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Valuation of Cultural Heritage: A Hedonic Pricing Analysis of Housing via GIS-based Data

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Abstract : The hedonic pricing model has been popularly applied to describe the economic value of environmental amenities in urban housing, but the results for cultural heritage variables remain relatively ambiguous. In this paper, integrated variables extending by GIS-based data and an existing typology of communities used to examine how cultural heritage and environmental amenities and disamenities affect housing prices across urban communities in Tainan, Taiwan. The developed models suggest that, although a sophisticated variable for central services is selected, the centrality of location is not fully controlled in the price models and thus picked up by correlated peripheral and central amenities such as cultural heritage, open space or parks. Analysis of these correlations permits us to qualify results and present a revised set of relatively reliable estimates. Positive effects on housing prices are identified for views, various types of recreational infrastructure and vicinity of nationally cultural sites and significant landscapes. Negative effects are found for several disamenities including wasteyards, refuse incinerators, petrol stations and industries. The results suggest that systematic hypothesis testing and reporting of correlations may contribute to consistent explanatory patterns in hedonic pricing estimates for cultural heritage and landscape amenities in urban.

Keywords : hedonic pricing model, cultural heritage, landscape amenities, housing
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