The Winery Report

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Napa Valley Appellation Value Grows to \$218,000 per Acre

We first examined the value of the Napa Valley American Viticultural Area (AVA) in 2012, using an innovative method - wine price differentials - as the basis for our analysis. We published an update for the 2016 AVA value in the summer, and now we've updated our analysis for 2017. Our current analysis revealed a Napa Valley AVA value for prime Cabernet Sauvignon vineyards of \$218,000 per acre, up from \$211,000 in 2016. As part of our analysis requires a close examination of Napa Valley wines and their wine critic ratings, we also select a couple "best value" Napa Cabs.

The Importance of the AVA Value

The contribution of the appellation to a vineyard's value became much more important in 2010 when the IRS issued a Chief Counsel Memorandum (CCM) concluding that the right to use an appellation or American Viticultural Area designation is an intangible asset, and is amortizable to offset income over a period of 15 years under § 197 of the Internal Revenue Code. Simply put, every dollar of AVA value shields a dollar of vineyard income from tax over 15 years. With purchases of vineyards routinely in the millions and tens of millions, the value of the AVA has become a material issue for buyers.

Our Method

As discussed in our 2012 newsletter on the same topic, we believe, along with most wine industry consultants, that grape prices are closed tied to wine prices. As Napa Valley Cabernet Sauvignon wine prices have increased over the past 25 years, Cabernet Sauvignon grapes prices have increased almost in lock-step. Our analysis shows that changes in Cabernet Sauvignon wine prices explain, in statistical terms, about 94% of the change in Cabernet Sauvignon grape prices. We also postulated in 2012 that if a Napa Valley AVA value exists, it must reveal itself in the prices consumers are willing to pay for wine with "Napa Valley" on the label. If consumers weren't willing to pay more for Napa Valley wine, then it seems unlikely Napa Valley grapes could sell for more given the very strong relationship between wine and grape prices. Finally, we needed a method to adjust out of the wine price, the quality difference between Napa Valley wines and those from lessor-know appellations. Otherwise, we would be unsure if the higher wine price was due to having "Napa Valley" on the label, or due to the higher quality of the wine. We are fortunate in that drinking wine is a favorite pastime of a lot of us and there are a host of services that provide

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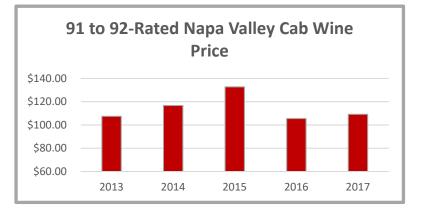
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wine ratings for 1000's of wines across the country. Comparing the prices of wines of the *same critic rating* allows us to adjust for quality differences. Making this adjustment is very important as the IRS in the CCM was concerned about methodologies that did not eliminate value attributable to the quality of the property, and by extension the grapes and wine, itself.

The Wine Market

Our experience providing AVA valuations over the past few years has revealed that the market for wine is quite efficient, i.e., wine prices react to over and under-supply conditions. This can be seen in the chart below for Napa Cabs with a rating between 91-92 points (the average critic rating of the wines we analyzed between 2013 and 2017).

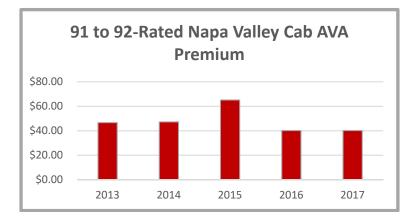


The 2011 vintage, which was sold mostly in 2014 and 2015, was a low-yield year in the Napa Valley. The average yield for Cab fell to 2.70 tons per acre. It is clear in the chart that the price of very good Cabs increased due to the supply shortage in 2014 and 2015. In 2016, the prices dropped quite significantly, as crop yields in 2012 and 2013 (sold in 2016) were above average, creating greater supply.

This is relevant to our AVA valuation method because fluctuations in wine prices can make certain years less meaningful for observation. Using annual data that represents an over or under-supply environment will tend to under or over-state the wine price premium attributable to the Napa Valley AVA. And the same market forces that impact the Napa Cab wine market also impact the lesser-known AVA market. Care must be taken in selecting the period over which to observe the wine market and price premium.

The second graph on the following page shows the Napa Valley per bottle retail price premium calculated from 2013 to 2017. As expected, the premium also reacts to over and under-supply forces. Selection of the wines that make up the sample of Napa and lesser-known AVA Cabs is very important. It goes without saying that the sample needs to be randomly selected. But beyond that, it is important to select wines that have a number of sellers and that are reviewed by several wine critics. We have found wine prices are much more highly correlated with average critic reviews than the review of a single critic.

Wine prices react to over and under-supply conditions.



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Beyond these data inputs there are many other factors that influence the value of the Napa Valley AVA. The suitability of the ground to grow Cabernet Sauvignon grapes is perhaps the most important. The AVA value for a vineyard that is best suited to grow Chardonnay will be lower than the \$218,000 AVA for a prime Cabernet Sauvignon vineyard. In addition, all the factors that affect the value of a vineyard, can impact the value of the AVA - vine condition and age, productivity, operating costs, and grape contracts, for example.

Napa "Best Value" Cabs

As part of our analysis of the Napa AVA premium we calculate what a wine *should* sell for based upon its critic rating. Some wines sell for more than the forecast price, and some wines sell for less. This can happen when a vintage is rated significantly higher or lower than the previous same-label vintages, and the winery continues to sell the wine for a comparable price. The Napa Cabs rated as best values in 2017 were the 2013 Venge Cabernet Sauvignon Napa Valley Silencieux (rated 92) and the 2013 Turnbull Cabernet Sauvignon (rated 92).



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