

# Structural Analysis of Dealer's Valuation: The case of Japanese Used Car Auction Data

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## Abstract

Japanese used car markets have widely utilized ascending price auction for trading. To understand demand structure of these markets, it needs to recover underlying valuations of dealers from the bidding data observed at the auctions. This paper explores the distribution of dealer's valuation under the Independent Private Value (IPV) assumption framework. Using estimated valuation, the number of potential bidders and optimal reserve price of sellers were simulated. As a result, simulated optimal reserve price was higher than actual average reserve price.

Keywords: Ascending Auction, Structural Estimation, Used Car Market.

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