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**Building an internationally competitive Australian olive industry:
lessons from the wine industry**

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Building an internationally competitive Australian olive industry: lessons from the wine industry

More than 100 years ago 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). The first *Yearbook of Australia* made a similar claim in 1908, but by the 1922 edition it added some comments on why that had not happened: “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.”

Why did it take 100 years to fulfil the promise seen for Australia’s wine industry in the late 19th century, and how much longer will it take for our olive industry to do likewise? With these questions in mind, this paper first notes the similarities and differences between Australia’s wine and olive industries. It then summarizes the four previous boom/bust cycles in the wine industry, examines the extent to which the current boom is different, and then highlights the steps the wine industry is taking to sustain its recent growth. With that as background, the paper finishes by drawing lessons from that case study for the rapidly expanding Australian olive industry.¹

¹ An early version of these ideas appear in Anderson (2000a,b).

Similarities and differences between Australia's wine and olive industries

Like wine, olives are Mediterranean-based with more than two-thirds of global production and consumption taking place (with considerable subsidization) in Europe. Australia supplies a small share of the global market of both products (3% of the world's \$150 billion wine market, less than 0.3% of the \$20 billion olives market). Southern Australia's climate is well suited to producing both, and our lifestyle is conducive to consuming both at least as much as Europeans do. Both involve processing and the processed products are sold over a wide price range according to quality and evolving consumer preferences. Both were first planted in Australia more than 200 years ago but plantings have taken off in a major way only in the past decade.

Yet there are also some major differences between the two industries in Australia. One is that the wine industry has been investing in R&D and generic promotion for many decades, unlike the olive industry which is only in its infancy in those respects. Another is that Australia's wine production last year was more than twenty times that of the olive industry in value terms. However, local olive production accounts for only about one-twentieth of domestic sales. So if/when Australian olive production matches domestic consumption, it will be a similar size to the wine industry currently. Given the explosion in nursery sales for young olive trees during the past decade, that may well be reached within the next ten years: there will be around 8 million newly planted trees by 2002, suggesting annual olive oil production could rise from less than 2kt currently to as much as 40kt by 2012 (RIRDC and AOA 2002, pp. 3-4). Managing that expansion will be no less a challenge for the olive industry than that faced by the wine industry over recent years. In what follows, attention first turns to the past and present experiences of the wine industry before drawing lessons for the olive industry.

How well has the Australian wine industry performed?

Australian wine exports rose from less than \$20 million per year (less than 5 per cent of sales) up to the mid-1980s to \$2 billion in 2002. As a consequence of huge increases in production relative to domestic consumption, export sales for the first time exceeded domestic sales of Australian wine in 2001-02. Australia is now the world's fourth largest wine exporter after France, Italy and Spain.

While Australia's wine exports have boomed several times in the past, in each case those booms subsequently plateaued and the expanded acreage meant grapegrowers went back to receiving low returns. Indeed in the latter 1970s/early 1980s wine exports were so low that Australia became a net importer of wine, and the industry's prospects were sufficiently dire as recently as 1985 as to induce the government to fund a vine-pull compensation scheme to encourage grapegrowers to move to alternative crops. Yet, like a phoenix, the industry has risen again and grown with renewed vigour: the acreage planted to vines has nearly trebled (Figure 1) and the real value of both winegrape and wine production has grown at more than 10 per cent per annum over the past dozen years.

The long history of fluctuating fortunes raises the obvious question of whether Australia's current wine boom is to be followed by yet another crash, at least in winegrape prices if not in wine production and export volumes. The wine industry is still bullish, having in 1995 set itself targets of doubling annual exports to A\$1 billion by the turn of the century (since achieved) and of trebling the real value of wine production within 30 years (AWF 1995). Others, aware of the boom-bust cycles of the past, still need to be convinced that this time the expanded demand is here to stay – at least long enough for growers to recoup a return from new plantings (which have nearly trebled Australia's area of winegrape vineyards). To help resolve this difference in views, consider the features of Australia's previous wine booms.

On the one hand, it is difficult not to be sobered by the past. This is because, as is clear from Figure 1, each of the first four booms in the Australian wine industry finished with a plateau in vineyard area (and winery output) growth. These were 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 in the world for at least two millennia.

Yet, on the other hand, our past history also is encouraging, because it shows the current boom to have several positive features that contrast with those of earlier booms. Some of these features are summarized in Table 1. The first boom, from the mid-1850s, was mainly 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 unable to be exported profitably, largely because of high duties on inter-colonial trade plus poor marketing and high transport costs in exporting the rather crude product of that time 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 higher quality but still mostly generic bulk (rather than winery bottled and branded) dry red wines. The relatively open British market absorbed one-sixth of Australia's production early in the 20th century, before the first world war intervened. That boom was part of a general internationalization of world commodity markets at that time – something that returned but in much-diminished form after that war.

The acreage boom induced by soldier settlement after World War I provided the basis for the third boom, from the mid-1920s. That third boom was helped by irrigation and land development subsidies, a huge 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 (Figure 2). The subsequent removal of the export subsidy, and the huge hike in UK tariffs on fortified wine in the latter 1940s, then 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. From the First World War until the late 1950s most winegrapes were destined for fortified wine or for distillation as brandy.

The fourth boom, following two post-war decades of slow growth in the industry, was entirely domestic. It emerged as Australian consumer tastes became more Southern European, as licensing and trade practice laws changed with income growth, as corporatization of wineries led to more-sophisticated domestic marketing and new innovations (including wine-in-a-box), and as Britain's wine import barriers rose again with its accession to the EC. Initially domestic demand grew for red table wine. Then the cask attracted a new clientele of white table wine drinkers, causing Australia's per capita wine consumption to treble during the fourth cycle. The economy-wide recession of the early 1980s subsequently slowed demand growth and caused wine prices to slump to the point that the Federal and South Australian governments intervened with vine-pull subsidies in the mid-1980s.

How does the fifth and latest boom, which began in the late 1980s, differ from the earlier booms? One difference is that the current boom is overwhelmingly export-oriented (Figure 2), since Australia's per capita wine consumption has been static over the 1990s. This contrasts with the first and fourth booms at least which were primarily domestic. It also differs from the inter-war boom, when exports were more a way of disposing of soldier-settlement induced surplus low-quality winegrape production than as a pre-planned growth strategy.

Secondly, the current boom is mainly market-driven, which is not unlike the first two booms but contrasts markedly with the third (inter-war) boom that evaporated once government assistance measures (the export subsidy and the preferential UK tariff) were withdrawn. What triggered the growth in export demand for Australian wine was the change in liquor licensing laws in the United Kingdom in the 1970s, allowing supermarkets to retail wine to the post-war baby boomers (by then adults). 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 Australian companies recognised and responded to this new market opportunity.² They were able to do so faster than EU suppliers because the latter have been hamstrung by myriad regulations and insulated from market forces by price supports. To exploit this rapidly growing market required large volumes of consistent, low-priced premium wine. Land- and capital-abundant Australia had the right factor endowments to supply precisely that. High labour costs were overcome for larger firms by adapting and adopting new techniques for mechanical pruning and harvesting, thereby generating economies of size. That stimulated a number of mergers and acquisitions among Australia's wine firms that resulted in several large and four very large wine companies.³ This has provided the opportunity to reap large economies of scale not only in

² The timing of the initial export surge was helped by the devaluation of the Australian dollar in the mid-1980s, which was due to a sharp fall in international prices of Australia's coal, grain and other major primary export products. That devaluation, together with low domestic prices for premium red grapes at the time (due to a domestic fashion swing to whites from the mid-1970s), increased substantially the incentive for investing in developing overseas markets for Australian wine. Other factors expanding foreign 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 was minimal from South Africa because of anti-apartheid sentiment and from Argentina and Chile because their domestic and trade policies for a long time had discriminated against exportable agricultural products (and the wine style produced for their domestic market was heavier than that sought in the northern hemisphere). For an accounting of the relative importance of various factors contributing to Australia's output boom since the latter 1980s, see Wittwer and Anderson (2001).

³ On the one hand, there has been a huge increase in the number of Australian wine producers (currently more than 1300, compared with fewer than 200 in the early 1970s and 300 in the early 1980s – see Winetitles (2001 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 Winetitles (2001, p. 20) for a chronology of ownership changes since the early 1960s). The net result has been a substantial increase in firm concentration.

grape growing and wine making but also in viticultural and oenological R&D, in brand promotion and related marketing investments, and in distribution including through establishing their own sales offices abroad rather than relying on distributors or in enhancing their bargaining power with wholesalers or retailers. The volumes of grapes grown and purchased from numerous regions by these large firms enable them to provide massive shipments of consistent, popular wines, with little variation from year to year, for the UK and now also North American and potentially German supermarkets.

Another major difference between now and the past is that the quality of wine output has improved hugely during the past decade or so, relative to the cost of production. Moreover, for the first time, the industry is in a position to build brand, regional, and varietal images abroad to capitalize on those improvements in the quality of its grapes and wines. That image building has been partly generic, with the help of the Australian Wine Export Council's activities in Europe and elsewhere. It has come also from the promotional activities of individual corporations and their local representatives abroad as those firms became ever-larger and more multinational via mergers and takeovers during the past dozen or so years. That promotion has been helped by being able to point to the legislated wine quality standards in the Australian Food Standards Code, and to the fact that Australian wines are still exceptionally good value for money in Northern Hemisphere markets, despite the real price increases of the 1990s. The depreciation of the Australian dollar during 1997-98 and again in 2000 has allowed overseas consumers and Australian producers to share the benefits: the unit value of Australia's wine exports rose from A\$2.80 in 1993 to A\$4.80 in 2000, a period when inflation averaged just 2 per cent per year.

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. The top three producers in the late 1990s accounted 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 (Osmond and Anderson (1998, Tables 11 and 12)).

And a fourth feature distinguishing the current situation is the health factor. An ever-wider appreciation of the desirability of moderate over heavy drinking, and in particular 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 to boost wine demand both in Australia and abroad. The health factor has attracted many new consumers to red wine in particular, for whom Australia's relatively fruity, easy-drinking reds are especially attractive starters.

Steps being taken by Australia's wine industry to sustain its growth

Resource endowments are the key determinant of comparative advantage (including climate, land with the appropriate *terroir*, sufficient water, and skilled growers, processors and marketers). For differentiated products such as wine, where purchase decisions are to some extent driven by fashion (as determined by advertising, the writings of food and wine critics/judges, etc.), another resource that is crucially important is information/knowledge (and the skills to use it profitably). Its generation, as well as its productive use, is to a considerable extent under the control of the industry's producers.

While acquiring and using information can be costly, it is gradually becoming less so - and it is becoming available more quickly, thanks to the digital revolution. To keep one's competitive edge in this new economic environment, strategies are needed to obtain and make good use of available information faster and at a lower cost than one's competitors, to generate new information, and to cost-effectively disseminate information about one's products to consumers. The information required relates not just to consumer demands but also to appropriate new technologies as they affect all aspects of growing, processing and marketing.

Much of that information has a public-good nature. That, together with the spillovers that can occur from private-firm generation of information through such activities as promotion and technical research, means collaboration between firms within the industry can have a high payoff. Hence critical determinants of future competitiveness include improvements in efficiency not only of individual firms (including through mergers and/or acquisitions and better grower/processor liason) but also via collaboration at the industry-wide level. With that improved collaboration can come higher-payoff investments in generic marketing and in research and training. Consider each of these in turn.

Collaboration and firm-level efficiency

Two levels of collaboration between wine firms are important: vertical (that is, between the grapegrower, other input supplier, wine maker, and wine marketer), and horizontal. The various channels through which it can occur include mergers, acquisitions, and a range of other alliances.

As with so many horticultural products, processing of winegrapes and then marketing/distributing the wine is necessary before the product reaches the final consumer. Many winegrape producers have chosen to also do some or all of those manufacturing and service activities themselves. But there are far more winegrape growers than there are wineries, with the former depend heavily on the latter to process their highly perishable and virtually non-internationally tradable product. That dependence had not been a problem during the 1990s when winegrape demand had grown much faster than supply. Indeed the shortage period led to the widespread signing of long-term (often ten-year) contracts, providing wineries with security of supply and growers with greater security of demand into the next decade. With supply growing faster than demand in the past year, the vulnerability of the non-winemaking grapegrower has to some extent returned. However, the increasing

emphasis on producing and promoting consistent high-quality wine, and the fact that much of that quality is determined in the vineyard, has led Australia's wineries to improve their two-way relationships with contract grapegrowers.

Another form of vertical integration is occurring between wine making and wine marketing. An example is e-commerce, which is lowering the cost, especially for smaller wineries, of using email and the internet to market their wines directly. One Australian firm even experimented in 2000 with selling their entire release by tender over the internet. The exemption of small wineries from the Australian Government's wine sales tax for own-marketed wines has added to the incentive to explore these new options. Another example is wineries getting involved in tourism, going beyond standard cellar-door activities to restaurant and entertainment services.

Turning to horizontal collaboration, New World wineries are beginning to diversify their markets abroad as their production grows. Knowledge about the various niches and the distributional networks in those foreign markets is expensive to acquire, however. Hence new alliances between Australian and overseas wine companies are being explored with a view to capitalizing on their complementarities in such knowledge. These may achieve the desired result much quicker than direct foreign investment, although that has been happening increasingly too. As well, in this era of floating exchange rates, cross-border operations can be a form of currency hedge; and ownership abroad can also serve as a form of insurance against a major disease outbreak (e.g., Phylloxera, Pierce's Disease) in the home country.

Horizontal mergers and acquisitions are also taking place domestically. A key objective is to get economies of scale not only in marketing but also in producing. This is especially important if firms wish to move beyond the boutique size and penetrate the large-scale (particularly supermarket) distribution networks. The most recent in Australia is the merger of St Hallett and Tatchilla to list a new firm, Banksia Wines, towards the end of 2000

(to which Hillstowe has since been added). Both Banksia and ultra-premium producer Petaluma have since been taken over by the trans-Tasman/Japanese brewer Lion Nathan.

Collaboration at the industry-wide level

In addition to collaboration to improve the efficiency of grape growing, wine making and wine marketing at the firm level, the Australian wine industry during the past decade has enjoyed a high and envied degree of collaboration also at the industry level. The key motivations for that collaboration are to internalize externalities and to overcome the free-rider problem of collective action. Efforts traditionally have been directed in three key areas: the generic promotion of Australian wine domestically and especially overseas; investments in research, education and training (and now also statistical information); and lobbying governments (most notably for lower taxes on wine consumption at home and lower barriers to imports overseas). Maintaining and expanding those activities requires a non-stop flow of deliberate and skilful leadership, something that the Australian wine industry has been fortunate to have in relative abundance compared with both other Australian industries and the wine industry abroad. Nowhere was that entrepreneurial leadership more noticeable than during the development through the Winemakers' Federation of Australia of a shared vision for the industry called *Strategy 2025* (AWF 1995). It was developed with nothing more in mind than providing a 30-year vision for the future so as to stimulate a steady flow of investment. At the time the targets in that document were considered by many observers as rather optimistic, since they involved 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 a crush of 1100 kt to produce 750 million litres of wine at a wholesale pre-tax value of A\$3 billion (A\$4/litre). Yet so convincing was that document, and so intense has been the

subsequent investment (see Figure 1 above), that the industry is virtually half-way towards its 30-year targets -- that is, in just six vintages.

Long-run strategic planning by firms and the industry is made easier with an active system of producer organizations. The Australian wine industry has an excellent system involving more than 80 organizations at the national, state and regional levels, with a well-developed hierarchy of interaction between them.⁴ Among them is the Australian Wine and Brandy Corporation (AWBC). One of its tasks is to ensure that exported wine meets the product standards of the importing country, so that the reputation of the industry as a whole is not jeopardised by any sub-standard shipments. Another is to supervise the Label Integrity Program. A third is to establish the regional boundaries for the purpose of registering Geographical Indications. A fourth is to lobby directly and via Australia's Department of Foreign Affairs and Trade for greater market access abroad through a lowering of tariff and non-tariff import barriers. And very important has been its role, via its Australian Wine Export Council, to invest in generic promotion of 'Brand Australia'.

A further task for AWBC that has been expanded significantly of late is the systematic provision of strategic information on market developments at home and abroad. The smaller an industry, the less likely such data will be available at low cost. Yet for capital-intensive industries with long lead times and large up-front costs such as wine, information on planting intentions of others in one's own country and elsewhere is especially pertinent for those contemplating investing, given that full bearing may not occur until 5+ years after beginning to invest. The grape and wine industry recognised this and spent some of its R&D funds on commissioning (a) the Australian Bureau of Statistics to collect more information including on growers' planting intentions in the coming year, and (b) Australian Bureau of Agricultural and Resource Economics to use that information to project supplies several years ahead. In addition, each year the Winemakers' Federation of Australia organises a Wine Industry

Outlook Conference and the Winegrape Growers' Council of Australia organises a National Winegrape Outlook Conference, so such projections information can be shared and discussed. As well, the Australian Wine Industry Technical Conference held every third year keeps producers up to date on new technologies, as does the National Wine Industry Environment Conference (first held in 2000); and the WFA's Wine Australia exhibition every second year is aimed at getting more wine information to new consumers.

More investment in research, education and training

Australia has had a long history of investing in formal grape and wine research, education and training, dating from the establishment of Roseworthy Agricultural College (now part of the University of Adelaide) in 1883 and of its Diploma in Oenology in 1934, plus the creation of the Australian Wine Research Institute adjacent to the University of Adelaide's Waite agricultural research campus in 1955 (Halliday 1994 pp. 109-11). In that same Waite precinct, but involving several interstate participants as well, is a Cooperative Research Centre for Viticulture. And the industry since 1988 has had its own Grape and Wine Research and Development Corporation (called a Council until 1991). The GWRDC's current budget is over \$10 million per year, and growing rapidly not only because output is expanding but also because in 1999 growers and wineries agreed to raise the research levy by more than one-third. The Federal Government matches producer levies dollar-for-dollar up to a maximum of 0.5 per cent of the gross value of output (a limit yet to be reached).

Rankine (1996) claims that even though Australia has supplied less than 2 per cent of the world's wine until very recently, it contributes as much as 20 per cent of the global flow of research papers on viticulture and oenology. A more recent study of 1995 data suggested a somewhat smaller but still disproportionately large contribution (Hoj and Hayes (1998, Figure 3). That latter study also showed that research as a percentage of gross product was

⁴ For this and all key aspects of the Australian Wine industry, see <http://www.wineaustralia.com.au>.

considerably smaller for grapes and wine than for Australia's larger rural industries and for that of major manufacturers. Moreover, Australia as a whole spends only two-thirds as much as other OECD countries on R&D as a percentage of GDP. While that may not be sufficient justification for boosting R&D spending, it does suggest the need for an empirical study of the likely rate of return from raising grape and wine producer levies at least to the level of attracting the maximum dollar-for-dollar contribution from the government.

Formal education in viticulture and oenology spread from the University of Adelaide first to Charles Sturt University and since to other tertiary education institutions. Also, the University of South Australia and several other universities are adding to the pool of wine marketing courses. As well, numerous Technical and Further Education (TAFE) campuses are offering viticultural training both for employees and for boutique vineyard/winery proprietors and hobby farmers. And high schools in wine areas are offering grape and wine oriented material in their agricultural science courses. Notwithstanding all these programs, the peak industry bodies believe much more effective programs are possible. In 2000 they completed a strategic review of the issue, which recommended they establish an education and training steering committee to fine-tune the programs to better meet the changing needs of the industry.

The payoff from investments in R&D is higher the more readily and rapidly new information is disseminated, trialed and adopted. That requires not only education and training but also – for on-going lifetime learning -- active journal, magazine and website publications, specialized publishers/distributors, and regional, state and national associations of producers whose culture is to share new information, ideas, and results of field experimentation. The role of grower liaison officers employed by the wineries to interact with contract growers, in disseminating new information and helping to boost and appraise grape quality, has been considerable. Those officers now insist on the use of diaries to record

irrigation, spraying and fertilizing activities, they encourage lower yields so as to intensify grape colour and flavours, and they help monitor baume (sugar) levels in the grapes. In short, 'precision viticulture' is being adopted as producers strive for quality improvements.

Finally on research, one of the more difficult priority setting issues is to decide how much of the R&D budget to spend on GMO, organic, and biodynamic technologies. Food consumers, especially in Europe, have become far more sensitized in recent years to food safety issues, making it awkward to anticipate their – and their governments' -- possible reactions to new products that might be generated using these different technologies. Vastly different outcomes are possibly depending on the nature of those consumer and/or government reactions. Given the international nature of these concerns, there may be a higher payoff than usual from collaborating with grape and wine researchers focused on these issues in the US and other New World countries.

More investment in marketing

The other classic ways to try to boost profitability is to promote one's product as being different from and superior to what others produce. For Australian wine this has been done in two key ways, particularly since the 1980s. One is generic promotion abroad by the Australian Wine Export Council, particularly through its London-based Australian Wine Bureau. The other is corporate brand promotion. Both are becoming more cost-effective with the increase in the quantity and quality of Australia's exportable wine, and together they have greatly enhanced the reputation of the Australian industry as a producer of high-quality, value-for-money wines.

Marketing is something the industry may not have done well during its first 150 years which, as the earlier quotation from the *Yearbook of Australia 1922* (p. 279) suggested, may partly explain why it had not revealed a strong comparative advantage in exporting premium

wine in the past. But that is changing rapidly. For example, being acutely aware of the prospect of premium prices falling during the next few years from their historically very high 1990s levels -- due in part to the spectacular success of its *Strategy 2025* -- the Australian industry is turning its attention to the next steps in its strategy. One of them was launched at the Wine Industry Outlook Conference in November 2000: the *Australian Wine Marketing Agenda 2000-2010* (WFA and AWEC 2000). That calls on firms to boost not only their own brand promotional efforts but also to support spending on 'Brand Australia' generic promotion.

National generic and brand promotion can be complemented by regional generic promotion. This is a more viable option now that the definition of boundaries for the various regions and sub-regions ('geographical indications') are being finalized. Thanks to the WTO's trade-related intellectual property rights agreement ('TRIPs'), Australia is now able to legally register and get its own geographical indications recognised globally. The payoff from exploiting that piece of intellectual property may be non-trivial: a new study by Schamel and Anderson (2001) finds that equally rated wines in sensory terms attract significantly different prices according to their regional origin within Australia, and similarly for New Zealand. Corporate brand advertising will still remain the dominant form of promotion, but regional branding will add to 'Brand Australia' as an additional and more-specific means of generic promotion of the nation's wines. Domestically, too, the better definition of regions is leading to more information-sharing among producers within regions, and to better coordination with regional wine (and food) tourism activities.

An additional marketing tool is quality assurance. This strategy is as old as the ancient Greeks. In Australia it takes the form of a Label Integrity Program to ensure the Australian wine and brandy quality standards in the Australian Food Standards Code are adhered to. That Code is partly as a consequence of the Australia-European Union international wine

agreement and partly because they were requested by the industry to assist the marketing of Australian wine abroad. The quality standards currently in place also apply to wine imported into Australia. These standards are not dissimilar to those in the EU or US (where more than two-thirds of the world's wine is produced, consumed and traded), and most wine-producing countries have seen virtue in legislating wine quality standards to regulate their domestic production and international trade in wine. Preventing consumer fraud has been one of the objectives of such regulation, since the damage to a national industry that follows exposure of fraudulent behaviour can be severe.

A further marketing strategy involves diversifying the destinations for Australia's exports as more exportable production comes on stream. The current narrowness of that distribution is clear from the fact that four-fifths of its export sales are in just English-speaking countries: half to the UK and Ireland, another quarter to the US and Canada, and 6 per cent to New Zealand. The next five largest markets for Australian exports in 1999 each accounted for just 2 per cent of sales: Germany, Netherlands, Sweden, Switzerland and Japan.

Of course there are good reasons for low shares in some markets. One is that the types and qualities of wine Australia exports may be not well matched with the types/qualities currently imported by some of the major importing countries. That is not the case in Japan though, yet Australia sells a very small proportion of its premium wine to Japan (while contributing a relatively high proportion of Japan's imports of other goods). This is probably due to Australia not being perceived by the Japanese as a super-premium supplier, having exported relatively low quality wine there in the early 1990s. Nor had Australia until very recently made much of an inroad into Germany, despite it being the world's biggest red wine importer (and overall wine importer in volume terms, accounting for 20 per cent of global wine imports). To date that has been because of insufficient premium red wine being available for export from Australia. As supplies expand over the next few years, the scope for high

returns from further efforts in marketing and trade diplomacy in such countries will grow commensurately.

Finally, more targeted marketing domestically may still have a high payoff, especially if it is targeted at younger adults, particularly females. After all, Australia's 20 litres per capita is still a long way short of the European Union's 34 litres, where wine accounts for 44 per cent of all alcohol consumption compared with just 30 per cent in Australia (albeit up from less than 10 per cent two generations ago).

Lessons for Australia's olive industry

What can be drawn from the wine industry's experience of relevance to the burgeoning olive industry? First, there has been no dramatic increase in export demand for Australian olive products in the way there has for premium wine. There has, however, been a steady increase in domestic demand for olive products, which is projected to continue. Since imports have been supplying up to 95 per cent of domestic sales, the presumption by some investors is that Australian olive producers have a large local market ripe for capture. This could be so *if but only if* those producers -- who face very different factor prices than Mediterranean producers (and no government subsidies) -- are able to lower their production costs sufficiently to be able to compete with imports. Certainly land prices are relatively low in Australia, but water is becoming more expensive and labour costs are very high by Southern European rural standards.

New large-sized groves using mechanical harvesting and pruning may offer opportunities to exploit economies of scale, but will the olives so produced be of the quality sought by consumers and hence by processors and at a price that allows the processors to match comparable imports? The answer to that depends in part on the extent to which processing firms themselves are able to improve their productivity in both manufacturing and

marketing/distribution. Even if they have the capacity to become much more productive, eg through exploiting economies of scale as the industry expands, it is not obvious that their focus should be on the domestic market alone. On the contrary, it may be that -- as is true of the wine industry -- the Australian olive producers' competitive niche covers a different segment of the quality spectrum than that which characterizes the Australian consumer market. (In the case of wine, premium wines account for less than one-third the volume of domestic sales but more than four-fifths of exports, and all of the expansion in vineyards and winery capacity has been geared towards export markets. Yet within the premium range, Australia's strongest comparative advantage has been above the bottom rung dominated by the likes of Chile but below the top rungs dominated by France.)

Second, a set of champion entrepreneurs able to present a convincing long-term vision for sustainable growth of the emerging Australian olive industry would be a great asset. Crucial to developing a strategic plan is a reliable set of data for the industry. McEvoy and Gomez (1999) provide some basic statistics on the national and global markets, but considerable investment would be needed for a comprehensive empirical picture of the industry to emerge of the sort that has been possible for wine.⁵ Also crucial for long-term strategic planning is an active system of producer organizations.

Third, while most of the resources necessary for developing the olive industry are readily available, they need to be competed away from other uses. The tax incentives to plant olive groves are no more attractive than for planting grapes or fast-growing blue gums, for example. And at present prices olives have difficulty competing with grapes for land and water. Nor is there a large stock of knowledgeable producers who have been in the industry for generations, or a well-developed set of tertiary courses for training future generations (as

⁵ See, for example, Osmond and Anderson (1998) and Anderson and Norman (2001) for historical data, ABS (2001 and earlier) for annual updates including intended vineyard plantings by growers, and Anderson, Norman and Wittwer (2003) for projections five years ahead using an economic model of global wine markets.

there is for viticulture, oenology and wine marketing). That is not to say such courses could not be developed, but they would have to begin virtually from scratch and the numbers enrolling may be too small to make courses viable.

Fourth, and closely related to education and training, is the paucity of past investment in olive research and development for Australian conditions and the associated dissemination or research findings. The wine industry has been making such investments for more than 150 years, in the form of on-farm selecting of varieties and clones for different locations and exploring through trial-and-error. More-formal scientific grape and wine research investment has been substantial and systematic for at least the most recent 50 of those years, which has put Australia's wine industry at the technological frontier globally. By contrast, Australia's olive industry is just starting to come out of its infancy in, for example, variety selection for different growing regions. As large olive production and processing corporations emerge, they will be able to invest in adapting research findings from abroad and doing their own within-firm R&D. But ultimately a grower and processor R&D levy system (with a dollar-for-dollar subsidy from the Federal Government) needs to be introduced and relied on to gradually build up the stock of pertinent knowledge and to extend it to producers. Initially that fund could be administered by the Rural Industries Research and Development Corporation.

Fifth, much larger investments in marketing, including quality assurance programs and promotional activities, have already been identified by McEvoy, Gomez, McCarrol and Sevil (1998) and McEvoy and Gomez (1999) as being needed for the olive industry. Those authors' surveys identified relatively low level of knowledge by Australian consumers about most attributes of olive products. Given the growing interest in using those products, this suggests considerable scope for high payoff investments in marketing once sufficient volumes of appropriate olive products become available.

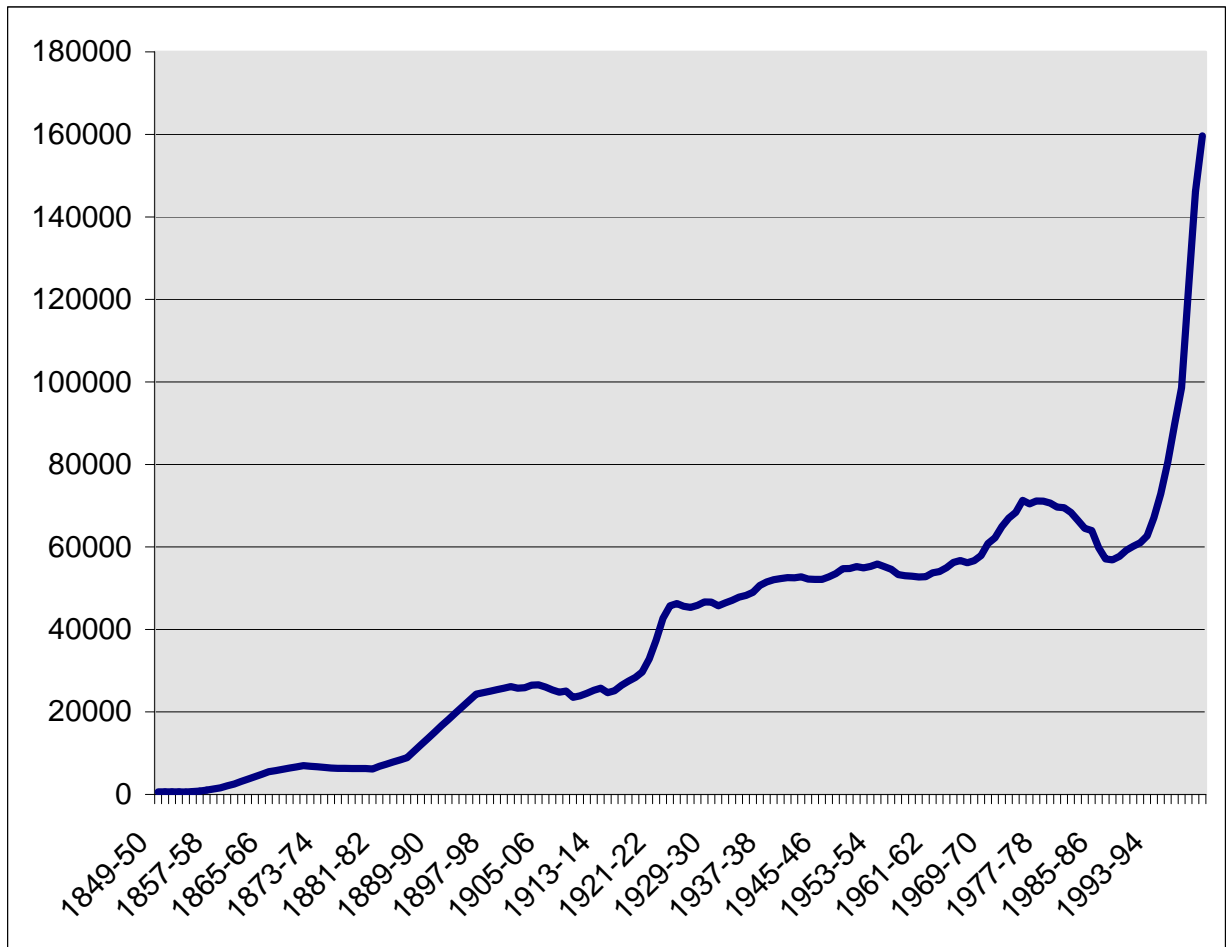
And finally, as with wine, there is a great need for olive growers and processors/marketers to work together as a team for industry growth to be sustained. Vertical integration of the production stages is one obvious route for achieving that synergy but, as the wine industry has demonstrated, it is possible to have specialized firms at each of the different stages so long as there is good communication between the various links in the production chain. A long-term contract between the grower and processor is one way of assisting that process. Moreover, collaboration on all the key dimensions of the industry (including such things as quality standards, R&D funding and generic promotion) could well enhance the profits of industry participants.

In short, relatively new industries such as olives have much to learn from the recent success of the more-established wine industry. The latter has shown that dramatic export-led expansion is possible, but not without substantial hard work and large synergistic investments of time, effort and money in all three stages of the production process (primary production, processing, and marketing/distribution), and a great deal of collaboration among all key stakeholders.

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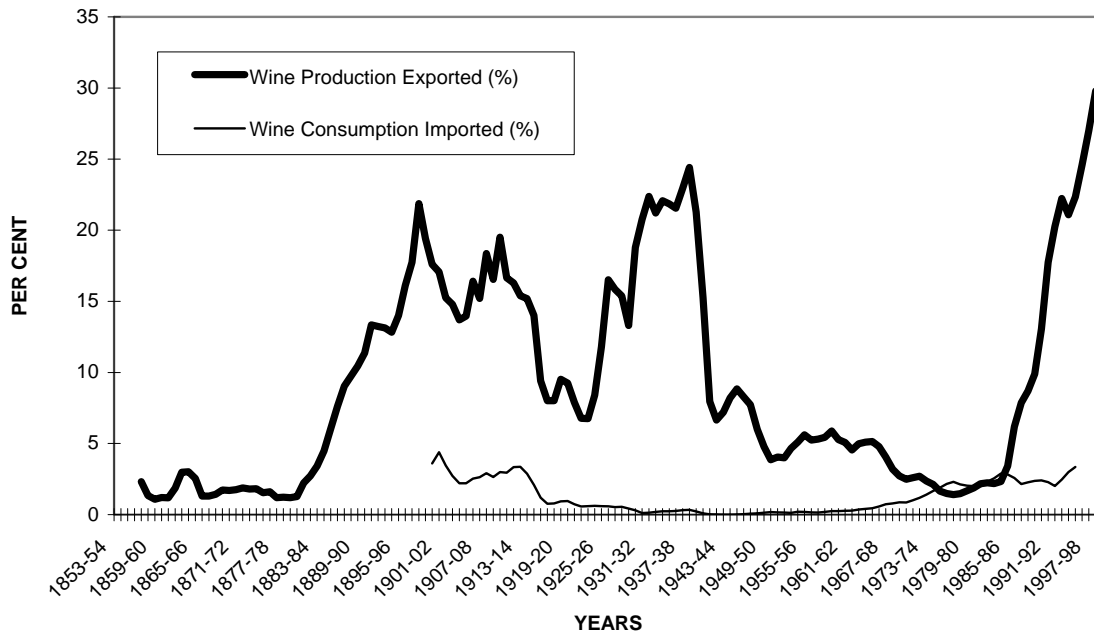
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Figure 1: Area of vineyards (hectares), Australia, 1849-50 to 2000-01

Source: Updated from Osmond and Anderson (1998, Table 2).

Figure 2 Shares of wine production exported and wine consumption imported, Australia, 1856-57 to 1999-2000 (per cent, 3-year moving averages)



Source: Osmond and Anderson (1998, Table 3).

Table 1: Booms and plateaus in the development of Australia's wine industry, vintages 1854 to 2000

| Vintages: | Boom/ plateau/ cycle no. | No. of years | Increase in vine area (% pa) | Increase in wine production (% pa) | Increase in wine export volume (% pa) | Share (%) of wine production exported | Domestic per capita consumption (litres p.a.) |
|------------------------------|--------------------------------|-----------------|------------------------------------|---------------------------------------------|------------------------------------------------|------------------------------------------------|--------------------------------------------------------|
| 1854 to 1871 | 1st boom | 17 | 15.5 | 18.4 ^a | 14.1 | 1.8 | na |
| 1871 to 1881 | 1st plateau | 10 | -1.1 | -0.6 | -5.2 | 1.6 | na |
| 1854 to 1881 | 1st cycle | 27 | 8.4 | 10.7 | 8.2 | 1.7 | na |
| 1881 to 1896 | 2 nd boom | 15 | 9.7 | 7.5 | 23.0 | 9.8 | na |
| 1896 to 1915 | 2 nd plateau | 19 | -0.1 | -0.4 | 0.4 | 16.5 | 5.1 |
| 1881 to 1915 | 2nd cycle | 34 | 3.9 | 3.3 | 8.7 | 14.4 | na |
| 1915 to 1925 | 3 rd boom | 10 | 7.0 | 12.7 | 4.5 | 8.5 | 5.8 |
| 1925 to 1945 | 3 rd plateau | 20 | 0.9 | 0.1 | -1.2 | 16.4 | 4.0 |
| 1915 to 1945 | 3rd cycle | 30 | 2.4 | 3.6 | 4.9 | 14.9 | 4.7 |
| 1945 to 1968 | slow growth | 23 | 0.2 | 2.1 | 0.2 | 5.4 | 6.2 |
| 1968 to 1975 | 4 th boom | 7 | 3.3 | 6.2 | -1.4 | 2.7 | 10.9 |
| 1975 to 1987 | 4 th plateau | 12 | -1.7 | 1.0 | 8.4 | 2.2 | 19.1 |
| 1968 to 1987 | 4th cycle | 19 | 0.2 | 3.1 | 2.5 | 2.4 | 16.0 |
| 1987 to present ^a | 5 th boom | >14 | 7.6 | 6.7 | 22.1 | 19.6 | 19.2 |

^a Acreage includes intended plantings in 2000-01; other data are to the 2000 vintage.

Source: Updated from Osmond and Anderson (1998).