

Spite and Counter-Spite in Auctions*

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October 2007

Abstract

The paper presents a complete information model of bidding in second price sealed bid and ascending price (English) auctions, in which potential buyers know the unit valuation of other bidders and may spitefully prefer that their rivals earn a lower surplus. Bidders with spiteful preferences should overbid in equilibrium when they know their rival has a higher value than their own, and bidders with a higher value underbid to “counter” spite the overbidding of the lower value bidders. The model also predicts different bidding behavior in second price as compared to ascending price auctions. The paper also presents experimental evidence broadly consistent with the model. In the complete information environment, lower value bidders overbid more than higher value bidders, and they overbid more frequently in the second price auction than in the ascending price auction. Overall, the lower value bidder submits bids that exceed value about half the time. These patterns are not found in the incomplete information environment, consistent with the model.

JEL Classifications: C72, D44

Keywords: ascending-bid auction, sealed bid auction, experiment, dominant strategy, reciprocity, fairness.