

A Research on Inference from Multiple Distance Variables in Hedonic Regression Focus on Three Variables

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Abstract : In urban context, urban nodes such as amenity or hazard will certainly affect house price, while classic hedonic analysis will employ distance variables measured from each urban nodes. However, effects from distances to facilities on house prices generally do not represent the true price of the property. Distance variables measured on the same surface are suffering a problem called multicollinearity, which is usually presented as magnitude variance and mean value in regression, errors caused by instability. In this paper, we provided a theoretical framework to identify and gather the data with less bias, and also provided specific sampling method on locating the sample region to avoid the spatial multicollinearity problem in three distance variable's case.

Keywords : hedonic regression, urban node, distance variables, multicollinearity, collinearity

Conference Title : ICACE 2015 : International Conference on Architecture and Civil Engineering

Conference Location : Venice, Italy

Conference Dates : April 13-14, 2015