The Decomposition of a House Price index into Land and Structures Components: A Hedonic Regression Approach

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Abstract

The paper uses hedonic regression techniques in order to decompose the price of a house into land and structure components using readily available real estate sales data for a Dutch city. In order to get sensible results, it proved necessary to use a nonlinear regression model using data that covered multiple time periods. It also proved to be necessary to impose some monotonicity restrictions on the price of land and structures. The results of the additive model were compared with the results of a traditional logarithmic hedonic regression model.

Key Words

Property price indexes, hedonic regressions, repeat sales method, rolling year indexes, Fisher ideal indexes.

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