The Effects of Origin and Closure on California Red Wine Prices:
Results from a Hedonic Price Analysis

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Abstract:
In this paper, we estimate the effects of regional origin and type of closure on the price of red wine while controlling for varietal and quality rating. The data set include prices of wines produced in two American Viticultural Areas (AVA) of California. Napa Valley has long been regarded as the premier growing region within the California AVA. However, recent premium wines from the Central Coast AVA and, in particular, the Paso Robles AVA have begun to challenge Napa in terms of quality. Wine quality may be compromised by the use of cork closures; screw-cap closures are increasingly used as an alternative for wines to be consumed up to four years after bottling. While screw-caps preserve wine quality, they may still be perceived negatively by consumers and therefore command lower prices, all other things equal.

A hedonic price analysis will be conducted, in which wine prices will be estimated as a function of wine characteristics, including AVA, closure type, varietal, and quality rating. By controlling for varietal and quality rating, we are able to isolate the effect of regional origin and the use of a screw cap on wine price. A positive and statistically significant effect of a dummy variable for wines from the Paso Robles AVA would indicate the price premium Paso Robles wines command relative to wines from the Napa Valley region, while a negative coefficient would indicate the converse. Similarly, a negative and statistically significant coefficient on a dummy variable indicating a screw-cap closure would indicate the price discount that wines with a screw-cap closure currently receive in the marketplace (on average).

Estimated price premiums or discounts may indicate differences in production costs or demand conditions. The relative costs of producing in Paso Robles versus Napa Valley or using cork versus a screw cap may be better understood by industry than relative demand conditions. As a result, the analysis should provide Napa Valley and Paso Robles wine producers and marketers with interesting insight into the net economic benefits of their regional designation. In addition, it may provide useful information for those vintners considering the use of screw-cap closures. Finally, the study will provide a useful baseline for studying how the price effects of Paso Robles versus Napa and cork versus screw caps change over time.