

# **Trends and Cycles in the Australian Wine Industry, 1850 to 2000**

**Robert Osmond and Kym Anderson**

**Centre for International Economic Studies, University of Adelaide**

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The authors welcome comments on how to improve the quantity and quality of the data and the way they have been summarized and interpreted. Please send feedback to:

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## Preface

This report is an early product of research begun in late 1997 at Adelaide's Centre for International Economic Studies aimed at improving our understanding of prospects for the Australian wine industry into the 21<sup>st</sup> century. The report's purpose is to bring a long historical perspective to the current export-oriented boom in the industry. A companion report, by Nicholas Berger, Kym Anderson and Randy Stringer, *Trends in the World Wine Market, 1961 to 1996*, provides comparative national statistics. And a CIES Seminar Paper, by Glyn Wittwer and Kym Anderson, is also being released in June 1998 on the implications of proposed tax reform in Australia for the Australian wine industry.

A much-abbreviated version of the present report formed part of a preliminary paper by G. Wittwer, K. Anderson and R. Osmond on 'Growth and Structural Change in the Australian Wine Industry,' presented at the 42<sup>nd</sup> Annual Conference of the Australian Agricultural and Resource Economics Society, University of New England, Armidale, 19-21 January 1998.

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## Executive Summary

During the past decade the land area in Australia devoted to grapevines has almost doubled and the real value of wine production has grown at more than 10 per cent per year. Nearly one-third of annual wine sales are now in export markets, compared with just 2 or 3 per cent in the decade to the mid-1980s when Australia was a net importer of wine. This is rightly being hailed as a remarkable success because the industry's current healthy state is a dramatic turnaround from the mid-1980s: as recently as 1985 the wine industry's prospects were considered so dire that the Federal Government funded a vine-pull compensation scheme to encourage grapegrowers to move to alternative crops.

This export-oriented boom is showing no signs of slowing down. In fact it has accelerated in the latter 1990s. Yet this is an industry with a long history of fluctuating fortunes, which raises the obvious question of whether/when it is to be followed by yet another crash, at least in winegrape prices if not in wine production and exports.

The wine industry has been very bullish about its future. Others, aware of the boom-bust cycles of the past, are sceptical or at least still need to be convinced that this time the expanded demand is here to stay long enough for those associated with the expansion to recoup a return on their investments.

What lessons can we learn from the industry's history? This first report from a new wine economics research project examines the industry's long-run trends and its four previous cycles around those trends since 1850. It shows also the structural changes towards and then away from fortified wines in the middle half of this century and, more recently, the swings from red to white and back to red table wines and from non-premium to premium production and consumption. It then looks more closely at the rapid developments of the past decade, the industry's fifth major boom. Details of the growth in prices of grapes and wine and their production volumes, and in wine sales domestically and abroad, are documented. Data are shown separately for premium red, premium white and non-premium types -- distinctions that turn out to be crucial in assessing the industry's future prospects. Projections to the turn of the century are then compared with the industry's targets for the year 2025.

The report finishes with some tentative conclusions as to the industry's prospects, pending the next stage of our research project. It suggests the past history is both sobering and encouraging for those currently involved or contemplating investing in the industry.

It is difficult not to be sobered by the past because each of the first four booms in the Australian wine industry finished with a plateau in vineyard area and winery output growth -- periods when returns to grapegrowers and often also winemakers were depressed for years because of the extent of new plantings during the boom. Nor is this phenomenon unique to Australia. On the contrary, it has periodically been the case in grape and wine markets elsewhere the world for at least two millenia. Surely Australia's current boom too will have to plateau eventually.

Yet the history summarized in this report is also encouraging because it shows the current boom to have features that differ from those of earlier booms. Those differences suggest the present boom may go on for longer than previous ones.

The first boom, from the mid-1850s, was almost exclusively driven by domestic demand growth following the gold-rush induced trebling in Australia's population in the 1850s. However, the wine produced from that excessive expansion was not able to be exported profitably, largely because of high duties on inter-colonial trade plus poor marketing and high transport costs in exporting to the Old World. Hence returns slumped quite quickly in that first cycle.

The second boom, from the 1880s, was due to a mixture of domestic and export demand growth, the latter involving better marketing and lower transport costs for what were mostly generic bulk (rather than winery bottled and branded) dry red wine sales to a relatively open British market. The Old World absorbed one-sixth of Australia's production early this century, before the first world war intervened.

The acreage boom induced by soldier settlement after World War I provided the basis for the next export boom, from the mid-1920s. That boom was helped by irrigation and land development subsidies, a fortified wine export subsidy, and a 50 per cent imperial tariff preference in the British market for fortified wines. The decline in domestic consumption, induced by the export subsidy and the Depression, added to wine exports in the 1930s -- which by then accounted for more than one-fifth of production. The subsequent removal of the export subsidy, and the huge hike in UK tariffs on fortified wine in the latter 1940s, caused a severe decline in export orientation. As well, the return to normal beer consumption after war-induced grain rationing kept down domestic wine sales growth.

The fourth boom, following two post-war decades of slow growth in the industry, was entirely domestic. It emerged as tastes became more European, as licencing and trade practice laws changed with income growth, as corporatization of wineries led to more-sophisticated domestic marketing and new innovations (including casks, or wine-in-a-box), and as Britain's wine import barriers rose again with its accession to the EEC. Initially domestic demand grew for red wine. Then the cask attracted a new

clientele of white wine drinkers, causing per capita consumption to more than treble during the fourth cycle.

How does the fifth and latest boom, which began in the late 1980s, differ from the earlier booms? One difference is that it is overwhelmingly export-oriented. This contrasts with the first and fourth booms at least which were overwhelmingly domestic. It also differs from the inter-war boom which took on exports more as a way of disposing of soldier-settlement induced surplus production than as a pre-planned growth strategy.

Secondly, both the current and the previous boom were mainly market-driven, which is not unlike the first two booms but contrasts markedly with the third (inter-war) boom: that third boom evaporated once government assistance measures were withdrawn. In the present boom the only form of assistance offered and hence able to be withdrawn is the tax incentive to expand plantings via the tax-reducing accelerated depreciation allowance for some vineyard construction costs.

Another major difference between now and the past is that the quality of wine output has improved vastly during the past decade. Moreover, for the first time, the industry is in a position to build brand, regional, and varietal images abroad to capitalize on those vast improvements in the quality of its grapes and wines. That image building has been partly generic, with the help of the Australian Wine Bureau's activities in Europe; but increasingly, and especially since the late 1980s, it is coming also from the promotional activities of individual corporations and their local representatives abroad as those firms have become ever-larger and more multinational via mergers and takeovers.

A fourth feature distinguishing the current situation is the health factor. An ever-wider appreciation of the desirability of moderate over heavy drinking, and of the possible health benefits of a moderate intake of red wine, are ensuring that the consumer trend towards spending on quality rather than quantity of wine (and on wine in preference to beer and spirits) will continue for the foreseeable future.

And fifth, Australian wines are still exceptionally good value for money in Northern Hemisphere markets, despite the real price increases of the 1990s. The recent depreciation of the Australian dollar will allow that to continue for a while longer. Should other countries lower their tariff and non-tariff barriers to imports, Australia will be well poised to expand sales there. And with nearly half of Australia's wine exports going to the United Kingdom and another fifth to North America, plenty of scope exists for geographic market diversification through greater penetration of other high-income and rapidly industrializing countries.

These are all reasons to be optimistic about Australia's long-term future as a successful exporter of premium wines. However, there are some causes for concern.

One cloud is the current financial crisis in East Asia. While Australian wine exporters are only very slightly exposed to East Asian markets, and are in a very advantageous position vis-a-vis other wine-exporting countries to penetrate them once those economies recover, that increased penetration will be delayed by the crisis. In so far as it also lowers income growth rates in other parts of the world, it will dampen demand growth elsewhere as well. Such a dampening of incomes outside the region is expected to be only slight, however. And even within the region, exports to Japan seem to be growing rapidly despite the economic slowdown there.

Another cause for concern with developments abroad is the rapid expansion in plantings of premium grape varieties in numerous other countries in the past few years. California reportedly has doubled its area of premium grapes in the past five years, Chile and South Africa have been expanding and upgrading also, and in both East and West Europe attention is being focused increasingly on replacing non-premium varieties with better-quality ones. Those trends, together with the continuing decline in (especially non-premium) wine consumption per capita in many traditional wine-drinking countries, will put some downward pressure on export prices of Australian wine. They in turn will be reflected in declines in winegrape prices.

The prospect for such a downturn in grape prices is likely to be reinforced by another trend also. With both Europe and the New World seeking to expand their output of high-quality wine, individuals and firms with expertise in the Australian industry are being sought after as consultants or joint venture partners. This is a part of the globalization of the world wine industry that the international transport, information, and communications cost revolutions have generated. An important consequence is that Australia's grape producers will face increasing international competition because the wine industry's technological innovations and marketing skills are being transferred rapidly to other producing regions. Thus not only are wineries more easily able to import wine for blending with local product (as is happening in making cask wine, for example), but as well they are able to take some of their capital and skills in wine making and marketing to other countries. These possibilities will help to keep profits of Australian-based multinational wine companies higher than they otherwise would be, but eventually will tend to put more downward pressure on the currently very high prices for winegrapes in Australia.

Some uncertainties at home also could affect the industry's future. Changes in the tax system are imminent, and could result in an increase in wine consumer taxes. That would push more Australian wine into international markets. It could also see a switch from an ad valorem to a specific or volumetric means of taxation. The latter would harm non-premium producers relative to premium producers, especially since Australia is not very competitive internationally in the non-premium market

and so there is less of an option of exporting a tax-induced excess supply of cask-quality wine. There is also the possibility that the accelerated depreciation provision in the income tax law that has encouraged vineyard construction since 1993 might be withdrawn – although that would directly affect prospective investors rather than current producers. Water pricing reforms also are under active consideration, which will raise irrigation costs. However, since vines use relatively little irrigation water, grapegrowers may benefit relative to other agricultural producers from higher pricing of water.

In short, the wine industry's future looks very bright for the next few years at least. Beyond that, grapegrowers' returns will continue at high levels only if demand for Australian wines continues to grow more rapidly than supply. That each of the booms in vineyard area in the past has been followed by a long plateau and a large decline in grape prices is sobering. Yet the reasons as to why this present boom may be sustained for a longer than usual period are encouraging new investments to continue at a high level. A more precise assessment of export prospects requires better information on recent and intended plantings of premium grapes around the world, on the changing nature of consumer preferences in different parts of the globe, and on the extent to which government domestic taxes and subsidies and trade policies might change. With that information it would be possible to develop and use forward-looking economic simulation models for obtaining projections into the future. Of particular interest in such projections exercises would be the impact on returns to grapegrowers relative to winemakers: the former have enjoyed a rising share of the benefits of the current boom so far, but for how much longer? Should international prices of Australian wines fall, winemakers will inevitably pass the decline back to grapegrowers. Since the grapegrowers' share of the pre-tax wholesale price of wine is currently at the top end of the usual 20-30 per cent range, the proportional decline in their returns could be considerable, perhaps as much as three times as large as any decline in wholesale wine prices. Potential investors in vineyards need to be aware of that risk, and to seek advice on the likely timing and magnitude of any downturn in winegrape prices.





# TRENDS AND CYCLES IN THE AUSTRALIAN WINE INDUSTRY, 1850 TO 2000

Robert Osmond and Kym Anderson

“The production of wine in Australia has not increased as rapidly as the suitability of soil and climate would appear to warrant. The cause of this is probably twofold ... Australians are not a wine-drinking people and consequently do not provide a local market for the product, and ... the new and comparatively unknown wines of Australia find it difficult to establish a footing in the markets of the old world, owing to the competition of well-known brands. Active steps are being taken in various ways to bring the Australian wines under notice, and it may be confidently expected that when their qualities are duly recognised the wine production of this country will exhibit a rapid development.”

The above statement is a quote from page 279 of the *Yearbook of Australia 1922*. That potential had been recognised for a long time, for almost the same statement appears in the country's first *Yearbook* published in 1908. And thirty years earlier it was claimed that “many of the leading wine merchants of London and other important commercial centres admit that Australia promises to become a powerful rival in the world's markets with the old-established vineyards of Europe” (Irvine 1892, p. 6).<sup>1</sup> Clearly the Australian wine industry has had a long gestation period. Until the 1970s domestic consumption had grown only very slowly. And while exports have boomed several times in the past, in each case those booms have plateaued and the expanded acreage has meant grapegrowers went back to receiving low returns. Indeed in the latter 1970s/early 1980s exports were so low that Australia became a net importer of wine. And as recently as 1985 the Federal Government introduced a vine-pull compensation scheme to encourage grapegrowers to move to alternative crops, so dire were the wine industry's prospects viewed at the time.

Yet like a phoenix, the industry has risen again and grown with renewed vigour during the past decade. The real value of both winegrape and wine production has grown at more than 10 per cent per annum over

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<sup>1</sup> The admission was not yet forthcoming from the French, however. At the international wine competition of the Vienna Exhibition of 1873, for example, the French judges, on hearing of the identity of the wines they had judged blind, are reported to have resigned when they learnt a prize-winning shiraz was not French but from Bendigo, Victoria (Beeston 1994, p. 62).

the past dozen years. For the first time more than 30 per cent of annual wine sales are now in export markets, up from just 2 or 3 per cent in the mid-1980s.

The history of fluctuating fortunes raises the obvious question of whether the export-oriented wine boom of the 1990s is to be followed by yet another crash, at least in winegrape prices if not in wine production and exports. The wine industry is very bullish, having in 1995 set itself targets of exporting \$1 billion worth of wine by the turn of the century (up from \$470 million in 1995-96 and less than \$100 million a decade ago) and of trebling the real value of wine production within 30 years (AWF 1995). Others, aware of the boom-bust cycles of the past, are sceptical or at least still need to be convinced that this time the expanded demand is here to stay long enough for growers to recoup a return from what looks set to be a doubling in Australia's grapevine area during the 1990s.

What accounts for this dramatic export-oriented growth? How are the returns from that growth being shared between grapegrowers and winemakers? At what pace can we expect the industry to keep growing over the next decade or so and who will be the main beneficiaries (and losers, if any)? Will this boom be followed by yet another crash and if so when and to what extent, bearing in mind the rapid expansion in winegrape plantings in other parts of the world as well as Australia during the 1990s? These are important questions not only for present grapegrowers and winemakers but also for those considering investing in one or more parts of the industry, including consumers with private cellars. They are also questions being asked by other primary producers and processors wishing to learn how to achieve more value-added growth through exporting.

This first report from our new wine research project does not provide answers to all those questions, but it does provide the historical background information necessary for addressing them. Specifically, it examines the industry's long-run trends and its cycles around those trends. It shows also the structural changes towards and then away from fortified wines in the middle half of this century and, more recently, the swings from red to white and back to red table wines and from non-premium to premium production and consumption. It then looks more closely at the rapid developments of the past decade, showing growth in prices of grapes and wine and their production volumes, and in wine sales domestically and abroad. Since it takes two to three years before newly planted vines produce a significant crop, it is also possible to project forward to the turn of the century with reasonable precision. Such projections are compared with the mid-1990s and with the industry's targets for the year 2025. Recent and projected data are shown separately for premium red, premium white and non-premium

types -- distinctions that turn out to be crucial in assessing the industry's future prospects.<sup>2</sup>

The report finishes with some tentative conclusions as to the industry's prospects, pending the next stage of our research project which involves using an economy-wide model to decompose the past decade's growth into its constituent parts and to project changes to the end of the decade and beyond. Such projections necessarily depend on numerous assumptions, however. Two critical ones will be developments in the export demand for Australian wines, and changes in the tax regime and its impact on domestic and export wine sales. Both are subjects of on-going research within our project. Together with the expansion in winegrape supplies, they will be key determinants of changes in the returns to winemakers and grapegrowers, both in real terms and relative to each other.

### ***Growth and structural changes since 1788: a brief overview***<sup>3</sup>

Before examining the details, an overview of trends and cycles in the Australian wine industry can be quickly grasped from Figures 1 to 4 and Table 1. While it is difficult to allocate a precise year to the start or finish of each cycle, Figures 1 and 2 nonetheless show five distinct cycles around the long-run upward trend in grapevine acreage. The absolute size of each of the five booms is best seen from Figure 1a, while their relative magnitude is discernible from the log-linear scaling of Figure 1b. Certainly the current boom in plantings is the biggest of the five by far in absolute terms, but in proportional terms it is only moderate by Australian historical standards. Wine production of course fluctuates more than acreage because of seasonal factors and the changes over time in the relative profitability of directing multipurpose grapes to wineries versus to drying. That makes it a bit less easy to see the cycles around the sharp upward trend in the twentieth century annual production data shown in Figure 2, but they are more discernible in Figure 3 which shows three-year averages on a log-linear scale.

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<sup>2</sup> We adopt the industry's definitions. Premium red grape varieties are considered to be Cabernet Franc, Cabernet Sauvignon, Malbec, Merlot, Pinot Noir, Ruby Cabernet, and Shiraz. Premium white grape varieties are Chardonnay, Chenin Blanc, Colombard, Muscadelle, Riesling, Sauvignon Blanc, Semillon, Traminer, and Verdelho. Premium wines are defined as those in bottles of no more than one litre. These definitions are necessarily somewhat arbitrary and the grape definitions do not match exactly the wine definitions, but are nonetheless found to be very useful.

<sup>3</sup> Excellent and very readable histories of the Australian wine industry can be found in Beeston (1994), Halliday (1994) and, for prior to 1950, Laffer (1949). Aspects of the history of South Australia's industry during the nineteenth century are recorded in Bell (1993, 1994). Unwin (1991) places Australia's history in global perspective in his superb history of the world wine industry stretching back well before Christ.

As for the export orientation of those booms, Figure 4 shows that the first one achieved almost nothing in terms of the industry becoming more outward-focused; the second one clearly was associated with making the industry much more export-oriented, even though the degree of export orientation halved in the latter half of that cycle to the early 1920s; the third boom took the industry to even greater export dependence, followed by an even greater reversal in the 1940s; and the fourth boom, in the late 1960s/early 1970s, followed a long period of slow post-war growth and was entirely driven by domestic demand (and in the subsequent plateau to the mid-1980s Australia even became a net importer of wine briefly). In stark contrast to the fourth boom, the fifth and current boom is very heavily export-oriented.

With this overview in mind, we now turn to examine in some detail each of the previous four cycles which then provides a helpful background for examining the distinguishing features of the current boom and their implications for its longevity.

### ***Small beginnings: the period to the early 1850s***

Vines were planted immediately upon white settlement of the country in 1788, but the wines produced from them were mostly a small sideline, primarily for household use rather than commercial sale. Sixty-five years later the Australian colonies had barely 600 hectares of grapes. Only a portion of those grapes was used for making wine, the rest being for table grapes and dried vine fruit. Annual wine production (including for distillation) was well under half a million litres up to the early 1850s.

### ***The first cycle: 1854 to 1881***

The gold rush caused Australia's white population to treble in the 1850s, raising substantially the domestic demand for alcoholic beverages including wine. Labour was short initially as men went off to the goldfields, but by the mid-1850s the area of grapevines had begun to increase rapidly and by 1870 it had expanded ten-fold (Tables 1 and 2). The consequent growth in wine supplies outstripped the growth in domestic demand in each colony, so export outlets were sought. Inter-colony trade was one option. However, transport costs were high, and each colony also sought to protect its local producers by imposing high import tariffs. In 1858 the duties on wine coming into South Australia, Victoria and New South Wales were already quite high at 1/-, 2/- and 3/- per gallon, respectively, but by 1876 they had been raised to the virtually prohibitive levels of 3/-, 4/- and 4/- per gallon (almost 9 cents per litre) -- at a time when the local wholesale price averaged well under 2/- (Bell 1993, Table 2).

Fortunately, British import duties and ocean shipping costs began to fall in this period. Specifically, Britain in 1860 abolished the import tariff

preference for South African wine (which had been taxed at half the rate of other wines), and by 1862 had lowered the tariff on all wine with less than 26 per cent proof spirit to 1/- instead of 5/9 per gallon (Irwin 1991, p.328). That made the dry wine duty only two-fifths that for the more-alcoholic fortified wines from Portugal and Spain -- having been nearly double the duty on fortifieds for most of the previous one hundred and sixty years (Kelly 1867, p. 6). While the abolition of South Africa's tariff preference caused British imports of Cape wine to plummet, the general cuts in dry wine tariffs, together with the creation of off-licence retailing (thanks to legislative changes in 1861), allowed Australia's exports to Britain to quadruple over the 1860s and double again by the mid-1870s.<sup>4</sup> This, however, was from a very low level first established in the mid-1850s, and throughout the 1860s and 1870s Australia's modest wine exports amounted to less than 3 per cent of its production (Figure 4 and Table 3).

Exports were inhibited not only because the wine produced was generally of extremely low quality (mostly dry red shipped bulk in hogsheads only weeks after the grapes had been crushed), but also because up until then very little had been invested in securing quality packaging, marketing and distribution arrangements in Britain (Bell 1994; Irvine 1892). Meanwhile, from the late 1860s producers suffered very low returns as a consequence of the rapid supply expansion outstripping demand growth. Kelly (1867, p. 1) opened his book by claiming that no industry in South Australia was as depressed as wine at that time. So poor were returns that the area of grapevines fell 10 per cent nationally and almost 30 per cent in South Australia during the 1870s (Table 2).

The poor export performance to the late 1870s was not without some highlights though. An important foundation for the future was the establishment in Britain of two firms distributing and promoting Australia's better wines: Auld and Burton's Australian (later Emu) Wine Co. from 1862 and P.B. Burgoyne and Co. from 1872. Those firms ensured the best of Australia's wines were included in European wine competitions, and to great effect. After the International Exhibition in Vienna in 1873, the editorial of the *Morning Post* of 8 June 1874 proclaimed:

"Australia promises ere long to become as celebrated for its wines as it is already for its wool and gold. ... Australia carried off the only Diploma of Honour awarded at the Vienna Exhibition for wines in competition with wines of all other countries, and took a larger percentage of the wine prizes generally at that Exhibition in proportion

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<sup>4</sup> Britain's annual imports of Cape wine fell from 3.4 to 0.2 million litres between 1857-59 and 1867-69 while its imports from Australia quadrupled, from 0.07 to 0.28 million litres. Both suppliers were, however, dwarfed by France, Portugal and Spain, whose combined imports into Britain amounted to 67 million litres p.a. during 1867-69. The volume of French imports also quadrupled over the 1860s because of the same tariff changes that favoured Australia (Laffer 1949, pages 118 and 123). For further details of the wine trade as it relates to Britain at that time, including the important role of the new off-licence retailing in expanding hugely the accessibility of wine to household consumers, see Briggs (1984) and Francis (1972).

to the number of its entries than any of its rivals. ... We cannot do better than quote the official report made in March last to the Commissioners of Her Majesty's Customs: 'The Australian wines are wonderfully advanced in improvement of quality and area of production since the Exhibition of 1862, while the scope for further increase is ... almost unlimited: they have generally a full, rich, vigorous character and quality. Some few are especially fine in all that constitutes a high-class wine, and will bear comparison with the best European growths, while the average of the remainder, compared with the bulk of Continental wines, omitting the best, is higher in quality, strength and body, as also in character and flavour.' " (quoted from Laffer 1949, pp.69-70).

Similar accolades (along with some critical reports) flowed from the International Exhibition of 1882, which happened to be in Bordeaux. This recognition provided some hope for the future, and that export future was not long in coming.

### ***The second cycle: 1881 to 1915***

The successes in International Exhibitions, together with the prospect of Australian Federation by the turn of the century which would see the removal of the high inter-colonial trade restrictions, encouraged growers to expand the area under winegrapes substantially. True, there were phylloxera outbreaks in Geelong in 1875 and later in Bendigo and elsewhere, but the Victorian Government responded with subsidies to remove diseased plants followed by subsidies to replant with resistant stocks. During the 1880s and early 1890s, the vineyard area and production of wine grew at about 10 and 7.5 per cent per year, respectively (Table 1).

Close behind this vineyard expansion were an expansion of winery capacity and improvements in wine-making technology. Given the heavy capital intensity of quality winemaking, this was associated with a concentration of winery ownership across Australia -- particularly by the three big family dynasties in South Australia at the time (Hardy, Penfold and Seppelt). That consolidation in winery ownership no doubt contributed to the industry's success in exporting as the new century and Federation approached.

The rapid growth in wine production and exports was such that by the turn of the century production was three times its 1880 level. Moreover, one-sixth of the newly federated country's wine production was being exported -- notwithstanding the considerable difficulties still associated with exporting from Australia at that time (Irvine 1892). Australia's export success was helped partly by the reduced competition from France following the arrival and spread of phylloxera and mildew in Europe in the 1870s and 1880s (Irwin 1991, pp. 284-96).

That first export boom, largely involving bulk full-bodied reds, was sustained for two more decades after the initial buildup from 1885 to 1895, before being interrupted by the First World War (Figure 4 and Table 3). While strong prejudices against New World wine remained in many quarters, a firm reputation for Australian dry wines had been established in Europe in the generic sense at least, even though varietal, regional and winery brand labelling was still absent (and would be until the 1950s).

Two key domestic contributors to the industry's second expansion were therefore Federation, which expanded aggregate domestic demand for wine by disallowing inter-state restrictions on trade, and winery modernization and ownership concentration across Australia. But the three pre-conditions that made the export take-off possible were the removal by Britain in 1860 of tariff preferences for South African wine and the subsequent lowering in 1862 of its tariff on dry table wines from 5/9 to 1/- per gallon, the legislation in 1861 that allowed off-licence retailing in Britain, and the establishment of firms in Britain specializing in the importation, distribution, and promotion (including in prestigious and well-publicised international wine shows) of Australian wines.<sup>5</sup>

### ***The third cycle: 1915-45***

Towards the end of and following World War I there was a rapid vine area expansion (Figure 1). This was encouraged by the subsidized settlement on farms of ex-servicemen, particularly in the newly developed Murrumbidgee Irrigation Area of NSW and along the Murray River (see Davidson 1969, Ch. 4). Annual output of wine more than doubled in the decade to 1925, leading to a glut especially of Dorradillo grapes whose price fell by two-thirds in 1924. This was clearly a case of excessive expansion fueled by government assistance with land development and water infrastructure. Having contributed to the over-supply problem, the Australian Government decided to assist producers in the newly planted areas by offering an export subsidy on wines with at least 34 per cent proof spirit (i.e., fortified wines, for which the non-premium Dorradillo variety was relatively well suited). The Wine Export Bounty Act, passed in 1924, provided the equivalent of 6 cents per litre plus excise duty drawback on the fortifying spirit making a total of 8.8 cents per litre -- at a time when the average unit value of Australia's wine exports was only 9.2 cents per litre (Laffer 1949, pgs. 78 and 134). This massive export subsidy was expected to make Australia better able to compete with much-closer Portugal and Spain in the British market for sweet fortified wines.

Since an export subsidy is the equivalent of a production subsidy and a domestic consumption tax, this dampened domestic fortified wine sales

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<sup>5</sup> Ocean shipping costs and travel times were falling dramatically over this period too, but that plus the introduction of refrigeration would have favoured exports of Australian bulk commodities such as wool, wheat and meat more than exports of its wine.



and dry wine production at the same time as boosting production and exports of fortified wines (and more so for lower-valued grapes and fortified wines, since the export bounty was a specific rather than an *ad valorem* duty).<sup>6</sup> Figure 5 shows that Australia's table wine production (the gap between the upper two lines) gradually diminished over the inter-war period, reaching close to zero in the late 1930s. Production of beer rose rapidly in the 1930s (Figure 6), presumably as a cheap substitute for domestic consumers in the wake of the diversion of grapes to the production of fortified wine for export.

As if the fortified wine export subsidy was not enough good news for grapegrowers at a time of surpluses and low prices, in its June 1925 budget the British Government introduced, by way of thanks for war contributions, a tariff preference for wines from the Empire. Thus Australian table wines faced a tariff of 2/- and its fortified wines 4/- per gallon, compared with 3/- (raised to 4/- at the Ottawa Conference in 1932) and 8/-, respectively, for wines imported by Britain from Europe.

Together these initiatives gave a considerable boost to Australia's depressed producers of lower-valued winegrapes and fortified wines. They also encouraged wine importers in Britain to expand purchases ahead of sales, in the expectation of making quick profits. Furthermore, the Australian Government in 1927 gave six months notice that it was going to reduce the export subsidy by a quarter. Hence it is not surprising that there was a big surge and then temporary downturn in exports in the latter 1920s before they levelled out at about 16 million litres per year for the 1930s (Table 3). In order to qualify for the higher bounty, the wines shipped in 1927 had not been given time to mature. That, together with poor storage treatment in Britain, ensured they were of low quality by the time they were sold. This meant they not only fetched a low price but also created a bad reputation for Australia as a new supplier of fortified wine.

In response, the Australian Government established in 1929 the Wine Overseas Marketing Board (later known simply as the Australian Wine Board). Like many marketing boards at the time, it tried to set a minimum price for export wine during 1930-36, but had to abandon it as the market price was barely half the set price.

With returns to winemakers falling from the late 1920s, they wanted to reduce the prices they paid for grapes by 25 per cent. In response, the S.A. Grapegrowers Cooperative was established as a competing winemaker, but it did little to stem the erosion in returns. In 1936 a vine-pull scheme

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<sup>6</sup> The export subsidy had been partly a response to a large hike in what until then had been a very small excise tax on fortifying spirit. That excise tax rate was raised again (almost doubled) in 1930. Lobbying from the industry caused the Government to put the boost in revenue from that second increase into a Wine Export Encouragement Trust Account, which largely financed the export bounty until its abandonment in 1947. In the meantime, the rate of the bounty had been lowered gradually by a total of two-thirds but also the excise tax on fortified wine had been cut by two-fifths in the turmoil of Government responses to the 1930s Depression (Laffer 1949, pp. 78-79).

sponsored by the South Australian Government saw two-thirds of Coonawarra vines uprooted. Meanwhile, in Victoria's Yarra Valley farmers began turning to dairying and in the Hunter Valley of New South Wales the acreage of vines was eventually halved. Not surprisingly, the total area of vines in Australia did not increase for many years (Figure 1). And it was five decades before the annual level of wine exports achieved in the late 1930s (artificially boosted to build stocks in Britain for the foreshadowed war) was again reached.

In short, the wine industry boomed in the early part of the interwar period in terms of acreage and volume, but those enlarged supplies depressed prices and rewards to producers even before the Depression of the early 1930s. The share of production exported rose, but more as a means of taking advantage of Australian and British trade policies to get rid of surplus low-quality grapes rather than as a concerted strategy to create a permanent market. The three key causes of the boom in volume were all government-induced: (1) the subsidized settlement of returned ex-servicemen on farms particularly in the newly expanding irrigation areas where low-priced water was made available largely at public expense, (2) the provision after 1924 of a huge export subsidy for fortified wines, and (3) the halving of tariffs in Britain for wines imported from the British Empire.<sup>7</sup>

The export subsidy was a mixed blessing for at least three reasons: confining it to low-quality fortified wines probably undermined the growing British and continental European interest in Australian dry table wines that had been slowly building up over the previous few decades; making it a specific rather than *ad valorem* duty dampened the incentive to produce high-quality wines; and giving six months notice of the intention to reduce the subsidy in late 1927 encouraged shipments of immature wines that could not be stored well in Britain and so damaged further Australia's reputation as a reliable supplier of quality wines.<sup>8</sup>

### ***Post-war slow growth to the mid-1960s***

Following World War II consumers in the United Kingdom moved away from wine once war-time rationing of grain used in beer production was lifted. Partly this was because of preference changes, but again policies gave a helping hand. Britain raised its tariff on fortified wines five-fold in 1947 and kept it very high until the end of the 1950s (when it was lowered but was still double the inter-war rate). In Australia, the wine export

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<sup>7</sup> Together these changes meant Australia exported more wine to Britain in the 1926-40 period than did France (Laffer 1949, p. 125).

<sup>8</sup> Two other changes in the 1930s not mentioned because they were of minor immediate significance to the Australian industry were the signing of the preferential trade agreement between Canada and Australia in 1931 and the lifting of prohibition on alcohol sales in the United States in 1933.

subsidy was removed in 1947. Meanwhile, Australia's licensing laws (whereby, among other things, purchased meals involving wine had to be completed by 8pm!) continued to discourage wine relative to beer consumption. Thus by the latter 1950s, after war-induced grain rationing to breweries was removed, Figure 7 shows that beer again comprised three-quarters of all alcohol consumption in Australia compared with only one-seventh coming from wine (and most of that fortified). The wine share was to double over the next three decades, however, while beer's share was to fall by 25 per cent of an aggregate intake that has been declining since the latter 1970s (Figure 7). Within the wine group domestic sales of sweet fortified wine gradually gave way to (initially relatively sweet) table wine. Annual wine consumption took until the early 1960s to reach 6 litres per capita and the early 1970s to reach 9 litres. (Only after that did domestic consumption accelerate, rising to 20 litres per capita by the mid-1980s -- WFA (1996, p.12)). That rise in the 1960s was helped by brand advertising as well as by generic promotion domestically by the industry's Wine Bureau, and by the influx of wine-preferring immigrants from Southern Europe.

On the supply side, new irrigation schemes at Loxton in South Australia and Robinvale in Victoria did little to boost winegrape production, particularly since the wool boom and subsidies to other farm products such as wheat and milk appealed more to farmers. Meanwhile, import restrictions on manufactured goods boosted the import-competing industrial sector and thereby indirectly dampened export incentives, including for wine. Hence wine production grew only slowly – about 3 per cent per year -- during the two decades to the mid-1960s, and wine exports remained flat (Tables 1 and 2, and Figures 2-4).

### ***The fourth cycle: domestic demand changes, 1968 to 1987***

In the late 1960s Britain again hiked its tariff on fortified wines and decided to join the EEC, while the mining boom at home was reducing the competitiveness of Australia's non-mineral exporters. So for both demand and supply reasons, wine exports remained flat. So did grape and wine prices, particularly for reds. The low red prices attracted the attention of domestic consumers and a surge in domestic red wine sales from the mid-1960s stimulated an expansion in their production. This was followed by a sudden surge in domestic consumer interest in whites from the mid-1970s (which was followed in turn during the past decade by a renewed interest in reds), and has been accompanied by a steadily greater interest in premium wines generally.

The producer responses to these consumer demand changes are reflected in the deliveries of different grape varieties to wineries. Figure 8 and Table 7 show that premium dry table wine varieties were less than one-sixth of the crush up to the mid-1960s, whereas they represented more than

30 per cent by the mid-1970s and 40 per cent by the mid-1980s (and 60 per cent by the mid-1990s). Within the premium category, that table shows first the surge in reds in the decade to the mid-1970s, then the surge in whites at the expense of reds for a decade (followed by a resurgence of reds in the most recent decade). Details of the changes in the vineyard area that allowed these wine crush changes are summarized in Table 8.<sup>9</sup> Notice from Table 8 that the proportions of premium varieties in the area planted and grapes crushed increased noticeably in the decade to the mid-1980s, from 27.5 to 36 per cent and from 19 to 25 per cent, respectively (the lower shares for crush reflecting the generally lower yields per hectare for premium varieties). In the following decade that trend accelerated, and by the mid-1990s the proportions of premium varieties in the area planted and grapes crushed were 56 per cent and 45 per cent, more than double the mid-1970s proportions.

Clearly, tastes/fashions in wine can change quickly and unpredictable, making life difficult for grapegrowers slow to adapt to the changes in demand. The move from tea-drinking to coffee-drinking over the 1960s and 1970s is symbolic of the gradual adoption of Continental tastes in Australia, which included a move to wine drinking. Reforms of liquor licencing laws for restaurants and hotels helped, as did the Trade Practices Act of 1974 which made retail price fixing illegal and led to the emergence of liquor chain stores and wine discounting.

Meanwhile, numerous takeovers of old family wineries by large corporations added a sharper commercial edge to production, R&D and marketing (see Halliday 1994, pp. 29-30 for a chronology in the 1965-76 period). Among other things, that led to the commercial development of the 2- to 4-litre cask, or 'wine in a box', which added hugely to domestic demand at the lower end of the market: the volume of white wine sold in Australia in a plastic bag inside a box rose from 32 to 104 million litres per year between 1977-78 and 1982-83, in a period when total bottled red and white wine sales only rose from 68 to 84 million litres (Unwin 1991, p. 348). All that was not enough to make the industry internationally competitive, however, particularly with the Australian dollar sharply appreciating in the mid-1970s.

The move away from reds was partly triggered by a histamine health scare associated with red wine consumption (later shown to be a fiction). But also the reds produced to meet the domestic demand growth from the mid-1960s were of relatively low quality. That was partly because Grenache grapes, whose demand had fallen away with the decline in sales of ports, were being used in dry wine production. Meanwhile, a new production technique was able to bring out more fruit flavours and aromas in white wine, making it relatively more attractive particularly for newcomers to table

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<sup>9</sup> The ABS data in Table 8 are from the viticulture series, which differ slightly from those reported by ABS in its wine series (used in Tables 9 and 10), for reasons the ABS cannot fully explain (see pp. 61-63 of the 1997 issue of ABS Cat, No, 1329.0).

wine consumption. The subsequent new technique for producing champagne-type sparkling whites at low cost added to that in the 1980s, as did the fashion swing by wine consumers towards Chardonnay.

In short, the fourth boom was driven mostly by domestic developments, and occurred despite exporting becoming even more difficult (with the UK's hike in its import duty on fortified wines in 1969 and its subsequent entry into the EEC, and with the appreciation of the Australian dollar in the mid-1970s and again around 1980 thanks to OPEC-induced rises in the prices of Australia's exports of energy raw materials). Factors contributing to domestic demand growth were the 'Europeanization' of Australian consumer habits which, among other things, led to reform of liquor licencing laws, and the outlawing of price fixing which led to liquor chain stores and wine discounting. Supply factors which contributed to the boom were the takeover of family wineries by corporates that led to better marketing and innovations, and in particular the commercial development of wine-in-a-box. That is, neither of the surges in production in the two decades to the mid-1980s, of first red and then white table wines, was export-driven. On the contrary, exports had remained of minor and declining importance since World War II and even fell below wine imports in the late 1970s/early 1980s (Figure 4).

Then in the August 1984 budget the Australian Government introduced a 10 per cent wholesale sales tax on wine, and raised it to 20 per cent two years later (on top of which there is a 15 per cent tax levied until recently at the State level but now collected by the Commonwealth and passed back to the states). That plus the perceived over-supply situation especially in reds in the mid-1980s meant the prospects for wine looked bleak – so much so that the Government financed a vine-pull scheme, which contributed to a significant net reduction in vineyard area at that time (see Figure 1). At the time it seemed inconceivable to many observers that another huge boom was about to begin.

### ***The fifth and current boom: export take-off***

Since the doubling in wine consumption per capita in Australia in the decade to the mid-1980s (which was mostly due to increased demand for non-premium white wine), consumers have substituted quality for quantity, especially in reds. During the past decade the total volume of domestic wine consumption per capita fell by one-eighth (1.4 per cent p.a.), yet premium red wine consumption per capita rose by 3.8 per cent p.a. (and premium white by 0.8 per cent p.a.) That recent maturing of the Australian palate has coincided with the industry's highly successful change in emphasis towards improving the quality of Australian wine – clearly evident in Tables 7 and 8 -- and promoting sales by brand at home and abroad. The

effects of these changes are summarized in Table 9 and detailed in Table 10, and the concentration of winery ownership (an important contributor to these changes) is shown in Tables 11 and 12.

In real terms (1995-96 Australian dollars) and excluding State and Federal sales taxes, the wholesale value of Australian wine sales doubled between 1984-87 and 1994-97. Most of that growth came from export sales: they grew 12-fold while domestic sales were only 50 per cent greater in real value terms in the mid-1990s than a decade earlier (Table 9). Contributing both directly and indirectly to these changes were changes in the prices of Australian (and to some extent imported) wines. On average, the pre-tax real wholesale price of Australian wine grew 48 per cent over the decade. Those price changes no doubt stimulated domestic wine production and exports, the volumes of which were 33 and more than 800 per cent greater in 1994-97 than 1984-87. However, the dampened domestic sales of Australian wine (down 2 per cent – see Table 9) were due not only to export price rises that diverted sales abroad. They were dampened also by the increase in the wholesale sales tax to 31 per cent in 1993 (later brought down to 26 per cent).

Grapegrowers were major beneficiaries of the increase in Australian wine prices – even more than winemakers. The average real price received for winegrapes was 73 per cent higher in 1994-97 than a decade earlier (compared with the 48 per cent wholesale wine price hike), which had stimulated a 42 per cent increase in the annual volume of winegrapes crushed (Table 9). Most of that increase is accounted for by an expansion in the area of bearing winegrapes, rather than through yield increases. The increased volume of winegrapes came about partly by new plantings but also by diverting grapes/vines from other uses and by grafting higher-valued winegrape varieties onto existing rootstocks. This had the effect of raising the proportion of Australia's grape production used for wine from around 60 per cent to more than 75 per cent over the decade (Table 10).

Within the industry there has been a marked decrease in the proportion of winegrape production that is non-premium. And within the premium classes, red is rapidly catching up with white: its share of premium wine sales has doubled in terms of volume and risen even more in terms of real value, the latter reflecting the more dramatic rise in the price of premium red wines.

An important contributor to this production and export growth relates to ownership concentration. On the one hand, there has been a huge increase in the number of Australian wine producers (currently more than 900, compared with fewer than 200 in the early 1970s and 300 in the early 1980s – see *Winetitles* (1998 and earlier issues)), but most of them are very small. On the other hand, there have been numerous mergers and takeovers by larger firms to form even larger conglomerates (see Halliday (1994, p. 59) for a chronology of ownership changes since the early 1980s).

The net result has been a substantial increase in concentration. Whereas in 1978 those crushing more than 1000 tonnes accounted for 17 per cent of wine firms, now they account for just 4 per cent of all wine firms (Table 11). The top three producers now account for about 50 per cent of the annual vintage, of the number of bottles of wine sold, and of the value of domestic sales, and for 70 per cent of wine exports; for the top nine producers those shares are about 75 and 95 per cent, respectively (Table 12).

This concentration has provided the opportunity to reap large economies of scale not only in wine making but also in R&D, distribution and brand promotion, including through establishing their own sales offices abroad rather than relying on distributors.<sup>10</sup> The large volumes of grapes grown and purchased<sup>11</sup> by these firms from numerous regions enable them to produce large volumes of consistent, popular wines for specific markets abroad. Indeed some types (eg, Lindemans Bin 65 Chardonnay) were only sold in those markets initially, being released in Australia several years later.

In particular, the production of large volumes of low-end premium wines that used grapes from several regions, so as to ensure little variation from year to year, suited perfectly the large UK supermarket shoppers. By the mid-1980s 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). Given also Australia's close historical ties with Britain, it is not surprising that it is the largest market for Australian wine abroad.

The timing for this export surge was helped by the devaluation of the Australian dollar in the mid-1980s, which was due to a sharp fall in prices of Australia's coal, grain and other primary products. That devaluation, together with low domestic prices for premium red grapes at the time, increased substantially the incentive for investing in developing overseas markets for Australian wine. Other factors expanding demand for Australian wine at the time were food-safety scares associated with Chernobyl in April 1986 and scandals involving additives in Austrian and Italian wines (Rankine 1996). Meanwhile, competition from South Africa was minimal because of anti-apartheid sentiment. Generic marketing of Australian wine by the Australian Wine Export Council, together with the huge increase in the quantity and quality of Australia's exports, began to build the country's reputation in quality winegrape growing, wine making, and wine marketing.

Thus this fifth boom has been largely market-driven with only a small element of influence from government intervention. The introduction in 1984

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<sup>10</sup> The corporatization of firms has helped in raising the enormous amounts of capital required for rapid expansion. The capital intensity of winegrape growing is about 50 per cent above that of other agriculture and that of winemaking is more than one-fifth higher than that of other manufacturing.

<sup>11</sup> Firms that were heavily dependent on purchased grapes went out of their way to build better relationships between grapegrower and winemaker (Hoole 1997).

and subsequent raising of the wholesale sales tax on wine, together with the government's vine-pull scheme in the mid-1980s, were negative influences on profitability rather than positive stimuli at the start of the present cycle. But by way of consolation for raising the wholesale sales tax again in 1993, the government did assist new plantings of vines by providing for accelerated depreciation of vineyard construction costs over just four years for tax purposes (even though the average life of the investments involved is more like thirty years). That provision has no doubt contributed to the rapid acceleration in vineyard area, which has increased by 50 per cent in the past five years (Figure 1 and Table 2).

### ***Expected production and export growth to 2000***

ABS surveys ask not only for bearing grape area but also for recently planted area by variety, allowing reasonably accurate projections of future winegrape production. Using those data, ABARE estimates grape crush by variety up to three years hence. Column 4 of Table 9 summarizes those latest estimates and some of their implications. It suggests that, relative to the average of the 1995-97 vintages, wine production will be up by 50 per cent in aggregate and premium wine output will double. The share of premium grapes in the total winegrape crush is expected to rise from 60 to 77 per cent, with red's share rising much faster than that for premium white wine. These expected increases in just four years will be as large as the crush increases of the previous decade. Assuming no increase in domestic consumption per capita, these projections imply a very large rise in wine exports, from 130 to 250 million litres. If that were possible without a fall in export prices, it should ensure the industry meets its target of \$1 billion in export sales by 2000.

How far will that bring the industry along towards its targets for 2025? In 1994-95 the wine industry developed and published its *Strategy 2025*, laying out its targets 30 years hence (AWF 1995). At the time those targets were considered rather optimistic, since they involve a three-fold increase in the real value of wine production, 55 per cent of it for the export market. Getting half way to those targets requires having 80,000 hectares of winegrapes bearing enough for a crush of 1100 kt to produce 750 million litres of wine at a wholesale pre-tax value of \$3 billion (\$4/litre) in 1995-96 Australian dollars. The estimates in column 4 of Table 9 suggest that by the turn of the century the industry will have reached that half-way point for achieving its volume target 30 years out -- that is, in just five vintages! If the price of wine were to be just a little above that of the past three years in real terms at the end of the decade, the value of wine output also would be roughly half way to the 2025 target. As mentioned though, a larger share of sales would have to be in export markets than was envisaged in *Strategy*



2025 (about 42 rather than 35 per cent)<sup>12</sup>, assuming domestic per capita consumption does not increase over the rest of this decade.

### ***How long can export-led growth be sustained?***

In thinking about the sustainability of the current boom, the past history is both sobering and encouraging for those currently or prospectively involved. It is sobering because each of the first four finished with a plateau in vineyard area and winery output growth. They were periods when returns to grapegrowers and often also winemakers were depressed for years because of the extent of new plantings during the boom. The 2-4 year delay between new planting and the first harvest, and the fact that many small producers expand their vine area with less than full knowledge of the extent to which others are expanding at the same time, have been *for at least two millenia* the reasons why grape and wine markets are so cyclical (Unwin 1991, pp. 359-60).

Yet the history summarized above is also encouraging because it shows the current boom to have features that differ from those of earlier booms. The first boom from 1854 was almost exclusively driven by domestic demand growth following the trebling in Australia's population in the 1850s, but the excessive volume of wine from that expansion was not able to be exported profitably, largely because of high duties on inter-colonial trade and poor marketing and high transport and communication costs in exporting to the Old World.

The second boom from the 1880s was due to a mixture of domestic and export demand growth, the latter involving better marketing and lower transport costs of mostly generic bulk (rather than winery bottled and branded) dry red wine sales to a relatively open British market. The Old World absorbed one-sixth of Australia's production early this century, before the first world war intervened.

The acreage boom induced by soldier settlement after World War I provided the basis for the next export boom from the mid-1920s, helped by irrigation and land development subsidies, a fortified wine export subsidy, and a 50 per cent imperial tariff preference in the British market for fortified wines. The decline in domestic consumption, induced by the export subsidy and the Depression, added to wine exports in the 1930s – which by then accounted for more than one-fifth of production. The removal of the export subsidy and the huge hike in UK tariffs on fortified wine in the latter 1940s caused a severe decline in export orientation, while the return to normal beer consumption after war-induced grain rationing kept down domestic wine sales growth.

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<sup>12</sup> Note that the shares of sales going to export markets in Tables 9 and 10 are not the same as exports as a percentage of wine production in Figure 4 and Table 2. This is because 'wine production' includes all uses, including for distillation, and in the 1990s an increasing proportion of production is premium quality and so is being retained in stock for longer.

The fourth boom, following two post-war decades of slow growth in the industry, was entirely domestic as tastes became more European, as licencing and trade practice laws changed with income growth, as corporatization of wineries led to more-sophisticated domestic marketing and new innovations (including casks), and as Britain's wine import barriers rose again. Initially domestic demand grew for red wine. Then the cask attracted a new clientele of white wine drinkers, causing per capita consumption to more than treble during the fourth cycle.

The latest boom is different in several respects from the earlier booms. One difference is that it is overwhelmingly export-oriented. This contrasts with the first and fourth booms at least which were overwhelmingly domestic. It also differs from the inter-war boom which took on exports more as a way of disposing of surplus production than as a pre-planned growth strategy.

Secondly, both the current and the previous boom were mainly market-driven, which is not unlike the first two booms but contrasts markedly with the third (inter-war) boom which was heavily induced by government policies of assistance: once those assistance measures were withdrawn, industry growth evaporated. In the present boom the only assistance that could be withdrawn is the tax incentive to expand plantings via the tax-reducing accelerated depreciation allowance for some vineyard construction costs.

Another major difference between now and the past is that the quality of wine output has improved vastly during the past dozen or so years. Moreover, for the first time, the industry is in a position to build brand, regional, and varietal images abroad to capitalize on those vast improvements in the quality of its grapes and wines. The industry's own Label Integrity Program, together with its moves to define regions precisely, and to change descriptors in response to the agreement with the European Union to phase out European names for wine types, will all add to the marketability of Australian wines as consumers become ever-more sophisticated. That image building has been partly generic, with the help of the Australian Wine Bureau's activities in Europe; but increasingly, especially since the late 1980s, it is coming also from the promotional activities of individual firms and their overseas representatives as those firms have become ever-larger and more multinational via mergers and takeovers. On-going rapid technological improvements in grape and wine production in Australia and in wine marketing at home and abroad are important contributors to these developments, and they have strengthened enormously Australia's comparative advantage in premium winemaking during the past decade.<sup>13</sup>

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<sup>13</sup> As reflected in the final row of Table 13, showing that Australia's rank in terms of the importance of all wine in national exports is now 8<sup>th</sup>, having been 18<sup>th</sup> two decades ago. It would be higher still if the index had been confined just to premium wine. Rankine (1996) claims that even though Australia has supplied less than 2 per cent of the world's wine until

A fourth feature distinguishing the current period is the health factor. An ever-wider appreciation of the desirability of moderate over heavy drinking, and of the possible health benefits of a moderate intake of red wine in particular, are ensuring that the consumer trend towards spending on quality rather than quantity of wine (and on wine in preference to beer and spirits) will continue for the foreseeable future. This is especially so among the post-war baby boomers in OECD countries who are now reaching middle age and have more disposable income and time to indulge in wine-inclusive dining as their children reach adulthood. Another feature of that maturing taste for wine is the desire for more diversity, which is causing intra-industry trade to grow. In other words, wine sellers even in wine-exporting countries are importing wines to widen the range available for their consumers.

And fifth, Australian wines are still exceptionally good value for money in Northern Hemisphere markets, despite the real price increases of the 1990s.<sup>14</sup> As brand and national recognition increase in response to on-going promotion activities, so consumers will expand their demand for Australian wines in particular. That means should other countries lower their tariff and non-tariff barriers to imports, Australia will be well poised to expand sales there. Such trade barrier reductions began in the latter 1990s, as part of the implementation of commitments made under the Uruguay Round of multilateral trade negotiations. The industry has welcomed those commitments to reform (for example, Japan agreed to lower its tariffs on wine by 60 per cent by the end of this decade), but much scope remains for further cuts in the next round of negotiations, to be launched by the World Trade Organization at the end of the decade (late 1999). There is also the prospect of using APEC to achieve further opening of markets in the Asia Pacific region, especially in East Asia where wine tariff barriers are still extremely high (ABARE 1997b, pp. 459-60). This opening up will not happen without effort being exerted by the industry, but the Department of Foreign Affairs and Trade is ready to assist as it did with agricultural exporters, including by forming the Cairns Group of 14 exporting countries to negotiate selected issues with a united front. A similar type of group

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very recently, it contributes 20 per cent of the global flow of research papers on viticulture and oenology. Australia has had a long history of investing in formal research and training, dating from the establishment of Roseworthy Agricultural College (now part of the University of Adelaide) in 1883 and its Diploma in Oenology in 1934, plus the creation of the Australian Wine Research Institute adjacent to the University of Adelaide's agricultural research campus in 1955 (Halliday 1994 pp. 109-11).

<sup>14</sup> Those Australian consumers finding it difficult to adjust to the recent surge in domestic wine prices are nonetheless grateful for the very low prices they enjoyed for so long prior to the export take-off this decade. Even the relatively high current prices are low by the standards of the Roman Empire: according to Unwin (1991, pp. 123-26), in the first century B.C., the price of a (roughly 22 litre) jar of standard wine exported from Italy to France was one Gaul slave!

could be created for this new (Millennium?) round among the Southern Hemisphere wine exporters.<sup>15</sup>

These are all reasons to be optimistic about Australia's long-term future as a successful exporter of premium wines. The recent fall in the value of the Australian dollar provides a further reason for expecting wine exporters to keep doing well while ever the currency remains depressed. Australia currently supplies only 2.5 per cent of world wine production (up from 1.5 per cent a decade ago) and 4 per cent of global exports (up from less than 1 per cent prior to the 1990s). It may now supply somewhat larger proportions of just the premium segment of that global market, but even so these data suggest that there is plenty of scope for Australia to expand its sales abroad without necessarily lowering international prices. As well, Australia's key wine export markets are currently the United Kingdom (about 45 per cent), North America (about 20 per cent), New Zealand (12 per cent) and Other EU (about 10 per cent). The share for all of East Asia is just 6 or 7 per cent (Table 14), which is very small compared with the shares for Australia's other primary and processing industries. Scope for geographic market diversification in the longer run thus remains very considerable.

However, there are some other developments that are cause for concern. One is the current financial crisis in East Asia. While Australian wine exporters are only very slightly exposed to East Asian markets, and are in a very advantageous position to penetrate them once those economies recover, that increased penetration will be delayed by the crisis. In so far as it lowers income growth rates in other parts of the world, it will dampen demand growth elsewhere as well. Such a dampening of incomes outside the region is expected to be only slight, however. And even within the region, exports to Japan seem to be growing rapidly despite the economic slowdown there.

Another cause for concern with developments abroad is the rapid expansion in plantings of premium grape varieties in numerous other countries in the past few years. California has doubled its area of premium grapes in the past five years, Chile and South Africa have been expanding and upgrading also, and in both East and West Europe attention is being focused increasingly on replacing non-premium varieties with better-quality ones.<sup>16</sup> That, together with the continuing decline in (especially non-premium) wine consumption per capita in many traditional wine-drinking countries (Berger, Anderson and Stringer 1998), will put some downward

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<sup>15</sup> Without or with the United States. The most obvious members are Argentina, Australia, Chile, New Zealand, South Africa, and Uruguay. That group had an inaugural meeting in Chile in March 1998 and is planning a second meeting in late 1998 to share some information papers on industry developments.

<sup>16</sup> Traditional wine-growing areas of Western Europe are slow to adjust, however, because of their strict regulations and the cumbersome wine market interventions associated with the European Union's Common Agricultural Policy. See, for example, Spahni (1988, 1995) and Tracy (1998).

pressure on export prices of Australian wine. They in turn will be reflected in declines in winegrape prices.

The prospect for such a downturn in grape prices is likely to be reinforced by another trend also. With both Europe and the New World seeking to expand their output of high-quality wine, individuals and firms with expertise in the Australian industry are being sought after as consultants or joint venture partners. This is a part of the globalization of the world wine industry that the international transport, information, and communications cost revolutions have generated (Williams 1995). An important consequence is that Australia's grape producers will face increasing international competition because the wine industry's technological innovations and marketing skills are being transferred rapidly to other producing regions. Thus not only are wineries more easily able to import wine for blending with local product (as is happening in making cask wine, for example), but as well they are able to take some of their capital and skills in wine making and marketing to other countries. These possibilities will help to keep profits of Australian-based multinational wine companies higher than they otherwise would be, but eventually will tend to put more downward pressure on the currently very high prices for winegrapes in Australia.

Some uncertainties at home also could affect the industry's future. Changes in the tax system are imminent, and could result in an increase in wine consumer taxes. That would push more Australian wine into international markets. It could also see a switch from an ad valorem to a specific or volumetric means of taxation. The latter would harm non-premium producers relative to premium producers, especially since Australia is not very competitive internationally in the non-premium market and so there is less of an option of exporting a tax-induced excess supply of cask-quality wine. There is also the possibility that the accelerated depreciation provision in the income tax law that has encouraged vineyard construction since 1993 might be withdrawn – although that would directly affect prospective investors rather than current producers. Water pricing reforms also are under active consideration, which will raise irrigation costs. However, since vines use relatively little irrigation water, grapegrowers may benefit relative to other agricultural producers from higher pricing of water.

### ***Conclusion and areas for further economic research***

The wine industry has contributed very substantially to growth of the Australian and especially South Australian economies in the past decade, and its future for the next few years at least looks very bright. Beyond that, grapegrowers' returns will continue at high levels only if the demand for Australian wines continues to grow more rapidly than supply. Each of the booms in vineyard area in the past has been followed by a long plateau and

a large decline in grape prices, but reasons have been given above as to why this present boom may be sustained for a longer than usual period.

However, a more precise assessment requires better information on recent and intended plantings of premium grapes around the world, on the changing nature of consumer preferences in different parts of the globe, and on the extent to which government domestic taxes and subsidies and trade policies might change. With that information it would be possible to develop and use forward-looking economic simulation models for obtaining projections into the future. Of particular interest in such projections exercises would be the impact on returns to grapegrowers relative to winemakers: the former have enjoyed a rising share of the benefits of the current boom so far (see final row of Table 9), but for how much longer? Should international prices of Australian wines fall, winemakers will inevitably pass the decline back to grapegrowers. Since the grapegrowers' share of the pre-tax wholesale price of wine is currently at the top end of the usual 20-30 per cent range (see bottom row of Table 9), the proportional decline in their returns could be considerable, perhaps as much as three times as large as any decline in wholesale wine prices. Potential investors in vineyards need to be aware of that risk, and to seek advice on the likely timing and magnitude of any downturn in winegrape prices.

## References

- ABARE (1997a), *Winegrapes: Projections of Winegrape Production and Winery Intake to 1999-2000*, Canberra: Australian Bureau of Agricultural and Resource Economics, December.
- ABARE (1997b), *Australian Commodities: Forecasts and Issues*, Canberra: Australian Bureau of Agricultural and Resource Economics, December quarter (Vol. 4, No.4).
- ABS (1997), *Australian Wine and Grape Industry 1997*, Catalogue No. 1329.0, Canberra: Australian Bureau of Statistics, December.
- AWF (1995), *Strategy 2025: The Australian Wine Industry*, Adelaide: Winemakers' Federation of Australia for the Australian Wine Foundation.
- BAE (1979), *The Australian Grape and Wine Industry: BAE Submission to the IAC Inquiry*, Industry Economics Monograph No. 19, Canberra: AGPS for the Bureau of Agricultural Economics.
- Beeston, J. (1994), *A Concise History of Australian Wine*, Sydney: Allen and Unwin.
- Bell, G. (1993), 'The South Australian Wine Industry, 1858-1876', *Journal of Wine Research* 4(3): 147-63.
- Bell, G. (1994), 'The London Market for Australian Wine, 1851-1901: A South Australian Perspective', *Journal of Wine Research* 5(1): 19-40.
- Berger, N., K. Anderson and R. Stringer (1998), *Trends in the World Wine Market, 1961 to 1996: A Statistical Compendium*, Adelaide: Centre for International Economic Studies, June.
- Briggs, A. (1985), *Wine for Sale: Victoria Wine and the Liquor Trade, 1860-1984*, London: B.T. Batsford.
- Commonwealth of Australia (various issues), *Yearbook of Australia*, Canberra: AGPS.
- Davidson, B.R. (1969), *Australia Wet or Dry?* Melbourne: Melbourne University Press.
- Francis, A.D. (1972), *The Wine Trade*, London: Adam and Charles Black.
- Halliday, J. (1994), *A History of the Australian Wine Industry: 1949-1994*, Adelaide: Winetitles for the Australian Wine and Brandy Corporation.
- Hallier, P.C. (1997 and earlier years), *Commercial Producer/Brand/Distributor Directory*, Adelaide: P.D. Consultancy to the Wine Industry, December.

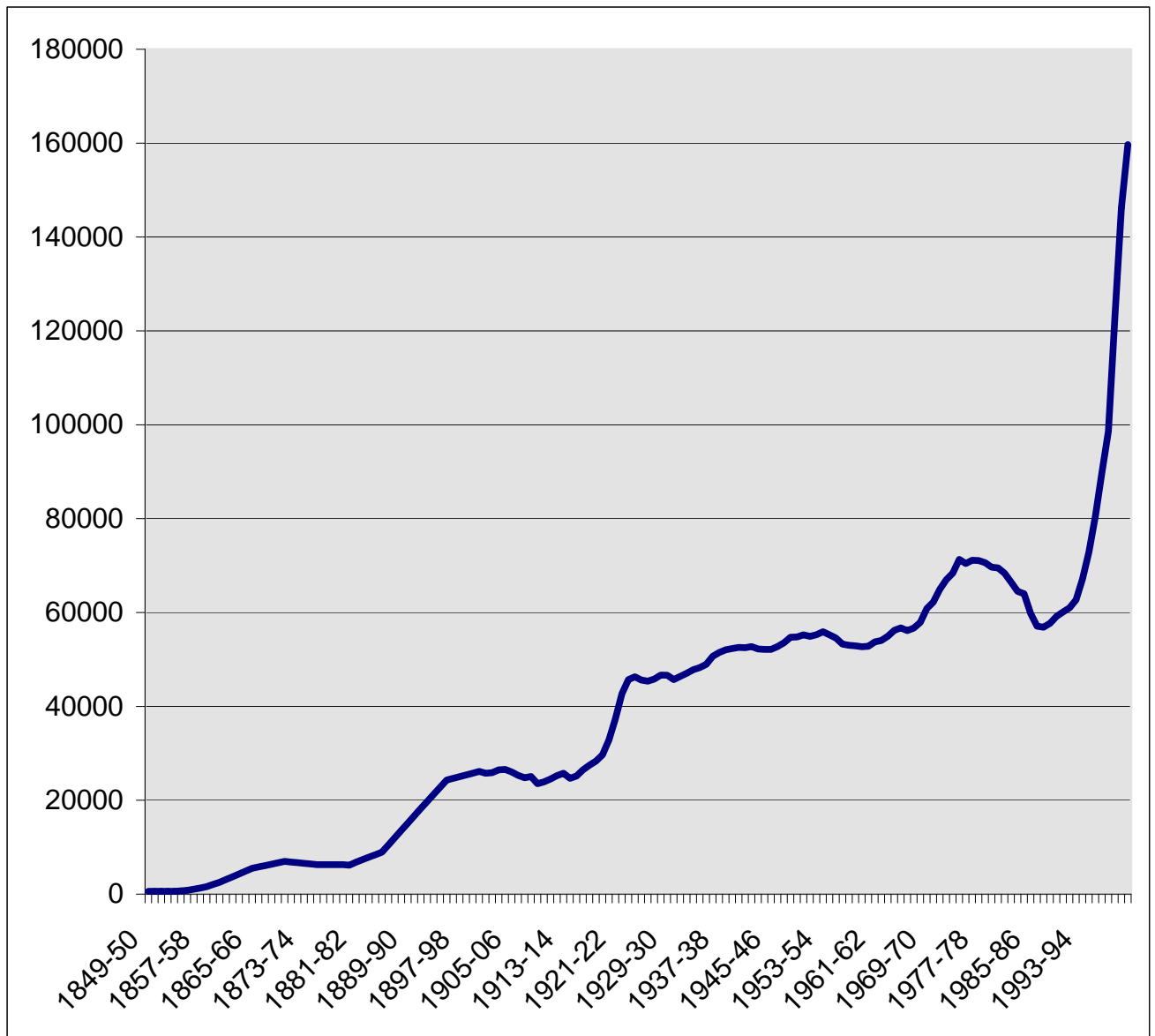
- Hoole, B.J. (1997), 'Securing Supply Through Improved Grower and Processor Relationships: Orlando Wyndham Pty Ltd', Ch. 8 in *Competitive Performance: Case Studies on the Australian Agribusiness Experience*, edited by D. Gifford, L. Hall and R. Collins, East Hawthorn: Morescope Publishing for DPIE.
- Irvine, H.W.H. (1892), *Report on the Australian Wine Trade*, Melbourne: R.S. Brain, Government Printer for the Victorian Minister of Agriculture.
- Kelly, A.C. (1867), *Wine-growing in Australia*, Adelaide: E.S. Wigg.
- Laffer, H.E. (1949), *The Wine Industry of Australia*, Adelaide: Australian Wine Board.
- Rankine, B. (1996), *Evolution of the Modern Australian Wine Industry: A Personal Appraisal*, Adelaide: Ryan Publications.
- Spahni, P. (1988), *The Common Wine Policy and Price Stabilization*, Aldershot: Avebury.
- Spahni, P. (1995), *The International Wine Trade*, Cambridge: Woodhead Publishing.
- Tracy, M. (ed.) (1998), *CAP Reform: The Southern Products*, Genappe, Belgium: Agricultural Policy Studies.
- Unwin, T. (1991), *Wine and the Vine: An Historical Geography of Viticulture and the Wine Trade*, London and New York: Routledge.
- WFA (1996), *Statistical Report 1996*, Adelaide: Winemakers' Federation of Australia.
- Williams, A. (1995), *Flying Winemakers: The New World of Wine*, Adelaide: Winetitles.
- Wittwer, G. And K. Anderson (1998), 'Tax Reform and the Australian Wine Industry', Seminar Paper 98-xx, Centre for International Economic Studies, University of Adelaide, June.
- Winetitles (1998), *Australian and New Zealand Wine Industry Directory 1998*, Adelaide: Winetitles.



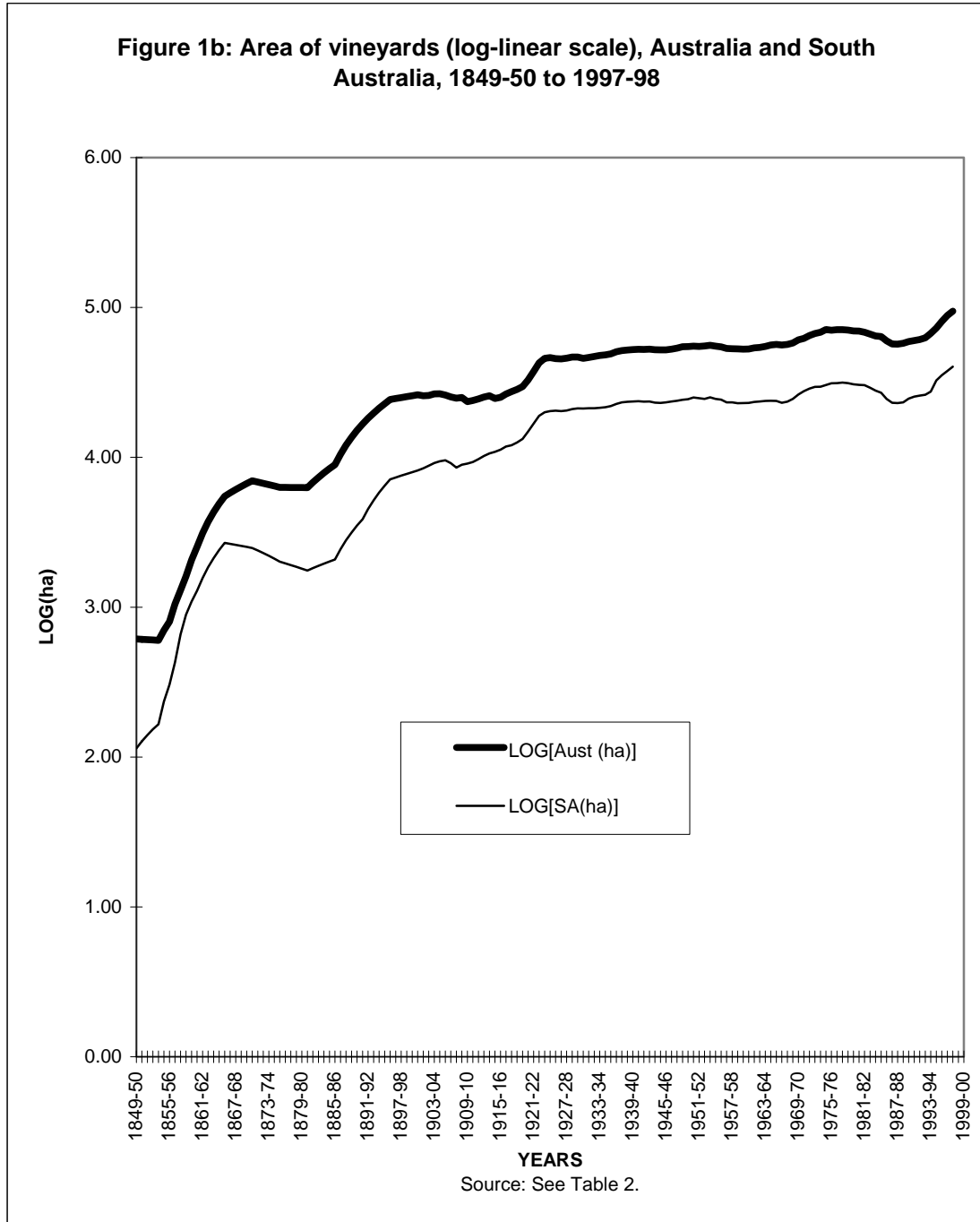


## Figures

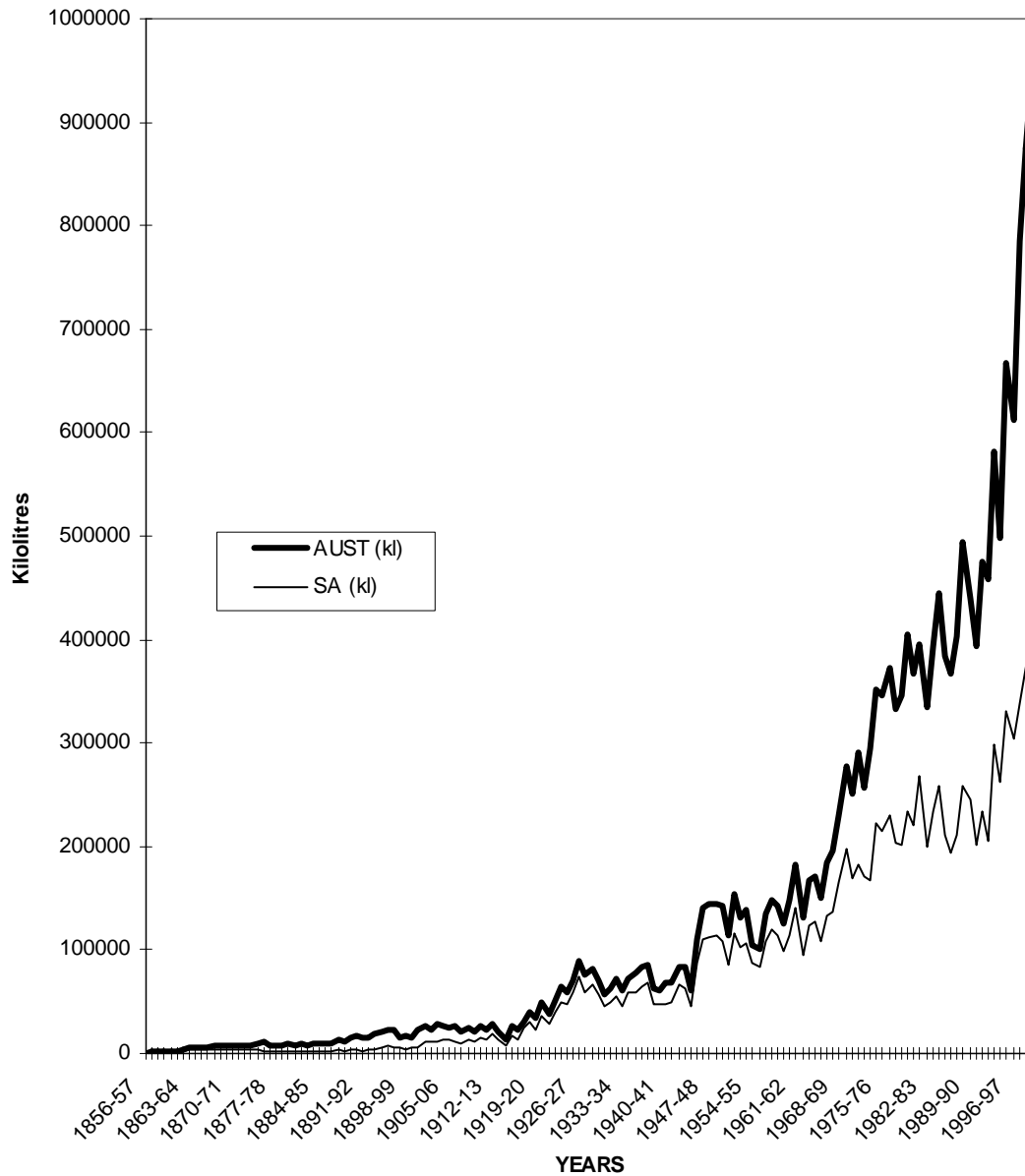
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**Figure 1a: Area of vineyards (hectares), Australia, 1849-50 to 2000-01**

Source: See Table 2.

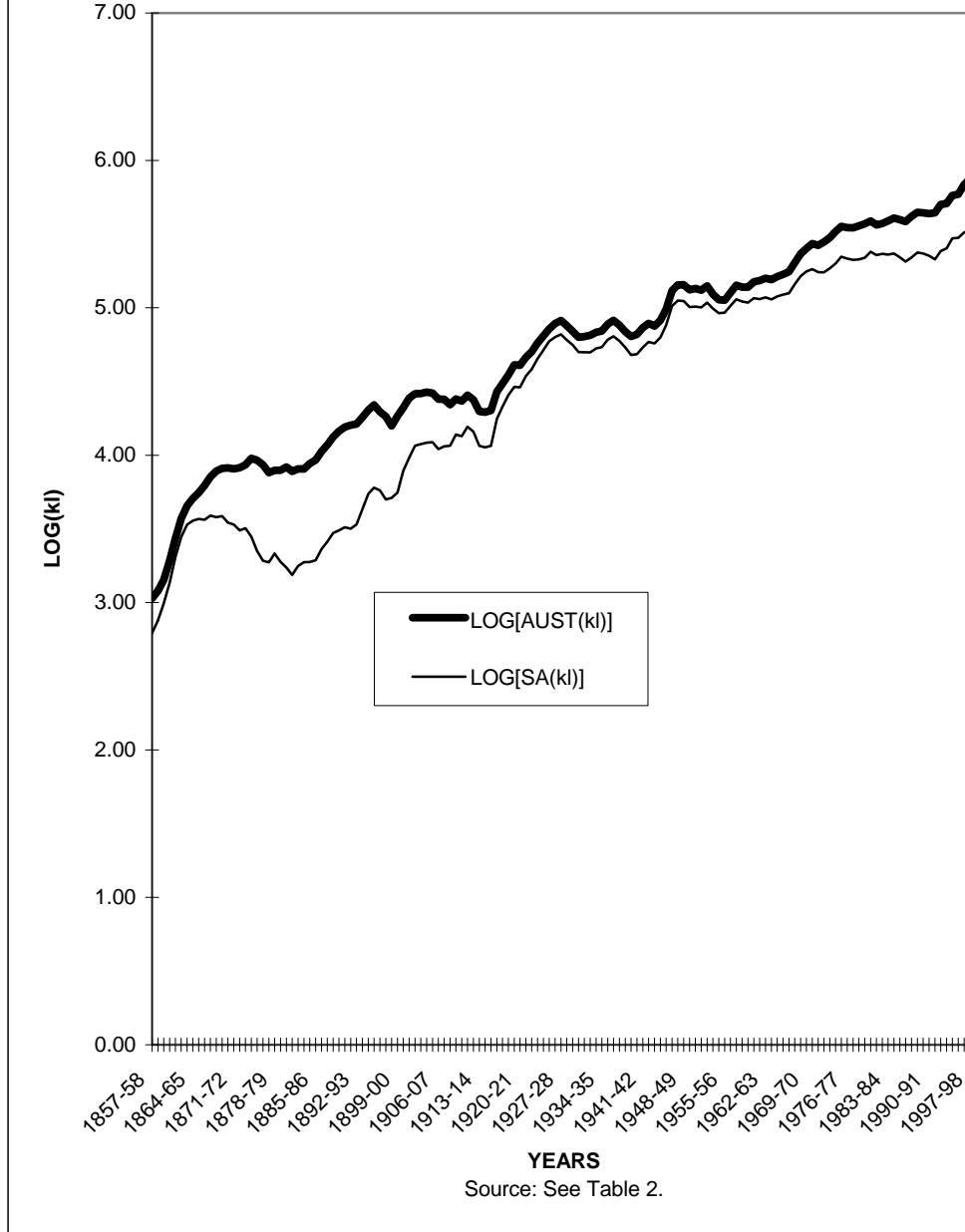


**Figure 2: Wine Production, Australia and South Australia,  
1856-57 to 1999-2000**

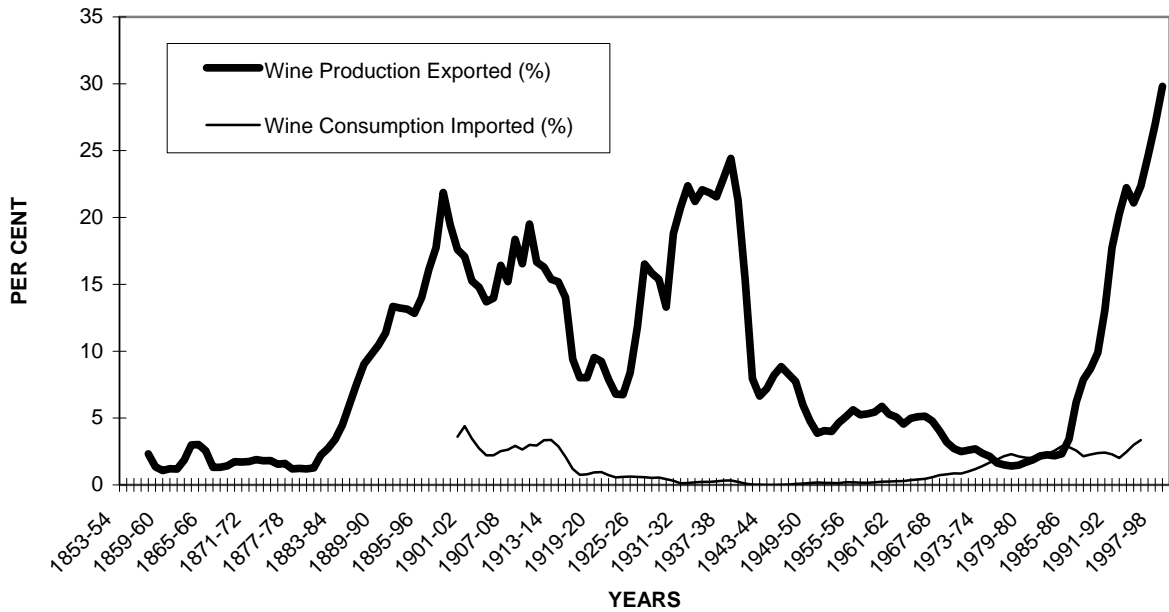


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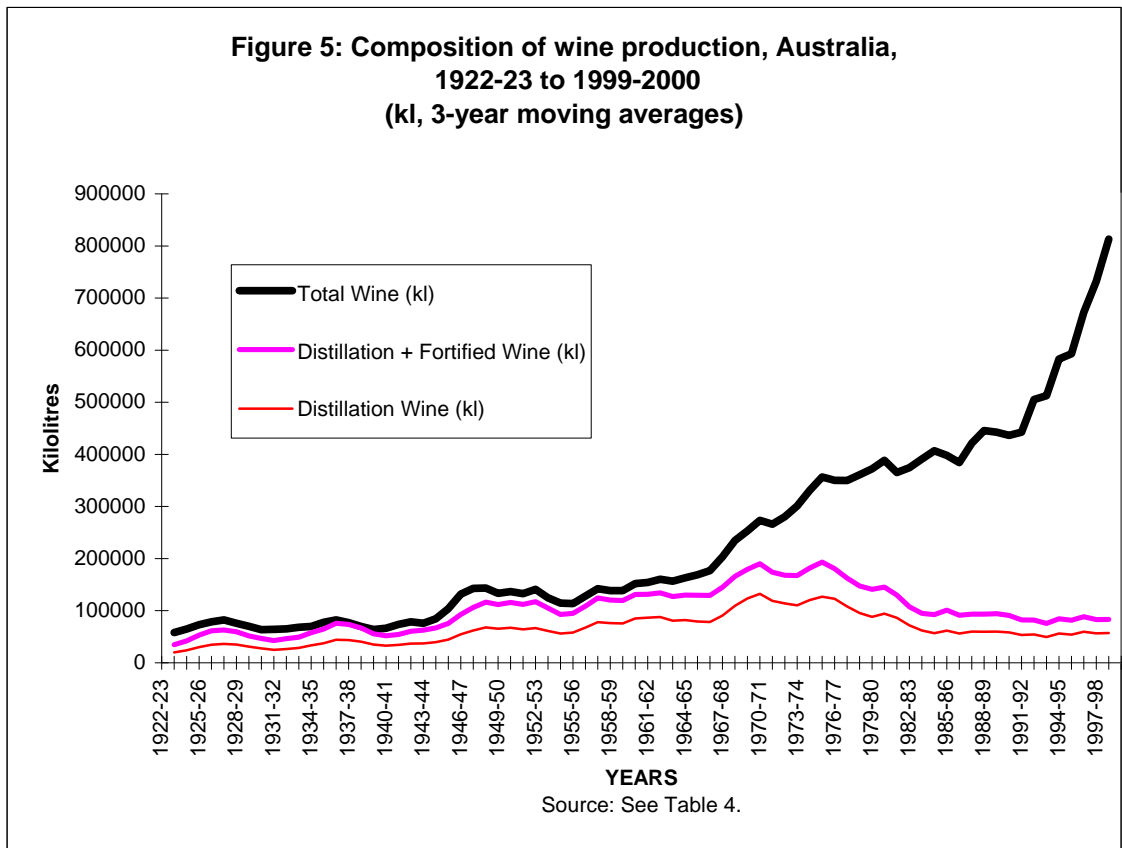
**Figure 3: Wine Production (log-linear scale), Australia and South Australia, 1856-57 to 1999-2000 (3-year moving average)**



**Figure 4: Shares of wine production exported and wine consumption imported, Australia, 1856-57 to 1999-2000 (per cent, 3-year moving averages)**

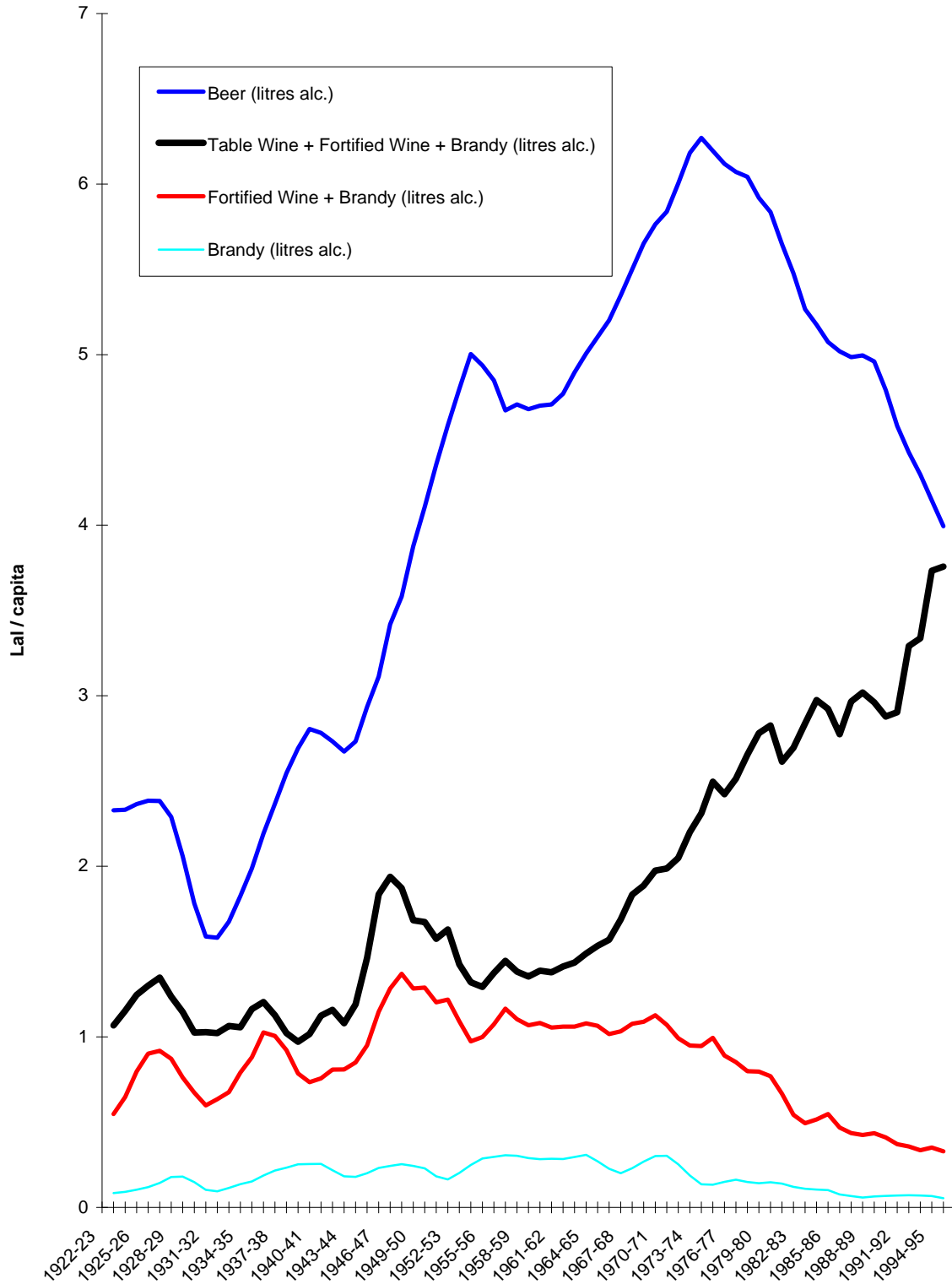


Source: See Table 3.



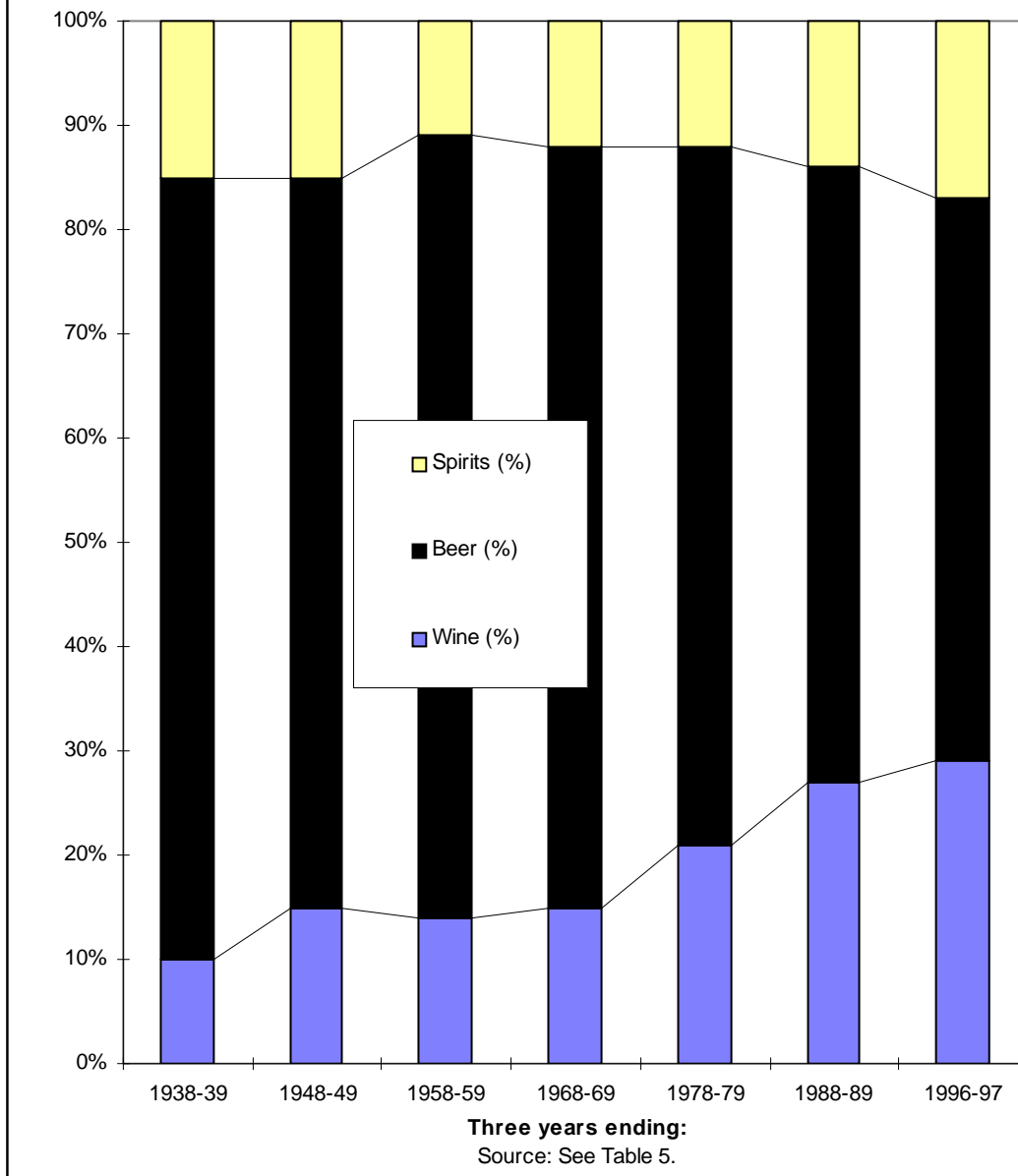


**Figure 6: Per capita production of beer, table wine, fortified wine and brandy, Australia, 1922-23 to 1996-97 (3-year moving averages)**

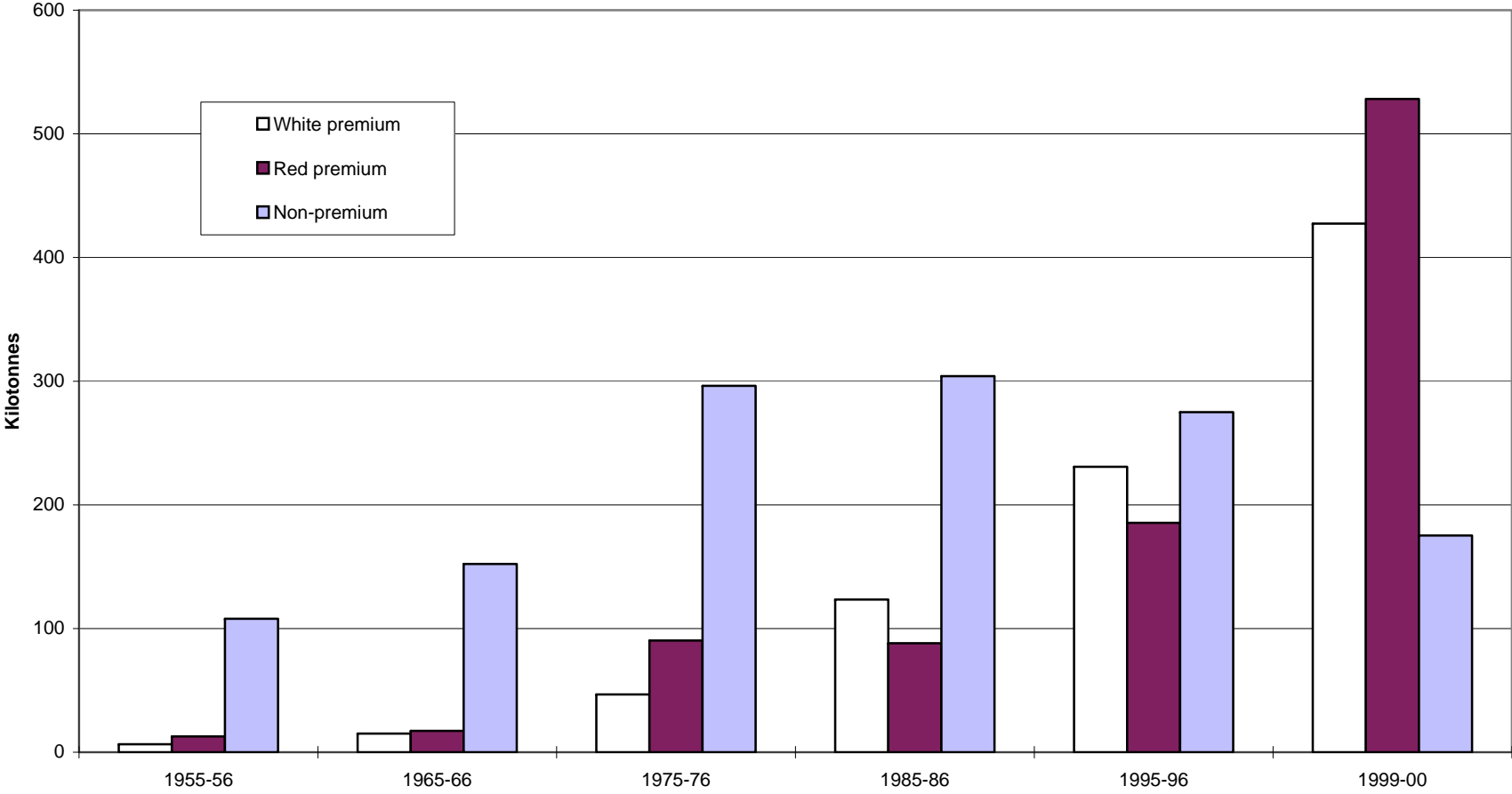


YEARS  
Source: See Table 6.

**Figure 7: Share of wine, beer and spirits in alcohol consumption, Australia, 1936-37 to 1996-97**

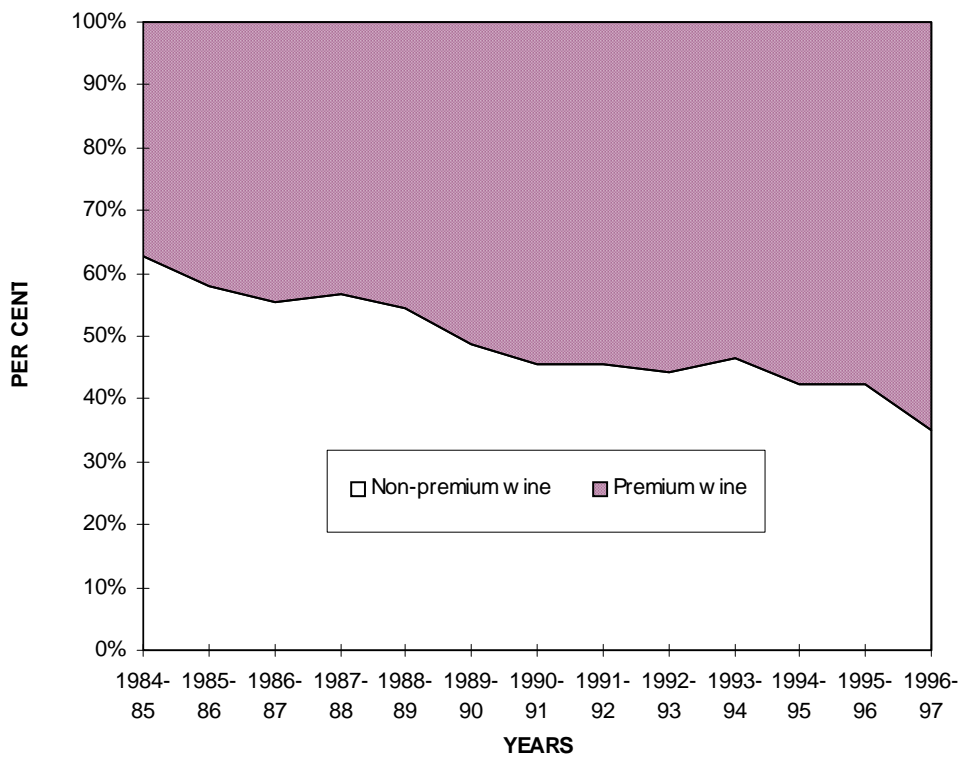


**Figure 8: Winegrape crush by variety group, Australia, 1955-56 to 1999-00  
(3-year average around year shown except 1955-56, 1965-66 and 1999-00)**



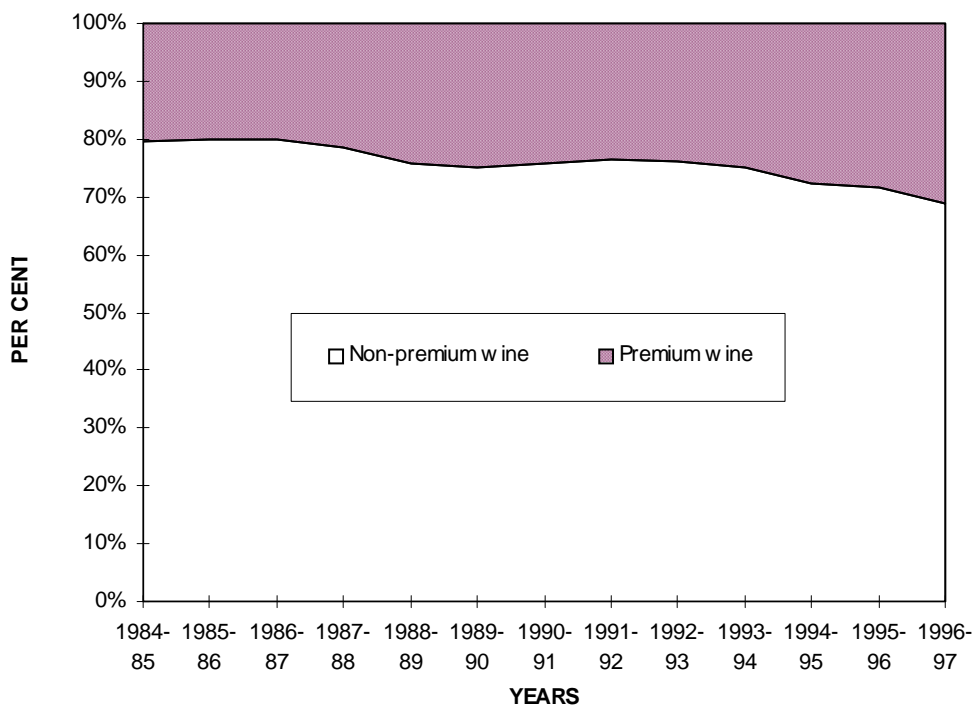
**YEARS**  
Source: See Table 7.

**Figure 9: Premium and non-premium shares of wine production, Australia, 1984-85 to 1996-97**



Source: See Table 10.

**Figure 10: Premium and non-premium shares of wine consumption, Australia, 1984-85 to 1996-97**



Source: See Table 10.



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**TABLE 1: SUMMARY OF BOOMS AND PLATEAUS IN AUSTRALIAN WINE INDUSTRY DEVELOPMENT, 1849-50 TO 1997-98**

Vintages:	Boom/ plateau/ cycle number	No. of years	Annual increase in vine area, Aust. (% pa)	Annual increase in vine area, Sth Aust. (% pa)	Annual increase in wine prodn., Aust. (% pa)	Annual increase in wine prodn., Sth Aust. (% pa)	Annual increase in wine export volume, Aust. (% pa)	Share of wine prodn. Exported (%)	Annual per capita consumption <sup>b</sup> (litres)
1854 to 1871	1st boom	17	15.5	16.0	18.4 <sup>a</sup>	19.9 <sup>a</sup>	14.1	1.8	na
1871 to 1881	1st plateau	10	-1.1	-3.5	-0.6	-8.2	-5.2	1.6	na
<b>1854 to 1881</b>	<b>1st cycle</b>	<b>27</b>	<b>8.4</b>	<b>6.8</b>	<b>10.7</b>	<b>7.3</b>	<b>8.2</b>	<b>1.7</b>	<b>na</b>
1881 to 1896	2nd boom	15	9.7	10.1	7.5	8.7	23.0	9.8	na
1896 to 1915	2 <sup>nd</sup> plateau	19	-0.1	1.9	-0.4	4.8	0.4	16.5	5.1
<b>1881 to 1915</b>	<b>2nd cycle</b>	<b>34</b>	<b>3.9</b>	<b>5.7</b>	<b>3.3</b>	<b>7.0</b>	<b>8.7</b>	<b>14.4</b>	<b>na</b>
1915 to 1925	3rd boom	10	7.0	7.0	12.7	16.1	4.5	8.5	5.8
1925 to 1945	3 <sup>rd</sup> plateau	20	0.9	0.9	0.1	-0.4	-1.2	16.4	4.0
<b>1915 to 1945</b>	<b>3rd cycle</b>	<b>30</b>	<b>2.4</b>	<b>2.4</b>	<b>3.6</b>	<b>4.1</b>	<b>4.9</b>	<b>14.9</b>	<b>4.7</b>
1945 to 1968	slow growth	23	0.2	-0.1	2.1	1.8	0.2	5.4	6.2
1968 to 1975	4th boom	7	3.3	3.7	6.2	3.8	-1.4	2.7	10.9
1975 to 1987	4 <sup>th</sup> plateau	12	-1.7	-2.2	1.0	0.1	8.4	2.2	19.1
<b>1968 to 1987</b>	<b>4th cycle</b>	<b>19</b>	<b>0.2</b>	<b>0.1</b>	<b>3.1</b>	<b>2.0</b>	<b>2.5</b>	<b>2.4</b>	<b>16.0</b>
1987 to 1998 <sup>c</sup>	5th boom	14	4.6	5.3	5.3	4.4	18.8	17.9	21.0
<b>1850 to 1998<sup>c</sup></b>		<b>148</b>	<b>2.6</b>	<b>2.8</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>9.7</b>	<b>na</b>
<b>1900 to 1998<sup>c</sup></b>		<b>98</b>	<b>1.6</b>	<b>1.9</b>	<b>3.6</b>	<b>4.2</b>	<b>na</b>	<b>9.8</b>	<b>na</b>
<b>1950 to 1998<sup>c</sup></b>		<b>48</b>	<b>0.7</b>	<b>0.6</b>	<b>3.7</b>	<b>2.5</b>	<b>na</b>	<b>9.1</b>	<b>na</b>

<sup>a</sup> Based on guesstimates for South Australia for the 1854-56 vintages.

<sup>b</sup> Consumption is estimated as production plus imports minus exports, so it includes distillation wine.

<sup>c</sup> Based on estimates for the 1997-98 year.

Sources: See Tables 2 and 3.



**TABLE 2: GRAPEVINE AREA AND WINE PRODUCTION  
AUSTRALIA AND SOUTH AUSTRALIA, 1849-50 TO 1999-2000**

YEAR	GRAPEVINE AREA (ha)			YEAR	WINE PRODUCTION (kl)		
	[1] AUST (ha)	[2] SA (ha)	[3]=100x [2]/[1] SA's share, %		[4] AUST (kl)	[5] SA (kl)	[6]=100x [5]/[4] SA's share, %
1849-50	614	114	19	1849-50	na	na	
1850-51	610	127	21	1850-51	na	na	
1851-52	607	140	23	1851-52	na	na	
1852-53	604	153	25	1852-53	na	na	
1853-54	601	166	28	1853-54	na	na	
1854-55	701	235	34	1854-55	na	na	
1855-56	801	305	38	1855-56	na	na	
1856-57	1050	427	41	1856-57	940	458	49
1857-58	1298	659	51	1857-58	1160	641	55
1858-59	1607	891	55	1858-59	1121	820	73
1859-60	2067	1090	53	1859-60	1337	828	62
1860-61	2526	1288	51	1860-61	1929	1420	74
1861-62	3121	1567	50	1861-62	2756	2151	78
1862-63	3715	1847	50	1862-63	3824	2759	72
1863-64	4310	2126	49	1863-64	4808	3634	76
1864-65	4904	2406	49	1864-65	5055	3822	76
1865-66	5499	2685	49	1865-66	5387	3344	62
1866-67	5794	2644	46	1866-67	6323	3929	62
1867-68	6089	2604	43	1867-68	7080	3695	52
1868-69	6385	2564	40	1868-69	7998	4076	51
1869-70	6680	2523	38	1869-70	8366	3648	44
1870-71	6976	2483	36	1870-71	8063	3878	48
1871-72	6841	2389	35	1871-72	8215	2992	36
1872-73	6707	2295	34	1872-73	7992	3337	42
1873-74	6572	2202	33	1873-74	8459	2949	35
1874-75	6438	2108	33	1874-75	9400	3312	35
1875-76	6303	2014	32	1875-76	10875	2244	21
1876-77	6298	1962	31	1876-77	7698	1514	20
1877-78	6293	1910	30	1877-78	7573	2085	28
1878-79	6289	1859	30	1878-79	7537	2091	28
1879-80	6284	1807	29	1879-80	8617	2279	26
1880-81	6279	1756	28	1880-81	7603	1424	19
1881-82	6810	1822	27	1881-82	8819	1580	18
1882-83	7340	1887	26	1882-83	6996	1632	23
1883-84	7871	1953	25	1883-84	8556	2154	25
1884-85	8401	2018	24	1884-85	na	na	na

YEAR	GRAPEVINE AREA (ha)			YEAR	WINE PRODUCTION (kl)		
	AUST (ha)	SA (ha)	SA's share, %		AUST (kl)	SA (kl)	SA's share, %
1885-86	8932	2083	23	1885-86	8968	1643	18
1886-87	10486	2438	23	1886-87	10083	2321	23
1887-88	12040	2794	23	1887-88	13127	3221	25
1888-89	13594	3150	23	1888-89	12238	2324	19
1889-90	15148	3506	23	1889-90	14604	3471	24
1890-91	16702	3862	23	1890-91	17287	3648	21
1891-92	18223	4515	25	1891-92	14806	2703	18
1892-93	19744	5169	26	1892-93	15993	3243	20
1893-94	21264	5822	27	1893-94	na	na	na
1894-95	22785	6476	28	1894-95	na	na	na
1895-96	24306	7130	29	1895-96	22409	6703	30
1896-97	24672	7336	30	1896-97	23246	5838	25
1897-98	25037	7543	30	1897-98	14655	4918	34
1898-99	25403	7750	31	1898-99	17870	4342	24
1899-00	25768	7957	31	1899-00	15005	6319	42
1900-01	26134	8164	31	1900-01	23280	6314	27
1901-02	25770	8448	33	1901-02	26440	11963	45
1902-03	25878	8785	34	1902-03	23578	11698	50
1903-04	26493	9160	35	1903-04	28459	11116	39
1904-05	26578	9400	35	1904-05	26603	12937	49
1905-06	26040	9559	37	1905-06	25412	12529	49
1906-07	25317	9147	36	1906-07	27008	11344	42
1907-08	24781	8537	34	1907-08	20230	9374	46
1908-09	25059	8923	36	1908-09	25075	14239	57
1909-10	23534	9089	39	1909-10	20923	11682	56
1910-11	23923	9296	39	1910-11	26667	15775	59
1911-12	24526	9714	40	1911-12	22617	13282	59
1912-13	25248	10209	40	1912-13	27748	18070	65
1913-14	25766	10614	41	1913-14	21411	12545	59
1914-15	24681	10880	44	1914-15	13071	6852	52
1915-16	25142	11244	45	1915-16	26763	16865	63
1916-17	26465	11817	45	1916-17	23304	13415	58
1917-18	27464	12054	44	1917-18	31209	24235	78
1918-19	28352	12564	44	1918-19	39518	29750	75
1919-20	29675	13278	45	1919-20	34774	23121	66
1920-21	32847	14848	45	1920-21	50071	35883	72
1921-22	37400	16777	45	1921-22	38835	28959	75
1922-23	42686	18934	44	1922-23	50449	39339	78
1923-24	45717	19968	44	1923-24	65001	48899	75

GRAPEVINE AREA (ha)				WINE PRODUCTION (kl)			
YEAR	AUST (ha)	SA (ha)	SA's share, %	YEAR	AUST (kl)	SA (kl)	SA's share, %
1924-25	46295	20363	44	1924-25	58365	47744	82
1925-26	45608	20491	45	1925-26	71093	59438	84
1926-27	45375	20360	45	1926-27	89583	73462	82
1927-28	45833	20519	45	1927-28	75312	58283	77
1928-29	46661	20980	45	1928-29	81781	67412	82
1929-30	46632	21193	45	1929-30	70496	56398	80
1930-31	45719	21155	46	1930-31	57425	46056	80
1931-32	46409	21262	46	1931-32	62384	48481	78
1932-33	47060	21254	45	1932-33	72392	55738	77
1933-34	47824	21416	45	1933-34	60969	45606	75
1934-35	48264	21611	45	1934-35	71462	58711	82
1935-36	48967	21959	45	1935-36	77079	59205	77
1936-37	50668	22729	45	1936-37	84244	64633	77
1937-38	51494	23253	45	1937-38	85447	68904	81
1938-39	52043	23498	45	1938-39	61883	47548	77
1939-40	52339	23580	45	1939-40	61697	47839	78
1940-41	52561	23658	45	1940-41	68427	48003	70
1941-42	52504	23506	45	1941-42	68593	49491	72
1942-43	52734	23572	45	1942-43	84148	65828	78
1943-44	52230	23191	44	1943-44	83574	62258	74
1944-45	52157	23055	44	1944-45	60289	45741	76
1945-46	52146	23263	45	1945-46	109866	87843	80
1946-47	52736	23580	45	1946-47	141013	110368	78
1947-48	53551	23848	45	1947-48	143984	112418	78
1948-49	54741	24221	44	1948-49	143548	113433	79
1949-50	54788	24402	45	1949-50	142443	107749	76
1950-51	55243	25098	45	1950-51	113590	84608	74
1951-52	54920	24792	45	1951-52	153878	115898	75
1952-53	55289	24544	44	1952-53	130635	103346	79
1953-54	55894	25159	45	1953-54	138199	106819	77
1954-55	55235	24548	44	1954-55	104995	87320	83
1955-56	54554	24244	44	1955-56	100879	83661	83
1956-57	53267	23251	44	1956-57	135437	109277	81
1957-58	53031	23263	44	1957-58	148316	120013	81
1958-59	52905	22983	43	1958-59	142723	114248	80
1959-60	52713	23025	44	1959-60	124541	98084	79
1960-61	52817	23043	44	1960-61	148514	113926	77
1961-62	53731	23424	44	1961-62	182679	140157	77
1962-63	54049	23598	44	1962-63	131382	94488	72

YEAR	GRAPEVINE AREA (ha)			YEAR	WINE PRODUCTION (kl)		
	AUST (ha)	SA (ha)	SA's share, %		AUST (kl)	SA (kl)	SA's share, %
1963-64	54958	23765	43	1963-64	166575	123204	74
1964-65	56223	23837	42	1964-65	171571	127387	74
1965-66	56707	23767	42	1965-66	151124	108578	72
1966-67	56152	23099	41	1966-67	183743	133307	73
1967-68	56688	23524	41	1967-68	195843	136630	70
1968-69	57901	24513	42	1968-69	229989	164502	72
1969-70	60850	26239	43	1969-70	278321	196846	71
1970-71	62226	27659	44	1970-71	251198	169261	67
1971-72	64943	28769	44	1971-72	290240	183276	63
1972-73	66986	29528	44	1972-73	256717	170820	67
1973-74	68392	29602	43	1973-74	294666	167611	57
1974-75	71317	30366	43	1974-75	351592	222236	63
1975-76	70448	31161	44	1975-76	346255	214114	62
1976-77	71123	31244	44	1976-77	372269	229973	62
1977-78	71083	31543	44	1977-78	332304	203219	61
1978-79	70633	31277	44	1978-79	345392	202050	58
1979-80	69666	30734	44	1979-80	404893	234547	58
1980-81	69518	30418	44	1980-81	366413	220384	60
1981-82	68351	30324	44	1981-82	394738	268685	68
1982-83	66473	29106	44	1982-83	334557	200283	60
1983-84	64516	27864	43	1983-84	393675	233307	59
1984-85	63995	26955	42	1984-85	444572	259094	58
1985-86	59834	24523	41	1985-86	383082	211770	55
1986-87	57074	23103	40	1986-87	366541	194362	53
1987-88	56871	23033	41	1987-88	403325	210359	52
1988-89	57707	23273	40	1988-89	494235	259127	52
1989-90	59192	24647	42	1989-90	439264	244993	56
1990-91	60128	25423	42	1990-91	394289	200774	51
1991-92	61007	25784	42	1991-92	475586	234061	49
1992-93	62709	26134	42	1992-93	457799	205833	45
1993-94	67074	27477	41	1993-94	582213	297991	51
1994-95	72869	32603	45	1994-95	498381	262629	53
1995-96	80574	35289	44	1995-96	668087	330863	50
1996-97	88474	37736	43	1996-97	612906	304364	50
1997-98	94369	40308	43	1997-98	785315	339033	43
1998-99				1998-99	874367	371885	43
1999-00				1999-00	944589	404412	43

Sources: AWF Statistical Report, 1996; ABS Cat. No. 1329.0, 1997; Colonial Statistical Registers; ABS Yearbooks; and ABARE Research Report No. 97.10, "Winegrape projections to 1999-2000".

Years 1997-98 to 1999-2000 are the authors' projections, based on ABS new grape vine plantings and ABARE winegrape intake projections.

**TABLE 3: WINE TRADE, AUSTRALIA, 1853-54 TO 1999-2000**

YEAR	Total Wine Exports <sup>a</sup> (kl)	Total Wine Imports (kl)	Total Wine Exports per litre ('000 \$)	Export Value (cents)	% of Wine Prod. (3-year moving av.)	% of Apparent Wine Consum. Imported (3-year moving av.)	Trade Volume Specialization Index
	[7]	[8]	[8a]	[8b]	[9]=[7]x100/[4]	[10]=[8]x100/100 x {[4]+[8]-[7]}/{[7]-[8]}/ {[7]+[8]}	
1853-54	6				na		
1854-55	113				na		
1855-56	21				na		
1856-57	31				na		
1857-58	33				2.3		
1858-59	11				1.3		
1859-60	4				1.1		
1860-61	32				1.2		
1861-62	36				1.2		
1862-63	33				1.9		
1863-64	144				3.0		
1864-65	232				3.0		
1865-66	84				2.6		
1866-67	111				1.3		
1867-68	51				1.3		
1868-69	118				1.4		
1869-70	164				1.7		
1870-71	142				1.7		
1871-72	114				1.8		
1872-73	169				1.9		
1873-74	182				1.8		
1874-75	115				1.8		
1875-76	225				1.5		
1876-77	91				1.6		
1877-78	104				1.2		
1878-79	78				1.2		
1879-80	110				1.2		
1880-81	97				1.3		
1881-82	110				2.2		
1882-83	314				2.7		
1883-84	240				3.4		
1884-85	276				4.5		
1885-86	662				6.0		
1886-87	742				7.6		

<b>YEAR</b>	<b>Total Wine Exports (kl)</b>	<b>Total Wine Imports (kl)</b>	<b>Total Wine Exports ('000 \$)</b>	<b>Export Value per litre (cents)</b>	<b>% of Wine Prodn. Exported (3-year moving av.)</b>	<b>% of Apparent Wine Cons. Imported (3-year moving av.)</b>	<b>Trade Volume Specialization Index</b>
1887-88	1043				9.0		
1888-89	1418				9.7		
1889-90	1434				10.5		
1890-91	1760				11.4		
1891-92	2114				13.3		
1892-93	2545				13.2		
1893-94	1813				13.1		
1894-95	2788				12.8		
1895-96	3202				14.0		
1896-97	3248				16.1		
1897-98	3265				17.8		
1898-99	3387				21.9		
1899-00	3742				19.4		
1900-01	3778	964	252	7	17.6	3.6	59.3
1901-02	3891	1004	260	7	17.1	4.4	59.0
1902-03	4846	824	298	6	15.3	3.5	70.9
1903-04	3233	557	210	6	14.8	2.7	70.6
1904-05	3550	499	216	6	13.7	2.2	75.4
1905-06	4237	515	226	5	14.0	2.2	78.3
1906-07	3250	524	196	6	16.4	2.5	72.2
1907-08	4441	538	254	6	15.2	2.6	78.4
1908-09	3300	596	206	6	18.4	2.9	69.4
1909-10	4419	494	252	6	16.5	2.6	79.9
1910-11	4303	554	258	6	19.5	3.0	77.2
1911-12	4980	698	304	6	16.7	2.9	75.4
1912-13	3548	699	242	7	16.3	3.3	67.1
1913-14	3167	682	212	7	15.4	3.4	64.6
1914-15	2859	454	202	7	15.2	2.9	72.6
1915-16	3274	405	242	7	14.0	2.1	78.0
1916-17	2719	302	224	8	9.4	1.2	80.0
1917-18	1653	187	204	12	8.0	0.8	79.7
1918-19	3164	173	402	13	8.0	0.8	89.6
1919-20	3642	416	468	13	9.5	0.9	79.5
1920-21	5039	470	622	12	9.2	1.0	82.9
1921-22	2750	206	322	12	7.9	0.7	86.1
1922-23	3211	266	330	10	6.8	0.6	84.7
1923-24	4506	349	434	10	6.7	0.6	85.6
1924-25	4007	370	378	9	8.4	0.6	83.1
1925-26	7831	397	744	10	11.8	0.6	90.4

YEAR	Total Wine Exports (kl)	Total Wine Imports (kl)	Total Wine Exports ('000 \$)	Export Value per litre (cents)	% of Wine Prodn. Exported (3-year moving av.)	% of Apparent Wine Consm. Imported (3-year moving av.)	Trade Volume Specialization Index
1926-27	14010	407	1668	12	16.5	0.6	94.4
1927-28	17151	346	2124	12	15.8	0.5	96.0
1928-29	7914	347	1002	13	15.4	0.5	91.6
1929-30	9927	369	1112	11	13.3	0.4	92.8
1930-31	10039	70	1020	10	18.8	0.3	98.6
1931-32	15801	38	1818	12	20.8	0.1	99.5
1932-33	14059	67	1582	11	22.4	0.1	99.1
1933-34	13941	110	1606	12	21.2	0.2	98.4
1934-35	15432	129	1624	11	22.1	0.2	98.3
1935-36	16865	136	1870	11	21.9	0.2	98.4
1936-37	18583	156	2088	11	21.5	0.3	98.3
1937-38	17716	226	1890	11	23.0	0.3	97.5
1938-39	16862	187	1964	12	24.4	0.3	97.8
1939-40	16456	120	1916	12	21.3	0.2	98.6
1940-41	7537	29	1032	14	15.3	0.1	99.2
1941-42	6336	14	996	16	8.0	0.0	99.6
1942-43	3714	0	594	16	6.6	0.0	100.0
1943-44	5662	3	846	15	7.2	0.0	99.9
1944-45	7051	0	1190	17	8.2	0.0	100.0
1945-46	8112	2	1482	18	8.8	0.0	100.0
1946-47	12368	15	2364	19	8.3	0.0	99.8
1947-48	12221	86	2860	23	7.7	0.1	98.6
1948-49	8535	199	1988	23	6.0	0.1	95.4
1949-50	5009	120	1032	21	4.8	0.1	95.3
1950-51	5557	208	1270	23	3.9	0.2	92.8
1951-52	5275	363	1462	28	4.1	0.2	87.1
1952-53	5302	35	1528	29	4.0	0.1	98.7
1953-54	6340	184	1806	28	4.7	0.1	94.4
1954-55	5745	242	1634	28	5.1	0.2	91.9
1955-56	5471	221	1468	27	5.6	0.2	92.2
1956-57	7938	152	2264	29	5.2	0.2	96.2
1957-58	6771	223	1994	29	5.3	0.2	93.6
1958-59	7935	236	2304	29	5.4	0.2	94.2
1959-60	7904	273	2530	32	5.9	0.2	93.3
1960-61	8603	446	2606	30	5.3	0.3	90.1
1961-62	7562	373	2772	37	5.1	0.3	90.6
1962-63	7325	404	2742	37	4.6	0.3	89.5
1963-64	6986	534	2741	39	5.0	0.4	85.8
1964-65	9058	681	3521	39	5.1	0.4	86.0

YEAR	Total Wine Exports (kl)	Total Wine Imports (kl)	Total Wine Exports ('000 \$)	Export Value per litre (cents)	% of Wine Prodn. Exported (3-year moving av.)	% of Apparent Wine Consm. Imported (3-year moving av.)	Trade Volume Specialization Index
1965-66	8897	663	3535	40	5.1	0.5	86.1
1966-67	8077	861	3169	39	4.8	0.6	80.7
1967-68	8386	1388	3153	38	4.0	0.7	71.6
1968-69	8200	2074	3395	41	3.2	0.8	59.6
1969-70	5886	1953	2913	49	2.7	0.9	50.2
1970-71	6563	2403	3581	55	2.5	0.9	46.4
1971-72	7957	2530	4245	53	2.6	1.0	51.7
1972-73	6244	3005	3220	52	2.7	1.2	35.0
1973-74	8466	4310	5641	67	2.4	1.4	32.5
1974-75	6546	5294	5343	82	2.1	1.7	10.6
1975-76	6132	6925	5500	90	1.6	1.9	-6.1
1976-77	4924	8098	5400	110	1.5	2.2	-24.4
1977-78	4629	7802	5400	117	1.4	2.3	-25.5
1978-79	5239	8481	6300	120	1.5	2.1	-23.6
1979-80	6087	6874	8400	138	1.7	2.0	-6.1
1980-81	7470	7492	11900	159	1.9	2.0	-0.1
1981-82	8401	8992	14000	167	2.2	2.2	-3.4
1982-83	7931	7334	13400	169	2.2	2.3	3.9
1983-84	8899	9646	16800	189	2.2	2.6	-4.0
1984-85	8698	13119	17400	200	2.3	2.9	-20.3
1985-86	10828	12794	20541	190	3.4	2.8	-8.3
1986-87	21323	7667	44620	209	6.2	2.6	47.1
1987-88	39135	8146	96157	246	7.9	2.1	65.5
1988-89	39044	9737	114521	293	8.7	2.3	60.1
1989-90	38120	10453	121248	318	9.9	2.4	57.0
1990-91	54156	8999	179588	332	13.1	2.4	71.5
1991-92	78679	8703	243526	310	17.8	2.3	80.1
1992-93	102832	7832	293157	285	20.3	2.0	85.8
1993-94	125464	8341	366574	292	22.2	2.5	87.5
1994-95	113663	14057	385704	339	21.1	3.0	78.0
1995-96	129671	20256	471576	364	22.4	3.4	73.0
1996-97	154375	13588	603274	391	24.6	na	83.8
1997-98					27.0		

a Data from 1853-54 to 1899-1900 based on UK imports of Australian wine in the following calendar year, taken from Laffer. Export volumes from 1997-98 are projections assuming Australian per capita wine consumption remains unchanged in the final four years of the 1990s, so that all the extra sales from the production in Table 2 are in export markets. Apparent wine consumption is defined simply as production plus imports minus exports. The trade volume specialization index is exports minus imports as a percentage of exports plus imports.

Sources: AWF Statistical Report, 1996; Laffer (1949, pp.123-124); and ABS Cat. No. 1329.0, 1997.



**TABLE 4:**  
**COMPOSITION OF WINE PRODUCTION, AUSTRALIA, 1922-23 TO 1996-97**

YEAR	<u>Composition of Australian Wine Prod'n</u>			<u>Share of Total Wine Prod'n (%)</u>		
	[11] Distillation Wine Prod'n (kl)	[12] Fortified Wine Prod'n (kl)	[13] Table Wine Prod'n (kl)	[14]=[11]x 100/[4]	[15]=[12]x 100/[4]	[16]=[13]x 100/[4]
1922-23	17271	12702	21979	na	na	na
1923-24	19240	14047	33375	34	26	43
1924-25	23173	17704	19582	37	28	38
1925-26	29653	22782	21353	41	32	31
1926-27	37668	28854	26474	44	34	26
1927-28	37206	28290	13162	44	33	27
1928-29	33683	23477	27397	46	32	25
1929-30	34132	21597	17322	44	30	29
1930-31	25201	17158	17096	44	30	30
1931-32	23602	17975	22934	39	28	37
1932-33	25487	18969	30179	41	30	33
1933-34	30225	22454	10945	42	30	32
1934-35	29588	20942	23410	48	35	21
1935-36	40671	29693	10228	48	35	21
1936-37	42439	31338	14174	54	39	12
1937-38	49361	34213	5920	57	39	9
1938-39	39345	24811	661	58	38	8
1939-40	32793	20579	10759	55	32	17
1940-41	32617	16733	21057	50	28	25
1941-42	33638	19274	17961	47	27	30
1942-43	36725	23702	26525	47	30	27
1943-44	40391	27916	18568	49	33	22
1944-45	34652	24357	4161	47	32	25
1945-46	43563	29958	39889	43	30	31
1946-47	55777	38548	51248	41	29	33
1947-48	64506	46385	38579	43	31	29
1948-49	65897	47719	35575	47	34	23
1949-50	72898	51543	24099	49	35	20
1950-51	57155	40342	20865	49	36	19
1951-52	71838	54044	34387	48	36	20
1952-53	63681	49456	23348	47	36	21
1953-54	64116	48662	31176	49	35	20
1954-55	55783	33379	19780	49	32	23
1955-56	48542	27945	27697	51	32	20
1956-57	69901	49224	20866	53	32	19

<b>YEAR</b>	<b>[11] Distillation Wine Prodn (kl)</b>	<b>[12] Fortified Wine Prodn (kl)</b>	<b>[13] Table Wine Prodn (kl)</b>	<b>[14]=[11]x 100/[4] Distillation Wine</b>	<b>[15]=[12]x 100/[4] Fortified Wine</b>	<b>[16]=[13]x 100/[4] Table Wine</b>
1957-58	84578	46219	23103	55	33	16
1958-59	79561	44092	24435	55	32	17
1959-60	64727	42469	21916	55	32	17
1960-61	82630	44846	26149	56	30	17
1961-62	108228	50356	31354	56	29	18
1962-63	68596	39828	27690	55	29	20
1963-64	86921	49210	35795	52	30	22
1964-65	86761	50629	39537	50	29	23
1965-66	72734	43996	39382	47	30	26
1966-67	78703	56375	54643	44	29	30
1967-68	83412	52434	66199	45	27	32
1968-69	109524	54820	72554	47	24	32
1969-70	135324	62480	89171	49	22	32
1970-71	125326	50379	83071	48	21	33
1971-72	136779	59921	94385	45	21	37
1972-73	94490	54328	117381	41	19	41
1973-74	110713	47954	136001	37	19	47
1974-75	125876	68484	166817	36	19	47
1975-76	124453	68137	163655	36	19	49
1976-77	130491	62471	190096	35	16	51
1977-78	113350	42672	183605	31	16	56
1978-79	80570	58041	216481	26	14	62
1979-80	92738	54746	266753	24	14	65
1980-81	90829	45659	237786	24	13	65
1981-82	99613	51907	251133	24	12	66
1982-83	68406	33541	238129	19	10	73
1983-84	47841	21279	327124	16	8	77
1984-85	70191	43893	337127	14	9	79
1985-86	52813	41692	294686	16	10	79
1986-87	62490	31766	306804	15	9	80
1987-88	53376	31403	322993	14	8	81
1988-89	63793	36937	399203	13	8	80
1989-90	61767	32904	349913	14	8	80
1990-91	54068	33817	312024	13	7	80
1991-92	59138	30776	390857	12	7	83
1992-93	46997	22264	392575	11	6	85
1993-94	56843	30458	500076	10	5	86
1994-95	44392	25399	433005	10	5	86
1995-96	67299	28874	577272	9	5	87
1996-97	50601	28656	538123	na	na	na

Sources: AWF Statistical Report, 1996 and ABS Cat. No. 1329.0, 1997.

**TABLE 5: PRODUCTION OF WINE, BRANDY AND GRAPE SPIRIT  
AUSTRALIA, 1860-61 TO 1996-97**

YEAR	[17] Population (millions)	[4] Total Wine Prodn (kl)	[18] Wine Prodn per Capita (litres)	[18a] Brandy Prodn (kl alc.)	[18a] Grape Spirit Prodn (kl alc.)
1845-46	0.28				
1850-51	0.41				
1855-56	0.79				
1860-61	1.15	1337	1.2	na	na
1865-66	1.39	5387	3.9	na	na
1870-71	1.65	8063	4.9	na	na
1875-76	1.90	10875	5.7	na	na
1880-81	2.23	7603	3.4	na	na
1885-86	2.69	8968	3.3	na	na
1890-91	3.15	17287	5.5	na	na
1895-96	3.49	22409	6.4	na	na
1900-01	3.77	23280	6.2	na	na
1901-02	3.82	26440	6.9	na	na
1902-03	3.88	23578	6.1	na	na
1903-04	3.92	28459	7.3	na	na
1904-05	3.97	26603	6.7	na	na
1905-06	4.03	25412	6.3	na	na
1906-07	4.09	27008	6.6	na	na
1907-08	4.16	20230	4.9	na	na
1908-09	4.23	25075	5.9	na	na
1909-10	4.32	20923	4.8	na	na
1910-11	4.43	26667	6.0	na	na
1911-12	4.57	22617	4.9	na	na
1912-13	4.75	27748	5.8	na	na
1913-14	4.89	21411	4.4	na	na
1914-15	4.97	13071	2.6	na	na
1915-16	4.97	26763	5.4	na	na
1916-17	4.92	23304	4.7	na	na
1917-18	4.98	31209	6.3	na	na
1918-19	5.08	39518	7.8	na	na
1919-20	5.30	34774	6.6	na	na
1920-21	5.41	50071	9.3	na	na
1921-22	5.51	38835	7.0	na	na
1922-23	5.64	50449	8.9	448	2209
1923-24	5.76	65001	11.3	517	2443
1924-25	5.88	58365	9.9	486	3079
1925-26	6.00	71093	11.8	600	3962

<b>YEAR</b>	<b>Population (millions)</b>	<b>Total Wine Prodn (kl)</b>	<b>Wine Prodn (ltr per capita)</b>	<b>Brandy Prodn (kl alc.)</b>	<b>Grape Spirit Prodn (kl alc.)</b>
1926-27	6.12	89583	14.6	777	5018
1927-28	6.25	75312	12.0	804	4920
1928-29	6.36	81781	12.9	1099	4083
1929-30	6.44	70496	10.9	1495	3756
1930-31	6.50	57425	8.8	893	2984
1931-32	6.55	62384	9.5	505	3126
1932-33	6.60	72392	11.0	622	3299
1933-34	6.66	60969	9.2	745	3905
1934-35	6.71	71462	10.7	910	3642
1935-36	6.75	77079	11.4	1093	5164
1936-37	6.81	84244	12.4	1079	5450
1937-38	6.87	85447	12.4	1644	5950
1938-39	6.93	61883	8.9	1738	4315
1939-40	7.00	61697	8.8	1466	3579
1940-41	7.07	68427	9.7	2108	2910
1941-42	7.14	68593	9.6	1823	3352
1942-43	7.20	84148	11.7	1528	4122
1943-44	7.27	83574	11.5	1359	4855
1944-45	7.35	60289	8.2	1095	4236
1945-46	7.43	109866	14.8	1492	5210
1946-47	7.52	141013	18.8	1877	6704
1947-48	7.64	143984	18.8	1857	8067
1948-49	7.79	143548	18.4	1839	8299
1949-50	8.05	142443	17.7	2251	8964
1950-51	8.31	113590	13.7	1777	7016
1951-52	8.42	153878	18.3	1653	9399
1952-53	8.64	130635	15.1	1196	8601
1953-54	8.90	138199	15.5	1401	8463
1954-55	9.09	104995	11.6	2777	5805
1955-56	9.31	100879	10.8	2608	4860
1956-57	9.53	135437	14.2	2616	6697
1957-58	9.75	148316	15.2	3258	8212
1958-59	9.95	142723	14.3	3073	7890
1959-60	10.14	124541	12.3	2691	6722
1960-61	10.3	148514	14.4	3029	7516
1961-62	10.6	182679	17.2	3058	10675
1962-63	10.7	131382	12.3	2931	6959
1963-64	11.0	166575	15.1	3167	7869
1964-65	11.2	171571	15.3	3634	7877
1965-66	11.4	151124	13.3	3559	7336
1966-67	11.6	183743	15.8	2054	8791
1967-68	11.8	195843	16.6	2265	9120

<b>YEAR</b>	<b>Population</b>	<b>Total Wine Prodn</b>	<b>Wine Prodn per Capita</b>	<b>Brandy Prodn</b>	<b>Grape Spirit Prodn</b>
	<b>(millions)</b>	<b>(kl)</b>	<b>(litres)</b>	<b>(kl alc.)</b>	<b>(kl alc.)</b>
1968-69	12.0	229989	19.2	2773	10160
1969-70	12.3	278321	22.6	3266	12727
1970-71	12.5	251198	20.1	3849	11178
1971-72	12.9	290240	22.5	4240	13150
1972-73	13.2	256717	19.4	3589	9419
1973-74	13.4	294666	22.0	2152	9467
1974-75	13.7	351592	25.7	1784	13572
1975-76	13.9	346255	24.9	1613	13803
1976-77	14.0	372269	26.6	2127	14750
1977-78	14.2	332304	23.4	2570	12065
1978-79	14.4	345392	24.0	2208	9887
1979-80	14.5	404893	27.9	1650	10301
1980-81	14.7	366413	24.9	2330	10814
1981-82	14.9	394738	26.5	2527	10203
1982-83	15.2	334557	22.0	1387	7881
1983-84	15.4	393675	25.6	1553	4505
1984-85	15.6	444572	28.5	2103	7971
1985-86	15.8	383082	24.2	1255	8258
1986-87	16.0	366541	22.9	1453	6646
1987-88	16.3	403325	24.7	939	5717
1988-89	16.5	494235	30.0	856	7614
1989-90	16.8	439264	26.1	1062	6990
1990-91	17.1	394289	23.1	1333	6710
1991-92	17.3	475586	27.5	1067	6344
1992-93	17.5	457799	26.2	1215	4602
1993-94	17.7	582213	32.9	1463	6169
1994-95	17.8	498381	28.0	1036	4860
1995-96	18.1	668087	36.9	1070	7842
1996-97	18.3	612906	33.5	800	5700

Sources: ABS Yearbooks; ABARE Australian Commodity Statistics, 1997; AWF Statistical Report, 1996; and ABS Cat. No. 1329.0, 1997.



**TABLE 6: PER CAPITA PRODUCTION OF TABLE WINE, FORTIFIED WINE, BRANDY AND BEER, AUSTRALIA, 1922-23 TO 1996-97 (litres of alcohol, 3-year moving average)**

YEAR	$\frac{[19]=0.12x[13]}{[17]}$ Table Wine	$\frac{[20]=0.18x[12]}{[17]}$ Fortified Wine	$\frac{[21]=[18]}{[17]}$ Brandy	[22] Beer	$\frac{[23]=[19]+[20]+[21]+[22]}{[17]}$ Total
1922-23					
1923-24	0.52	0.46	0.08	2.33	3.40
1924-25	0.51	0.56	0.09	2.33	3.48
1925-26	0.45	0.69	0.10	2.36	3.61
1926-27	0.40	0.78	0.12	2.38	3.69
1927-28	0.43	0.77	0.14	2.38	3.73
1928-29	0.36	0.69	0.18	2.29	3.53
1929-30	0.38	0.58	0.18	2.06	3.20
1930-31	0.35	0.52	0.15	1.78	2.81
1931-32	0.43	0.50	0.10	1.59	2.62
1932-33	0.39	0.54	0.09	1.58	2.60
1933-34	0.39	0.56	0.11	1.68	2.74
1934-35	0.27	0.65	0.14	1.83	2.88
1935-36	0.28	0.73	0.15	1.99	3.15
1936-37	0.18	0.84	0.19	2.19	3.40
1937-38	0.12	0.79	0.22	2.37	3.49
1938-39	0.10	0.69	0.23	2.55	3.57
1939-40	0.19	0.53	0.25	2.69	3.66
1940-41	0.28	0.48	0.25	2.80	3.82
1941-42	0.37	0.50	0.25	2.78	3.91
1942-43	0.35	0.59	0.22	2.73	3.89
1943-44	0.27	0.63	0.18	2.67	3.75
1944-45	0.34	0.67	0.18	2.73	3.92
1945-46	0.51	0.75	0.20	2.93	4.40
1946-47	0.69	0.92	0.23	3.11	4.95
1947-48	0.66	1.04	0.24	3.42	5.36
1948-49	0.50	1.12	0.25	3.58	5.45
1949-50	0.40	1.04	0.24	3.88	5.56
1950-51	0.38	1.06	0.23	4.11	5.78
1951-52	0.37	1.02	0.18	4.36	5.93
1952-53	0.41	1.06	0.16	4.59	6.22
1953-54	0.33	0.89	0.20	4.80	6.22
1954-55	0.35	0.73	0.25	5.00	6.32

<b>YEAR</b>	<b>Table Wine</b>	<b>Fortified Wine</b>	<b>Brandy</b>	<b>Beer</b>	<b>Total</b>
1955-56	0.29	0.71	0.29	4.94	6.23
1956-57	0.30	0.78	0.30	4.85	6.22
1957-58	0.28	0.86	0.31	4.67	6.12
1958-59	0.28	0.80	0.30	4.71	6.09
1959-60	0.29	0.78	0.29	4.68	6.03
1960-61	0.31	0.80	0.28	4.70	6.09
1961-62	0.32	0.77	0.29	4.71	6.09
1962-63	0.35	0.78	0.28	4.77	6.18
1963-64	0.38	0.76	0.30	4.90	6.33
1964-65	0.41	0.77	0.31	5.01	6.50
1965-66	0.47	0.79	0.27	5.10	6.64
1966-67	0.55	0.79	0.23	5.20	6.77
1967-68	0.66	0.83	0.20	5.35	7.04
1968-69	0.76	0.85	0.23	5.50	7.33
1969-70	0.80	0.82	0.27	5.65	7.54
1970-71	0.85	0.82	0.30	5.76	7.74
1971-72	0.92	0.77	0.30	5.84	7.83
1972-73	1.06	0.74	0.25	6.00	8.05
1973-74	1.25	0.76	0.19	6.18	8.38
1974-75	1.37	0.81	0.14	6.27	8.58
1975-76	1.50	0.86	0.13	6.19	8.69
1976-77	1.53	0.74	0.15	6.12	8.54
1977-78	1.66	0.69	0.16	6.07	8.59
1978-79	1.86	0.65	0.15	6.04	8.70
1979-80	1.98	0.65	0.14	5.92	8.70
1980-81	2.06	0.62	0.15	5.84	8.66
1981-82	1.95	0.53	0.14	5.65	8.26
1982-83	2.15	0.42	0.12	5.48	8.17
1983-84	2.34	0.38	0.11	5.27	8.10
1984-85	2.46	0.41	0.10	5.18	8.15
1985-86	2.38	0.45	0.10	5.07	8.00
1986-87	2.31	0.39	0.08	5.02	7.79
1987-88	2.53	0.37	0.07	4.99	7.95
1988-89	2.59	0.37	0.06	5.00	8.01
1989-90	2.53	0.37	0.06	4.96	7.92
1990-91	2.47	0.34	0.07	4.79	7.67
1991-92	2.53	0.30	0.07	4.58	7.49
1992-93	2.93	0.29	0.07	4.43	7.72
1993-94	3.00	0.27	0.07	4.30	7.63
1994-95	3.38	0.28	0.07	4.15	7.88
1995-96	3.43	0.28	0.05	3.99	7.75

Sources: AWF Statistical Report, 1996; ABS Cat. Nos. 1329.0, 4306.0 and Yearbooks



TABLE 7

**WINEGRAPE CRUSH (kt and per cent) BY VARIETY GROUP, AUSTRALIA, 1955-56 TO 1999-2000**

	1955-56	<i>% of total</i>	1965-66	<i>% of total</i>	1974-75 to 1976-77	<i>% of total</i>	1984-85 to 1986-87	<i>% of total</i>	1994-95 to 1996-97	<i>% of total</i>	1999-2000	<i>% of total</i>
Red premium	12.8	10.1	17.3	9.4	90.3	20.8	88.1	17.1	185.5	26.8	455	39
Red non-prem.	28.6	22.5	32.3	17.5	81.7	18.9	51.2	9.9	45.2	6.5	53	5
<b>Red, total</b>	<b>41.4</b>	<b>32.6</b>	<b>49.6</b>	<b>26.9</b>	<b>172.0</b>	<b>39.7</b>	<b>139.3</b>	<b>27.0</b>	<b>230.7</b>	<b>33.4</b>	<b>508</b>	<b>44</b>
White premium	6.4	5.0	15.1	8.2	46.7	10.8	123.5	23.9	230.8	33.4	439	38
White non-prem.	79.3	62.4	119.9	65.0	214.6	49.5	252.9	49.0	229.8	33.2	213	18
<b>White, total</b>	<b>85.7</b>	<b>67.4</b>	<b>135.0</b>	<b>73.1</b>	<b>261.3</b>	<b>60.3</b>	<b>376.4</b>	<b>73.0</b>	<b>460.6</b>	<b>66.6</b>	<b>652</b>	<b>56</b>
Premium, total	19.2	15.1	32.4	17.6	137.0	31.6	211.6	41.0	416.3	60.2	894	77
Non-prem., total	107.9	84.9	152.2	82.4	296.3	68.4	304.1	59.0	275.0	39.8	266	23
<b>TOTAL CRUSH</b>	<b>127.1</b>	<b>100.0</b>	<b>184.6</b>	<b>100.0</b>	<b>433.3</b>	<b>100.0</b>	<b>515.7</b>	<b>100.0</b>	<b>691.3</b>	<b>100.0</b>	<b>1160</b>	<b>100</b>

Tonnages are shown for individual years (1955-56, 1965-66 and 1999-2000) and 3-year averages (around 1975-76, 1985-86 and 1995-96).

See footnote 'a' of Table 9 for the definition of premium grape varieties.

Sources: 1955-56 & 1965-66 data adapted from Halliday (1994, pp. 118-19); other years from ABS,

Viticulture Series, Cat. Nos. 7310.0 & 1329.0, except projections to 1999-2000 which are from ABARE (1997).

TABLE 9

**SUMMARY STATISTICS OF WINE INDUSTRY GROWTH, AUSTRALIA,  
1985 TO 2000**

(values are in 1995-96 Australian dollars, using the GDP deflator)

	Unit	1984-85 to 1986-87 (1)	1994-95 to 1996-97 (2)	(2)/(1) (3)	1999- 2000 (4)	(4)/(2) (5)
<b>Quantity of grapes crushed for wine</b>	<b>kt</b>	<b>543</b>	<b>770</b>	<b>1.42</b>	<b>1160</b>	<b>1.51</b>
-- of which: premium red <sup>a</sup>	kt	93	206	2.22	455	2.21
premium white <sup>a</sup>	kt	130	257	1.98	439	1.71
non-premium	kt	320	307	0.96	266	0.87
<b>Price received by winegrape growers</b>	<b>\$/t</b>	<b>352</b>	<b>610</b>	<b>1.73</b>	<b>658<sup>P</sup></b>	<b>1.08</b>
<b>Value of winegrape production</b>	<b>\$m</b>	<b>191</b>	<b>470</b>	<b>2.46</b>	<b>736</b>	<b>1.61</b>
<b>Quantity of wine produced for sale</b>	<b>MI</b>	<b>339</b>	<b>451</b>	<b>1.33</b>	<b>590<sup>S</sup></b>	<b>1.48</b>
( <b>% premium</b> )	<b>%</b>	<b>19</b>	<b>42</b>	<b>2.21</b>	<b>62</b>	<b>1.48</b>
of which: domestic sales	MI	325	319	0.98	340	1.07
(% premium)	%	18	27	1.50	35	1.30
export sales	MI	14	132	9.43	250	1.89
(% premium)	%	45	76	1.69	95	1.25
<b>Quantity of wine imported</b>	<b>MI</b>	<b>11</b>	<b>16</b>	<b>1.43</b>	<b>20</b>	<b>1.25</b>
<b>Quantity of wine consumed in Australia</b>	<b>MI</b>	<b>336</b>	<b>335</b>	<b>1.00</b>	<b>360</b>	<b>1.07</b>
<b>Wine consumption per capita</b>	<b>litres</b>	<b>21.3</b>	<b>18.5</b>	<b>0.87</b>	<b>19.0<sup>P</sup></b>	<b>1.03</b>
<b>Share of exports in wine production sold</b>	<b>%</b>	<b>4.0</b>	<b>29.3</b>	<b>7.35</b>	<b>42.4</b>	<b>1.45</b>
<b>Share of wine consumption imported</b>	<b>%</b>	<b>3.3</b>	<b>4.8</b>	<b>1.44</b>	<b>5.6</b>	<b>1.17</b>
<b>Wholesale price (pre-tax) of Aust. wine</b>	<b>\$/l</b>	<b>2.64</b>	<b>3.91</b>	<b>1.48</b>	<b>4.18<sup>P</sup></b>	<b>1.07</b>
-- of which: domestic sales	\$/l	2.63	4.02	1.53	4.30 <sup>P</sup>	1.07
export sales	\$/l	2.97	3.65	1.23	3.91 <sup>P</sup>	1.07
<b>Wholesale (pre-tax) value of Aust. wine</b>	<b>\$m</b>	<b>894</b>	<b>1770</b>	<b>1.98</b>	<b>2470</b>	<b>1.40</b>
-- of which: domestic sales	\$m	853	1283	1.50	1460	1.10
export sales	\$m	41	487	11.88	980	2.01
<b>Grapegrower share of w'sale revenue</b>	<b>%</b>	<b>22</b>	<b>27</b>	<b>1.23</b>	<b>29</b>	<b>1.07</b>

<sup>a</sup> Premium red varieties are Caberbet Franc, Cabernet Sauvignon, Malbec, Merlot, Pinot Noir, Ruby Cabernet, and Shiraz. Premium white varieties are Chardonnay, Chenin Blanc, Colombard, Muscadelle, Riesling, Sauvignon Blanc, Semillon, Traminer, and Verdelho.

<sup>P</sup> Projected assuming no change in real terms from 1996-7 (which allows for a drop in premium prices as their volumes rise so their weights rise).

<sup>S</sup> Assumes the same ratios of grapes crushed to wine sold as averaged in the 1994-95 to 1996-97 years for each of the premium red, premium white, and non-premium categories.

Sources: See Table 10.



TABLE 11

**WINERY CONCENTRATION IN THE AUSTRALIAN WINE  
INDUSTRY, BY GRAPE CRUSH, 1977-78 AND 1995-96**  
(as percentage of industry total)

	Grape crush size (tonnes)				<b>TOTAL</b>
	<b>up to 99 t</b>	<b>100-999 t</b>	<b>1000-9999 t</b>	<b>&gt; 10000 t</b>	
<b>1977-78</b>					
No. of producers	57	26	10	7	100
Grape crush	1	5	16	78	100
<b>1995-96</b>					
No. of producers	79	17	2.6	1.4	100
Grape crush	3	6	13	78	100

Source: BAE (1979, Table B9) and Hallier (1997).

TABLE 12  
**WINERY CONCENTRATION IN THE AUSTRALIAN WINE  
 INDUSTRY, BY SALES VOLUME AND VALUE, 1996**  
 (as percentage of industry total)

	<b>Largest 3<sup>a</sup> producers</b>	<b>Largest 6<sup>a</sup> producers</b>	<b>Largest 9 producers</b>	<b>Other 845 producers</b>	<b>TOTAL</b>
Grape crush	50	68	77	23	100
Branded cases	47	65	71	29	100
Value of domestic sales	51	69	78	22	100
Value of export sales <sup>b</sup>	70	87	95	5	100

<sup>a</sup> The top four producers in all four categories are, in order of size, Southcorp, Orlando-Wyndham, BRL Hardy, and Mildara-Blass. The next six biggest exporters are, in order, Negotiants International (associated with Yalumba but also exporting other brands), Rosemount, McWilliams, Cranswick, Mitchelton, and Brown Brothers.

<sup>b</sup> 1993-94

Source: Hallier (1997).

TABLE 13

**AUSTRALIA'S POSITION IN THE WORLD WINE MARKET, 1961 TO 1996**

	1961-65	1971-75	1981-85	1986-90	1991-95	1996
<b>(a) Share (%) of world wine:</b>						
Production	0.6	1.0	1.2	1.4	1.9	2.5
Consumption	0.6	0.9	1.2	1.4	1.5	1.7
Export volume	0.3	0.2	0.2	0.7	1.9	4.2
Export value	0.6	0.4	0.3	0.9	2.3	3.7
Import value	0.1	0.3	0.5	0.5	0.4	0.4
<b>(b) National ranking in the world for wine:</b>						
	1963-65	1973-75	1983-85	1988-90	1993-95	1996
Production	15	14	14	10	10	9
Consumption	16	14	14	12	12	12
Export volume	15	19	19	9	8	5
Export value	15	18	18	8	6	6
Per capita production	14	13	13	11	8	7
Per capita consumption	15	13	12	12	13	12
Self sufficiency (%)	9	11	18	11	7	3
Comparative advantage <sup>a</sup>	14	18	16	10	9	8

<sup>a</sup> Wine's share of national merchandise exports relative to wine's share of world merchandise exports.

Source: Berger, Anderson and Stringer (1998).

**TABLE 14: VOLUME AND UNIT VALUE OF AUSTRALIA'S EXPORTS, BY DESTINATION, 1980-81 TO 1997-98**

	(percentage shares in parentheses)					
	1980-81 to 1984-85	1985-96 to 1989-90	1990-91 to 1994-95	1995-96	1996-97	1997-98 <sup>b</sup>
<b>VOLUME (million litres)</b>						
United Kingdom	0.6 (8)	5.5(18)	35.3(37)	61.0(47)	72.7(47)	80.7(44)
United States	0.6 (8)	3.8(11)	9.8(10)	15.9(12)	22.7(15)	30.9(17)
New Zealand	1.0(12)	2.8 (9)	14.6(15)	13.8(11)	15.6(10)	21.7(12)
Canada	1.2(14)	2.5 (8)	6.0 (6)	6.0(5)	6.4(4)	7.6(4)
Sweden	0.3 (4)	7.0(23)	13.3(14)	6.3(5)	4.8(3)	4.1(2)
Japan				2.5(2)	2.6(2)	4.1(2)
Other Northeast Asia				2.0(2)	3.9(3)	4.0(2)
Southeast Asia				3.5(3)	3.6(2)	
Others	4.5(54) <sup>a</sup>	9.1(31) <sup>a</sup>	17.5(18) <sup>a</sup>	19.3(14)	22.7(14)	29.2(16) <sup>a</sup>
<b>TOTAL</b>	<b>8.3(100)</b>	<b>30.7(100)</b>	<b>96.5(100)</b>	<b>130.3(100)</b>	<b>155.0(100)</b>	<b>182.3(100)</b>
<b>UNIT VALUE (cents/litre)</b>						
United Kingdom	157	317	355	345	354	na
United States	271	429	455	483	528	na
New Zealand	262	302	201	252	256	na
Canada	146	259	319	420	452	na
Sweden	84	123	174	274	246	na
<b>TOTAL</b>	<b>173</b>	<b>220</b>	<b>295</b>	<b>362</b>	<b>385</b>	<b>na</b>

<sup>a</sup> Includes the East Asian countries not shown separately.

<sup>b</sup> Twelve months to 31 March rather than 30 June.

Source: Australian Wine Export Council.





## About the Centre for International Economic Studies

The Centre was established in 1989 by the School of Economics of the University of Adelaide to strengthen teaching and research in the field of international economics and closely related disciplines. Its specific objectives are:

- to promote individual and group research by scholars within and outside the University of Adelaide
- to strengthen undergraduate and post-graduate education in this field
- to provide shorter training programs in Australia and elsewhere
- to conduct seminars, workshops and conferences for academics and for the wider community
- to publish and promote research results
- to provide specialised consulting services
- to improve public understanding of international economic issues, especially among policy makers and shapers

Both theoretical and empirical, policy-oriented studies are emphasised, with a particular focus on developments within, or of relevance to, the Asia-Pacific region. Further details and a list of publications are available from:

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## **Trends and Cycles in the Australian Wine Industry, 1850 to 2000**

The Australian wine industry has always had a tendency to boom and then plateau. Even by historical standards, though, the boom since the late 1980s has been exceptional, with the area of grapevines in Australia almost doubling in a decade. Does that mean the industry is headed for another period of over-supply and depressed prices, and if so when and to what extent, bearing in mind the rapid vineyard expansion recently in other parts of the world as well? This is an important question not only for present grapegrowers and winemakers but also for those considering investing in one or more parts of the industry, including consumers with private cellars, and producers and processors of other primary products wishing to expand their exports.

This, the first of a series of reports from a new wine research project, does not give a definitive answer to the above question, but it does provide the historical background information necessary to begin to address it. Specifically, it examines the industry's long-run trends and its cycles around those trends. It shows also the structural changes towards and then away from fortified wines and, more recently, from red to white and back to red table wines and from non-premium to premium production and consumption. The report then looks more closely at the rapid developments of the past decade, showing growth in prices and volumes of grape and wine production, and in wine sales domestically and abroad. Since it takes two or three years before newly planted vines produce a significant crop, it is also possible to project forward to the turn of the century with reasonable precision. Such projections are compared with the mid-1990s and with the industry's targets for the year 2025. Data are shown separately for premium red, premium white and non-premium types -- distinctions that turn out to be crucial in assessing the industry's future prospects. The paper finishes with some tentative conclusions as to the industry's prospects, pending the next stage of the research project. The authors present several reasons as to why the present buoyancy probably will continue into the new millennium, and offer suggestions of ways to increase that probability.

**Robert Osmond** is currently an Honours economics student at the University of Adelaide, preparing a thesis on the extent to which government interventions have influenced the duration and amplitudes of the fluctuations in the Australian wine industry since 1850.

**Kym Anderson** is Professor of Economics and Director of the Centre for International Economic Studies at the University of Adelaide. He has authored or edited eleven books and more than 100 articles in the areas of international, agricultural and development economics. He lives on a farm in the emerging super premium winegrape area of the Adelaide Hills.