
Positives in supply adjustment, but there's more to go

*An analysis of the 2014-15
Vineyard Survey data*

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EXECUTIVE SUMMARY

Conclusions

Supply adjustment is approaching 'balance' in terms of the popularly accepted level of vine removals needed for supply to match demand but it is not there yet. Continued signs of stress in the supply chain, in the form of continued net removals of vines and grapes left on the vine or dropped at harvest, point to further adjustment being required.

The positives in supply adjustment include the extent the national vineyard has shrunk, record low non-bearing areas and lower levels of grapes left on the vine. Nevertheless, while the direction of these elements is positive, their continued existence is a reminder that there is still some unwinding of supply to go and the 'turn-around' is unlikely to be soon enough for businesses that are eating into assets to survive in anticipation of better times.

Key observations from the data

- Winegrape production in 2014-15 was 1.61 million tonnes excluding a further 67,500 tonnes estimated to be left in the vineyard at harvest.
- National tonnages have trended down since 2005-06.
- The major driver of the declining production is a steady decline in vine bearing areas since 2007-08.
- Despite the steady decline in bearing areas, tonnages have been edging up in recent years.
- The driver of tonnages edging up is higher tonnes per hectare which are rising after a period of historically low levels in recent years.
- Rising tonnes per hectare are occurring on balance of declining yields in cooler-temperate districts and increasing yields in the warm inland.
- The divergence in yields between cool and warm districts has caused an eleven percentage point shift towards warm inland production.
- Non-bearing areas in the industry are at an historical low.
- Grapes left on the vine or dropped at harvest continued to exist in 2014-15.
- Net vine removals in 2014-15 were at the lowest levels recorded anytime in the 2007-08 to 2014-15 period.
- Around 23% of the 6,700 winegrape growing businesses that existed in 2010 have left winegrape growing.
- Warm and cool districts contributed equally to the exit of winegrape growing businesses in relative terms (23% of each has been lost) although in absolute terms, the numbers were dominated by exits from the higher number of businesses in the cooler districts.

INTRODUCTION

The Australian Grape and Wine Authority (AGWA) re-instated the Australian Bureau of Statistics (ABS) Vineyard Survey for the 2014-15 year. It was the first comprehensive survey of the Australian wine sector's viticultural underpinnings since 2012 when the Vineyard Survey ceased, and it was a decision to be celebrated with insights once again available into the industry's production capacity and performance and most importantly, supply adjustment.

This article analyses the data and attempts to identify some of the trends and implications. Much more interpretation is possible than is provided here – not just by drilling down into the data in more detail (to variety and region for example) but also by applying a deeper understanding of the industry context that shaped the numbers. For the time being however, this treatment will provide a relatively high level of interpretation. Subsequent articles may drill down further into the data and reflect more on the causes of the observations.

By and large, the analysis will focus on a selection of years that have the Vineyard Survey, and the same methodology, as the source of the data. The advantage is consistency and greater reliability of the interpretation.

The starting year is 2007-08 which is arguably when serious supply adjustment commenced. Following this is 2008-09, 2011-12 and finally the data just delivered, 2014-15. The 2008-09 year is skipped because the survey methodology was sampling rather than the traditional census survey that occurred in the other years of the Vineyard Survey. In addition, 2010-11 is omitted because in that year, viticulture data was collected through the ABS Agricultural Census, rather than a dedicated viticulture survey like the ABS Vineyard Survey. In both cases the methodological differences meant a break in the vineyard survey time series and it is never known if some observations of interest are artefacts of the collection methodology or real.

Hence, the main focus of this analysis is four years, commencing when supply adjustment started, ending with the latest data and with reference points relatively evenly spaced between.

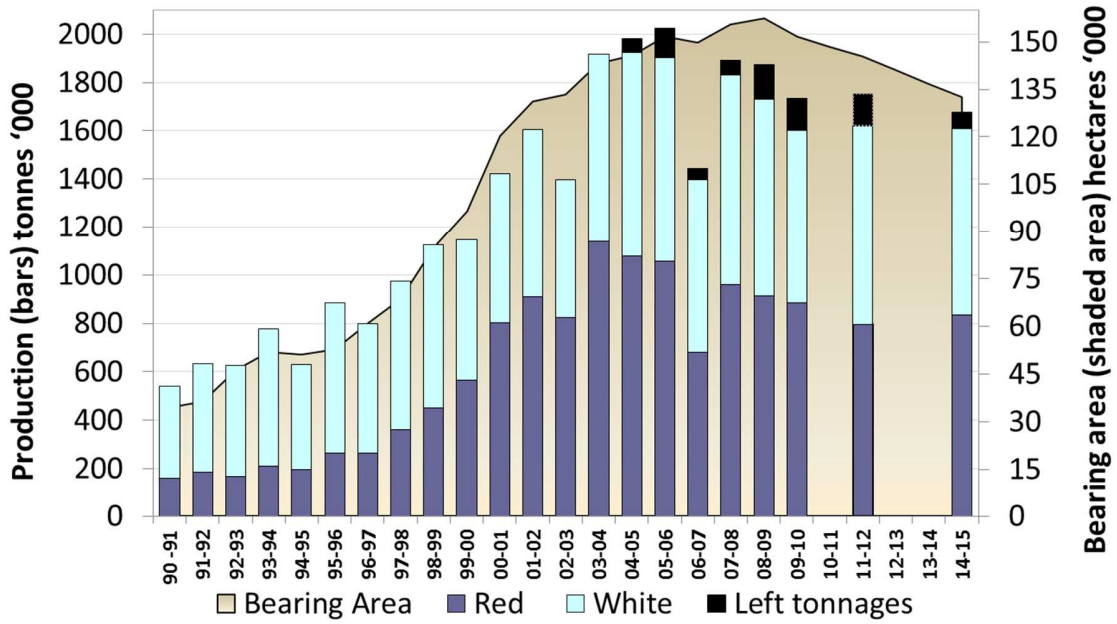
A HELICOPTER VIEW OF THE OUTCOMES

Figure 1 shows that winegrape production was 1.608 million tonnes in 2014-15 excluding a further 67,500 tonnes estimated to be left in the vineyard at harvest.

The vineyard production number represents about 3.8% fewer tonnes than reported in the WFA Vintage Report as being crushed by processors in 2014-15, at 1.669 million tonnes. This gap is the standard difference between these two types of surveys, production versus crush, largely reflecting the logistical differences in the how the data is collected in each.

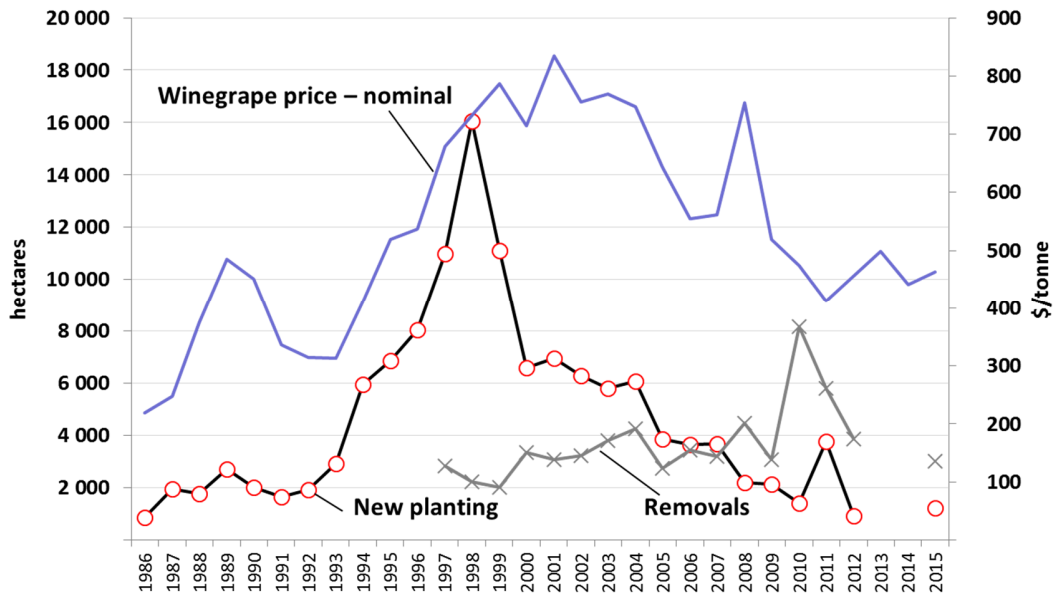
In general terms, production tonnages have trended down since 2005-06, the year that in the author's opinion, the wider industry acknowledged that it was structurally out of supply/demand balance. The downward trend in production is observed both with and without grapes left on the vine taken into account.

Figure 1: Winegrape vineyard production history



Note: The bars represent tonnages (red and white are tonnes crushed while the 'Left tonnages' are estimates from the ABS reported 'areas of vines with grapes left or dropped at harvest') and the background shaded area represents bearing areas (ABS). 2011-12 includes an anecdotal estimate of tonnages left because the data was not collected in that year.

Figure 2: Winegrape price and vineyard renewal history



Notes. Winegrape prices represent a national average winegrape price series compiled from the Australian Bureau of Statistics' publication 'Value of Agricultural Commodities Produced', 1984-1996; selected and representative districts and varieties reported in the South Australian and Murray Valley winegrape utilisation surveys, 1989 to 1999; and the National Winegrape Crush and Price Report, 1999 to 2008 [with compositional influences (by red and white, warm-climate and cool-climate) removed]; PGIBSA, MVWG and NSW WGMB Wine Grape Utilisation Surveys [with raising factors of 9.5% to match the foregoing census history], 2009 to 2010 and finally, the Wine Australia Price Dispersion Report has been used from 2011 to 2015. The five series have been merged to represent a continuous series. Planting and removal data is sourced from the Australian Bureau of Statistics Vineyard Survey – new planting and removals in 2011 is a WGGA estimate based on ABS Ag Census data and historical trends.

The exception to the downward trend in production was 2007 – due to drought. Production nevertheless bounced back in the two-to-three subsequent years of drought, largely due to the active use of water markets at the time.

The major driver of declining production is clear - there has been a steady decline in bearing areas of vines since 2007-08.

Figure 2 shows that plantings fell in parallel with falling winegrape prices after the latter peaked in 2001.

Newly planted vine areas fell significantly from the lofty height of around 16,000 hectares they reached in 1998 and they now bump along at around 1,000 hectares a year. On the other hand, with the exception of 2010, vine removals have remained located in the relatively narrow range of 2,000 to 4,000 hectares per year.

In 2007, vine removals roughly matched new plantings but in subsequent years, outweighed them. Hence, net removals of vines and supply adjustment commenced in 2008 – and have continued in all years recorded since then.

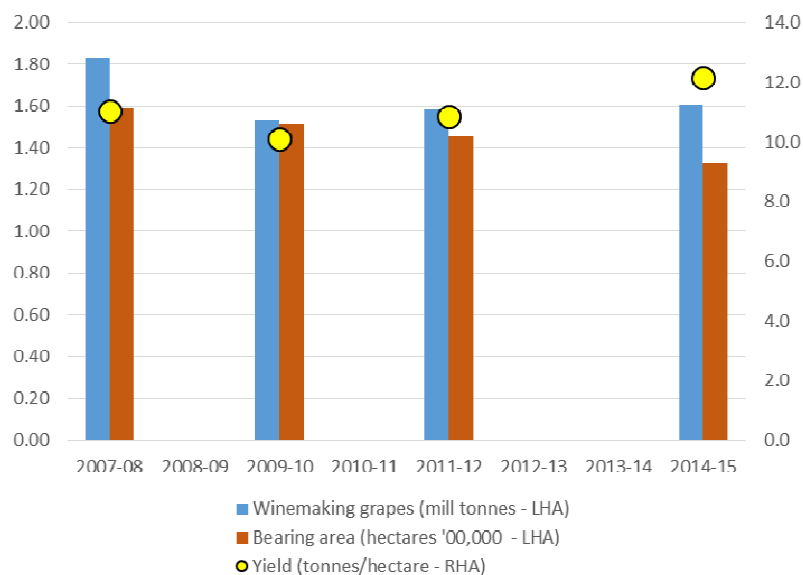
In 2014-15, the latest data shows that vine removals still outweighed new planting.

PRODUCTION TRENDS IN THE LAST SEVEN 'ADJUSTMENT YEARS'

Figure 3 describes again the steady decline in vineyard area – this time for bearing areas.

Despite the steady decline in bearing areas, tonnages are on the rise in recent years. At 1.83 million tonnes in 2007-08, the tonnages were at about the average experienced around that time. The result in 2014-15, at 1.61 million tonnes, nevertheless represents the highest tonnage produced in the three years recorded since 2007-08.

Figure 3: Winegrape production and drivers



The driver of higher tonnages despite lower bearing areas, is clearly the yields in terms of tonnes per hectare. The average national yield was 12.1 tonnes per hectare in 2014-15 and represents the first recorded yield above 12 tonnes per hectare since 2005-06. Moreover, it was in only four of the 27 years preceding 2005-06, that yields fell below 12 tonnes per hectare meaning recent sub-12 tonne per hectare yields have been exceptionally low.

Figure 4: Warm and cool region production and yield per hectare



Figure 4 provides some clues to the driver of rising yields over the past five years.

Figure 4 illustrates the annual tonnages produced since 2007-08, the tonnage contributions from each of the warm and cooler districts and the tonne-per-hectare yields in each case. The divergence of yields between warm and cool is dramatic with cooler-temperate yields declining steadily from 2007-08 while in the warm inland districts, the trend has been upward. In the cooler-temperate districts, yields declined 22% between 2007-08 and 2014-15 while in the warm inland, yields grew 25%.

The divergence in yields between cool and warm districts has caused a dramatic shift in their respective shares of production. In 2007-08, 60% of the national tonnages were produced in the warm districts but by 2014-15 the share was 71%. Conversely the cooler-temperate proportion of tonnages fell from 40% to 29%.

It can be further asserted that the shift in production is entirely yield driven on the grounds that the decline in bearing areas between these two climate categories was roughly equivalent if not in fact,

contrarily biased to greater losses of vine from the warm districts. Warm bearing areas declined by 21% between 2007-08 while cool bearing areas declined by 19.5%.

While it is hazardous to speculate on the causes behind the yield shifts without more knowledge of the context, it is interesting nevertheless to speculate on what they may be. Front of mind are two common observations from over these years. Firstly, the prevalence of yield caps imposed in the cooler districts – in pursuit of higher quality outcomes - and secondly, in warm districts, there has been a tendency to irrigate heavily to raise tonnages, and revenue per hectare, in a low dollar-per-tonne operating environment.

SOME UNAMBIGUOUSLY POSITIVE SIGNS IN THE PRODUCTION CAPACITY DATA

Vine removals are approaching the popularly viewed amount needed for supply to match demand

From an average size of 162 250 total hectares in the national vineyard between 2007 and 2009, the size has declined to 135 200 hectares in 2015, or, it has shrunk by 17%.

In 2008, it was popularly believed that a 20% reduction in the national vineyard was required for production capacity to match demand (sales). Using the latter as an indicator of progress towards 'balance', from a supply adjustment perspective, the Australian wine sector approaches this situation – albeit that it is not there yet.

Reinforcing that supply adjustment is not yet complete, it is notable that an equivalent calculation for sales as that done for bearing areas - average sales volumes between 2007 and 2009 compared to 2015 - reveals a 2% deterioration in sales volumes in this period and hence, the requirement for additional production losses to achieve supply-demand balance. Furthermore, this calculation does not account for a likely greater decrease in profitable sales – a more relevant measure of 'actual' demand and an indication that more reduction in supply is required for balance of supply with profitable demand to occur, unless of course demand improves.

There are other signs of continued stress in the supply chain and they are dealt with in later sections of this article.

Nonetheless, the uptick in export sales in the most recent financial year is encouraging and the expectation that this will continue is reasonable on the basis of an improved ER environment, the recovery in the United States economy, the ascendancy of China among Australia's major wine markets, the advent of FTAs with Japan, South Korea and China, and increased proactivity of Wine Australia promotions in the market place.

On balance, the long and painful adjustment in winegrape supply continues to advance to a desired position of balance but there is no certainty yet for the businesses in most danger – those that are eating into assets to survive in anticipation of better times.

Readers should also be aware that when the industry achieves 'balance' on the terms described above, the adjustment process will still not be complete. With the task of reaching the 'right amount' complete, the task remaining will be to ensure 'the right type'. The rush to grow over the last 20 years saw not just too much planting but also planting in the wrong places.

Plantings yet to bear are at record lows

It is notable that reported non-bearing areas in 2014-15 are the lowest on record (the records go back to 1973) - in both absolute and relative terms – at 2,736 hectares and 2% of total area.

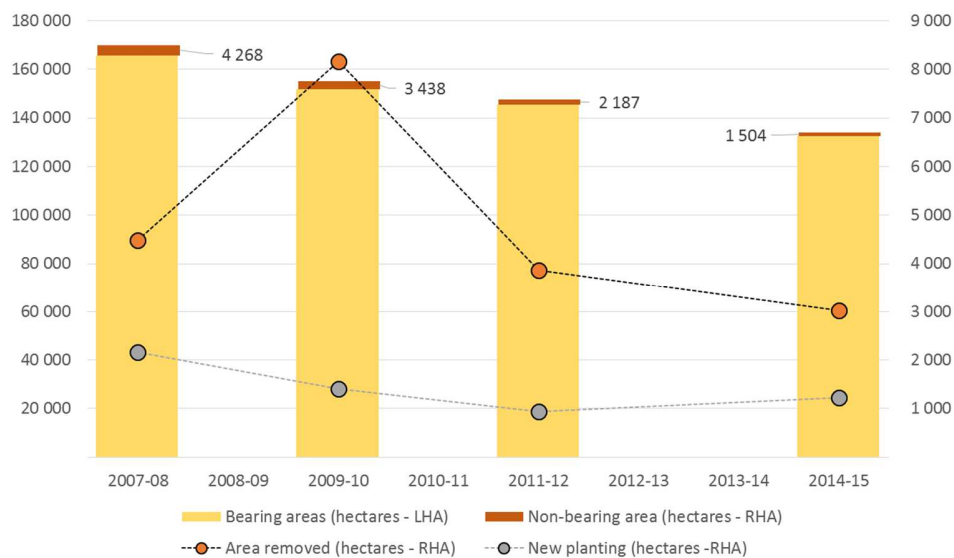
Hence, grape production ‘in reserve’ for meeting potential growth in demand, is low. The positive for growers is that wine grape prices will improve as supply tightens and they have more bargaining power – but this will be subject to the final unwinding of supply/demand imbalance already mentioned and the willingness of wine companies to negotiate prices until they have rebuilt their margins.

THE FINAL UNWINDING THAT IS NEEDED BEFORE FULL CONFIDENCE OF A TURN-AROUND FOR GROWERS

Net removals of vines

Net removals of vines, which commenced in 2007-08, continued in 2014-15 and remain a reminder of supply/demand imbalance. Nevertheless, the vines removed net of new plantings in 2014-15 was at its lowest level for anytime in the 2007-08 to 2014-15 period (see Figure 5).

Figure 5: Renewal elements for winegrape production



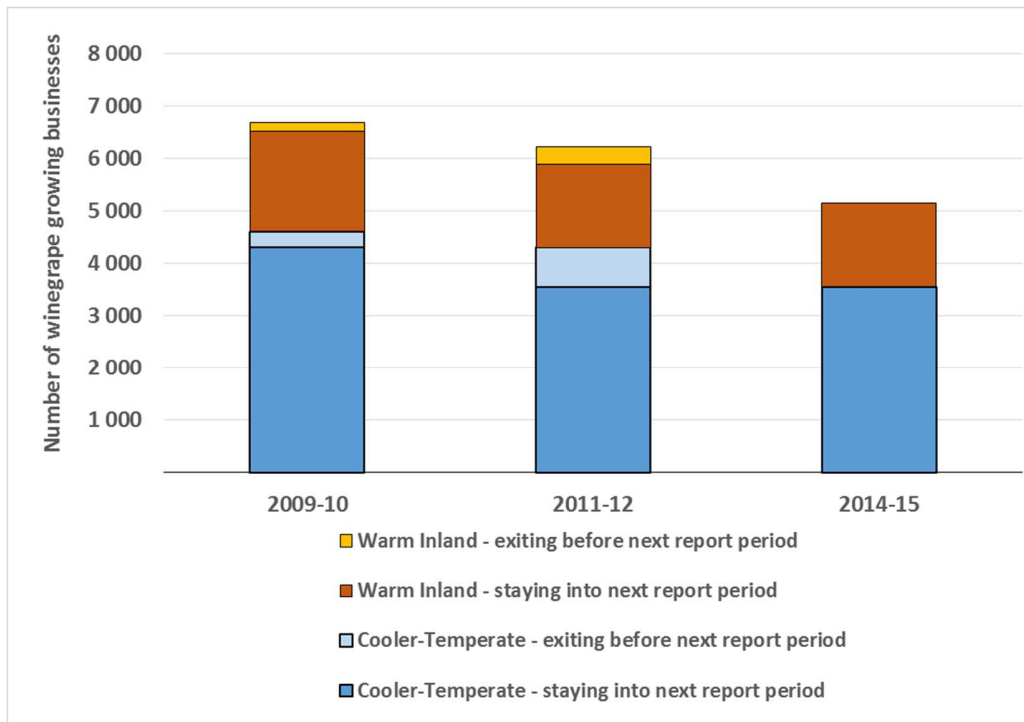
Grapes left on the vine or dropped at harvest

Referring back to Figure 1, it can be seen that grapes left on the vine or dropped at harvest have occurred in all years since 2004-05, and are likely to have occurred before this time because the anecdotal evidence that it was occurring, led to the commencement of data collection on the phenomenon from 2004-05. Once again, there is some encouragement about the supply/demand imbalance unwinding in the fact that the estimated tonnes left behind in 2014-15 were at the lowest in the time the grapes-left data has been collected (except for 2006-07 when production was severely reduced by drought and then in the subsequent year, 2007-08, when stocks were being re-built after the low production levels of 2006-07).

BEHIND THE DECLINING PRODUCTION SITS AN EXODUS OF WINEGRAPE GROWING BUSINESSES.

Between 2010 and 2012, there were losses of around 470 winegrape growing businesses across Australia and between 2012 and 2015 the losses accelerated to around 1,070 in these years. This is a loss of around 1,540 winegrape growing businesses in the five years between 2010 and 2015. Out of 6,700 winegrape growing businesses in place in 2010, this loss represents a loss of 23% of the winegrape growing businesses in Australia.

Figure 6: Numbers of winegrape growing businesses



Greater numbers of cooler- temperate businesses exited than did warm inland businesses (see Figure 6). In the five years between 2010 and 2015, 1,055 cooler-temperate businesses exited while the number of warm inland businesses was around 485. Nevertheless, true to the economic reality that non-profitability in one part of the industry flows to all sectors of the industry - the relative impact was the same in each of the two climate categories. After considering that a larger number of winegrape businesses are located in the cooler districts, both lost the same proportion of their businesses, at 23%.