andrew Peace	16	12	16	565	6	6	1995
Littore	17	14	4	1850	19	14	2008
Zilzie	18	9	15	587	20	19	1999

Source: http://winetitles.com.au/statistics/wineries_numbers.asp

close historical ties with Britain, its firms were able to dominate that market in the final decade of the twentieth century.

Not all of Australia's oldest wineries are the largest. Among them are the dozen so-called First Families of Wine, which between them have 1200 years of winemaking experience (www.australiasfirstfamiliesofwine.com.au). These are all family-owned private businesses, some of them several generations old. They formed an alliance in 2009 to tell the world about the heritage of Australia's premium wines, to share the stories behind them, to celebrate the things they have in common and the differences that make them unique and occasionally to travel together on sales missions abroad.

In terms of quality of wines produced in Australia, as of 2009 about one-eighth were non-premium, half were commercial premium (between US$2.50 and $7.50 per liter wholesale pre-tax), a bit over one-quarter were super premium still wines and one-tenth were sparkling wines. Domestic consumption and imports were more biased toward higher quality, while exports were more biased toward the lower-quality range in 2009 (Anderson and Nelgen 2013, Section VI). Since then, however, the quality of Australian wines produced, consumed domestically and exported have all risen somewhat. In the case of red wines, for example, the share of off-trade domestic sales at less than AUD6 per liter fell from 35% to 25% between 2009 and 2016 while the share above AUD13.50 per liter rose from 27% to 33% and the share between those two extremes rose from 38% to 42% (Euromonitor International 2017).

6.4 Features of Grape Growing in Australia

There are more than twice as many independent grapegrowers as winemaker-grapegrowers in Australia, and their vine area and winegrape crush also are about twice that of winemaker-grapegrowers. This varies by state though, with South Australia having a disproportionate share of independent grapegrowers (see bold columns of Table 6.6). Many of those independent growers would have been members of processing cooperatives (as in Europe) before those organizations were absorbed by private companies. The average vineyard size was 23 hectares nationally in 2012, but that of independent grapegrowers was only two-thirds the size of that of winemaker-grapegrowers (20.5 vs. 30.4 hectares). The latter have lower yields per hectare though, at 8.6 tonnes compared with 12.3 tonnes for independent grapegrowers in 2012, according to the data reported in Table 6.6. It is not clear whether the average size of vineyards and their average yields will rise or fall over the coming years, given the wide dispersion in vineyard area around the average size.

Australia's regions can be classified as hot, warm and cool. Hot regions in 2008 accounted for 61% of the volume of winegrapes produced but just 44% of their value, while cool regions accounted for 9% of the volume and 16% of the value. Yields are particularly high in the hot regions because of irrigation, averaging 17.5 tonnes/ha in 2012 while cool regions averaged 5.6 tonnes and warm regions only a little higher at 6.2 tonnes. Winegrape prices are more than commensurately lower in the hot regions, however, at three-fifths of the national average compared with 70% above that average in warm regions and 110% above in cool regions (Anderson 2015, Tables 55, 57, 61, 72 and 73). During 2012 to 2015, more than 85% of the growers in hot regions suffered financial losses, whereas in Australia's other regions less than half the producers suffered losses in those painful years when grape prices were at their lowest (WFA 2015).

Table 6.6 Number, vine-bearing area and crush of Australian independent and winemaker grape-growing establishments, by vineyard size range (ha) and state, 2012

Number	**Independent grapegrowers**					**Sub-total**	**Winemaker-grapegrowers**					**Sub-total**	**Total**
	<10	10–25	25–50	50–100	>100		<10	10–25	25–50	50–100	>100		
South Australia	1158	585	261	117	55	**2176**	161	145	95	50	58	**509**	**2685**
New South Wales	430	244	124	65	53	**916**	204	66	21	16	29	**335**	**1252**
Victoria	568	190	63	39	25	**885**	348	89	50	29	17	**532**	**1417**
Western Australia	214	70	21	11	6	**323**	168	79	16	18	17	**298**	**620**
Tasmania	51	2	2			**56**	61	10	1	3	3	**79**	**134**
Australia total[a]	**2458**	**1096**	**472**	**232**	**140**	**4398**	**994**	**394**	**187**	**116**	**125**	**1815**	**6213**
Area (ha)	**Independent grapegrowers**					**Sub-total**	**Winemaker-grapegrowers**					**Sub-total**	**Total**
	<10	10–25	25–50	50–100	>100		<10	10–25	25–50	50–100	>100		
South Australia	5844	9018	9033	8192	11,596	**43,683**	761	2437	3395	3453	16,242	**26,287**	**69,970**
New South Wales	1853	3870	4423	4315	13,194	**27,654**	872	977	671	1075	7114	**10,709**	**38,363**
Victoria	2333	2876	2167	2565	4272	**14,213**	1465	1347	1688	2124	3876	**10,500**	**24,713**
Western Australia	799	1069	733	760	860	**4222**	766	1281	494	1206	2349	**6095**	**10,316**
Tasmania	105	28	71			**205**	213	125	41	204	442	**1024**	**1229**
Australia total[a]	**11,045**	**16,934**	**16,427**	**15,833**	**29,921**	**90,160**	**4254**	**6229**	**6399**	**8144**	**30,196**	**55,222**	**145,382**

(*continued*)

Table 6.6 (continued)

Crush (tonnes)	Independent grapegrowers					Sub-total	Winemaker-grapegrowers					Sub-total	Total
	<10	10–25	25–50	50–100	>100		<10	10–25	25–50	50–100	>100		
South Australia	67,291	119,257	121,043	83,905	150,648	**542,143**	3525	14,816	20,897	22,529	165,008	**226,776**	**768,918**
New South Wales	15,801	42,393	57,528	54,819	177,313	**347,854**	2312	3356	2279	8156	96,844	**112,948**	**460,802**
Victoria	26,215	38,323	32,406	35,426	55,704	**188,074**	5681	7861	11,218	17,344	47,576	**89,680**	**277,754**
Western Australia	3557	6781	6138	4601	5450	**26,528**	3490	7419	3409	9184	17,992	**41,493**	**68,021**
Tasmania	455	147	155			**757**	971	638	136	1503	1375	**4622**	**5379**
Australia total[a]	**113,534**	**206,947**	**217,269**	**178,752**	**389,115**	**1,105,618**	**16,311**	**34,240**	**38,172**	**58,717**	**328,992**	**476,431**	**1,582,049**

Source: WGGA (2013)

[a]Total includes Queensland, the Australian Capital Territory and the Northern Territory, where winegrape growing is very minor

Since the demise of cooperatives, growers have sought contracts with wineries. These have varied from a handshake to a written legal document. Typically they specify an area of vines by variety and certain quality criteria or proxies such as a maximum number of tonnes per hectare. In the 1990s as the industry was expanding and wineries were keen to secure grape supplies, contracts as long as ten years were not uncommon. But as the oversupply situation emerged in the new century, those contracts were often renewed with much shorter time frames. In some cases they were not renewed at all, leaving the grower to either sell on the spot market or get the grapes produced into wine for later resale in the wholesale bulk market or for retail sale under their own new label.

Despite the rapid expansion of Australia's wine industry over the two decades to 2008, vineyards still account for less than 1% of the country's area under crops, and even less than was the case in the first globalization wave in the latter half of the nineteenth century. In 2015 its share was 0.55%, which is not much above the global average of 0.45% of total crop area—and barely one-tenth the fraction in the key wine-producing countries of Western Europe.

Winegrapes in Australia are grown in more than 60 legally defined regions or geographical indications, covering a spectrum from cool (similar to Burgundy) to hot (similar to some Mediterranean regions). A little over two-fifths of the bearing area is located in hot regions, a similar proportion is in warm regions and the remaining one-eighth is in cool regions. Almost half the vineyards are in the state of South Australia, which has all three types of climate zones. The vineyards on the island of Tasmania, by contrast, are virtually all classified as cool climate. Irrigation is essential in the hot regions, so their vineyards are mostly located along the sides of major rivers. In cool regions, by contrast, irrigation is rarely used once young vines are established.

In sharp contrast to the European Union, there are relatively few regulations controlling the winegrape production process in Australia. In particular, blending of wines from any combination of grape varieties is allowed, as is blending from any number of regions. There is therefore no distinction in Australia of the sort made in Europe between appellation and generic wines. Australian producers have made a point of marketing their wines with varietal labeling and have only recently begun to also emphasize regional (and even single vineyard) origins of the grapes. Meanwhile, France is beginning to add varietal names to the labels of some of its wines. Hence the Old World and New World are converging toward both using both attributes in their marketing.

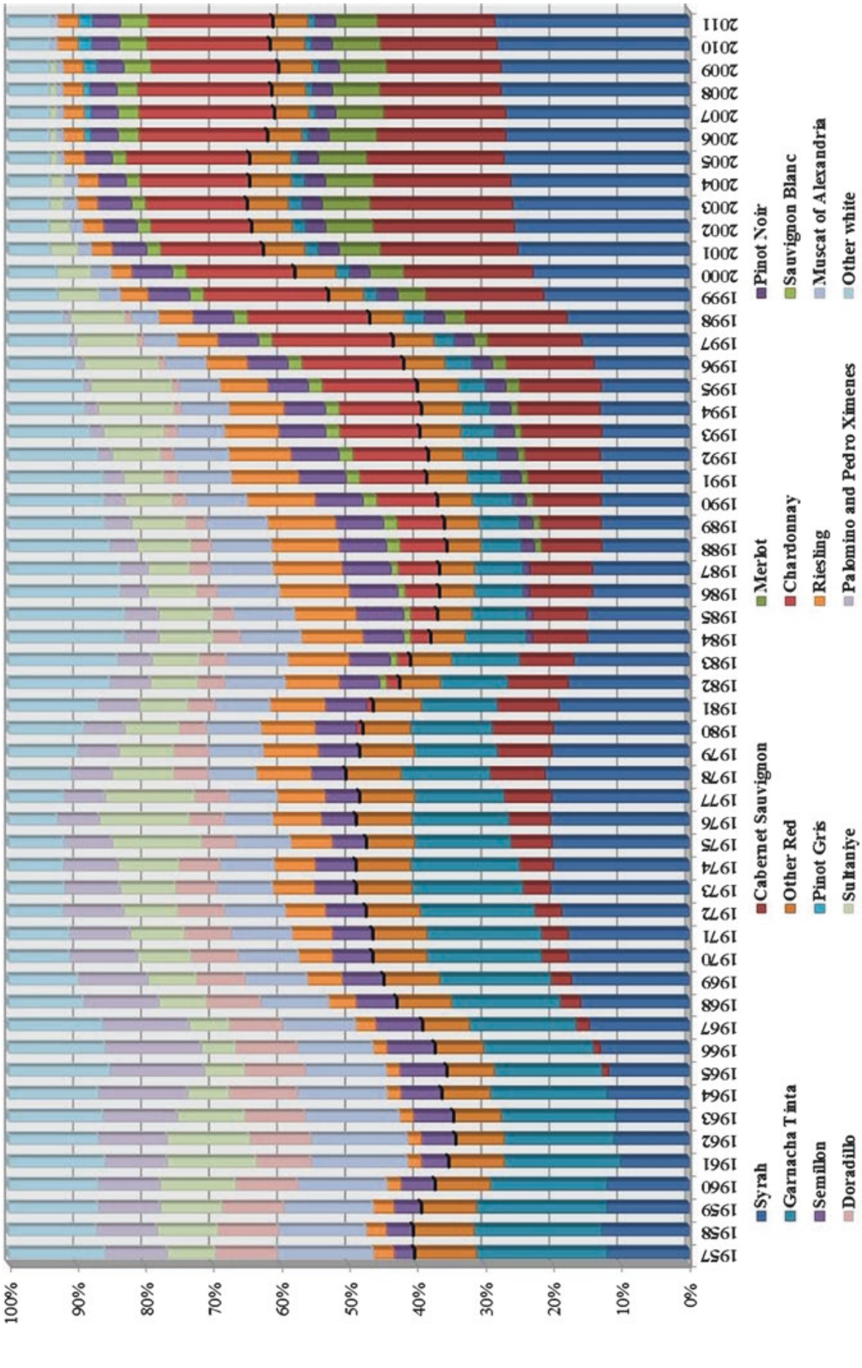

Fig. 6.8 Shares of varieties in Australia's winegrape-bearing area, 1956 to 2012 (%, three-year averages). (Source: Anderson 2015)

Australia has changed its winegrape varietal mix enormously during the past six decades. Figure 6.8 reveals the expanded share of bearing area of reds through the 1960s and 1970s before whites emerged with a new preference for Chardonnay, and then reds re-emerged with the expansion of both Cabernet Sauvignon and Syrah (Shiraz) plus Merlot. Accompanying the growth of these varieties was the demise in popularity of grape varieties such as Garnacha Tinta (Grenache), Muscat of Alexandria, Doradillo, Sultana, Palomino and Pedro Ximenes. Those declining varieties had been the mainstay of fortified wines and/or served well as multipurpose grapes able to be directed to drying when that was more profitable than their use in winemaking (Fig. 6.8).

These trends in winegrape-bearing areas mean there have also been great changes in the country of origin shares of the nation's winegrape varieties, as defined by Robinson et al. (2012). Australia's mix has become more 'international' or, more accurately, more French than most countries. In the 1950s, 20% of the national vineyard was planted to French varieties while 40% was planted to Spanish varieties and another 10% to Greek varieties. Only small shares were from Italy and Germany, and the shares from other countries were tiny. By contrast, by the early 2000s all but 10% of the bearing area was planted to French varieties, and Spanish and German varieties filled half of the remainder. In this second decade of the present century, there has been new interest in planting varieties from warm parts of southern Europe (especially Italy) in anticipation of further global warming, but they still comprise only a small fraction of the national area (Anderson 2016, Table 2).

The main reason for Australia's varietal mix becoming more French has to do with Shiraz, or Syrah as it is called in most parts of the world. The popularity which Australia brought to Syrah in the 1990s has led to many other countries expanding their plantings of this variety. In 1990 there were barely 35,000 bearing hectares globally, making it 35th in the area ranking of all winegrape varieties in the world. But by 2000 there were 102,000 hectares, and by 2010 that had risen to 186,000, bringing Syrah to the 6th position on that global ladder and less than one-third below the global areas of the two now-most-widespread varieties, namely, Cabernet Sauvignon and Merlot (Anderson 2013).

Over the decade to 2010, the Syrah area globally grew more than either Cabernet or Merlot—in fact only Tempranillo expanded faster. Certainly Australia contributed to that expanding area of Syrah, but expansion was even greater in France and Spain. There were also large plantings in other key New World wine countries, and in Italy and Portugal. As a result, Australia is no longer as globally dominant in this variety: Its share of the global Syrah area dropped from 29% in 2000 to 23% in 2010—even though Syrah increased its share of Australia's own vineyards over that decade, from 22% to 28%.

Varietal differences also are more muted between regions within Australia than is the case within other countries—notwithstanding the very large differences in growing conditions between cool, warm and hot regions across Australia. In 2010, of the three most similar regions in the world to each of Australia's 94 regions and sub-regions, less than 7% were non-Australian regions. In New Zealand, by contrast, more than two-thirds of the three most similar regions to each of its ten regions were in other countries (Anderson 2016).

6.5 The Changing Structure of Australian Wine Distribution and Retailing

During Australia's first export boom in the three decades to World War I (see Fig. 6.9), virtually all its wine was shipped bulk, in hogsheads (large wooden barrels). Exports were generally of extremely low quality prior to that (mostly dry red, shipped only weeks after the grapes had been crushed), with little invested in marketing and distribution arrangements in the (almost sole) destination country of Britain. While strong prejudices against New World wine remained throughout that first globalization wave, a firm reputation for

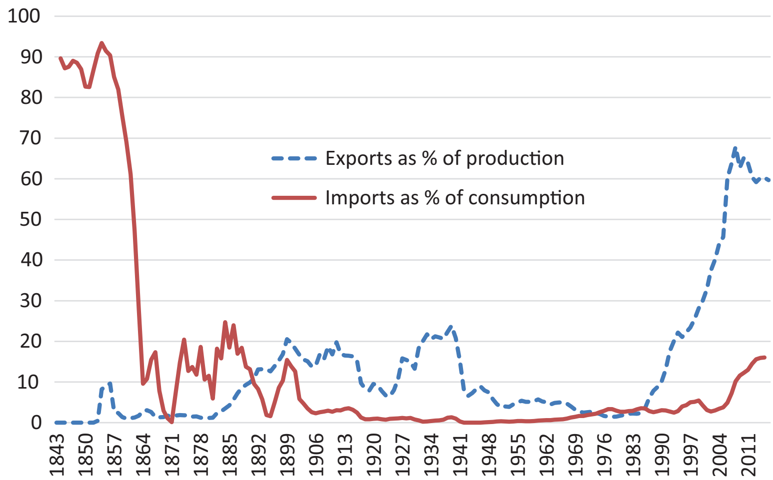

Fig. 6.9 Exports as percentage of wine production and imports as percentage of apparent wine consumption, Australia, 1843 to 2017 (percentage, three-year moving average around year shown). (Source: Updated from Anderson 2015, Chart 8)

Australian dry wines began to be established in Europe by 1914 in the generic sense at least, even though varietal, regional and winery brand labeling was still absent (and would be until the 1950s).

In the first half of the most recent three-decade export boom, by contrast, most wine was exported in labeled 750 ml bottles revealing regional details along with the winery brand. In addition, as mentioned above, Australian producers chose to differentiate themselves from those in Europe by clarifying on their labels the winegrape variety or varieties (or cultivars) used to produce each wine.

Since 2000, however, the share of Australian wine exported in bulk has risen rapidly, from less than 15% to 57% by 2014 (in volume terms and to 22% in value terms), although it fell slightly to 53% by 2017. That bulk wine is typically transported in 24,000-liter bladders that fit exactly into 20-foot containers for shipping to the northern hemisphere. Only some of it is low-quality surplus wine destined for blending into non-premium wine at its destination; an increasing share of it is bottled and labeled on arrival by or for the winery that produced it or for a retailer seeking to label it under its own brand. That is especially so of exports to the United Kingdom, all but one-fifth of which is shipped bulk.

The destination of Australia's exports has changed dramatically in the past two decades. The United Kingdom and New Zealand were initially the main destinations, and then gradually the United States and Canada became more important. But in the most recent decade, East Asia has also become very significant such that by 2017 it had a far larger share (46%) than either Europe

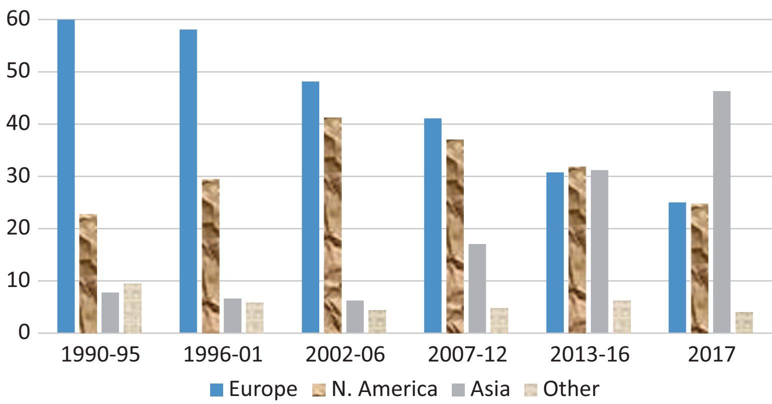

Fig. 6.10 Shares of the value of Australia's exports to various regions, 1990 to 2017 (The 2016 data are for the 12 months to September 30). (Source: Updated from Anderson and Nelgen 2013, Table 144) (%)

or North America, both at 25% (Fig. 6.10). The average price of Australia's exports to Asia are about twice as high as exports to the rest of the world, and most sales are now in bottles. This plus proximity ensures the region's importance to Australia relative to other wine-exporting countries will grow as Australia continues to raise the average quality of its wine exports and as the three bilateral trade agreements recently signed by Australia with China, Japan and Korea are implemented—and the United Kingdom's withdrawal from the EU is likely to contribute to that trend (Anderson and Wittwer 2015, 2018).

In the Australian domestic market (where 35–40% of production is sold), supermarket dominance has been on the rise. Today just two supermarket chains (Coles and Woolworths) account for the majority of domestic wine sales, with Aldi supermarkets a distant third but rapidly expanding. Each of them is developing their own 'home' brands, with perhaps more than one-fifth of their wine sales now under their own labels. Since consumers find it very difficult to distinguish those brands from traditional winery brands, they are in direct competition with the latter on the same supermarket shelves.

It is this dominance of supermarkets at home, as well as abroad, that has encouraged takeovers and increasing concentration among wineries and their corporatization. The aim of those developments has been partly to raise the enormous amounts of capital required for expansion: The capital intensity of winegrape growing is about 50% above that of other agriculture, and that of winemaking is more than one-fifth higher than that of other manufacturing in Australia. Larger size and greater diversity of offerings also improve the negotiating position of wineries vis-à-vis supermarket retailers and the financial muscle to market abroad.

The latter is more important for wineries in the antipodes than in the northern hemisphere, because of the long distance and travel costs associated with developing and maintaining those export markets. True, relative distance is becoming less of a handicap for Australia as markets in Asia grow. Nonetheless, breaking into and servicing those emerging markets is very time-consuming, so economies of size of export-focused wineries will continue to play a role there as well.

Online sales are becoming more important in Australia as elsewhere. In Australia in 2016 they accounted for 10% of the volume of off-trade wine sales (and 4.4% of the value of all alcohol sales in 2014, up from 0.9% in 2009). However, the supermarket chains are at least as actively engaged in online sales as other retailers, and this channel may even be adding to their overall market dominance. Indeed one of the two large Australian supermarkets is exploring the option of establishing a physical and online presence in

China, which will mean Australia's exporters to that expanding market will not have escaped that retailer's influence.

One indication of that increasing dominance is the declining share of the five top wineries' brands in the volume of Australia's domestic sales. In 2008 those five brands accounted for 65% of the still wine market in Australia, but by 2016 their share was just 48% (Euromonitor International 2017).

6.6 What of the Future?

Recovery from the Australian wine industry's recent difficulties won't be easy, as major adjustments are required by many participants. To the extent there is a willingness to continue to invest for the long term (rather than just focusing on quarterly returns to shareholders), and if the earlier spirit of collaboration and unity within the industry can be reinvigorated, a return to at least normal levels of profitability should be possible before long. Growth in domestic sales will be sluggish because of slowing income and population growth and a strengthening anti-alcohol lobbying; but with the ending of the mining investment boom, the Australian dollar depreciated by more than one-quarter during 2013–17 which has boosted Australia's competitiveness in export markets and lessened the competition from imports in the domestic wine market.

As well, adjustments are under way in generic export marketing. The earlier emphasis on 'Brand Australia', of providing 'sunshine in a bottle', has switched to a marketing strategy that places far more emphasis on higher-quality wines and exploits the scope to differentiate through building regional, varietal and style reputations. This new emphasis is certainly needed, given the increasing competition from lower-wage Southern Hemisphere countries in the commercial premium category. Chile may have already surpassed Australia in offering the world the best value wine in that category, hence the switch in emphasis to making the point that Australia also offers excellent value for money with its finer wines.

Getting that message across in not only Australia's traditional markets but also in Asia will require a larger generic marketing budget than the industry has had in the past, which was trivial relative to the value of national production and the extent of expenditure by European competitors. In 2011–12, for example, Australia's expenditure on generic promotion was barely 0.7 cents per liter of wine produced. That same year, Bordeaux alone spent 3.3 cents per liter. The European Union supplements regional and national promotion expenditures of its member states, and during 2009–13 it provided 522 million Euros for wine promotion, the equivalent to 0.6 Australian cents per liter of EU wine produced. Moreover, that EU promotion expenditure is to be raised to 1156 million Euros for the period 2014–18 (European Court of Auditors 2014). That is around 1.3 cents per liter, or double the rate recently spent in Australia—and that is just the supplement from Brussels, which adds to what will be spent by national governments and EU wine regions themselves.

Fortunately for the Australian industry, the national government announced in 2016 that it would provide a one-off grant of AUD50 million over the four years to 2020 to boost the industry's competitiveness and thereby reboot profitability. More specifically, this Export and Regional Wine Support Package is to focus on wine promotion internationally and domestically and is designed to help regional wine producers, wine-related tourism and export-focused businesses.

As for grape and wine research, less than 1% of the value of grape and wine production has been invested in R&D in the past, despite the returns from such investments being very high. Returns in the next two decades are likely to be even higher, bearing in mind rapid marketplace changes (the need to produce better quality rather than quantity of grapes and wine) and long-term uncertainties such as climate change and global economic growth.

Wine consumer tax policy reform could contribute to the transition to higher-quality wine production. If Australia were to switch from its current 29% ad valorem wholesale tax to a volumetric tax on domestic sales, that would encourage the transition to finer wines while weakening the case by anti-alcohol lobbies and the beer and spirits producers for a higher *rate* of tax on wine. Such a switch would make it easier for small fine-wine producers to sell all their production on the domestic market, thereby avoiding the high fixed costs of breaking into new export markets.

6.7 Synthesis of Structural Features

This chapter makes it clear that Australia's wine industry structure is very different from that of traditional wine-producing countries of Europe. Specifically, in Australia:

- Winegrape production faces relatively few regulations and so growers are free to choose their variety of grapes, yields, how much to irrigate and so on.

- Wineries too face relatively few regulations and so can blend wines from various regions, blend whatever varieties they wish and label their bottles with as much varietal, regional and vineyard information as they wish.
- Since the industry's take-off in the 1990s, the focus has been on export markets, since the domestic market has been growing very little in volume terms at least.
- The importance of Asia, and especially China, to Australian wine exporters is already very strong and will become even more so in the next few years as Australia's new bilateral trade agreements with Northeast Asian countries are implemented.
- The average quality of wine will keep rising as the share of production in the warmest regions, where quality is lowest, shrinks in response to global warming and rising prices of irrigation water.

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