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Clarifying controversial contributions to Australia's current wine industry crisis

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Clarifying controversial contributions to Australia's current wine industry crisis

Kym Anderson

The current crisis of low prices and surplus red wine stocks in the wine industry is being felt in many countries, but perhaps most severely in Australia. In debates over the country-specific origins of the crisis in Australia, the finger has been pointed at the industry's 30-year strategic plan that was launched in 1996 (*Strategy 2025*), at income tax concessions available to investors in the 1990s, and at the subsequent rapid expansion of vineyard planting in the country's warm inland irrigated regions that was encouraged by the largest wineries' lucrative long-term grower contracts.

This article seeks to clarify those influences' respective contributions to the nearly three-fold expansion in the nation's winegrape bearing area between 1995 and the peak in 2008. The total area of vines (including non-bearing) rose from 63,000 hectares in 1993 to 90,000 by 1997 and to a peak of almost 174,000 by 2007. While precise empirical estimates of each of their contributions are not available, collating the data that are available can at least shed some light on the issue. This is particularly so for bearing area and crush volume changes in cooler regions versus the warm inland regions (namely South Australia's Riverland, Victoria's Murray Darling-Swan Hill region, and the Murray Darling-Swan Hill and Riverina regions of New South Wales).

The article begins with the role of *Strategy 2025*. It then focuses on generous income tax concessions available in the 1990s. It is argued that neither might have been very influential on their own had the prices of winegrapes not risen dramatically in the 1990s, which raises the question of why they rose so suddenly. Explanations are given in the third section, before attention turns to changes in the bearing area and crush volume in warm inland versus cooler regions. The article concludes by pointing to additional influences that led to the rapid rises in sales first to the UK and then to the US leading up to their peaks in 2007.

The 30-year strategic plan (*Strategy 2025*)

In 1995/96, two important reports were published that affected winegrape production decisions. The first was a wide-ranging Research Report by the Federal Government's Industry Commission (now Productivity Commission), on the competitiveness and export potential of the winegrape and wine industry and on impediments to its growth (Industry Commission 1995). That report did not attempt to develop an industry plan with future objectives, targets and associated strategies, considering that to be most appropriately developed by the industry itself. But it laid a factual foundation from which wine industry leaders were able to develop the *Strategy 2025* document a year later (AWF 1996).

That second report, *Strategy 2025*, was a simple 12-page document suggesting targets its promoters believed to be achievable over the 30 years to 2025. At the time of publication, the targets were considered very optimistic by many observers. Those targets included a three-fold increase in the real value of wine production, 55% of it for the export market. Getting half way to those targets required having 85,000 hectares of winegrapes bearing enough for a crush of 1200 kilotonnes to produce 850 million litres of wine at a wholesale pre-tax value of \$3.5 billion (\$4.12/litre) in 1996 Australian dollars.

By the turn of the century – that is, in just five vintages – the industry had reached most of the half-way points for achieving its 2025 targets, having expanded the winegrape bearing area from 50,000 to 120,000 hectares between 1995 and 2001. More than that, by the mid-2000s the industry had reached virtually all of its 30-year targets for winegrape production, export volume and value and domestic sales volume and value (Figure 1).

[insert Figure 1 around here]

Some have argued (e.g., Smart 2023, 2024) that the *Strategy 2025* document generated excessive exuberance among investors in the latter 1990s. However, enthusiasm was already being fuelled from 1991 by hikes in the prices of Australian winegrapes. The average nominal price received for winegrapes in 1999 was four times that in 1986, even though the export price had risen ‘only’ 140% (Figure 2).

[insert Figure 2 around here]

A delayed and then dramatic response to new investment opportunities is what economic theory predicts would happen: caution accompanies initial uncertainty but, as that uncertainty fades with new information, and evidence appears of new investment by others, a bandwagon effect is triggered leading to excessive investment. Nobel Laureate Daniel Kahneman calls it the planning fallacy. To quote: “There is a well-documented trend for people to neglect downside risks when developing and evaluating a new project. This is part of a general tendency for people to be overly optimistic about new projects, including overstating the likely benefits, understating the costs, and neglecting risks that could cause the project to fail” (Kahneman 2011, pp. 249-52).

As often happens with booms, many people along the value chain (including newcomers to the industry) saw short-term income-earning opportunities and thereby contributed to the excessiveness of investor exuberance. The largest wine companies encouraged it by being among the first to plant large new vineyards, including in the inland irrigated regions, some of which they then sold to new investors at what in retrospect were excessive prices by providing buyers with attractive long-term contracts. Advisors, consultants and physical input suppliers also had a vested interest in the rapid expansion.

Given this feature of human behaviour, it is in retrospect not surprising that most of the *Strategy 2025* targets were met early. But would that 12-page document alone have been very influential had the export price and hence winegrape price not risen as rapidly and to such heights in the 1990s as shown in Figure 2?

Two pertinent income tax concessions

Investment was also encouraged by two provisions in income tax law that attracted new investments, including from outsiders to the industry. They involved accelerated depreciation of vineyard establishment expenses, and generous provisions in so-called Managed Investment Schemes.

The first of those came about when the wholesale sales tax on wine was raised again in 1993: by way of consolation, the government altered the provision for accelerated depreciation of vineyard establishment expenses from eight years to just four years for income tax purposes (even though the average life of a new vineyard could be thirty or more years). Furthermore, it applied to leased as well as grower-owned land. That tax concession change was reversed in 2004, but in the intervening dozen years it provided an extra incentive to plant more vines. As noted by the Industry Commission (1995, pp. 328-30), this provision was of most benefit to individual investors whose other income put them on a high income-tax bracket.

The second income tax provision that stimulated vineyard investments is one that drew in funds from outside the wine industry via so-called Managed Investment Schemes

(MIS).¹ A key feature of an agricultural MIS was that up-front costs of establishing the activity were 100% deductible for investors' income tax purposes, which made them very attractive for those in the highest income tax bracket.

According to WGGGA (2009), MIS investments were responsible for perhaps 16,000 of the 100,000-plus hectares of new vineyards planted in the 1993-2008 growth period. Typically those investments focused on developing large-scale vineyards.

A review by the Treasury (2009) concluded that, for the MIS managers vis-a-vis other producers, the schemes lowered the cost of capital and the risk involved. They were encouraged via initially very generous supply contracts offered by the large wineries – who no doubt anticipated that such contracts would eventually boost their profits by leading to lower local prices of all winegrapes.²

MIS investments were disliked by established grapegrowers, however. One reason was because they too expected them to lower grape prices by generating a net addition to the bearing area under vines. Another reason was because the schemes raised the prices of land and water in wine regions and thus made it more costly for established grapegrowers to expand their own vineyards.

But, as with the *Strategy 2025*, it is questionable whether these tax incentives would have been very influential on their own had Australia's winegrape prices not been rising so rapidly in the 1990s.

Why did winegrape prices rise so dramatically in the 1990s?

The winegrape price rise in Australia from the late 1980s to the start of the new millennium is attributable to increases in both domestic and export demand, plus considerable devaluation of the AUD.³

Domestically, Australian consumer preferences were gradually changing from beer to wine. Beer consumption per capita fell by nearly one-third between the early 1980s and mid-1990s, from two-thirds to barely half the volume of national alcohol consumption (AIHW 2023; Anderson 2020). But, despite considerable growth in disposable income, the volume of wine consumption per capita rose only slightly over that period, because consumers were moving towards higher-quality wines, that is, away from non-premium (especially fortified and flagon) wines to premium still wines in bottles (Chart 41 in Anderson 2015). As a result,

¹ Such schemes were operating in the 1980s and were reviewed in 1993 and amended in 1998 to provide less uncertainty over the tax treatment of such schemes (ALRC 1993; Treasury 2009). An MIS allowed the pooling of investors' money to ensure an agricultural operation could achieve significant size. Investors paid up-front fees that provided the scheme manager with the necessary funds to establish and operate the scheme subject to a management agreement. The MIS investors did not own any physical assets such as vineyard land, nor have day-to-day control over the operation of the scheme, but simply received a share of the harvest proceeds for a specified number of years. Nor did the manager own any physical assets, which instead were leased from a third party. The manager was responsible for operating, harvesting, marketing and selling the crop, but could contract these activities out to other entities. The manager received the proceeds from each vintage, keeping a proportion of the proceeds as a fee and distributing the remainder to MIS investors in proportion to the number of allotments they each held.

² During 1995-98, bulk wine was imported by large wineries to boost their supplies, pending new local vineyards coming into production. Shipments came from countries as diverse as Argentina, Chile, France, Spain, South Africa and the United States, at CIF prices ranging from 60 to 125 US cents per litre (Anderson and Puga 2024).

³ As well, a number of factors reduced competition abroad for Australian wine from the mid-1980s. They included food-safety scares associated with Chernobyl in April 1986, scandals involving additives in Austrian and Italian wines, anti-apartheid sentiment toward South Africa, macroeconomic and political instability in South America, and the high value of the US dollar relative to European currencies that impeded exports from California.

national expenditure per litre of wine consumed roughly doubled between 1994 and 2000 (Euromonitor International 2002; Holmes and Anderson 2017a,b). That indicates a considerable shift in domestic alcohol demand toward wine, given that all domestic wine prices were being pulled up to international levels during the 1990s by the rise in the share of Australia's wine production being exported (which rose from less than 2% in the mid-1980s to 60% of production by 2007) and in the share of more-expensive wine imports in domestic consumption in the latter 1990s (Figure 3).

[insert Figure 3 around here]

Australia's average export price in US\$ terms rose at the same rate as the rest of the world's in the 1990s, as it shared in the benefits of rapid wine globalization (Anderson and Pinilla 2018). True, that price then trended downward while the rest of the world's continued rising, but that trend difference in the 2000s is partly due to a trend difference in the share of exports shipped in bulk (Figure 4).

[insert Figure 4 around here]

When converted from US\$ to AUD, the rise in the average price of Australia's exports, not only to the UK but also to the US and to other markets, roughly doubled from 1995 to 2001 (Figure 5). Hence so too did the average price of the country's winegrapes (Figure 3).

[insert Figure 5 around here]

Nearly half of the AUD price rises can be attributed to the 43% devaluation of the AUD over those six dramatic years. Together with initially low domestic prices for grapes, that depreciation increased substantially the incentive to invest in the growth of overseas markets for Australian wine.

An important contributor to growth in Australia's wine production and exports from the mid-1980s was a rise in the industry's ownership concentration. That provided an opportunity for the biggest firms (created via corporate takeovers and amalgamations of traditional family wine companies – see Table 23 of Anderson 2015) to reap economies of scale not only in winemaking but also in sales distribution and brand promotion, by providing large volumes of consistent, popular wines for supermarkets. That increased concentration in firm size has persisted: the largest 1% of wineries crushed 78% of grapes by 1996 and that share rose to 83% by 2009. Among the largest 1%, the top three firms accounted for half the nation's crush in 1996 (Table 21 of Anderson 2015). Those three firms have remained the biggest, and two (Pernod Ricard and Accolade) were in the process of combining in late 2024, which may displace Treasury Wine Estates as No. 1. The next two are also big producers and exporters of commercial wines, namely Casella and Australian Vintage (Winetitles 2024 and earlier).⁴

Numerous small- and medium-sized fine wine producers believe the growth in these largest wineries' exports of commercial wines badly damaged the reputation abroad of the Australian wine offering (see, e.g., Croser 2023). However, those wineries drew commercial-quality grapes not just from the warm inland regions. One indicator of that is the share in the volume of exports from South Australian regions other than the Riverland that sold at less than A\$5 per litre (Table 1). Another is the recent offer prices and volumes of bulk wine for

⁴ When the AUD was at its lowest point in 2001 (at around 50 US cents), Casella Family Wines launched its [yellow tail] brand and, despite the AUD's appreciation in the 2000s, it became one of the most profitable and recognised wine brands in the world (Andrivet 2023). It created a huge new market at a time when prices for winegrapes in Australia's warm inland irrigated regions were falling, thereby slowing their fall and thus providing a win-win for those growers and for Casella. Since 2001, [yellow tail] wines have accounted for around 8% of Australian wine sales volume. They contributed to a rise in the Riverina region's share of the national winegrape bearing area from 10% in the early 2000s to 13% in the early 2010s and still 12% by the early 2020s (Anderson and Puga 2023).

sale from warm inland regions/zones versus cooler regions: in March 2024, the majority of the value of such wines were from cooler regions of South Australia at an average price of less than A\$3 (US\$2) per litre (Table 2).

[insert Tables 1 and 2 around here]

Growth in bearing area and crush in warm vs cooler regions

Associated with that growth in commercial wine exports from Australia was an expansion in vineyards in the warm inland regions. But there were equally rapid bearing area increases in the country's cooler regions as in the Riverina and Riverland, with all three areas trebling between the mid-1990s and late 2000s. Somewhat slower vine area increases occurred in the Murray-Darling/Swan Hill regions until 2008, when their area began to shrink rapidly as other crops, most notably almonds, became more profitable.⁵ Together the warm inland regions' area rose slower than that of cooler regions, such that the share of its national winegrape bearing area gradually fell from 49% in the 1995-99 to 42% in 2005-09 and 38% in 2015-19. However, thanks to yields increasing in the warm irrigated inland regions but shrinking in cooler regions, the share of the national crush coming from warm inland regions has risen: it averaged 57% in 1995-99 to 63% in 2005-09 and 70% in 2015-19 (Figure 6).

[insert Figure 6 around here]

The expansion in the share of some warm inland regions (e.g., Riverland) in national production early this century, and their continued contribution this decade, is not surprising because, despite the decline in their winegrape prices, their yield increases have been such that their gross revenue per hectare of winegrapes has been above that of the country's cooler wine regions in most years (Figure 7). As for *net* revenue per hectare of producing commercial winegrapes in Australia's warm inland regions, it has been held up in recent vintages because irrigation water has been ample and thus low-priced. If total costs per hectare were similar, this could suggest some growers in the warmer inland regions have been at least as competitive as those in cooler ones.⁶

[insert Figure 7 around here]

Additional influences on the rise and fall of sales to the UK and US

The rise and fall in Australia's wine exports to the UK and US are depicted in Figure 8. The fall began around the time of the global financial crisis in 2007-08, and was accentuated in value terms by the share of wine exported in bulk rising from less than 20% pre-2007 to around 80% for UK sales and 40% for US sales.

[insert Figure 8 around here]

The prior rise in sales to the UK began after a change in UK liquor licensing laws in the 1970s that allowed supermarkets to retail wine to the (by then adult and relatively affluent) post-war baby boomers. Given Australia's close historical ties with Britain, and the exceptionally low value of the Australian dollar in the mid-1980s, it is not surprising that

⁵ The area planted to almonds in Australia has expanded ten-fold since the early 2000s to more than 62,000 hectares, most notably in Sunraysia where there are now 35,000 hectares compared with almost 15,000 hectares in the Riverina and 11,000 hectares in the Riverland (ABA 2024). Australia also now has more than 25,000 hectares of both table grapes and olives (Horticulture Australia 2024). During that time Sunraysia's winegrape bearing area fell from a peak of over 23,000 ha in 2006 to less than 10,000 since 2014 (Anderson and Puga 2023).

⁶ However, in future drier and hotter years the price of water leasing could rise several-fold and reverse that ranking, wiping out profits on the least-efficient vineyards in those warm inland regions – but also in other irrigation-intensive regions such as Langhorne Creek and the Limestone Coast.

Australia's largest wineries recognized and responded to this new market opportunity. They were able to do so faster than European suppliers because the latter were smaller in size (or were co-ops focused just on local low-priced markets), were hamstrung by myriad regulations, and were somewhat insulated from international market forces by price supports. Their production of large volumes of commercial wines that used grapes from several regions allowed them to ensure little wine variation from year to year, which suited perfectly national advertising by large UK 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).

Four other influences were important to sales success in the UK. One was a visit to Australia in 1984, sponsored by the Australian Wine and Brandy Corporation (AWBC, now Wine Australia), by a group of Master of Wine graduates who were becoming the UK's most important wine writers/critics. Those influencers were amazed by the quality of Australia's wines at then-current prices, and they helped greatly to spread the word back in the UK. Secondly, from October 1986 the BBC began showing the hugely popular Australian TV soap opera called *Neighbours*, starring Kylie Minogue. Thirdly, that free promotion was complemented by AWBC generic marketing of Australian wine, particularly following Hazel Murphy's appointment in London in 1985 (she stayed until 2003) to tirelessly lead promotion through the Australian Wine Bureau and via the Australian Wine Export Council that came into being in 1992. And fourthly, the big wine retailer Oddbins was a huge advocate of Australian wines through the 1990s.

Wine exports to the US benefitted initially from an Australian sailing team winning the America's Cup in 1983 plus the release in 1986 and 1988 of the popular comedy *Crocodile Dundee* movies. Generic promotion there took advantage of a rapid rise in consumer interest in wine at a time when US wine production had plateaued following overplanting in the 1970s and the need to replant much of the Napa Valley's vines in the early 1990s because of a resurgence in phylloxera there (Figures 15.2 and 15.3 in Alston et al. 2018). But, as in the UK, free publicity by key influencers added greatly to the US demand for Australian wine. In particular, from the late 1990s the US wine critic Robert Parker began praising high-alcohol Shiraz wines from several South Australian wineries (Parker 2005), causing their prices to dramatically spike upwards at the turn of the century (see (Figure 8(b))).

However, that enthusiasm for Australian wines faded in the mid-2000s. One reason was that US consumers were blessed with huge growth in both the volume and quality of wine output from California's premium regions. California's winegrape area grew by 60% between 1992 and 2001, much of it driven by the increasing popularity of Cabernet Sauvignon from Napa at the expense of Shiraz from anywhere – but Shiraz was the variety that had dominated Australian exports to the US. Another reason was the global financial crisis, which dampened US consumption in the late 2000s. And a third reason was that, in addition to US wine critics turning their attention to the rising quality of US wines, Australia's exports to the US became increasingly dominated by [yellow tail] and similar 'critter' labels plus low-priced (<US\$1/litre) bulk wine – and they remain so (Figure 9).

[insert Figure 9 around here]

Final comment

The rise and fall in the volume and price of Australian exports to the UK and US has since been repeated in sales to China, for reasons explained in Anderson (2023). It is reflected clearly in the right hand ends of Figures 8(c) and 9, and it is partly responsible for the current huge surplus of red wine stocks in Australia. The removal on 28 March 2024 of the punitive

tariffs on Australia's wine exports to China provides an opportunity to return to that market – although it is now very different from and more subdued than what it was in the late 2010s. China may absorb some of Australia's surplus bulk red wine, although the competition there is fierce. For example, in October 2024 Aldi's 50+ stores in Shanghai were reportedly retailing bottles of Chilean Cabernet Sauvignon at the equivalent of A\$3 (Cai 2024).

Perhaps a lesson from the rise in the 1990s in bottle sales to the UK and US is the need to recruit powerful influencers in each export market. The challenge, however, will be to find such influencers in the current environment where social media is increasingly taking over from traditional wine writers/critics in influencing wine demand. A movie or music superstar might be able to do some magic, but they don't come cheaply and their potential impact would vary across countries.

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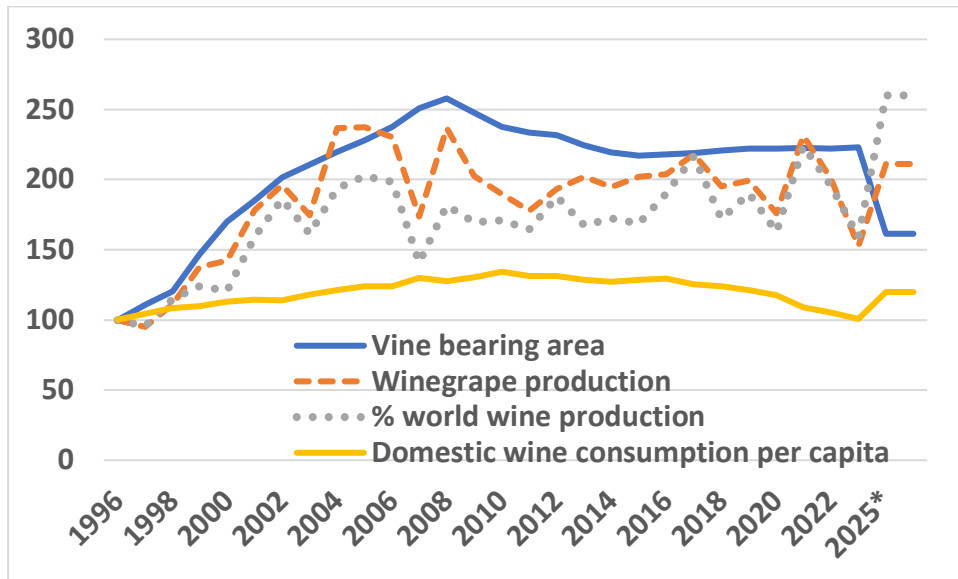
References

- ABA (2024), *Almond Insights 2022-23*, Loxton: Almond Board of Australia.
<https://viewer.joomag.com/2230aba-almond-insights-22-23-4v/0179131001694064762>
- ABS (2001 and earlier issues), *Australian Wine and Grape Industry*, Catalogue No. 1329.0, Canberra: Australian Bureau of Statistics. www.abs.gov.au
- AIHW (2023), *Apparent Consumption of Alcohol in Australia 2019-20: Supplementary Data Tables*, Canberra: Australian Institute for Health and Welfare, October.
<https://www.aihw.gov.au/reports/alcohol/apparent-consumption-of-alcohol-in-australia/data>
- ALRC (1993), *Collective Investment: Other People's Money*, Report No. 65, Companies and Securities Advisory Committee, Sydney: Australian Law Reform Commission.
- Alston, J.M., J.T. Lapsley, O. Sambucci and D. Sumner (2018), "United States", Ch. 15 in *Wine Globalization: A New Comparative History*, (edited by K. Anderson and V. Pinilla, Cambridge and New York: Cambridge University Press.
- Anderson, K. (with the assistance of N.R. Aryal) (2015), *Growth and Cycles in Australia's Wine Industry: A Statistical Compendium, 1843 to 2013*, Adelaide: University of Adelaide Press. Freely available at www.adelaide.edu.au/press/titles/austwine
- Anderson, K. (2020), "Evolving from a Rum State: A Comparative History of Australia's Alcohol Consumption", *Australian Journal of Agricultural and Resource Economics* 64(3): 724-49.
- Anderson, K. (2023), "What's Happening to China's Wine Market?" *Australian and New Zealand Grapegrower and Winemaker* 712: 79-82, May.
- Anderson, K. (2024), *Australia's Wine Industry Crisis and Ways Forward: An Independent Review*, Report commissioned by Wine Australia for Federal, State and Territory Ministers of Agriculture, Adelaide, July.
<https://www.agriculture.gov.au/sites/default/files/documents/wine-industry-crisis-ways-forward.pdf>
- Anderson, K. and V. Pinilla (eds.) (2018), *Wine Globalization: A New Comparative History*, Cambridge and New York: Cambridge University Press.

- Anderson, K. and V. Pinilla (2024), *Annual Database of Global Wine Markets, 1835 to 2023*, freely available in Excel at the University of Adelaide's Wine Economics Research Centre, November. <https://economics.adelaide.edu.au/wine-economics/databases>
- Anderson, K. and G. Puga (2023), *Database of Australian Winegrape Vine Area, Price, Crush Volume and Value, and Per Hectare Yield and Value, by Region and Variety, 1956 to 2023*, Wine Economics Research Centre, University of Adelaide, December. <https://economics.adelaide.edu.au/wine-economics/databases>
- Anderson, K. and G. Puga (2024), *Global Bilateral Beverages Trade Database from 1995*, Wine Economics Research Centre, University of Adelaide, November. <https://economics.adelaide.edu.au/wine-economics/databases>
- Andrivet, M. (2023), "Yellow Tail: Clever Brand Positioning Within the American Wine Industry", *The Branding Journal*, 30 November. <https://www.thebrandingjournal.com/2014/05/yellow-tail-clever-product-positioning-within-american-wine-industry/#:~:text=1.-,Product,of%20the%20population%20in%20America>
- AWF (1996), *Strategy 2025: The Australian Wine Industry*, Adelaide: Winemakers' Federation of Australia for the Australian Wine Foundation, June.
- Cai, M. (2024), "The Big Wine Downgrade in China: From Premium Labels to Bargain Bottles", *Vinojoy* blog of 23 October at <https://vino-joy.com/2024/10/23/the-big-wine-downgrade-in-china-from-premium-labels-to-bargain-bottles/>
- Croser, B. (2023), "Smells Like Opportunity: Australian Wine's Totally Awesome Decade – the '90s", *Australian and New Zealand Grapegrower and Winemaker* 717: 18-21, October.
- Euromonitor International (2002), "Passport: Wine in Australia", London: Euromonitor International.
- Holmes, A.J. and K. Anderson (2017a), *Annual Database of National Beverage Consumption Volumes and Expenditures, 1950 to 2015*, Wine Economics Research Centre, University of Adelaide, July. www.adelaide.edu.au/wine-econ/databases/alcohol-consumption
- Holmes, A.J. and K. Anderson (2017a), "Convergence in National Alcohol Consumption Patterns: New Global Indicators", *Journal of Wine Economics* 12(2): 117-48.
- Horticulture Australia (2024), *Horticulture Statistics: Fruits*, at <https://www.horticulture.com.au>
- Industry Commission (1995), *Winegrape and Wine Industry in Australia*, Industry Commission (now Productivity Commission) Research Report dated 30 June but not released until 2 November. <https://www.pc.gov.au/research/supporting/wine-grape>
- Kahneman, D. (2011), *Thinking, Fast and Slow*, London: Penguin.
- Parker, R.M. (2005), *The World's Greatest Wine Estates: A Modern Perspective*, New York: Simon and Schuster.
- Smart R. (2023), "The Implosion: Did the Australian Wine Industry Begin to Implode in 1996?" *WBM Australia's Wine Business Magazine*, pp. 60-63, November-December.
- Smart R. (2024), "Wine Region Recovery After the Surplus", *Wine and Viticulture Journal* 39(3): 13-17, Winter.
- Treasury (2009), *Review of Non-Forestry Managed Investment Schemes*, Canberra: The Treasury, December.
- Unwin, T. (1991), *Wine and the Vine: An Historical Geography of Viticulture and the Wine Trade*, London and New York: Routledge.
- VWSWG (2024), *Viticulture and Wine Sector Working Group: Final Report*, Canberra: Department of Agriculture, Fisheries and Forestry, July. <https://www.agriculture.gov.au/sites/default/files/documents/viticulture-wine-sector-working-group-report.pdf>
- WGGA (2009), "Submission to the Parliamentary Inquiry into Agribusiness Managed Investment Schemes," Adelaide: Wine Grape Growers Australia, June.

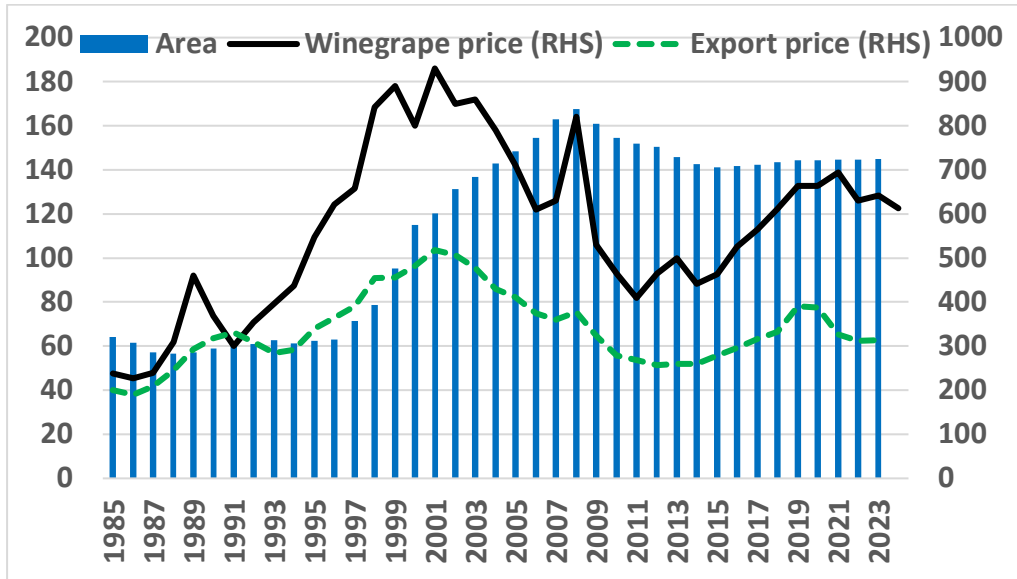
Winetitles (2024 and earlier), *The Australian and New Zealand Wine Industry Directory*,
Adelaide: Winetitles Media.

Figure 1: Four *Strategy 2025* target indicators and pathways toward them, 1996 to 2023 (1996 = 100 for each indicator, 2025* is the target; ignore the lines joining 2023 and 2025*)



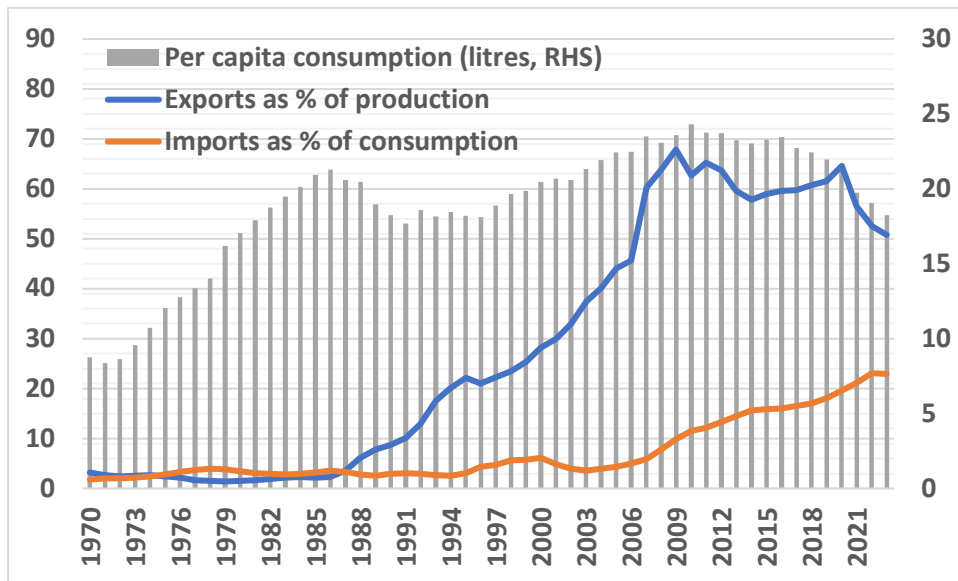
Source: Compiled from AWF (1996) and Anderson and Pinilla (2024).

Figure 2: Australia's vine bearing area, average winegrape price, and wine export price ('000 ha, A\$ per tonne, and A\$ per hectolitre)



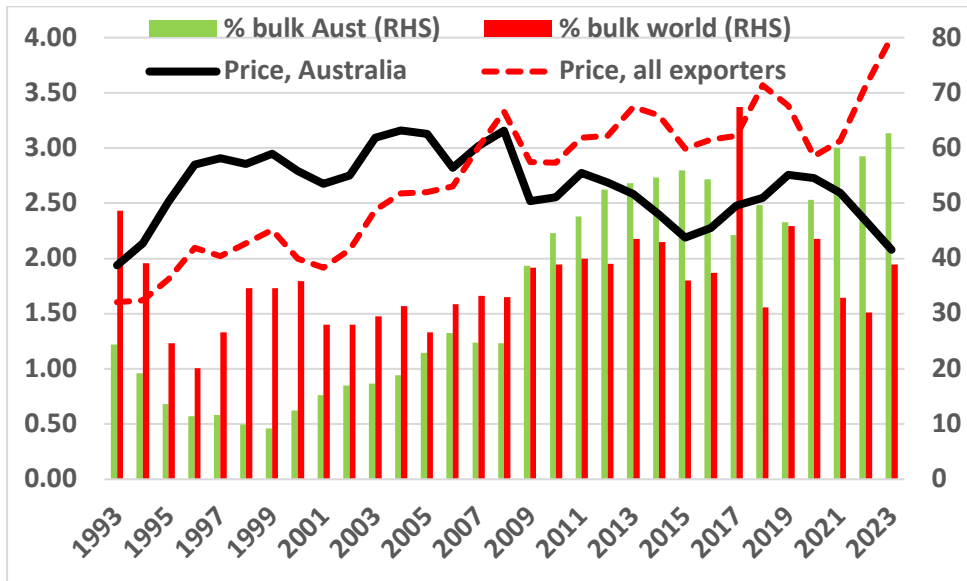
Source: Compiled from Anderson and Puga (2023) and Anderson and Pinilla (2024).

Figure 3: Exports as a % of wine production, imports as a % of wine consumption volume, and wine consumption per capita (litres), 1970 to 2023 (3-year moving average % to year shown)



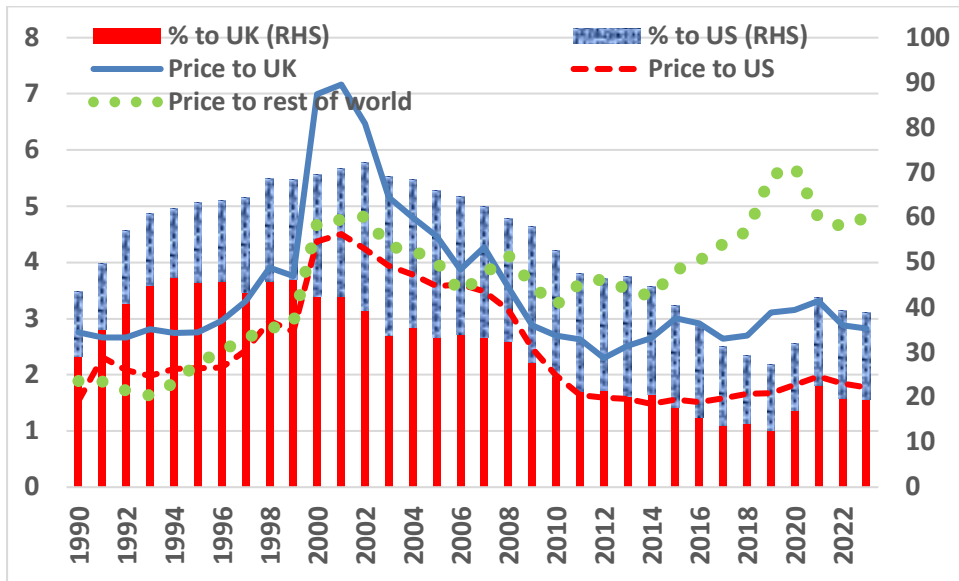
Source: Compiled from Anderson and Pinilla (2024).

Figure 4: Average wine export price (US\$/litre) and % of wine exported in bulk, Australia and all wine-exporting countries



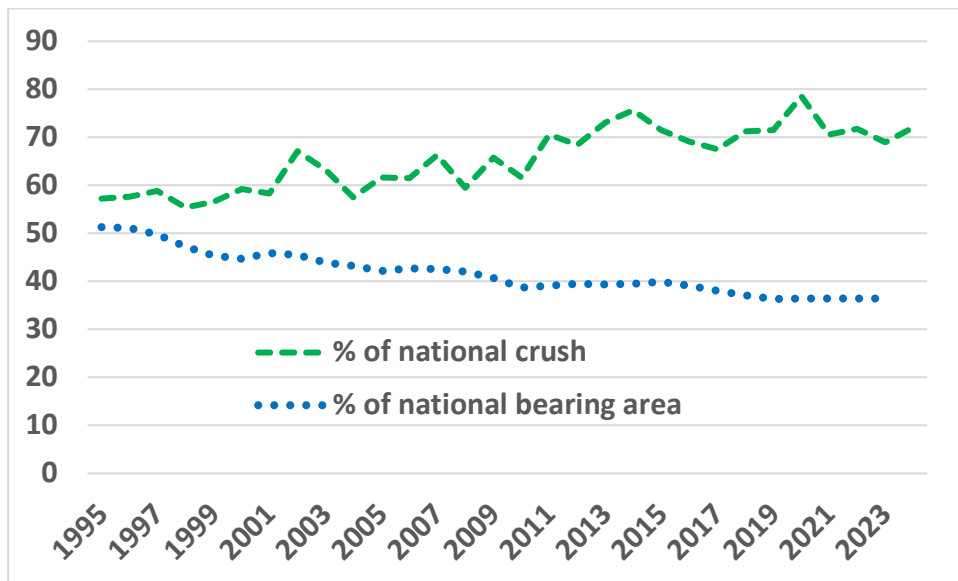
Source: Compiled by Anderson and Puga (2024) from UN COMTRADE.

Figure 5: Average export price and share of Australian wine to the UK, US and rest of world (A\$/litre and %)



Source: Compiled by Anderson and Puga (2024) from UN COMTRADE data.

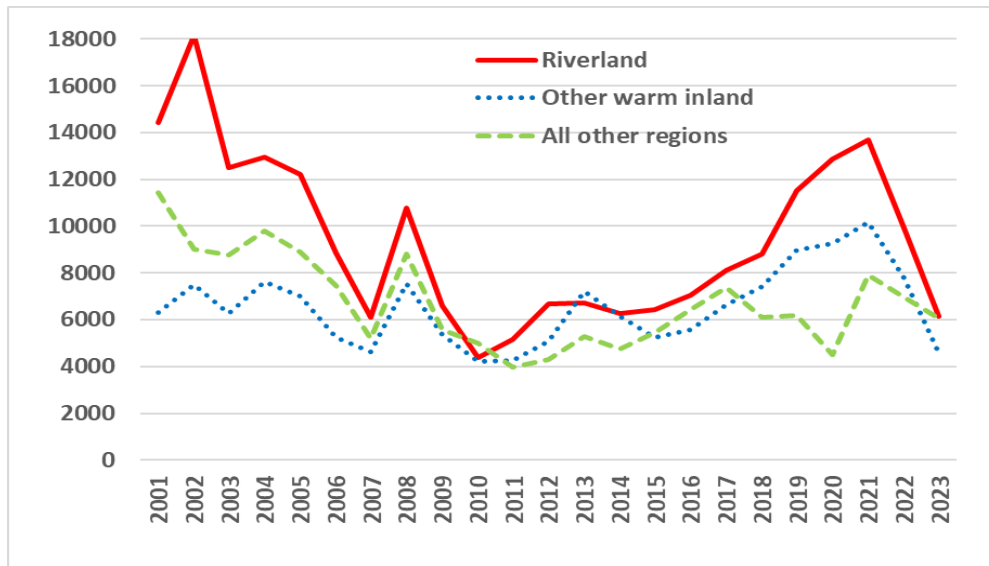
Figure 6: Shares of winegrape bearing area in and crush from Australia's warm inland regions^a (%)



^a South Australia's Riverland, Victoria's Murray Darling-Swan Hill region, and the Murray Darling-Swan Hill and Riverina regions of New South Wales.

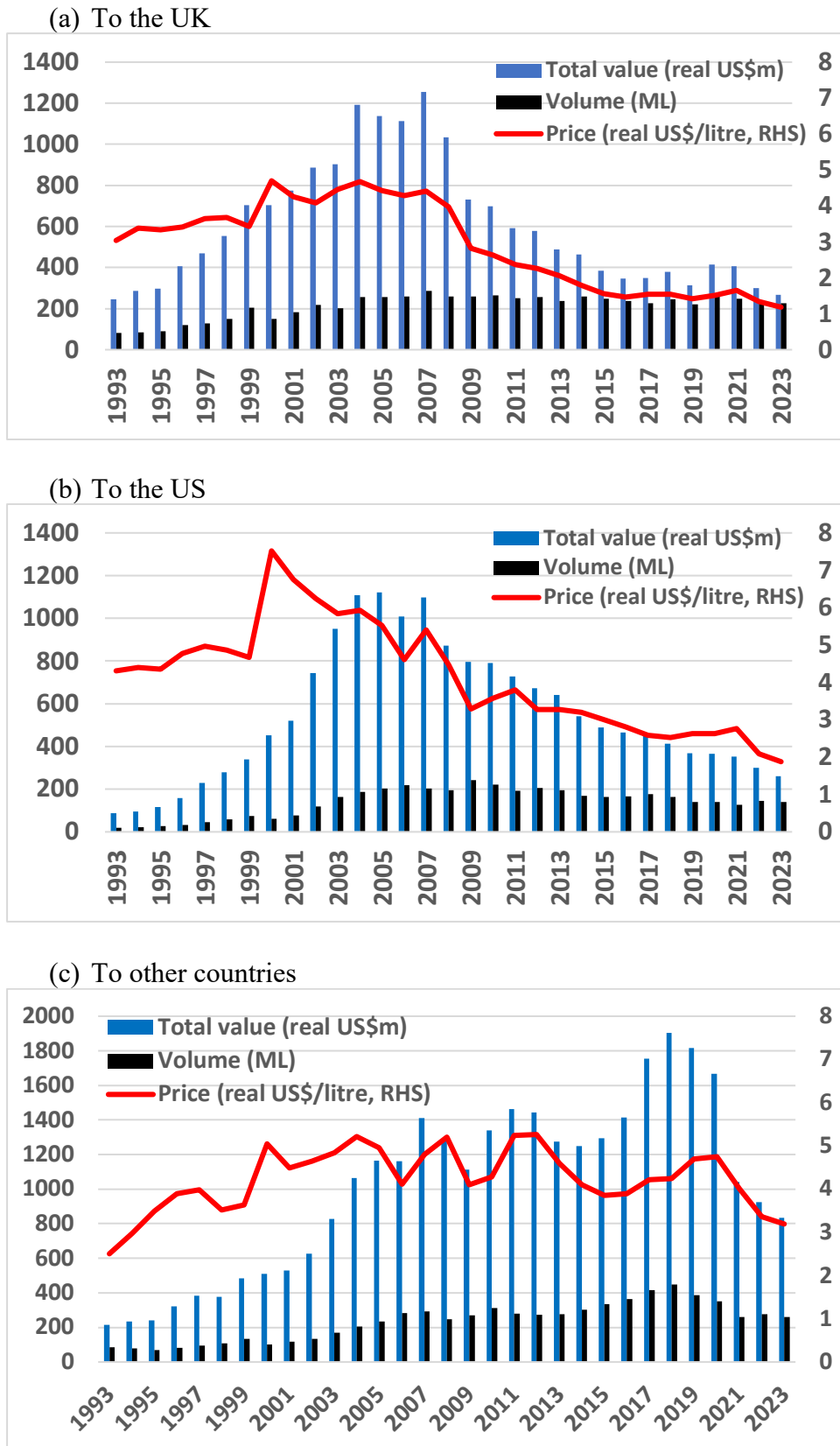
Source: Compiled by Anderson and Puga (2023) from Wine Australian data and, for pre-2001, from ABS (2001 and earlier).

Figure 7: Gross revenue per hectare of winegrapes in Australia's Riverland, other warm inland regions, and cooler regions (A\$)



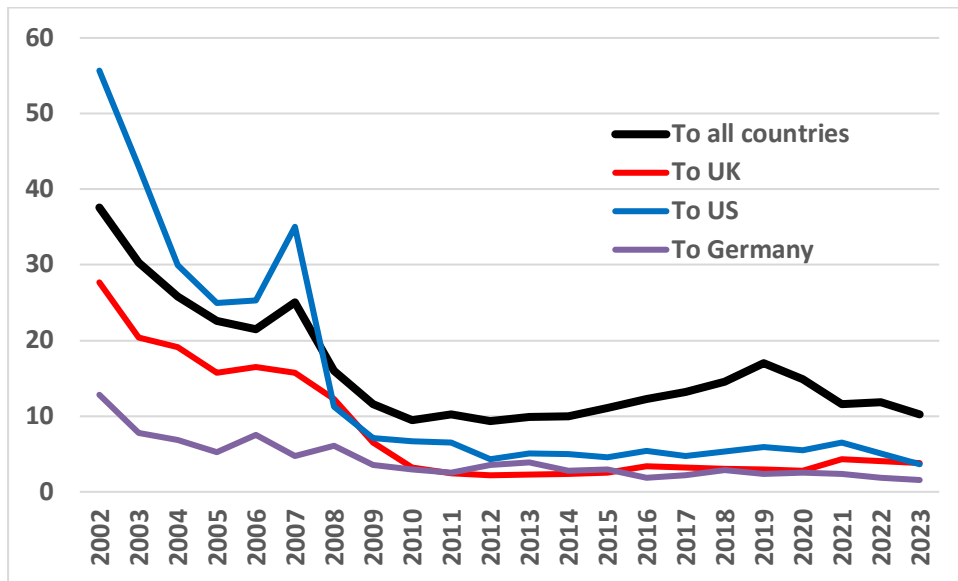
Source: Compiled by Anderson and Puga (2023) from Wine Australian data.

Figure 8: Real total value and average price of Australian wine exports to the UK, US and all other countries (US\$ million and US\$ per litre, both inflated to 2023 US dollars using the US CPI)



Source: Compiled by Anderson and Puga (2024) from UN COMTRADE data.

Figure 9: Shares in the volumes of Australian wine exports to the UK, US, Germany and all countries that are above A\$5/litre (%)



Source: Wine Australia.

Table1: Shares of export volume from cooler regions sold at less than \$5 per litre, by GI region (%)

	2001-05	2006-10	2011-15	2016-20
Adelaide Hills	0	2	6	3
Barossa	9	15	20	13
Clare Valley	2	6	13	11
Coonawarra	13	15	20	26
Langhorne Creek	11	37	37	51
Margaret River	4	13	15	13
McLaren Vale	7	15	24	13
Padthaway	14	45	56	62
Wrattonbully	3	18	23	27
Unweighted average	7	19	24	25

Source: Wine Australia.

Table 2: Average offer price, volume and value of bulk wine for sale, by GI region or Zone, 1 March 2024 (A\$/litre, ML and A\$ million)

	Average price (A\$/litre)	ML	A\$ million
<i>Warm inland regions/Zones:</i>			
Riverland	0.90	5	4
South Eastern Australia	0.73	56	41
South Australia	1.22	14	17
Victoria	1.54	3	4
Sub-total	0.85	77	66
<i>Cooler GI regions:</i>			
Barossa Valley	4.07	10	42
Clare Valley	3.19	5	14
Coonawarra	2.88	9	26
Langhorne Creek	2.30	6	14
Limestone Coast	2.07	8	16
McLaren Vale	3.37	5	18
Padthaway	2.08	2	4
Wrattonbully	2.26	3	7
Sub-total	2.95	48	141

Source: WyattMunk Winebrokers.