

The Pearls and Perils of Google Trends: A Housing Market Application

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Abstract

This study aims to provide insights into the correct usage of Google search data, which are available through Google Trends. The main focus is on the effects of sampling error in these data as these are ignored by most scholars using Google Trends. To demonstrate the effect a housing market application is used; that is, the relationship between online search activity for mortgages and real housing market activity is investigated. A simple time series model, based on Van Veldhuizen, Vogt, and Voogt (2016), is estimated that explains house transactions using Google search data for mortgages. The results show that the effects of sampling errors are substantial. It is also stressed that in this particular application of Google Trends data 'predetermined' transactions, house sales where the purchase contracts have been signed but where the conveyance hasn't occurred yet, should be excluded as they lead to an overestimation of the effects of mortgage searches. All in all, the application of Google Trends data in economic applications remains promising. However, far more attention should be given to the limitations of these data.