

Search with Adverse Selection*

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Abstract

We present and analyze a model of search with adverse selection—a search analog of a common values (procurement) auction. The searching agent—the buyer—samples sequentially alternative trading partners—sellers—for a potential transaction that involves information asymmetry. To have a concrete story in mind, one can think of a simple procurement scenario in which a homeowner (the buyer) needs a repair service and searches among potential providers (the sellers). The buyer has private information that affects the cost of the sellers, while sellers observe only imperfect signals of it. The buyer has an incentive to search for a seller who receives a favorable signal (indicating low cost), since this will translate to a relatively low price. Sellers cannot observe the buyer’s search history, but they understand that the buyer engages in search and take it into account when interpreting their own information.

The main objective is to understand how the combination of search activity and information asymmetry affects prices and welfare. Specifically, we characterize the relationships between the informativeness of the signal technology, on the one hand, and the extent of information revelation—how close the equilibrium prices are to the full information prices—and the level of total welfare, on the other hand. We observe that welfare is not monotonic in the informativeness of the signal technology. We also conclude, that information is aggregated less well by the search process than it is by the corresponding auction model. We trace this to a stronger form of winner’s curse that is present in the search scenario.

Still preliminary and Incomplete.

JEL Classifications: D44, D82, D83

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