

Which wine descriptors make a superstar? Evidence from Wine Spectator database

1. Introduction

Wine can be defined an “experience good”, a product for which quality and other characteristics can be determined only after consumption (Storchmann, 2012). For this reason, the wine market presents information asymmetries, since consumers have less information about the product’s qualities with respect to producers (Pennerstorfer, Weiss, & Huber, 2019). Bearing this in mind, it is no surprise that, during the last decades, wine magazines have become popular, in particular with respect to ratings of fine wines.

It has been proved by several researches that some wine critics and their rankings have even become influential in determining the price of wines. Notably, Hadj Ali, Lecoq and Visser (2005) have tried to assess the impact that the ratings of Robert Parker may have on Bordeaux wine prices, finding a “Parker effect”, which is estimated to be around 2.80 euros per bottle (Hadj Ali, Lecoq, & Visser, 2005). Additionally, Schamel (2009) used data from *Wine Spectator* to prove the impact of quality characteristics over consumers’ willingness to pay. The author shows that, on average, a 1% increase in sensory quality can correspond to a 2.9% increase in price (Schamel, 2000). Further research was conducted by Oczkowski and Doucouliagos (2015), where, through the use of a Meta-Regression analysis over 180 hedonic price studies, they found a positive correlation of +0.30 between wine prices and quality ratings (Oczkowski & Doucouliagos, 2015).

A bit differently from the above-mentioned studies, Ramirez (2010) has, instead, tried to evaluate if the tasting notes used to describe a certain have any impact on its price. The author uses tasting notes published on *Wine Spectator* and considers both the length of the note and the number of “analytical” words contained in it, to see if they affect the wine’s price. Ramirez finds that longer tasting notes can result in higher prices, while, on the other hand, the use of analytical words has limited effect on wine prices (Ramirez, 2010).

Capehart (2021) examines consumers’ willingness to pay for wines that include some descriptors considered by a previous work as “bullshit” descriptors (Quandt, 2007). The author finds that, for most of them, consumers have a zero or near-zero marginal willingness to pay (MWTP), but for some others there is a non-zero MWTP, meaning that they are valued by some consumers. Capehart suggests that this may be caused by a subjective effect, rather than real qualities of the wine (Capehart, 2021).

As confirmed by the aforementioned studies, quality ratings seem to have indeed an influence on wine prices, in particular for top-quality ones. The aim of this study is to assess which are the descriptors in quality ratings that are more commonly found in the reviews of “superstar” wines, that is, those with a score between 95 and 100. The result suggests which qualities should be more looked for by producers in order to gain top-quality ratings.

2. Methodology

We use the ratings by the American magazine *Wine Spectator*, which every year publishes wine ratings and tasting notes. We consider white and red vintage wines from 1986 to 2017, produced in 11 countries. We then employ a step-wise approach, implementing a logistic regression on the descriptors used in reviews wines with scores between 95 and 100, in order to estimate the probability of these descriptors to be included in reviews of top-quality wines. Explanatory variables are the wine descriptors; we also include the variables related to wine characteristics and wine description, as vintage (1986-2017), the attribute of “drinkable now” of wine, the length of wine notes, the author of the note. Moreover, we test in logistic regression the variable of countries producing wines described in notes, as control variables. We adopted a nested model approach, implementing three different model, establishing a threshold in the number of wine descriptors, selected by frequency of

appearance (threshold=500; 100; no threshold). Tests based on the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) are used to gauge the goodness of fit of the model and to compare performance of non-nested models.

3. Results and conclusions

Models both for white and red wines have been implemented. As for “superstar” red wines, main results suggest positive relationships between wines with high score and mainly tertiary descriptors, that is, deriving from the chemical evolution of the aromas due to aging and from the passage in barrels or bariques, as cinnamon, mocha, vanilla. Moreover, also secondary aromas, that are bewitching and intense aromas of fruit of fermentation origin, chemically called esters, emerge as impacting. More in detail. They are apple and strawberry aromas, this last characterizing some types of wine as Pinot Noir, Gamay and Merlot, that seem to have an impact on the score.

Hints of candied fruit, such as dried fig and date, or exotic fruit as guava and tropical, result to impact on the score of “superstar” white wines. These characteristics are typical of aged white wines and of vines particularly suitable for aging, as, for example Sauvignon Blanc. “Honey” has a positive impact on the dependent, being, for example, a typical secondary aroma of Chenin and aged Chardonnay, two of the most important vines among the high score whites.

Future step of the research will be dedicated to explore other data from wine magazines, trying to expand the sample. Moreover, will be possible focus the research on the differences between countries about this topic, specifically between the Old and the New World.

4. References

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