

# On Asymmetric Reserve Prices

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## Abstract

We investigate equilibrium bidding in standard auctions with asymmetric reserve prices. For example, the auctioneer sets a low reserve price for one subset of bidders and a high reserve price for others. In the first-price auction we identify an equilibrium reserve price externality whereby bidders facing a high reserve price benefit from a reduction of opponents' reserve prices. We also document cases where introducing asymmetric reserve prices can increase the auctioneer's expected revenue compared to an optimal, but uniform, reserve price—even if all bidders are ex ante identical. An extension of the model characterizes equilibrium bidding in asymmetric first-price auctions with asymmetric reserve prices. The use of asymmetric reserve prices in auction design is discussed.

Keywords: First-Price Auction, Second-Price Auction, All-Pay Auction, Asymmetric Auctions, Reserve Prices, Mechanism Design

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<http://www.hks.harvard.edu/fs/mkotows/1101-reserve-wpWEB.pdf>

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