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Online housing search and gravity models

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Abstract

In this paper we apply a gravity framework to user-generated data of a large housing market platform. We show that gravity describes the patterns of inflow and outflow of hits (mouse clicks, etc.) from one municipality to another, where the municipality of the user defines the origin and the municipality of the property that is viewed defines the destination. The estimates indicate that even the simplest gravity model explains close to 80 percent of the bilateral flows. By distinguishing serious searchers from recreational searchers we demonstrate that the gravity framework describes search patterns of both types of users. The results indicate that recreational search is centered more around the user's location than serious search. However, this finding is driven entirely by differences in border effects as there is no difference in the distance effect. As such we find no evidence of differences in information frictions between both groups of searchers.

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