In vino veritas
WINE RATINGS AND PRICES

Any supermarket shelf of wines will leave you wondering about the relationship between quality and price. To explore the mystery, Frontier Economics has compiled a database of 18,000 “old world” wines from the Robert Parker reviews of the 2014 and 2015 vintages, testing the relationship between the scores given by him and his reviewers and the prices these wines fetched as reported by Wine Alert and Wine-Searcher. From this extensive database we can learn not only whether there is any clear link between rating and price, but also whether customers’ tastes are biased in favour of particular countries or types of wine. The results were intriguing - and just may help next time you run your eye along the higher-priced end of the shelf.

Wine is a complex product. Different varieties of grape from innumerable vineyards in different areas are pressed to produce wines with different levels of sweetness, acidity, tannin and alcohol, which age differently, and are sold in bottles bearing a huge variety of different “brand” labels. This results in a vast array of choice for the consumer at any particular point in time, giving what economists call an “information problem”.

The average wine shopper rarely gets the opportunity to assess quality before buying, so wine is also what economists also call an “experience good”. Indeed, some might argue wine is actually a “post-experience”, or “credence” good, in that consumers don’t find it that easy to assess quality even after consumption. And not just the ordinary drinker: blind tastings have demonstrated that wine experts frequently fail to identify even well-known wines or are unable tell the difference between supposedly “good” and “bad” ones.

So what makes people pay more or less for a bottle of wine? Clearly, price has little to do with cost of production; although mass-production methods, blending and quick sales reduce costs at the cheap end, there is very little difference in the cost of producing good and very good wines. The wine market has long been a playground for economic sociologists, given the range of societal influences and the difficulty of objectively assessing quality.

Purchasers will be influenced not only by whether they enjoyed a similar wine before, but by whether it is drunk by people like them. Fashion plays an important point in wine-buying, otherwise it would be impossible to explain the social pre-eminence of (Italian) Prosecco over (Spanish) Cava. Purchasers will display some well-known behavioural biases - for example, they will be affected by whether they like the name, the design of the label or the country of origin - as well as being influenced by “framing” - the pricing of other wines on the same shelf.

Think of a number

But the more serious purchasers will check out wine ratings. Ratings systems flourish in markets where there is an information problem. Ratings systems have been around for as long as wine buffs. Some producing regions have long had their own: for example, only a handful of Bordeaux reds carry the “premier cru” accolade amongst the select number of clarets that are “grand cru classe”. But those producer classifications change only slowly, while today there are lots of wine commentators giving instant, fast-changing recommendations in magazines, online, and in the wine outlets themselves.
The value of such ratings is highly debatable. There is lots of vivid language about taste and aroma, leaving the buyer sniffing hopefully for blackberries or woodsmoke, but a reviewer is, in the end, only as good as wine buyers think him or her to be. And one reviewer has come to epitomise American taste - the former lawyer Robert Parker, who with his team of experts scores a vast range of wine from both the “new” and “old” worlds. His influence became such that President Chirac is said to have consulted him about what to serve President Clinton, and Californian wine producers are said to have tried to tune their output to his palate.

The “Parker scale” of wine scores runs up to 100, with anything below 60 deemed to be undrinkable. Our database of 18,000 wines from the 2014 and 2015 vintages all had Parker scores of 85 and over. The pyramid below shows the qualities he ascribes to wines at these scores:

**Figure 1  Robert Parker's Wine Advocate Rating System**

- **96-100**
  "An extraordinary wine of profound and complex character displaying all the attributes expected of a classic wine of its variety. Wines of this caliber are worth a special effort to find, purchase, and consume."

- **90-95**
  "An outstanding wine of exceptional complexity and character. In short, these are terrific wines."

- **85-89**
  "Very good; many of the wines that fall into this range often are great value as well."

*Source: Robert Parker's Wine Advocate*

According to Mr Parker, the ratings reflect “an independent, critical look at the wines” and “neither price nor the reputation of the producer/grower affect the rating in any manner”. Assuming this to be true, these ratings would seem to offer a first approximation for a measure of quality, to see how it correlates with price. But it may, of course, be that Robert Parker scores have such an influence on the market that they drive price whether or not they accurately measure quality.

Our selection from the Parker database is limited to Frontier’s “old world” (European) territory, and only to a selection of the continent’s main wine-producing countries. The following tables show, on the one hand, the number of wines from each country, with France predictably predominating, and on the other hand the number of wines on each range of Parker points. Fortified wines have not been included (and nor have any from the UK). The data was extracted during April 2018. Prices are provided from three sources: Robert Parker’s Wine Advocate, Wine Searcher and Wine Alert. We choose the lowest price of the range of available retail prices.

**Table 1  Compiled wines for each “old world” country**

<table>
<thead>
<tr>
<th>Country</th>
<th>Red wines</th>
<th>White wines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>-</td>
<td>587</td>
</tr>
<tr>
<td>France</td>
<td>7,314</td>
<td>4,146</td>
</tr>
<tr>
<td>Germany</td>
<td>112</td>
<td>1,874</td>
</tr>
<tr>
<td>Italy</td>
<td>1,027</td>
<td>823</td>
</tr>
<tr>
<td>Portugal</td>
<td>462</td>
<td>468</td>
</tr>
<tr>
<td>Spain</td>
<td>1,062</td>
<td>591</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,977</strong></td>
<td><strong>8,489</strong></td>
</tr>
</tbody>
</table>
Table 2  Compiled wines for each Parker points range

<table>
<thead>
<tr>
<th>Parker points range</th>
<th>Red wines</th>
<th>White wines</th>
</tr>
</thead>
<tbody>
<tr>
<td>85-89</td>
<td>4,728</td>
<td>3,826</td>
</tr>
<tr>
<td>90-95</td>
<td>5,002</td>
<td>4,466</td>
</tr>
<tr>
<td>96-100</td>
<td>247</td>
<td>197</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,977</strong></td>
<td><strong>8,489</strong></td>
</tr>
</tbody>
</table>

Up, Up and Away

The chart below shows the average price for all wines scored at each point on the upper reaches of the scale, from 85 to 100, divided between red and white wines. It shows price moving upwards with every extra Parker point. And what’s more, they do so exponentially, so that prices move up more rapidly with every extra point on the score, once it is above 90. Moving from 85 to 86 adds only on average €1; moving from 95 to 96 adds €100.

Figure 2  Average price difference between red and white wines

The reds have it

At the very top, moreover, prices are much more volatile, with a scatter of both the high and the super-high. And another difference shows up clearly once past the 90 score - the price for red wines rises faster than for white. Within the 90-95 range, the average difference is €58, but the difference rises to €300 or more at the top end.

The following chart shows the average difference in price between red and white wines according to its rating. Trophy wines are, it seems clear, mostly red.
Figure 3  
Average price difference between red and white wines

Vive le France

So far, the analysis has made no distinction between the different European countries of origin. Slicing and dicing the data by wine-growing countries reveals some clear consumer prejudices, as the chart below shows.

French wines command a premium at all ratings levels - a premium that is at its highest amongst wines with a Parker score of 96-100. Amongst these top-rated wines, the Portuguese offer the best value for money if you’re looking for a red, while the Austrians offer the best value amongst the top whites. One step down on the Parker scale, amongst wines rated 90-95, it’s the Spanish wines that offer best value amongst the reds and Portuguese amongst the whites.

Figure 4  
Average price on each range in red and white wines
Conclusion

Cross-border wholesale price data for wines suffer from the complicated effects of different tax regimes at the retail purchase point. If, for example, tax is levied on the alcoholic content rather than (or as well as) ad valorem, this will represent a declining proportion of the price as prices rise, affecting the shape of the demand curve. All the same, a database of this size gives some confidence that the exponential price curve revealed by the analysis does indeed exist. It supports the view that the wine market is highly segmented, with “top” wines commanding trophy prices that do more than reflect their quality premium, at least as measured by their Parker scores.

The analysis also makes it clear that, at least as far as European wines go, the prejudice in favour of French origin amongst the highest-priced wines remains strong. But it would be instructive to compare these French superstars with “new world” wines, particularly those from California, to explore which are better value for money.

Portuguese wines equally clearly have an image problem that has not been overcome by some good Parker ratings. Analysis at this aggregate level does not permit us to draw conclusions as to whether this reflects the lack of strong brands, either generic or regional - such as (Spanish) Rioja or (French) Burgundy - or specific to a vineyard (eg, Chateau Latour).

Further down at the mass market level, well-recognised generic brands are clearly critical to success in the wine trade, and highly subject to fashion. While even a database of this size would hardly allow for companions at the vineyard level, it could reveal some interesting regional biases, giving both producers looking for markets and consumers looking for value food (and drink) for thought.