



By Robert N. Stavins

## Oenonomy: What's in a Wine's Name?

Today, I offer the product of a merger of profession and avocation — environmental economics and oenonomy (the study, as well as the enjoyment, of fine wine).

In an article that appeared in the *Journal of Wine Economics* (Volume 6, Number 1, 2011), Robin Cross, Andrew Plantinga (both of Oregon State University), and I examined a concept that is central to the thinking of wine geeks around the world: *terroir*. Wine producers and enthusiasts use the term, from the French *terre* (meaning land), to refer to the special characteristics of a place that impart unique qualities to the wine produced.

The Appellation d'Origine Contrôlée system in France, and similar systems adopted in other wine-producing countries, are based upon the geographic location of grape production, predicated on this notion of *terroir*. Under the U.S. system, production regions are designated as American Viticultural Areas (AVAs), with finer geographical designations known as sub-AVAs. Such designations allow wineries to identify the geographical origin of the grapes used in producing their wines, and — equally important — seek to prevent producers outside an AVA from making false claims about the nature and origin of their wines.

What is the value of *terroir* in the

American context? Does the “reality of *terroir*” — the location-specific geology and geography — predominate in determining the quality of wine? Does the “concept of *terroir*” — the location within an officially named appellation — impart additional value to grapes and wine? Does location within such an appellation impart additional value to vineyards?

The central question we sought to address in this work was whether measurable site attributes — such as slope, aspect, elevation, and soil type — or appellation designations are more important determinants of vineyard prices. How should site attributes and sub-AVA designations influence vineyard prices? If site attributes significantly affect wine quality and if consumers are able to discriminate such quality, then vineyard prices would depend on site attributes, and AVA designations might be redundant. Alternatively, consumers might not be able to discriminate among wines perfectly and might use AVA designations as signals of average quality of wines from respective areas, or might derive utility directly from drinking wines which they know to be of particular pedigree.

We examined these questions by conducting a hedonic price analysis to investigate sales of vineyards in Oregon's Willamette Valley, one of the most important wine-producing regions in the United States. We employed a new data set we developed on vineyard sales with extensive information about respective properties, combined with geographical information system-based information on specific parcels. In our sample (actually, the universe of sales of vineyard, and potential vineyard, properties in the Willamette Valley between 1995 and 2007), the average price of vineyards was about \$10,000 per acre, with prices ranging from \$2,500 to \$42,000 per acre.

We also carried out a check on our

vineyard pricing analysis by examining price premiums paid by consumers for wines from related origins. If you would like to read about either methodology, or see our quantitative results, please take a look at the article. But, in this column, I will turn immediately to a summary of our results.

We found that vineyard prices are strongly determined by location within specific sub-AVAs, but not by site attributes. These appellations are supposed to reflect the area's *terroir*, but our finding that the physical characteristics of vineyards are not priced implicitly in land markets raises questions about whether sub-AVA designations have a fundamental connection with *terroir*.

On the other hand, our results make clear that the concept of *terroir* matters economically, both to consumers and to wine producers. Buyers and sellers of vineyard parcels in the Willamette Valley of Oregon attach a significant premium to sub-AVA designations.

One possibility is that buyers are less informed than sellers about how the attributes of a vineyard will affect wine quality and, therefore, rely on sub-AVA designations as quality signals.

In any event, consumers are evidently willing to pay more for the experience of drinking wines from these areas. While they may not discriminate among wines in terms of their intrinsic qualities, consumers are apparently responding to extrinsic qualities of wines, such as price and area of origin. So, *terroir* survives — as a concept, but somewhat less as a fundamental reality.

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*How value accrues to micro-environments and their namesake producing regions*