Size and Bias Effects of Search Engines: Theory and Experimental Evidence

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Abstract

This paper analyzes equilibrium prices under incomplete and biased information provided to consumers by price-comparison search engines. Theoretical results predict a conflict of interests between users and non users of these engines. More (unbiased) information does not necessarily increase welfare. Experimental evidence supports some of the model's predictions and rejects others. Data analysis indicates that divergence between empirical and theoretical price distributions can partly be due to systematic effects of agents' attitudes towards risky choice. Two aspects of such attitudes are identified: a subject's degree of risk aversion and whether the subject's choices are compatible with theories assuming dominance.

JEL classification: D43, D83, L13.

Keywords: Search engines, incomplete information, biased information, price levels, experiments.