Auction bids decline with intensity of competition: new research

April 15 2019

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Economists from the University of Sydney and the University of

Technology Sydney (UTS) have co-authored a new study that challenges conventional thinking about auctions and is applicable to real-life bidding situations including property auctions.

The study suggested that the more bidders there are in an auction, the lower each individual bidder perceives their probability of winning, which has demotivating effect on their desire to win the auction.

"This is a counterintuitive finding because usually auctioneers would assume that the more bidders there are in an auction, the more money they will make—the logic being that that the more bidders there are, the more likely it is that there is a bidder with a high willingness to pay for the good," said co-author Associate Professor Agnieszka Tymula from the University of Sydney's School of Economics.

"However, it turns out that there is also a downside to having more bidders—most people bid less."

The researchers' conclusions were drawn from an experiment where they asked nearly 100 adults to bid on items of varying value—including clothing, movie tickets, Bluetooth speakers, and more.

On average, the participants bid less in auctions as the number of other bidders increased.

More than half of the participants changed their bids in response to an increase in the number of rivals.

"For most of the items, when the number of bidders increased from three to 12, the average bid declined by around 7%," said co-author Dr. Antonio Rosato from UTS Business School.

"Our findings are consistent with 'loss aversion' - the idea that people dislike losses more than they like equal-size gains. When the number of bidders increase, participants experience this lower chance of winning as a loss and this reduces their willingness to pay."

Associate Professor Tymula said their findings could be applicable to many real-life auction situations, including property market auctions.

"In real-life, the auctions that attract many bidders are usually those auctions for better properties—and they will therefore generate higher bids just because the property is of higher quality," she said.

"Many real estate agents infer from this that more people at an auction, the higher the final bid is going to be, so they try to get as many people as possible to their auction. However, our results suggest that this actually plays against them because seeing many competitors at an auction makes bidders submit lower bids on average."

Associate Professor Tymula and Dr Rosato's findings are published in the latest issue of *Games and Economic Behavior*.

More information: Antonio Rosato et al, Loss aversion and competition in Vickrey auctions: Money ain't no good, *Games and Economic Behavior* (2019). DOI: 10.1016/j.geb.2019.02.014

Provided by University of Sydney