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Australia's viticultural trends: Insights from a new database

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Wine Economics Research Centre

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Australia’s viticultural trends: Insights from a new database

Kym Anderson^a and German Puga^b

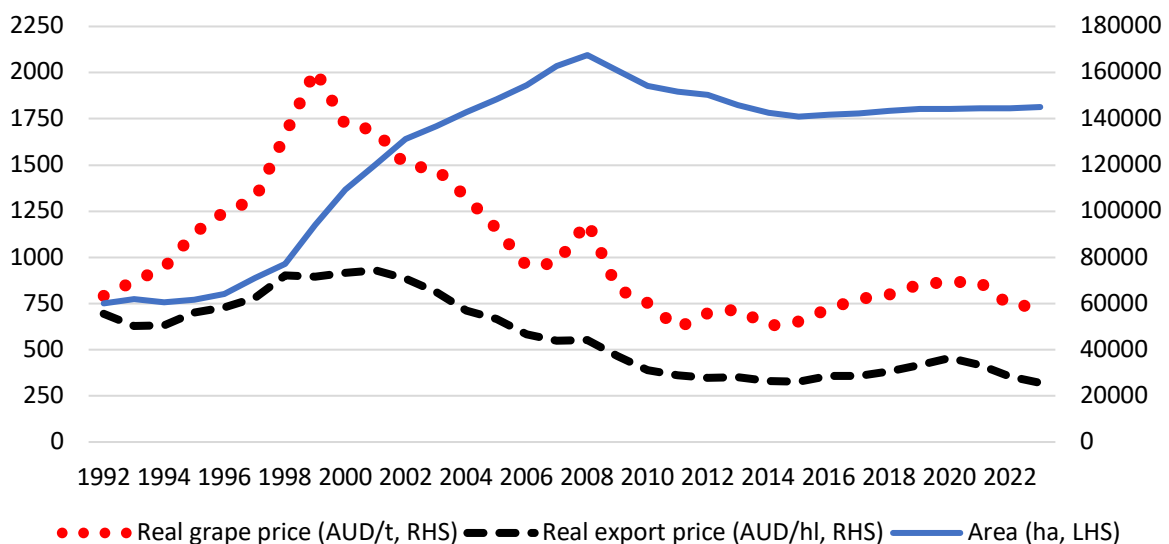
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This summarizes and updates an article originally published as Anderson and Puga (2023b).

The aim of this note is to summarise key insights from a recently compiled and updated annual database on Australia’s winegrape and wine production (Anderson and Puga, 2023a). This database, with its 189 tables, is freely available from the website of the University of Adelaide’s Wine Economics Research Centre.¹

The Australian wine industry has had four cycles and is currently in its fifth (Anderson, 2015). The current cycle started in the late 1980s and saw the nation’s winegrape bearing area soar in the 1990s, in what was a delayed reaction to rising winegrape prices (Figure 1). However, wineries struggled to expand export markets fast enough, and export prices began to fall, also because of a dramatic appreciation of the AUD in the 2000s thanks to rapid growth in mineral exports to China. That led to a belated and only modest decline in area from 2008 to 2015, before it plateaued as prices started to rise again. But in 2020, China imposed massive tariffs on imports of Australian wine and its market shrank (Anderson 2023), which lowered prices again – especially for reds.

Figure 1: Evolution of Australia’s winegrape bearing area and price and its wine export price, 1992 to 2023



Even though there are currently more than 180 winegrape varieties growing in Australia, the majority of the country’s surface is planted to a few key French varieties. Only nine varieties have an area larger than 1%: Syrah (30%), Cabernet Sauvignon (18%), Chardonnay (15%), Merlot (6%), Sauvignon Blanc and Pinot Noir (4% each), Pinot Gris and Sémillon (3% each), and Riesling (2%). Together those nine account for 86% of the Australian vineyard bearing area in 2023.

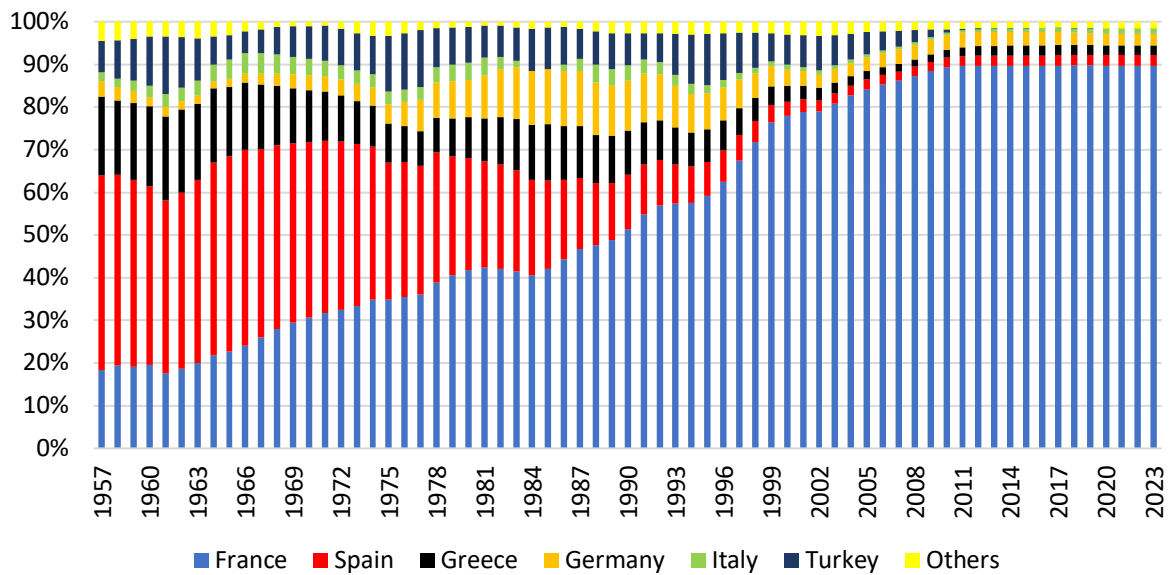
This concentration on French varieties has not always been the case (Figure 2). In the 1950s/early 1960s, the share originating from Spain was more than 40% while the French share was no more than that of Greece at just under 20%, with Turkey next at around 10%. But the share of some varieties such as Garnacha Tinta from Spain and Sultaniye from Turkey has shrunk hugely. At the same time, the share of some French varieties has increased so much that now more than 90% of the Australian winegrape area is planted to French varieties.

This degree of concentration is also evident when looking at the varietal concentration index (Puga and Anderson, 2023). In 2001, it was 12%, which means that if two vineyard blocks were randomly selected in Australia in 2001, there was a 12% chance of those two vineyard blocks having the same variety. By 2023, the varietal concentration index rose to 16%. That is, the mix of winegrape varieties has become one-third more concentrated over the past

¹ For a lengthier analysis and a detailed description of the assumptions behind this database, see Anderson and Puga (2023b).

two decades. Another index, known as the varietal similarity index, shows that over the same period the Australian mix of winegrape varieties has become more similar to that of the world as a whole (and to France).

Figure 2: Australia’s winegrape bearing area based on varieties’ country of origin, 1956 to 2023



Besides being concentrated on a few winegrape varieties, the Australian wine industry is also concentrated in a few regions. While there are more than 60 wine regions in Australia, often up to two-thirds of the wine is produced in just three major hot irrigated regions. With such a large share of winegrape production taking place in hot regions, only a bit more than one-third of the vineyard area has an optimal growing season temperature for producing high-quality wine – based on research by Jones (2006). By 2050, climate change projections suggest the share of the vineyard area with an optimal growing season temperature for producing high-quality wine may decrease to 10-15% if the area by region and variety does not change (Puga and Anderson, 2024).

In the future, one strategy for maintaining wine styles could be to plant varieties that do better in hotter climates. However, despite much media attention on alternative varieties, they represent only a tiny fraction of the Australian vineyard area (Anderson and Puga, 2024). Another strategy for maintaining wine styles could be to source grapes from regions with cooler climates, such as Tasmania. This region/state has higher winegrape prices and gross revenues per hectare than any other region in Australia, and it is the only region and state in which the gross revenue per hectare has been trending upwards in recent years. However, even though its area has trebled in the past two decades, it currently represents only 1% of Australia’s current winegrape bearing area.

References

- 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 e-book at www.adelaide.edu.au/wine-econ/databases.
- Anderson, K. (2023). “What’s Happened to the Wine Market in China?” *Journal of Wine Economics* 18(2): 173-183.
- Anderson, K. & Puga, G. (2023a). Database of Australian Winegrape Vine Area, Crush, Price and Per Hectare Volume and Value of Production, by Region and Variety, 1956 to 2023. Wine Economics Research Centre, University of Adelaide, December. Freely available Excel file at www.adelaide.edu.au/wine-econ/databases.
- Anderson, K. & Puga, G. (2023b). Two Decades of Grape Variety Trends in Australian Wine Regions. *Wine and Viticulture Journal* 38(2): 65-72. Freely available as a wine brief at www.adelaide.edu.au/wine-econ/publications.
- Anderson, K. & Puga, G. (2024). Which are Australia’s Emerging Winegrape Varieties? *Wine and Viticulture Journal* 39(2) (forthcoming). Freely available as a wine brief at www.adelaide.edu.au/wine-econ/publications.
- Jones, G.V. (2006). Climate and Terroir: Impacts of Climate Variability and Change on Wine. In *Fine Wine and Terroir: The Geoscience Perspective*, edited by R.W. Macqueen and L.D. Meinert, Geoscience Canada Reprint Series Number 9, Geological Association of Canada, St. John's, Newfoundland.
- Puga, G. & Anderson, K. (2023). Concentrations and Similarities across Countries in the Mix of Winegrape Cultivars. *American Journal of Enology and Viticulture* 74(1): 0740018.
- Puga, G. & Anderson, K. (2024). Climate Change and the Australian Mix of Winegrape Varieties. *Australian and New Zealand Grapegrower and Winemaker* 721: 28-32. Freely available as a wine brief at www.adelaide.edu.au/wine-econ/publications.