Unobserved terroir effects and the hedonics of geographical indications: Evidence from vineyard sales in Burgundy (France)

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Abstract

It is common knowledge that the taste of a wine depends on Natural Conditions (NCs) prevailing where the grapes are grown, and that Geographical Indications (GIs), which group similar NCs, provide information about the taste of wines. However, disentangling their relative hedonic values is a complex matter because of the unobservable nature of some NCs - exemplified by the widespread evocation of the voque concept of terroir – and the resulting endogenous structure of GIs. We propose and compare several identification strategies to control for this potential bias (spatial filters, control functions, instrumental variables, and propensity scores) all with flexible, semi-parametric specifications. Using an original plot-level dataset on vineyard sales from Burgundy, France, we find globally that GIs are a more important source of value than NCs. However, taking into account the possibility of spatially omitted terroir effects implies at least more than a doubling of the part accounted for by NCs (from 8% to 17%) while the GI part falls drastically (from 51% to 37%). These results contrast sharply with previous results from classical hedonic approaches and illustrate how precise information about sale locations can be used to control for unobserved spatial heterogeneity. Gls are nevertheless still highly significant determinants of vineyard prices, with a per-hectare hedonic premium of €0.35 million for the most famous Grands Crus, illustrating their high economic importance.

Keywords: Geographical indications; value of terroir; vineyard sale; omitted variable; ordered triangular models.

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