The Effect of Auctioneers on Auction Outcomes

Nicola Lacetera - Toronto
Bradley Larsen - Stanford
Devin Pope - Chicago
Justin Sydnor - Wisconsin

Becker Brown Bag
October 14, 2014
Auctions are a major economic institution
Empirical setting: wholesale car auctions
Empirical setting: wholesale car auctions

Car dealers accept “trade-ins”
Empirical setting: wholesale car auctions

Car dealers accept “trade-ins”

Cars are auctioned off to other dealers in wholesale market
Empirical setting: wholesale car auctions

Car dealers accept “trade-ins”

Cars are auctioned off to other dealers in wholesale market

Dealers sell cars to final customers
Most work focuses on auction design, not auction process

Auction “design”

- 1\text{st} vs. 2\text{nd} price; sealed bid, open; ascending, descending
- Private, common, correlated values
- Number of bidders
Most work focuses on auction design, not auction process

Auction “design”
- 1st vs. 2nd price; sealed bid, open; ascending, descending
- Private, common, correlated values
- Number of bidders

Auction “process”
- The differences in how to actually run an auction conditional on the design and information structure
- The type of things that an auctioneer might impact
Most work focuses on auction *design*, not auction process

**Auction “design”**

- 1\textsuperscript{st} vs. 2\textsuperscript{nd} price; sealed bid, open; ascending, descending
- Private, common, correlated values
- Number of bidders

**Auction “process”**

- The differences in how to actually run an auction conditional on the design and information structure
- The type of things that an auctioneer might impact

Little room for auctioneers in traditional auction theory

Outcomes

Main Outcome: Conversion Rate (Probability of Sale)

• “Conversion rate pays the bills. Speed and price of sale are parents of conversion rate. Speed can help make a sell by bringing adrenaline into the mix for the buyer”
• Like a stock market
Performance heterogeneities: Probability of sale
Performance heterogeneities: Probability of sale

The graph illustrates the probability of sale across different auctioneer ranks, with various control factors included.

- **Y-axis**: Probability of sale
- **X-axis**: Auctioneer Rank Order (Worst to Best)

The graph shows different lines representing different control factors:
- **No Controls**
- **Seller F.E.**
- **Auction Day, Time of day F.E.**
- **Lane F.E.**
- **Car type F.E., miles**

The data trends indicate how each control factor affects the probability of sale across different auctioneer ranks.
Stability of outcomes over time: 2007-09 vs. 2010-13

T-Statistic: 4.91
Correlation with subjective ratings by auction house

T-Statistic: 4.62
Stayers vs. Goers

T-Statistic: 2.53
### Size of the effects and benchmarking

<table>
<thead>
<tr>
<th>Effect</th>
<th>Probability of sale</th>
<th>Residual price</th>
<th>High bid</th>
</tr>
</thead>
<tbody>
<tr>
<td>90th-10th %ile auctioneer effect</td>
<td>5.6%</td>
<td>$96</td>
<td>$223</td>
</tr>
</tbody>
</table>

~ +123 cars sold each year; ~$24,600 fees
What mechanisms explain the heterogeneous performance?

Rational/sophisticated bidder explanations:
• Persuade sellers to lower reserve price
• Reveal quality information about the cars
• Reveal information from low-valuation bidders
• Matching buyers and cars
• Facilitate bargaining (directly or through “phantom bids”)

“Behavioral” bidder explanations:
• Exploit cognitive, emotional biases, value of attention and entertainment
  • Anchoring, left-digit/round-number biases, “irrational exuberance”, “auction fever”, “scarcity effects”, “competitive arousal”
What mechanisms explain the heterogeneous performance?

Survey of 33 auto auctioneers

“If you had to pick one of the statements below, which one do you think best describes the most important role of auctioneers at [company’s] auctions?”

1. Auctioneers create a sense of excitement, competition, and urgency among buyers that encourages more bidding

2. Auctioneers provide expert information about cars on the block that bidders do not know themselves

3. Auctioneers persuade sellers to accept the fair market price

4. Buyers know what a car is worth and will bid accordingly. Therefore, auctioneers do not have a large impact on auction outcomes
What mechanisms explain the heterogeneous performance?

Survey of 33 auto auctioneers

“If you had to pick one of the statements below, which one do you think best describes the most important role of auctioneers at [company’s] auctions?”

1. Auctioneers create a sense of excitement, competition, and urgency among buyers that encourages more bidding (31)

2. Auctioneers provide expert information about cars on the block that bidders do not know themselves (1)

3. Auctioneers persuade sellers to accept the fair market price (1)

4. Buyers know what a car is worth and will bid accordingly. Therefore, auctioneers do not have a large impact on auction outcomes (0)
What mechanisms explain the heterogeneous performance?

Survey of 33 auto auctioneers

“Here is a short list of some skills and tactics of auctioneers. Thinking about what separates a “highly effective” auctioneer from an “average auctioneer, how would you rank the importance of each of these skills and tactics?” (1-5 scale)
Summary and conclusion

Conclusions

- Auctioneers can have an important impact on auction outcomes: not just there to call prices and take bids
- Results are robust to a variety of specifications
- Our ability measures are correlated across time and across outcomes
- Our ability measures are correlated with subjective measures provided by auction house
- We argue that the results are most consistent with a mechanism of excitement/urgency.

Implications and Future Work

- Why have not all auctions moved to an online format?
- How should one treat the auction process in an online format (e.g. speed optimization)?
- We can learn more about bidder behavior by understanding these auctioneer effects.
- Field experiments and laboratory work going forward may help pin down exact mechanisms and inform auctions of optimal process measures.
Thank You!