The Winery Report

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INSIDE THIS ISSUE

Do Wine Ratings Really Matter?

We've all likely bought a bottle of wine based upon its rating or score and have been disappointed. We've probably also bought a lower-priced wine that was unrated and been pleasantly surprised! The question comes to mind: How much do professional ratings impact the price of a bottle of wine? Certainly there are other variables at work, such as the reputation of the appellation, the brand or label strength, the vintage, production quantities, and just simple mispricing. In any event, I thought it would be interesting to apply some simple statistical techniques to try and determine if ratings really do impact wine prices.

I used a statistical technique called regression analysis which looks at two data points and measures the dependency of one on the other. Regression analysis tells us how much of the change in the dependent variable (retail bottle price) is due to the change in the independent variable (the wine rating). This technique is expressed visually using an x-y graph where the independent variable in listed on the x-axis (bottom) and the dependent variable is listed on the y-axis (left side). Regression analysis can fit a straight line to the data points, or a curved line, whichever "fits" best. If the independent variable could predict the dependant variable exactly, all the data points would fall on the regression line, but that is extremely rare. A regression analysis generates a lot of other complicated statistical measures, but it's important to understand just one: R-squared. It measures how well the independent variable can predict the dependant variable. An R-squared of 0 (zero) means that the independent variable (rating) has nothing to do with predicting the dependant variable (retail wine price), while an R-squared of 1 (one) would mean that the wine rating can predict the retail price of a bottle of wine precisely, and that there are no other variables at work.

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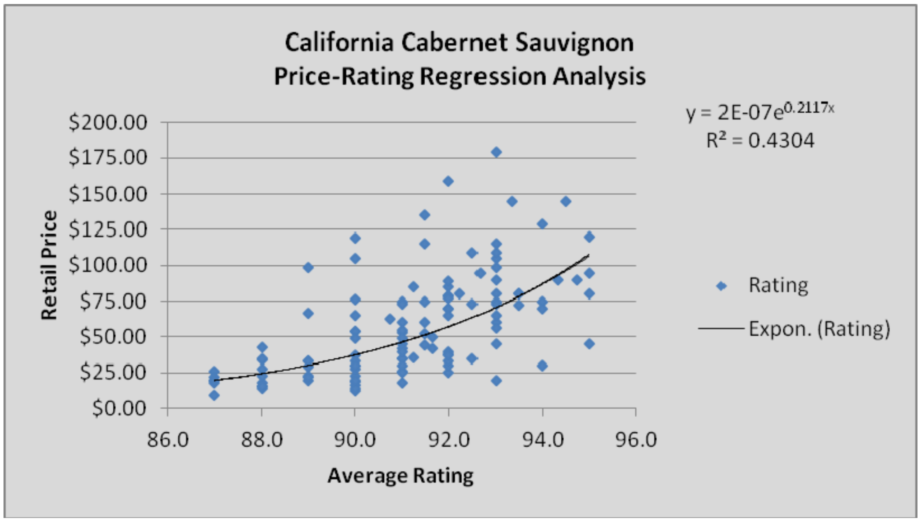
For my analysis, I looked at 117 California Cabernet Sauvignons sold on Wine.com in early March 2012. I only looked for wines that had a professional rating. If a particular wine had more than one rating, I took the average rating. The retail bottle price reflects any discounts, if they were offered. The highest rating was 95, while the lowest was 87. Prices ranged from $9.49 to $179.00. The average rating and price were 91.2 and $58.23, respectively.

The results of this regression analysis were compelling even to the wine novice. First, I discovered that the line that best fit the rating and price



The 93-point wines ranged in price from $19.99 to $179.00, a range of $159.01!

Price Estimates by Rating

86	$15.99
87	$19.76
88	$24.42
89	$30.18
90	$37.30
91	$46.09
92	$56.96
93	$70.39
94	$86.99
95	$107.50
96	$132.85

This implies that Napa Cabs command a premium of $19.10 per bottle over Sonoma Cabs of the same rating!

data was curved (see graph below) indicating that a one point rating change from 86-87 had less impact on the price (an increase of $3.77) than a rating change from 95-96 (a price increase of $25.35). This result really speaks to the relatively limited supply of highly-rated Cabernet Sauvignons and the willingness on the part of wine consumers to pay premium prices for the best wines. What is also clear from looking at the graph is that a low rating narrows a winery's pricing power considerably. The 87-rated wines ranged in price from $9.49 to $25.99, or $16.50 from the highest to lowest price. The 93-point wines ranged in price from $19.99 to $179.00, a range of $159.01!

The R-squared from the regression analysis was 0.43. This means that 43% of the variability in the wine price could be explained by the rating. Put another way, there are other factors at work that, taken together, have a bigger impact on the wine price. To help identify at least one of those variables I divided the wines by appellation. There were 89 wines from Napa, 20 from Sonoma, 3 from other California appellations, and 4 with no appellation. As expected, the Napa wines had the highest average rating (91.6) and price ($67.00). The Sonoma wines had an average rating of 90.0 and an average price of $33.45. The other two groups had much lower average ratings and prices. To help determine the impact of the appellation on price we pulled 43 Napa wines out of the data set that had an average rating of 90.0 (the same rating as the Sonoma wines). If the rating were a perfect predictor of wine price, we would expect the Sonoma wines and this subset of the Napa wines to be priced the same. They weren't. As expected again, the Napa wines with an average rating of 90.0 had an average price of $52.55 versus the average Sonoma price of $33.45. This implies that Napa Cabs command a premium of $19.10 per bottle over Sonoma Cabs *of the same rating*! My analysis shows that the premium for Napa wines over lessor known appellations is even higher. Translating these bottle prices into grape prices and vineyard values certainly appears to justify the premium valuations placed on Napa vineyards.

Does a wine's rating impact its price? My analysis says it does matter, but isn't the final word. Appellation also seems to have a material impact. We suspect, but haven't empirically confirmed, that brand strength, vintage, availability and mispricing also play a role. In upcoming reports we'll explore the impact of rating and appellation, and other factors, on other popular California varietals.

Current Winery Valuations

For winery owners contemplating estate planning transactions, it's helpful to know if now is a good time to make gifts, or enter into other estate planning transactions, from a valuation perspective. With that in mind, I set out to determine if current valuations were high or low relative to historical norms.

When looking for current valuations of US companies, security analysts frequently look to publicly-traded companies. The share prices of these companies represent trades between informed minority investors. This is a good starting place for estate planning valuations, because estate planning transactions are usually minority or non-controlling interests as well. Unfortunately, there are only two US publicly-traded wineries of a reasonable size whose primary business is making and selling wine (Constellation Brands and Willamette Valley Vineyards). Such a small number of companies can lead to volatility in the valuation due to company-specific issues, such as depressed earnings. Given this limitation, I expanded the search to include two Canadian wineries (Andrew Peller and Magnotta Winery).

It can be argued that Canadian wineries are producing and selling different, lower-priced wines in a different country, and therefore aren't comparable to US wineries. An alternative would be to select wineries from other New World wine regions, such as Australia and New Zealand, or Old World regions, such as France and Italy. These regions however, are less correlated with the US economy than Canada, so over-all, I think Canadian wineries are more representative of the economic forces at work on US wineries. A case could be made however, to use Old World public wineries to value a strong Napa brand in the luxury segment, as they may be more comparable in terms of product offerings. I'll explore Old World winery valuations in a future report.

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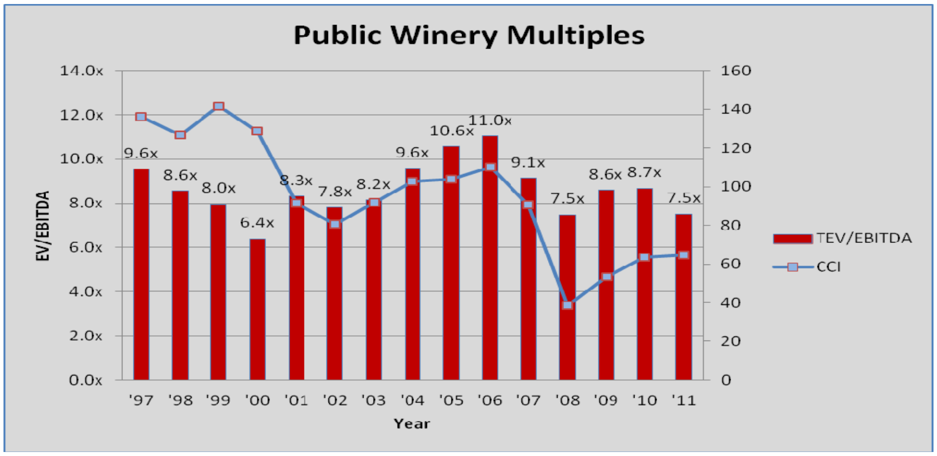
To determine how wineries are currently valued by investors I selected from several "multiples." Multiples are measured by taking some measure of value divided by some financial result or projection from the public company. Often analysts will use enterprise value (the value of equity implied by the stock price plus net debt) divided by EBITDA (earnings before interest, taxes, depreciation and amortization). However, there are many other multiples based on different levels of earnings and balance sheet measures, measured both historically and on a forecast basis. A good valuation will use several multiples as well as consider all the particulars of the company's situation such as growth prospects, the level of product and geographic diversification, management depth, brand strength, distribution channels, average retail bottle price, grape supply contracts, vineyard health and age, among other factors. I used the enterprise value to EBITDA multiple because it's likely one of the most used multiples in winery transactions.

The EBITDA multiples of the public wineries from 1997 to 2011 can be seen in the graph below. As should be apparent from the graph, the market is valuing wineries close to their low since 1997.

As you see on the graph's right scale, I also plotted the consumer confidence index ("CCI") to show how it correlates or moves with winery



valuations. The CCI is a measure of how good, or confident, consumers are feeling about the future, which of course impacts their spending habits. By looking at the graph you will note how multiples generally decline as the CCI index declines, and vice versa. You'll also note how the CCI index is still at a relatively low rate (64.8), which indicates it may still be some time before we return to market conditions similar to the mid-2000s. Wine sales, and especially luxury wine sales, are very susceptible to how consumers are feeling, so it is no surprise that when consumer confidence declines, so do the fortunes of wineries. In short, in terms of winery valuations, it's a good time to enter into estate planning transactions.

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