Hedonic valuation of Geographical Indications with unobserved terroir effects

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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. Accordingly, 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 that are locally known, and used in GIs’ designation. This is exemplified by the widespread evocation of the vogue concept of terroir as a rationale for GIs. We present three empirical strategies against this omitted variable bias, all from a semi-parametric hedonic framework: surface filters, triangular restrictions, and designation gaps. The three strategies share the use of fine spatial variations of GIs and land prices, where terroir can be considered as constant. They differ by the assumptions about the unobservables. Using an original plot-level dataset on vineyards and vineyard sales from Burgundy (France) we find globally that GIs are a more important source of value than NCs. Nevertheless, taking into account the possibility of omitted terroir effects implies more than a doubling of the part of vineyard prices accounted, from 8% to 17%. 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 location can be used to control for unobserved spatial heterogeneity.

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

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