

AJAE Appendix:

“Posted Prices and Bid Affiliation: Evidence from Experimental Auctions”

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Note: The material contained herein is supplementary to the article named in the title and published in the *American Journal of Agricultural Economics (AJAE)*.”

Appendix A: Auction Instructions

General Instructions

You are about to participate in an experiment in the economics of market decision making. Because we are trying to examine individual decisions, we ask that you please refrain from communicating with other participants until this experiment is over.

You will receive \$10 for participating in this experimental auction. Your take-home income will consist of your initial income (\$10) less the price of any goods that you choose to purchase.

Please pay attention to the monitors at all times and do not hesitate to ask any question about the instructions.

Your identification number, which is written on each of your bid sheets, is «ID»

How the Auction Works

Today we will be using what is known as a “second-price, sealed-bid auction.” Every round will have four steps:

- Step 1 The monitor will describe the product being auctioned off during that round, and you will have a chance to examine the product.
- Step 2 Each bidder submits a bid to purchase the product being auctioned off.
- Step 3 The monitor collects the bids and ranks them from highest to lowest.
- Step 4 If you placed the highest bid, you purchase the product and pay the price submitted by the second highest bidder. If you are not the highest bidder, you do not purchase the product.

A simple example should help to clarify things. Suppose ten people (Person A, Person B, Person C, ... , Person J) are bidding to buy some product (say, a front row ticket to next season’s Ohio State-Michigan football game). Their bids are as follows:

Person A—\$24.50
 Person B—\$98.00
 Person C—\$250.00
 Person D—\$12.80
 Person E—\$50.00
 Person F—\$1.42
 Person G—\$67.00
 Person H—\$34.50
 Person I—\$9.99
 Person J—\$10.00

The monitor collects these bids and ranks them from highest to lowest:

Rank-ordered bids:	Person C—\$250.00	highest bid
	Person B—\$98.00	
	Person G—\$67.00	
	Person E—\$50.00	
	Person H—\$34.50	
	Person A—\$24.50	
	Person D—\$12.80	
	Person J—\$10.00	
	Person I—\$9.99	
	Person F—\$1.42	lowest bid

Person C is the highest bidder, so she pays the second highest price in exchange for the ticket. In this case, she buys the ticket for \$98.00.

In this type of auction it is always in your best interest to bid exactly what the product being auctioned off is worth to you. You don't want to bid more than what the product is worth to you because the second highest price might turn out to be more than you are willing to pay. Likewise, you don't want to bid less than what the product is worth to you because you may miss out on a purchase that you would've liked to have made. This is because the winner generally doesn't pay the amount that he or she bid, but instead pays the price submitted by the second highest bidder.

Short Quiz on Auction Format

Please complete the following quiz on the auction format. The quiz will not be collected. It is only intended to ensure that you understand how the auctions will work. The monitor will explain the answers once everyone has finished.

- 1) If you have the second highest bid, you purchase the product being auctioned off.
 - a) True
 - b) False

- 2) If you are the highest bidder in an auction, you may pay less than the amount you bid, but you will never have to pay more than the amount you bid.
 - a) True
 - b) False

- 3) The person who submits the highest bid purchases the product being auctioned off and pays the price submitted by the second highest bidder.
 - a) True
 - b) False

Auctions, Stage 1

Please examine the candy bar displayed at the front of the room.

The first ten auction rounds will be for this candy bar. Only one of these ten rounds will be “binding.” That is, only the transaction from one of the rounds will be carried out. The binding round will be determined at random after all ten rounds have been completed.

In each of these rounds, you will be asked to submit the highest price for which you would be willing to buy the candy bar. You’ll do this by writing that price on the bid sheet provided. At the end of each round, the monitor will collect everyone’s bid sheet. The top two bids submitted from each round will be displayed at the front of the room.



**Please do not turn the page until
instructed by your monitor**

Auctions, Stage 2

Please examine the coffee mug displayed at the front of the room.

The first ten auction rounds will be for this coffee mug. Only one of these ten rounds will be “binding.” That is, only the transaction from one of the rounds will be carried out. The binding round will be determined at random after all ten rounds have been completed.

In each of these rounds, you will be asked to submit the highest price for which you would be willing to buy the coffee mug. You’ll do this by writing that price on the bid sheet provided. At the end of each round, the monitor will collect everyone’s bid sheet. The top two bids submitted from each round will be displayed at the front of the room.



**Please do not turn the page until
instructed by your monitor**

I.D. # «ID»

Post-Auction Questionnaire

Please answer the following questions by circling the appropriate choice or filling in the appropriate line. Keep in mind that this information will be kept confidential. We will not be able to connect you to your responses.

- 1) What is your gender?
 - a) Male
 - b) Female

- 2) To see if we have a representative sample of respondents, we would like to know your approximate monthly disposable income. Please indicate the amount of money you typically have to spend each month after you pay your monthly bills such as rent, car loans, electric bill, etc. My monthly disposable income is
 - a) less than \$50
 - b) \$50 to \$99
 - c) \$100 to \$199
 - d) \$200 to \$299
 - e) \$300 to \$399
 - f) \$400 to \$499
 - g) \$500 to \$599
 - h) \$600 or more

- 3) What is your cumulative college GPA (approximately)?

- 4) How much do you think a candy bar like the one you bid on today would cost at a store?
\$_____

- 5) How much do you think a coffee mug like the one you bid on today would cost at a store?
\$_____

Appendix B: Tables Not Included in the Article

Appendix Table 1. Summary Statistics from Experiments 1 and 3

	Rounds 1-3	Rounds 8-10	Difference
Control treatment (N = 28)			
Mean	\$1.20	\$1.50	\$0.30
Standard deviation	\$0.82	\$1.11	\$0.63
Confederate treatment (N = 36)			
Mean	\$1.66	\$2.64	\$0.98
Standard deviation	\$1.58	\$2.91	\$2.18
Double confederate treatment (N = 37)			
Mean	\$1.67	\$1.88	\$0.21*
Standard deviation	\$2.01	\$1.92	\$0.99

* Statistically different across control and confederate treatments at the 0.05 level in a one-sided test ($t = 1.78$). No significant difference across control and double confederate treatments ($t = 0.47$).

Appendix Table 2. Summary Statistics from Experiment 2

	Rounds 1-3	Rounds 8-10	Difference
Control treatment (N = 64)			
Mean	\$0.39	\$0.40	\$0.01
Standard deviation	\$0.43	\$0.29	\$0.38
Confederate treatment (N = 37)			
Mean	\$0.38	\$0.57	\$0.19*
Standard deviation	\$0.39	\$0.56	\$0.46

* Statistically different across treatments at the 0.05 level ($t = 2.09$).

Appendix Table 3. Summary Statistics for Non-Zero Bids from Experiments 1 and 3

	Round 1	Round 9	Difference	Rounds 1-3	Rounds 8-10	Difference
Control treatment (N = 25) ^a						
Mean	\$1.16	\$1.66	\$0.49	\$1.34	\$1.68	\$0.34
Standard deviation	\$0.83	\$1.09	\$1.02	\$0.74	\$1.04	\$0.66
Confederate treatment (N = 34)						
Mean	\$1.33	\$2.80	\$1.47	\$1.76	\$2.80	\$1.04
Standard deviation	\$1.37	\$3.03	\$2.64	\$1.57	\$2.92	\$2.23
Double confederate treatment (N = 29)						
Mean	\$2.04	\$2.52	\$0.48 [*]	\$2.13	\$2.40	\$0.26 [†]
Standard deviation	\$2.05	\$2.20	\$0.88	\$2.04	\$1.86	\$1.11

^a Here we define zero bidders as those who bid \$0 in rounds 1 through 3 and 8 through 10.

^{*} Statistically different across control and confederate treatments at the 0.05 level in a one-sided test ($t = 1.97$). No significant difference across control and double confederate treatments ($t = 0.05$).

[†] Statistically different across control and confederate treatments at the 0.05 level in a one-sided test ($t = 1.74$). No significant difference across control and double confederate treatments ($t = 0.30$).

Appendix Table 4. Summary Statistics for Non-Zero Bids from Experiment 2

	Round 1	Round 9	Difference	Rounds 1-3	Rounds 8-10	Difference
Control treatment (N = 53) ^a						
Mean	\$0.46	\$0.46	\$0.00	\$0.45	\$0.45	\$0.01
Standard deviation	\$0.60	\$0.29	\$0.62	\$0.43	\$0.27	\$0.41
Confederate treatment (N = 32)						
Mean	\$0.32	\$0.71	\$0.39*	\$0.44	\$0.66	\$0.22 [†]
Standard deviation	\$0.27	\$0.63	\$0.56	\$0.39	\$0.55	\$0.49

^a Here we define zero bidders as those who bid zero in rounds 1 through 3 and 8 through 10.

* Statistically different across control and confederate treatments at the 0.01 level ($t = 3.03$).

[†] Statistically different across control and confederate treatments at the 0.05 level ($t = 2.10$).