

Abstract

Two-stage auctions are defined by the following rules of play:

1. 1st stage: The players submit sealed bids, all of which are then opened and made public.
2. 2d stage: Each player chooses exactly one of the 1st-stage bids, either by affirming its own bid or by usurping another player's bid.
3. Payoffs: If there is only one player who makes the highest bid at the 2d stage, that player wins the auction, regardless of what it bid at the 1st stage. If there is more than one player who makes the highest bid at the 2d stage, the player who made the highest bid at the 1st stage wins the auction.

The "winner's curse," in which the highest bidder, because it wins, overpays, plagues common-value sealed-bid auctions, in which there is a single common value that an object is worth. A model for estimating this value in sealed-bid auctions, which requires that players take account of the curse and depreciate their valuations in making bids, is developed.

The curse is more easily averted in two-stage auctions. Because the highest bidder always has the opportunity to "bail out" in the 2d stage, and lower bidders to move up, players generally have an incentive to bid their valuations in the 1st stage. The 1st-stage bids can then be used to revise estimates of the common value, based on the median, mean, or a "weighted point estimate," which partially discounts outliers. Thereby the players can approximate the common value--less some reasonable profit--which benefits both them and the bid taker.