

Econ 219B
Psychology and Economics: Applications
(Lecture 7)

Stefano DellaVigna

March 7, 2007

Outline

1. Social Preferences: Introduction II
2. Social Preferences: Gift Exchange in the Field
3. Social Preferences: From Lab to Field
4. Non-Standard Information Processing
5. Attention: Introduction
6. Attention: eBay Auctions

1 Social Preferences: Introduction II

- Laboratory data from ultimatum, dictator, and trust games
—> Clear evidence of social preferences
- Charness-Rabin simplified model of preferences of B when interacting with A :

$$U_B(\pi_A, \pi_B) \equiv \rho\pi_A + (1 - \rho)\pi_B \text{ when } \pi_B \geq \pi_A.$$

$$U_B(\pi_A, \pi_B) \equiv \sigma\pi_A + (1 - \sigma)\pi_B \text{ when } \pi_B \leq \pi_A.$$

- Captures:
 - baseline altruism (if $\rho > 0$ and $\sigma > 0$)
 - differentially so if ahead or behind ($\rho > \sigma$)

- In addition to payoff-based social preferences, intentions likely to matter
- ρ and σ higher when B treated nicely by A
- Positive reciprocity and negative reciprocity
- More evidence of the latter in experiments

- Taking this to field data? Hard
- **Charitable giving.**
 - Patterns consistent with social preferences
 - However: Very hard to export models from the lab
 - Lab: Person A and B . Field: Millions of needy people. Public good problem
 - Lab: Forced interaction. Field: Sorting (fund-raisers)
- Focus on **Field Experiments on Reciprocity**
 - Exogenously manipulate 'niceness' of A with a gift
 - Observe behavior of B

2 Social Preferences: Gift Exchange in the Field

- Laboratory evidence: **Fehr, Kirchsteiger, and Riedl (1993)**.
 - 5 firms bidding for 9 workers
 - Workers are first paid $w \in \{0, 5, 10, \dots\}$ and then exert effort $e \in [.1, 1]$
 - Firm payoff is $(126 - w) e$
 - Worker payoff is $w - 26 - c(e)$, with $c(e)$ convex (but small)
- Standard model: $w^* = 30$ (to satisfy IR), $e^*(w) = 0$ for all w
- Findings: effort e increasing in w and $Ew = 76$

- Where evidence of gift exchange in the field?
- **Falk (2005)** — field experiment in fund-raising
 - 9,846 solicitation letters in Zurich (Switzerland) for Christmas
 - Target: Schools for street children in Dhaka (Bangladesh)
 - 1/3 no gift, 1/3 small gift 1/3 large gift
 - Gift consists in postcards drawn by kids

Appendix: An example of the included postcards



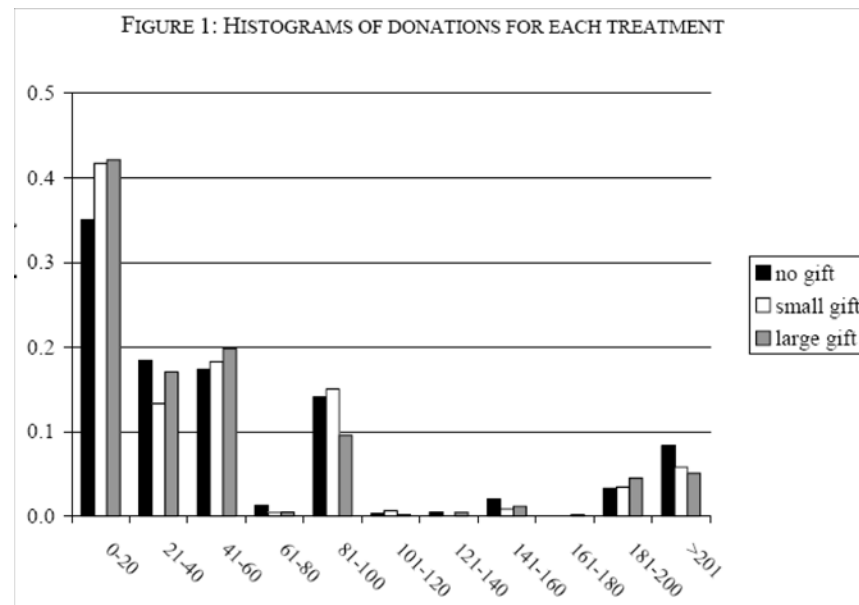
- Short-Run effect: Donations within 3 months

TABLE 1: DONATION PATTERNS IN ALL TREATMENT CONDITIONS

	No gift	Small gift	Large gift
Number of solicitation letters	3,262	3,237	3,347
Number of donations	397	465	691
Relative frequency of donations	0.12	0.14	0.21

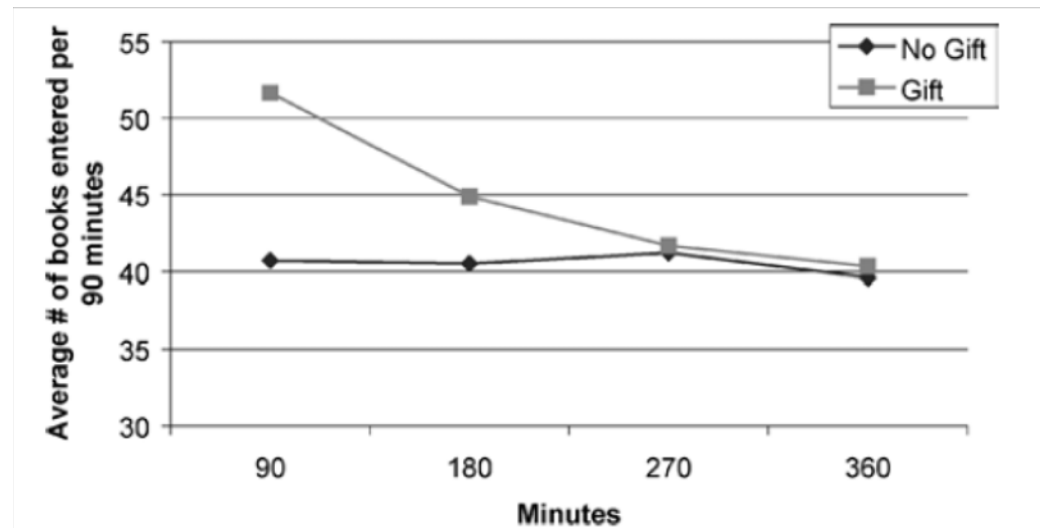
- Large gift leads to doubling of donation probability
- Effect does not depend on previous donation pattern (donation in previous mailing)
- Note: High donation levels, not typical for US

- Small decrease in average donation, conditional on donation (Marginal donors adversely selected, as in 401(k) Active choice paper)

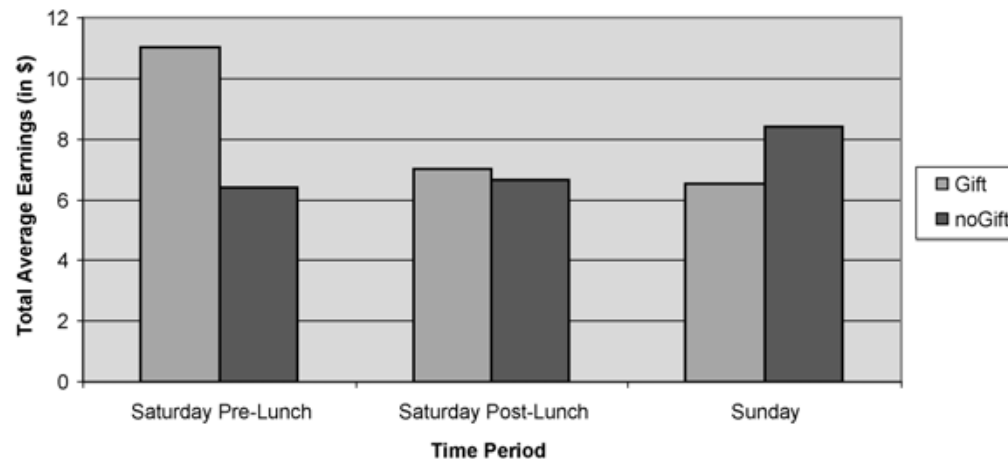


- Limited intertemporal substitution. February 2002 mailing with no gift. Percent donation is 9.6 (control), 8.9 (small gift), and 8.6 (large gift) (differences not significant)

- **Gneezy-List (2006)** → Evidence from labor markets
- *Field experiment 1.* Students hired for one-time six-hour (typing) library job for \$12/hour
 - No Gift group paid \$12 ($N = 10$)
 - Gift group paid \$20 ($N = 9$)



- *Field experiment 2.* Door-to-Door fund-raising in NC for one-time weekend for \$10/hour
 - Control group paid \$10 ($N = 10$)
 - Treatment group paid \$20 ($N = 13$)



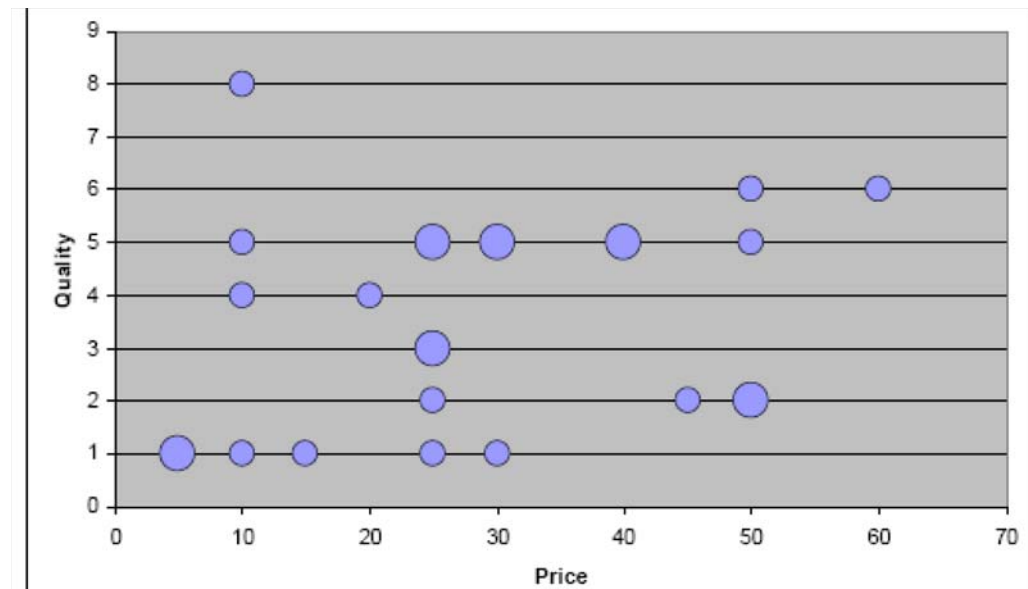
- Note: Group coming back on Sunday is subset only (4+9)

- Evidence of reciprocity, though short-lived
- Issue: These papers test only for positive reciprocity
- Very difficult to test for negative reciprocity (which is strongest in the lab)
 - Send nasty drawing when asking for money?
 - Cut people's wage?
 - Can say that pay is random and see what happens to (randomly) lower paid people

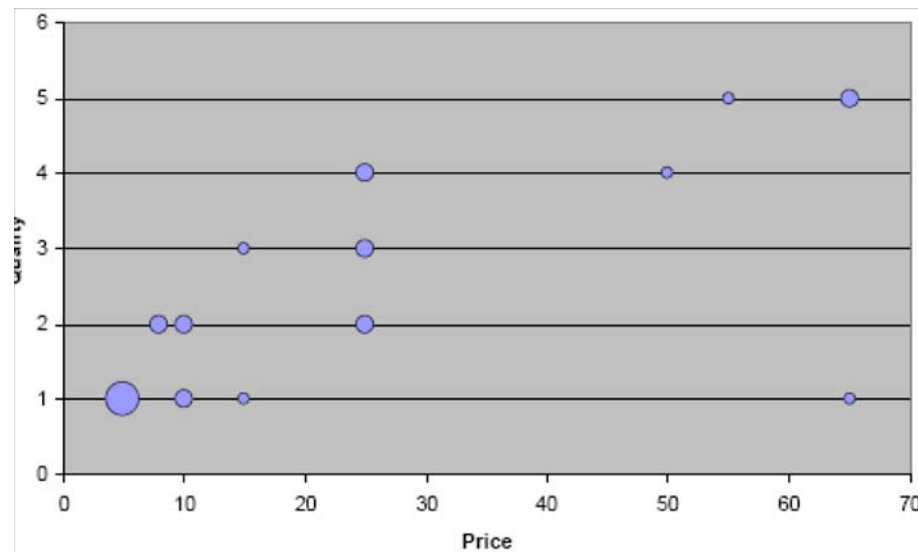
3 Social Preferences: From Lab to Field

- **List (2005)**. Test of social preferences from sellers to buyers
- Context: sports card fairs \rightarrow Buyers buying a particular (unrated) card from dealers
- Compare effect of laboratory versus field setting
- *Treatment I-R*. Clever dual version to the **Fehr, Kirchsteiger, and Riedl (1993)** payoffs
 - Laboratory setting, abstract words
 - Buyer pay $p \in \{5, 10, \dots\}$ and dealer sells card of quality $q \in [.1, 1]$
 - Buyer payoff is $(80 - p)q$
 - Dealer payoff is $p - c(q)$, with $c(q)$ convex (but small)
- Standard model: $p^* = 5$ (to satisfy IR), $q^*(p) = 0.1$ for all p

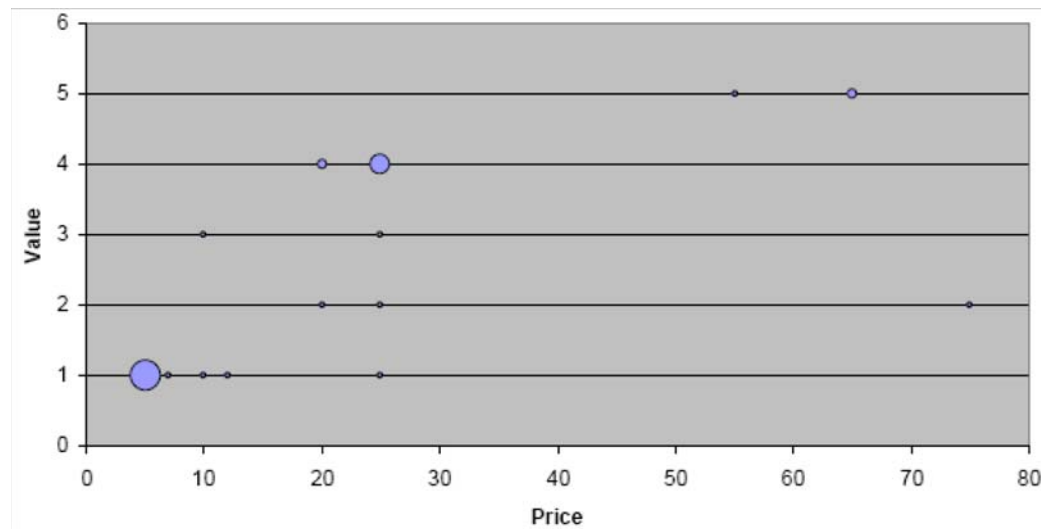
- Effect: Substantial reciprocity
 - Buyers offer prices $p > 0$
 - Dealers respond with increasing quality to higher prices



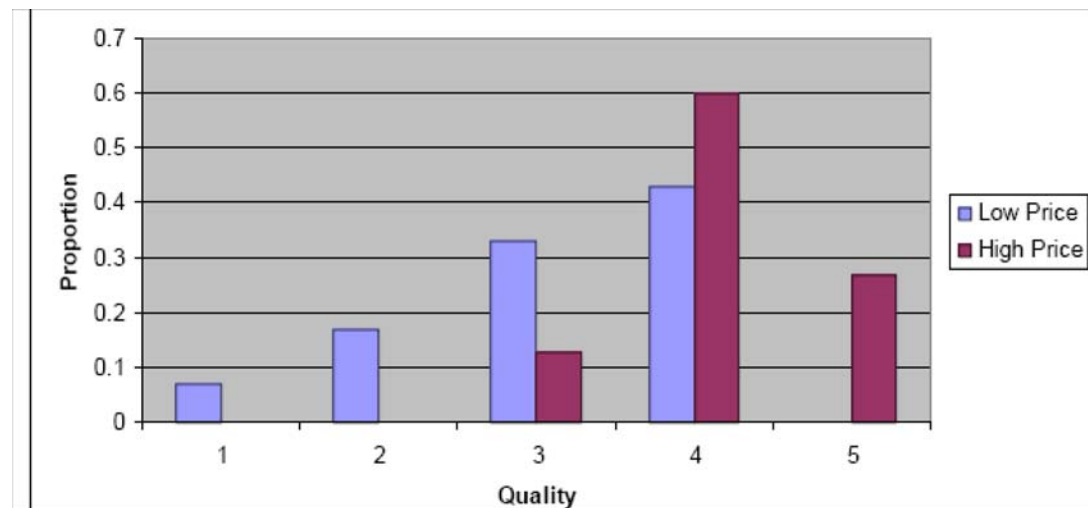
- *Treatment I-RF*. Similar result (with more instances of $p = 5$) when payoffs changed to
 - Buyer payoff is $v(q) - p$
 - Dealer payoff is $p - c(q)$, with $c(q)$ convex (but small)
 - $v(q)$ estimated value of card to buyer, $c(q)$ estimate cost of card to dealer



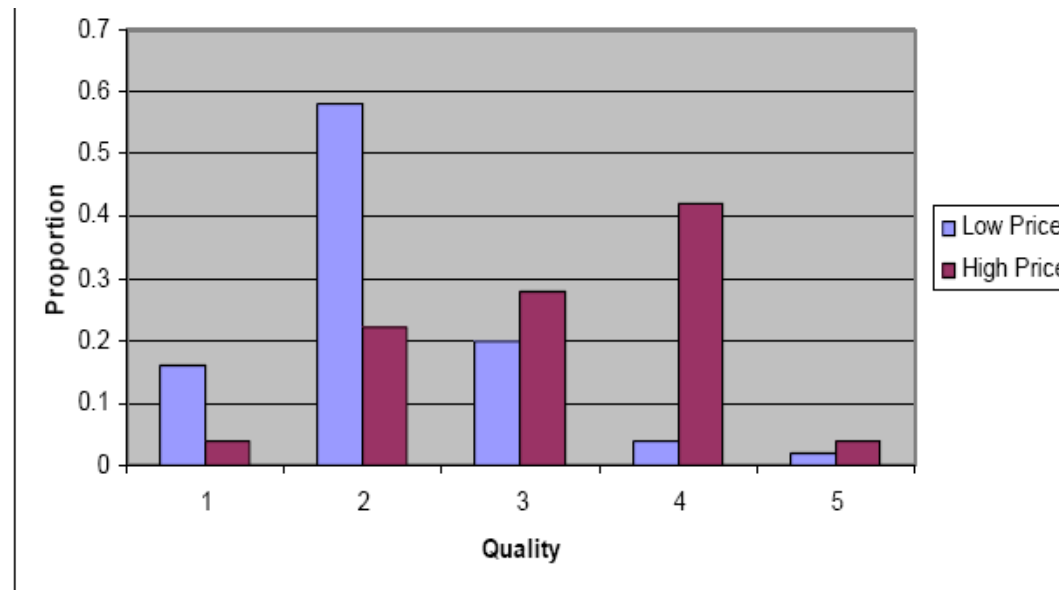
- *Treatment II-C*. Same as Treatment I-RF, except that use context (C) of Sports Card
- Relatively similar results



- *Treatment II-M* → Laboratory, real payoff (for dealer) but...
 - takes place with face-to-face purchasing
 - Group 1: Buyer offers \$20 for card of quality PSA 9
 - Group 2: Buyer offers \$65 for card of quality PSA 10
 - Substantial “gift exchange”



- *Treatment III* → In field setting, for real payoffs (for dealer)
 - Group 1: Buyer offers \$20 for card of quality PSA 9
 - Group 2: Buyer offers \$65 for card of quality PSA 10
 - Lower quality provided, though still “gift exchange”



- However, “gift exchange” behavior depends on who the dealer is
 - Local dealer (frequent interaction): Strong “gift exchange”
 - Non-Local dealer (frequent interaction): No “gift exchange”
- This appears to be just rational behavior
- *Treatment IV.* → Test a ticket market before (*IV-NG*) and after (*IV-AG* and *IV-G*) introduction of certification
 - No “gift exchange” in absence of certification(*IV-NG*)
 - “gift exchange” only for local dealers

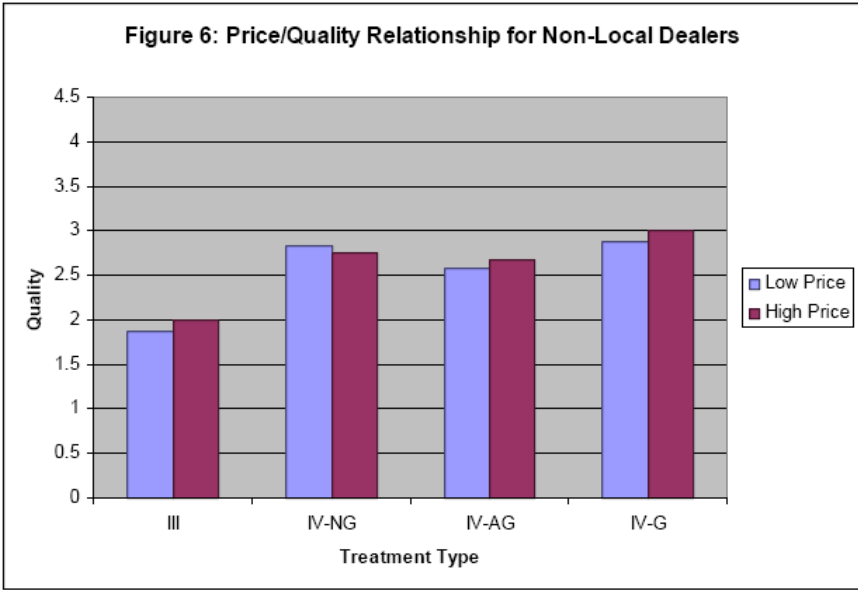
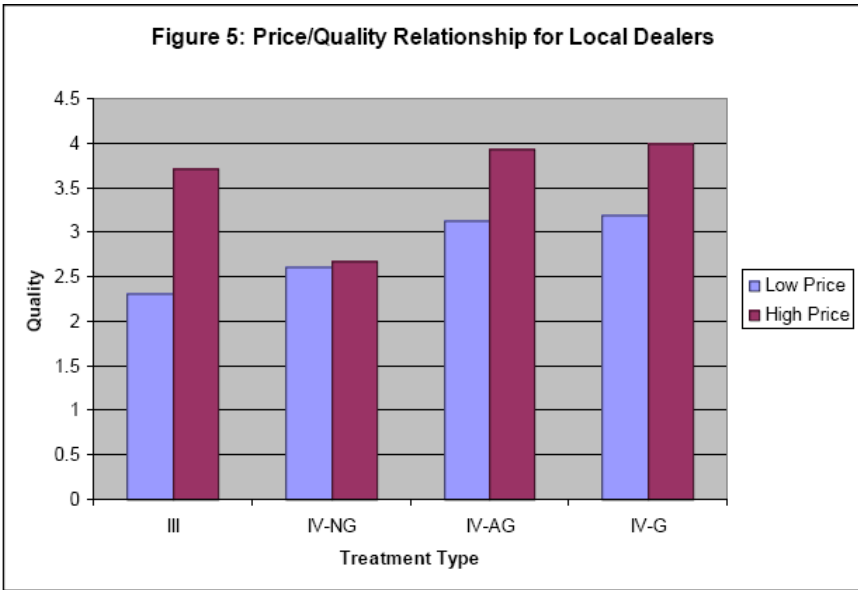


Table 1. Experimental Design

Treatment I	Treatment I-R <i>Replicate lab studies</i> $n = 25$	Treatment I-RF <i>Extend to field values</i> $n = 25$	Treatment I-RF1 <i>Extend to one-shot environment</i> $n = 27$
Treatment II	Treatment II-C <i>Adds market context</i> $n = 32$	Treatment II-MS20 <i>Adds market interaction</i> $n = 30$	Treatment II-MS65 <i>Adds market interaction</i> $n = 30$
Treatment III	Treatment IIIS20 <i>Naturally occurring sportscards</i> $n = 50$	Treatment IIIS65 <i>Naturally occurring sportscards</i> $n = 50$	
Treatment IV	Treatment IV-NG <i>Naturally occurring tickets before grading was available</i> $n = 60$	Treatment IV-AG <i>Naturally occurring tickets post-grading announcement</i> $n = 54$	Treatment IV-G <i>Naturally occurring tickets when grading service is available</i> $n = 36$

Notes: Each cell represents one (or two, in the case of Treatment IV) unique treatment. For example, Treatment I-R in row 1, column 1, denotes that 25 dealer and 25 nondealer observations were gathered to replicate the laboratory gift exchange studies in the literature.

Table 3: Marginal Effects Estimates for the Sellers' Quality^{a,b}

Variable	Treatment Type									
	I-R	I-RF	I-RF1	II-C	II-M	III	IV-NG	IV-AG	IV-G	IV-P
Price	0.05* (1.8)	0.05^ (3.3)	0.10^ (5.0)	0.06^ (4.2)	0.02^ (4.4)	0.02^ (6.6)	-0.001 (0.01)	0.02^ (2.1)	0.02 (1.1)	0.02^ (2.6)
Constant	0.6 (0.7)	-0.4 (0.7)	-0.8 (1.7)	-0.6 (1.7)	1.6^ (6.2)	0.6^ (3.1)	1.7^ (8.0)	1.6^ (5.8)	1.8^ (3.3)	1.7^ (7.3)
θ	---	\$0.72^ (3.6)	\$1.3^ (5.5)	\$0.77^ (4.2)	0.45^ (2.1)	\$0.21^ (5.0)	\$0.01 (0.3)	\$0.17 (1.1)	\$0.23 (1.1)	\$0.21^ (2.3)
Person Random Effects	YES	YES	NO	NO	YES	YES	YES	YES	YES	YES
N	25	25	27	32	60	100	60	54	36	90

^aDependent variable is the sellers' product quality given to the buyer. IV-P pools IV-AG and IV-G data. θ is the monetary gift exchange estimate, computed as $\partial v(q)/\partial P$.

^bt-ratios (in absolute value) are beneath marginal effect estimates.

^ Significant at the .05 level.

* Significant at the .10 level.

Table 4: Marginal Effects Estimates for the Sellers' Quality Split by Dealer Type^{a,b,c}

Variable	Treatment Type									
	III _L	III _N	IV-NG _L	IV-NG _N	IV-AG _L	IV-AG _N	IV-G _L	IVG _N	IV-P _L	
Price	0.03^ (8.6)	0.004 (0.7)	0.002 (0.2)	-0.005 (0.5)	0.04^ (2.1)	0.003 (0.3)	0.04^ (2.7)	0.003 (0.1)	0.04^ (4.8)	
Constant	0.6^ (4.1)	0.6^ (4.6)	1.6^ (5.0)	1.8^ (5.2)	1.7^ (5.2)	1.5^ (4.6)	1.8^ (5.0)	1.8* (1.7)	1.8^ (10.0)	
θ	\$0.31^ (5.2)	\$0.01 (0.5)	\$0.02 (0.4)	-\$0.006 (0.5)	\$0.32 (1.4)	\$0.02 (0.6)	\$0.42 (1.5)	\$0.03 (0.1)	\$0.35^ (2.1)	
Person Random Effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	
N	70	30	36	24	30	24	20	16	50	

- Conclusion on gift exchange and social preferences
 - Reciprocation and gift exchange are present in field-type setting (Falk)
 - However, they disappear fast (Gneezy-List)
 - Not all individuals display them – not dealers, for example (List)
 - Laboratory settings may (or may not) matter for the inferences we derive
- Much more field evidence needed to understand how social preferences matter in the field

4 Non-Standard Information Processing

- First part of class: We discussed non-standard preferences:
 - Over time (present-bias)
 - Over risk (reference-dependence)
 - Over social interactions (social preferences) [briefer]
- Now turn to cases with standard preferences (mostly) but non-standard processing of information
 - Limited attention
 - Menu effects
 - Persuasion and social pressure

5 Attention: Introduction

- Attention as limited resource:
 - Satisficing choice (Simon, 1955)
 - Heuristics for solving complex problems (Gabaix and Laibson, 2002; Gabaix et al., 2003)
- In a world with a plethora of stimuli, which ones do agents attend to?
- Psychology: Salient stimuli (Fiske and Taylor, 1991)

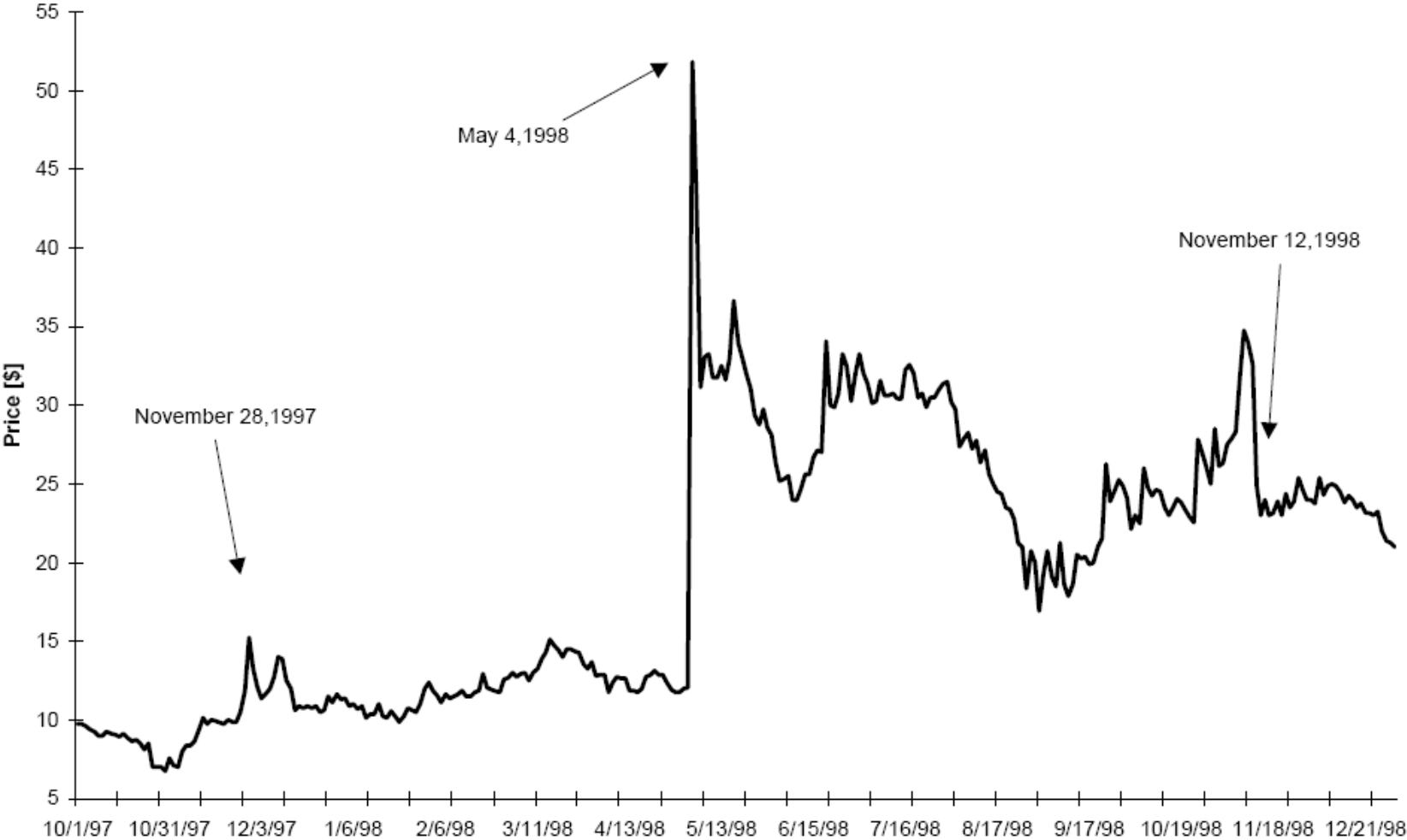
5.1 Attention to Non-Events

- Huberman and Regev (2001)
- Timeline:
 - October-November 1997: Company EntreMed has very positive early results on a cure for cancer
 - November 28, 1997: *Nature* “prominently features;” *New York Times* reports on page A28
 - May 3, 1998: *New York Times* features essentially same article as on November 28, 1997 on front page
 - November 12, 1998: *Wall Street Journal* front page about failed replication

- In a world with unlimited arbitrage...

- In reality...

Figure 5: ENMD Closing Prices and Trading Volume 10/1/97-12/30/98



5.2 Theory of attention?

- Which theory of attention explains this?
- We do not have a theory of attention!
- However: Attention allocation has large role in volatile markets
- Suggests successful strategy on attention papers:
 - Do not attempt general model
 - Focus on specific deviation

6 Attention: eBay Auctions

- Two different papers using eBay data:
 - **Hossain and Morgan (2006)**. *Inattention to shipping cost*
 - **Lee and Malmendier (2006)**. *Inattention to posted price*
- Both shipping cost and posted price are not salient in an ongoing auction
 - the current price is salient
- Two different ways to identify a phenomenon:
 - **Hossain and Morgan (2006)**. *Field Experiment with shipping costs*
 - **Lee and Malmendier (2006)**. *Menu Choice*

- **Hossain and Morgan (2006)**

- Field experiment selling CD and XBoxes on eBay

- Treatment 'LowSC' [A]: reserve price $r = \$4$ and shipping cost $sc = \$0$
- Treatment 'HighSC' [B]: reserve price $r = \$.01$ and shipping cost $sc = \$3.99$
- Same total reserve price $r_{TOT} = r + sc = \$4$
- Measure effect on total revenue R , probability of sale p

- Predictions:

- Standard model: $\partial R / \partial sc = 0 = \partial p / \partial sc \rightarrow R_A = R_B$
- Inattention with parameter $\theta (< 1)$:
 - * Buyers perceive $\hat{r}_{TOT} = r + \theta sc = r_{TOT} - (1 - \theta) sc < r_{TOT}$
 - * $\partial R / \partial sc > 0, \partial p / \partial sc > 0 \rightarrow R_A < R_B$

- Similar strategy to Ausubel (1999)
- Strong effect: $R_B - R_A = \$2.61 \rightarrow \text{Inattention } (1 - \theta) = 2.61/4 = .65$

Table 3. Revenues from Low Reserve Treatments

CD Title	Revenues	Revenues	B - A	Percent Difference
	under Treatment A	under Treatment B		
Music	5.50	7.24	1.74	32%
Ooops! I Did it Again	6.50	7.74	1.24	19%
Serendipity	8.50	10.49	1.99	23%
O Brother Where Art Thou?	12.50	11.99	-0.51	-4%
Greatest Hits - Tim McGraw	11.00	15.99	4.99	45%
A Day Without Rain	13.50	14.99	1.49	11%
Automatic for the People	0.00	9.99	9.99	
Everyday	7.28	9.49	2.21	30%
Joshua Tree	6.07	8.25	2.18	36%
Unplugged in New York	4.50	5.24	0.74	16%
<i>Average</i>	<i>7.54</i>	<i>10.14</i>	<i>2.61</i>	<i>35%</i>
<i>Average excluding unsold</i>	<i>8.37</i>	<i>10.16</i>	<i>1.79</i>	<i>21%</i>

- Smaller effect for Xbox: $R_B - R_A = \$0.71 \rightarrow$ Inattention $(1 - \theta) = 0.71/4 = .18$
- Pooling data across treatments: $R_B > R_A$ in 16 out of 20 cases \rightarrow Significant difference

Xbox Game Title	Revenues	Revenues	B - A	Percent Difference
	under Treatment A	under Treatment B		
Halo	34.05	41.24	7.19	21%
Wreckless	44.01	33.99	-10.02	-23%
Circus Maximus	40.99	39.99	-1.00	-2%
Max Payne	36.01	36.99	0.98	3%
Genma Onimusha	41.00	32.99	-8.01	-20%
Project Gotham Racing	37.00	38.12	1.12	3%
NBA 2K2	42.12	42.99	0.87	2%
NFL 2K2	26.00	33.99	7.99	31%
NHL 2002	36.00	37.00	1.00	3%
WWF Raw	33.99	40.99	7.00	21%
<i>Average</i>	<i>37.12</i>	<i>37.83</i>	<i>0.71</i>	<i>2%</i>

- Similar treatment with high reserve price:
 - Treatment ‘LowSC’ [C]: reserve price $r = \$6$ and shipping cost $sc = \$2$
 - Treatment ‘HighSC’ [D]: reserve price $r = \$2$ and shipping cost $sc = \$6$
- No significant effect for CDs (perhaps reserve price too high?): $R_D - R_C = -.29 \rightarrow$ Inattention $(1 - \theta) = -.29/4 = -.07$
- Large, significant effect for XBoxes: $R_D - R_C = 4.11 \rightarrow$ Inattention $(1 - \theta) = 4.11/4 = 1.05$
- Overall, strong evidence of partial disregard of shipping cost: $\hat{\theta} \approx .5$
- Inattention or rational search costs

Table 4. Revenues from High Reserve Treatments

CD Title	Revenues	Revenues	D - C	Percent Difference
	under Treatment C	under Treatment D		
Music	9.00	8.00	-1.00	-11%
Oops! I Did it Again	0.00	0.00	0.00	
Serendipity	12.50	13.50	1.00	8%
O Brother Where Art Thou?	11.52	11.00	-0.52	-5%
Greatest Hits - Tim McGraw	18.00	17.00	-1.00	-6%
A Day Without Rain	15.50	16.00	0.50	3%
Automatic for the People	0.00	0.00	0.00	
Everyday	10.50	13.50	3.00	29%
Joshua Tree	8.00	11.10	3.10	39%
Unplugged in New York	8.00	0.00	-8.00	-100%
<i>Average</i>	<i>9.30</i>	<i>9.01</i>	<i>-0.29</i>	<i>-3%</i>
<i>Average excluding unsold</i>	<i>12.15</i>	<i>12.87</i>	<i>0.73</i>	<i>6%</i>

Game Title	Revenues	Revenues	D - C	Percent Difference
	under Treatment C	under Treatment D		
Halo	40.01	43.00	2.99	7%
Wreckless	35.00	36.00	1.00	3%
Circus Maximus	39.00	42.53	3.53	9%
Max Payne	37.50	42.00	4.50	12%
Genma Onimusha	36.00	37.00	1.00	3%
Project Gotham Racing	35.02	40.01	4.99	14%
NBA 2K2	41.00	45.00	4.00	10%
NFL 2K2	33.00	40.10	7.10	22%
NHL 2002	36.00	41.00	5.00	14%
WWF Raw	37.00	44.00	7.00	19%
<i>Average</i>	<i>36.95</i>	<i>41.06</i>	<i>4.11</i>	<i>11%</i>

- **Lee and Malmendier (2006)**

- Test of inattention to a different aspect: availability of buy-it-know price (posted price) offer

- eBay:

- Purchase good in auction
- Purchase good with posted price

- Slides courtesy of Ulrike

eBay Auctions

- Proxy bidding
 - Bidders submit “maximum willingness to pay”
 - Quasi-second price auction: price outstanding increased to prior leading maximum willingness to pay + increment (see Table 1).
- Fixed prices (“Buy-it-now”)
 - Immediate purchase.
 - Listing on same webpage, same list, same formatting.
 - About 1/3 of eBay listings
 - Key ingredient for analysis.
 - Persistent presence of buy-it-now price as a (conservative) upper limit of bids

Identification of Overbidding

Overbidding = bidding more than value of auction object to bidder or alternative purchase price ← more than alternative price

1. Hard to measure: Where does over-bidding exactly start?
2. Hard to evaluate cause.

- **Incentive misalignment**

- Private benefits from having the top pick/desired target (prestige)
- Empire building
- Career concerns

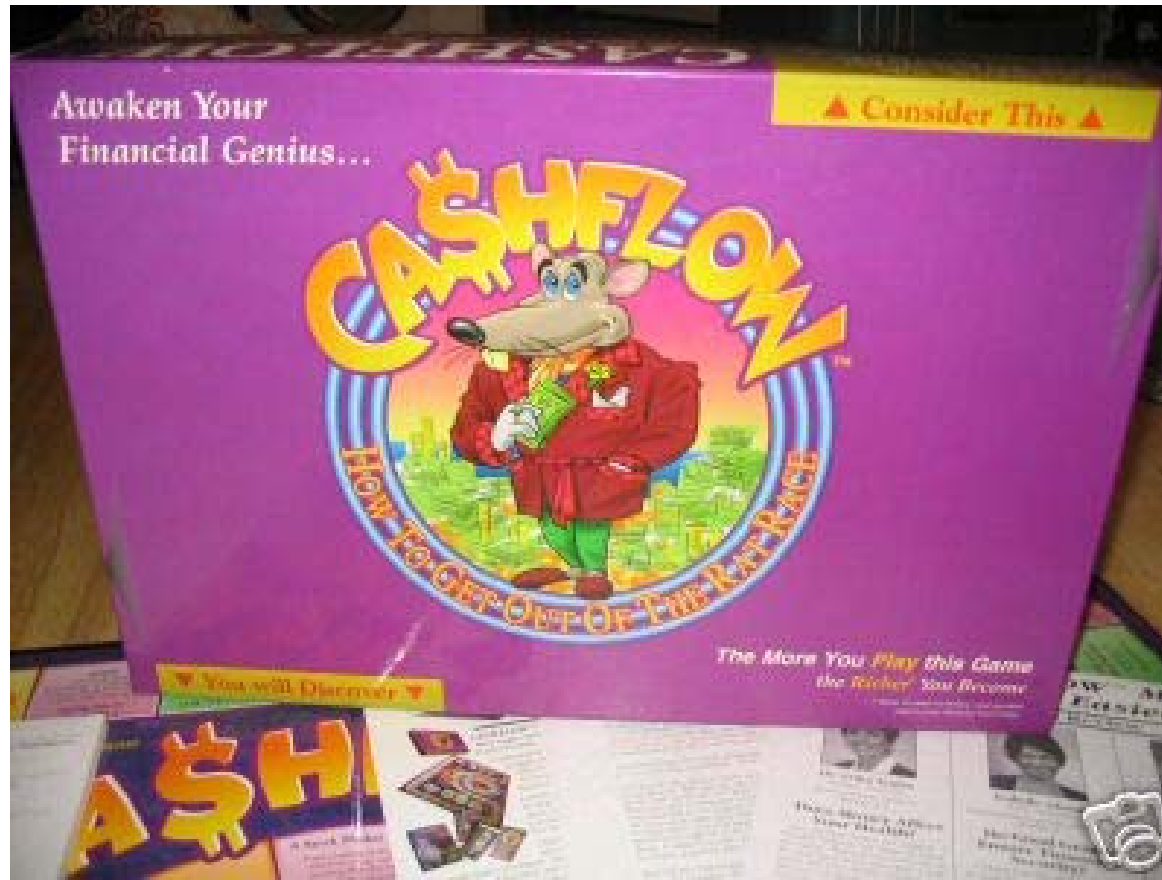
- **Winner's curse**

- **Other non-standard bidding behavior**

- Utility from bidding
- Bidding fever (emotions)
- Sunk cost (having submitted a bid)

Limited attention to lower outside prices / too much attention to advertising

The Object



The Data

- Hand-collected data of all auctions and Buy-it-now transactions of Cashflow 101 on eBay from 2/19/2004 to 9/6/2004.
- Cashflow 101: board game with the purpose of finance/accounting education.
- Retail price : \$195 plus shipping cost (\$10.75) from manufacturer (www.richdad.com).
- Two ways to purchase Cashflow 101 on eBay
 - Auction (quasi-second price proxy bidding)
 - Buy-it-now

Sample

- Listings (excluding non-US\$, bundled offers)
 - 287 by individuals (187 auctions only, 19 auctions with buy-it-now option)
 - 401 by two retailers (only buy-it-now)
- Remove terminated, unsold items, hybrid offers that ended early (buy-it-now) and items without simultaneous *professional* buy-it-now listing. → 2,353 bids, 806 bidders, 166 auctions

Sample

- Listings (excluding non-US\$, bundled offers)
 - 287 by individuals (187 auctions only, 19 auctions with buy-it-now option)
 - 401 by two retailers (only buy-it-now)
- Remove terminated, unsold items, hybrid offers that ended early (buy-it-now) and items without simultaneous *professional* buy-it-now listing. → 2,353 bids, 806 bidders, 166 auctions
- Buy-it-now offers of the two retailers
 - Continuously present for all but six days. (Often individual buy-it-now offers present as well; they are often lower.)
 - 100% and 99.9% positive feedback scores.
 - Same prices **\$129.95** until 07/31/2004; **\$139.95** since 08/01/2004.
 - Shipping cost **\$9.95**; other retailer \$10.95.
 - New items (with bonus tapes/video).

Listing Example (02/12/2004)

Rich Dad's Cashflow Quadrant, Rich dad ...	\$12.50	4	1d 00h 14m
Rich Dad's Cashflow Quadrant by Robert T. ...	\$9.00	9	1d 00h 43m
Real Estate Investment Cashflow Software \$\$\$!	\$10.49	2	1d 04h 36m
CASHFLOW® 101 202 Robert Kiyosaki Best Pak \$	\$207.96	<i>=Buy It Now</i>	1d 06h 47m
TRY IT TODAY, WITH ABSOLUTELY NO RISK,			
CASHFLOW® 101 Robert Kiyosaki Plus Bonuses!	\$129.95	<i>=Buy It Now</i>	1d 08h 02m
Your satisfaction is GUARANTEED, 100% \$ back			
MINT Cashflow 101 *Robert Kiyosaki Game NR!	\$140.00	13	1d 08h 04m
It's easy to be rich. Brand New. Still sealed			
cashflow Hard Money Funding 101 real estate	\$14.99	<i>=Buy It Now</i>	1d 09h 28m
BRANDNEW RICHDAD CASHFLOW FOR KIDS E-GAME	\$20.00	1	1d 13h 54m
CASHFLOW® 101 Robert Kiyosaki Plus Bonuses!	\$129.95	<i>=Buy It Now</i>	1d 14h 17m
Your satisfaction is GUARANTEED, 100% \$ back			
CASHFLOW® 101 202 Robert Kiyosaki Best Pak \$	\$207.96	<i>=Buy It Now</i>	1d 15h 47m
TRY IT TODAY, WITH ABSOLUTELY NO RISK,			

Listing Example – Magnified

[CASHFLOW® 101 202 Robert Kiyosaki Best Pak \\$](#) 

\$207.96 *Buy It Now*

TRY IT TODAY, WITH ABSOLUTELY NO RISK,

Pricing:

[Buy Now]

[CASHFLOW® 101 Robert Kiyosaki Plus Bonuses!](#) 

\$129.95 *Buy It Now*

Your satisfaction is GUARANTEED, 100% \$ back

\$129.95

[MINT Cashflow 101 *Robert Kiyosaki Game NR!](#) 

\$140.00

It's easy to be rich. Brand New. Still sealed

Pricing:

\$140.00

Bidding history of an item

eBay.com Item Bid History - Microsoft Internet Explorer - Stanford GSB

File Edit View Favorites Tools Help

Address <http://offer.ebay.com/ws/eBayISAPI.dll?ViewBids&item=5512116924>

Google Search Web 285 blocked AutoFill Options

Item title: CASHFLOW 101 Board Game Rich Dad Poor Dad
Time left: **Auction has ended.**

Only actual bids (not automatic bids generated up to a bidder's maximum) are shown. Automatic bids may be placed days or hours before a listing ends. Learn more about [bidding](#).

User ID	Bid Amount	Date of bid
beezebugs (21 ★)	US \$152.50	Aug-11-04 09:51:21 PDT
mkdir-half (21 ★)	US \$150.00	Aug-11-04 06:39:53 PDT
beezebugs (21 ★)	US \$140.00	Aug-08-04 12:06:05 PDT
dj_orbit (86 ★)	US \$130.01	Aug-09-04 23:49:02 PDT
successbroker (931 ★) me	US \$110.00	Aug-08-04 19:56:26 PDT
successbroker (931 ★) me	US \$105.00	Aug-06-04 17:18:21 PDT
002la (1)	US \$102.50	Aug-06-04 17:11:31 PDT
successbroker (931 ★) me	US \$100.00	Aug-05-04 15:41:40 PDT
002la (1)	US \$99.00	Aug-06-04 17:10:48 PDT
002la (1)	US \$95.00	Aug-06-04 17:10:21 PDT
12-gauge (29 ★)	US \$88.00	Aug-05-04 09:13:30 PDT
lindyque (110 ★)	US \$58.00	Aug-05-04 10:47:33 PDT
lindyque (110 ★)	US \$45.00	Aug-05-04 10:45:41 PDT
lindyque (110 ★)	US \$40.00	Aug-05-04 10:45:08 PDT
bearsnbulls22 (3)	US \$31.00	Aug-05-04 06:49:19 PDT
75lon (1)	US \$30.00	Aug-04-04 19:46:54 PDT
bearsnbulls22 (3)	US \$28.00	Aug-05-04 06:48:28 PDT
bearsnbulls22 (3)	US \$25.00	Aug-05-04 06:48:01 PDT

If you and another bidder placed the same bid amount, the earlier bid takes priority.

Start | Gmail - fe... | WinEdt -... | bidhistory | Presenta... | eBay.co... | http://off... | untitled - ... | Internet | 4:07 PM

Overbidding

Given the information on the listing website:

- (H0) An auction should never end at a price above the concurrently available purchase price.

Figure 1. Starting Price (*startprice*)

➔ 46% below \$20; mean=\$46.14; SD=43.81

➔ only 3 auctions above buy-it-now

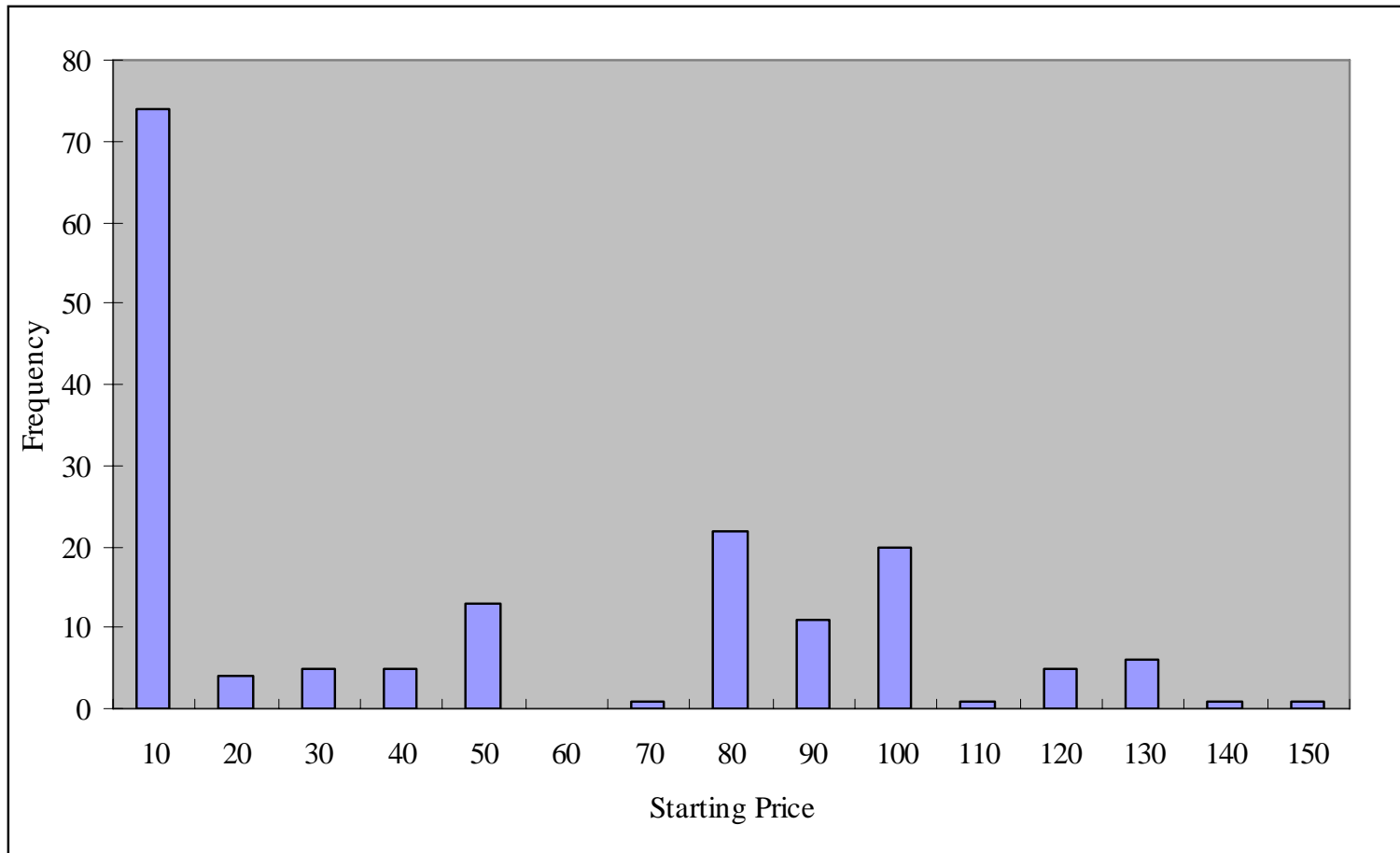


Figure 2. Final Price (*finalprice*)

➔ 43% are above “buy-it-now” (mean \$132.55; SD 17.03)

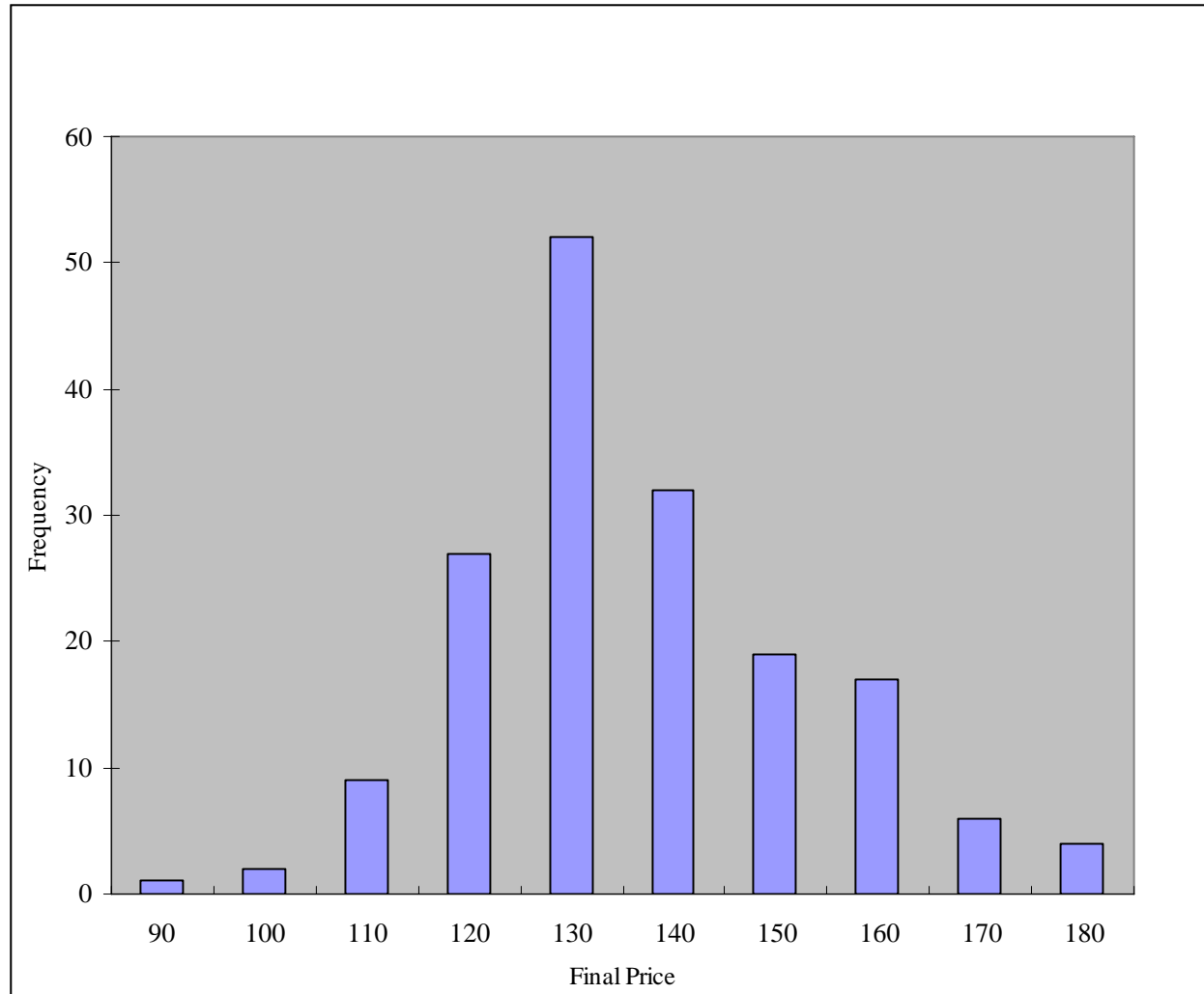
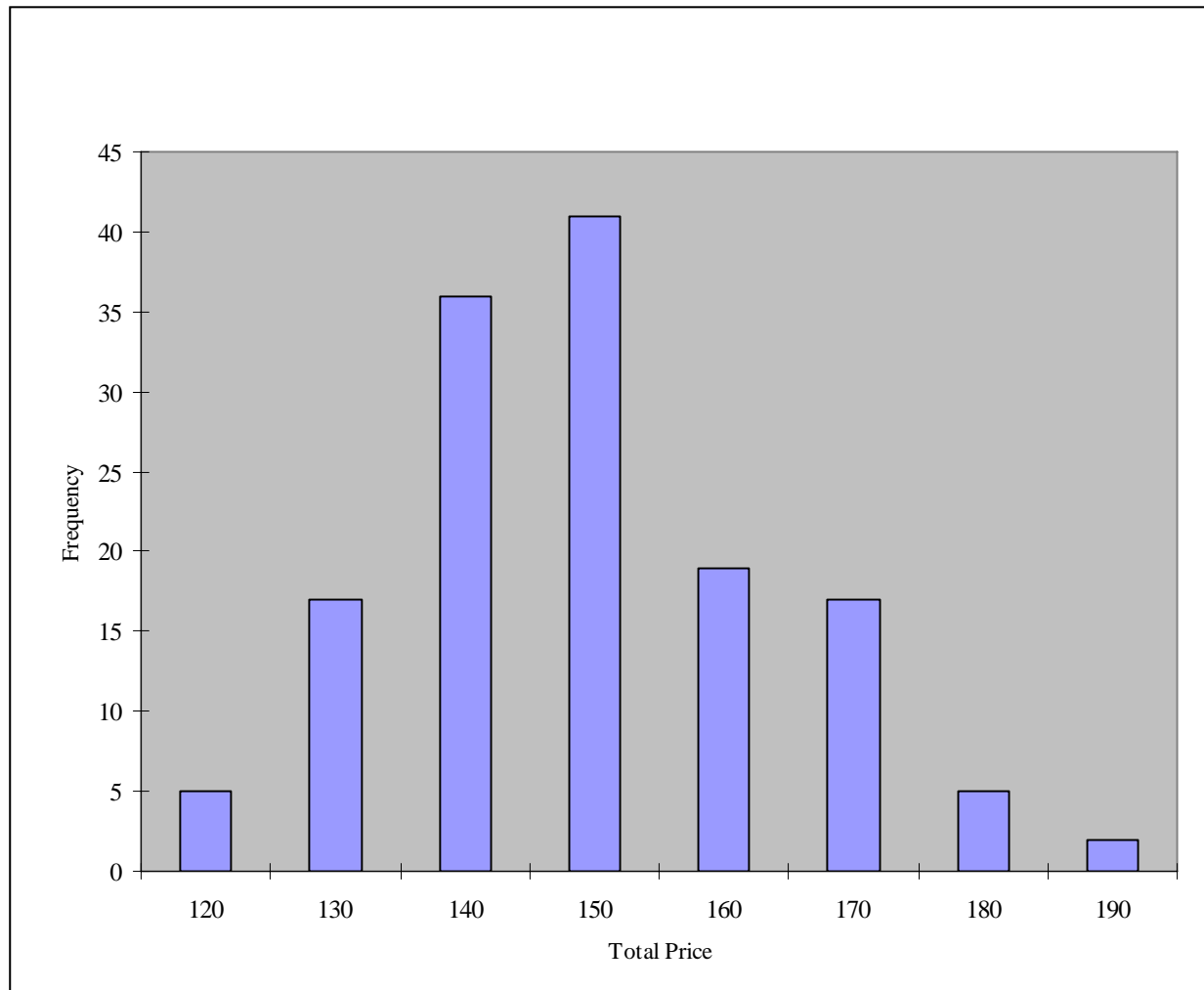


Figure 4. Total Price (incl. shipping cost)

→ 72% are above “buy-it-now” plus its shipping cost
(mean=\$144.68; SD=15.29)

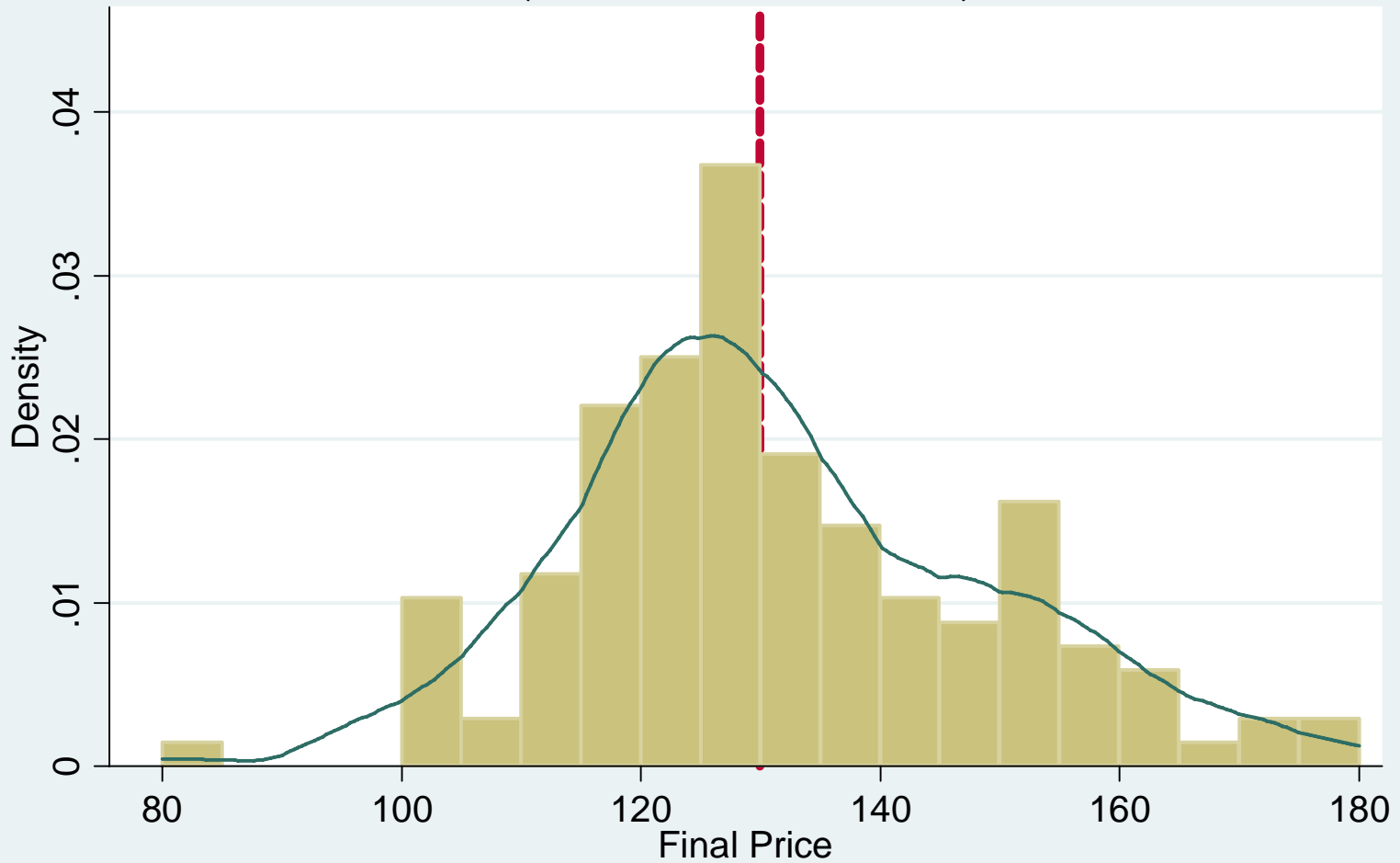


Alternative Explanations

1. “Noise”: are these penny-difference
2. Quality differences (I): quality of item
3. Quality differences (II): quality of seller
4. Concerns about unobserved wording differences between auctions and buy-it-now posting.
5. Concerns about consumers’ understanding of buy-it-now posting.

Distribution of Final Price

Subsample with fixed price of \$129.95
(Dashed Line at \$129.95)



Distribution of Final Price

Subsample with fixed price of \$139.95
(Dashed Line at \$139.95)

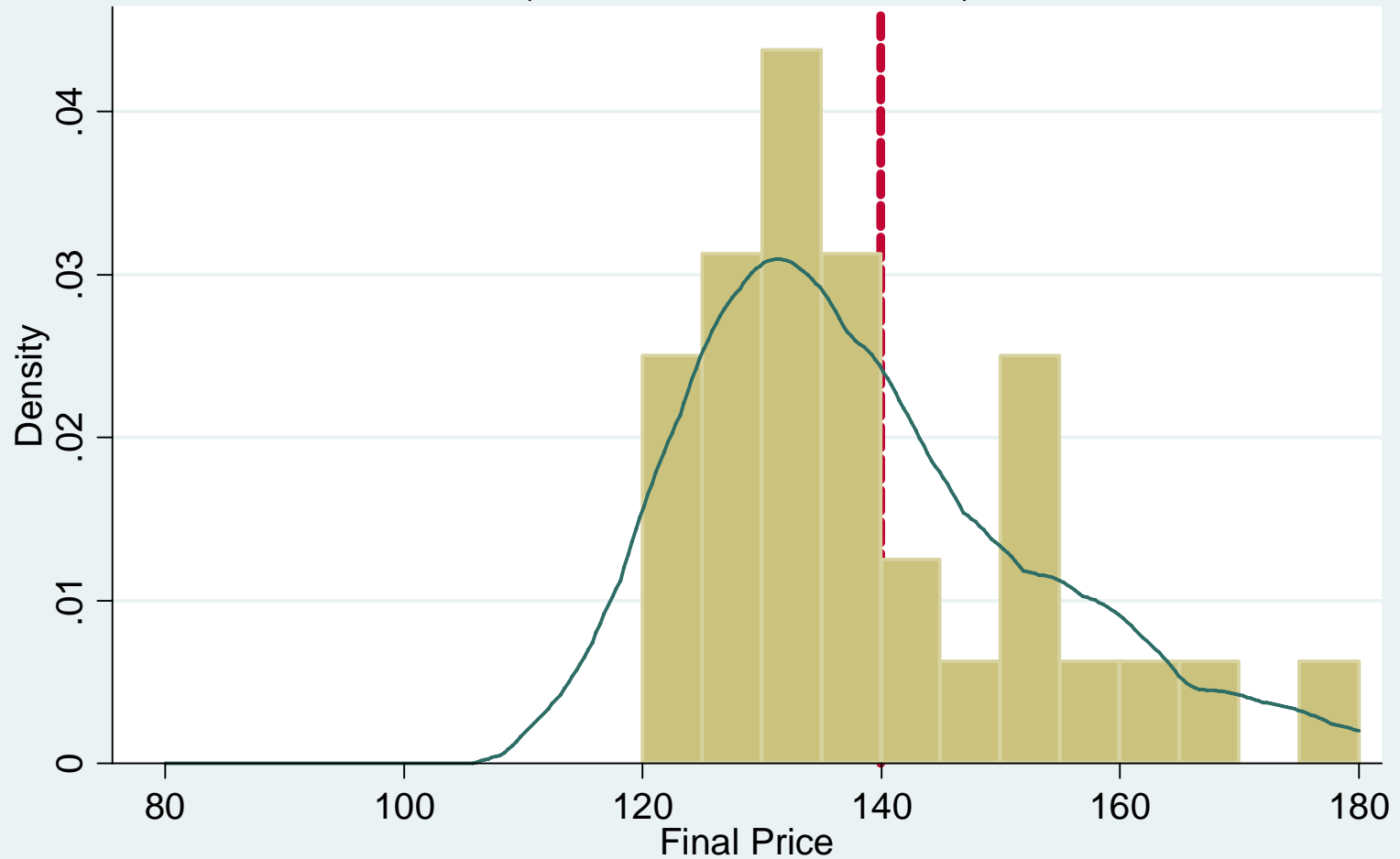


Table II. Retailers' Information

Seller X

Feedback Score:	2849
Positive Feedback:	100%
Members who left positive feedback:	2849
Members who left negative feedback:	0
All positive feedback received:	2959

Recent Feedback:	Past Month	Past 6 Months	Past 12 Months
positive	52	365	818
neutral	0	1	1
negative	0	0	0

Seller Y

Feedback Score :	3107
Positive Feedback:	99.90%
Members who left a positive:	3111
Members who left a negative :	4
All positive feedback received:	3333

Recent Feedback:	Past Month	Past 6 Months	Past 12 Months
positive	112	666	1316
neutral	0	2	2
negative	0	0	1

“Unobserved Wording” Test

- Survey of 99 Stanford students.
- Hypothetical choice between one BIN wording and 2 auction wording; randomized order
- Over 77% choose BIN.
 - Lowest % if last in order (68%).
 - Highest % if first in order (88%).

“Over-bidders”

Question: Do markets ameliorate biases?

→ Here: Who is most likely to transact?

Quantify

- What % of auctions end up overbid?
- What % of bidders ever overbid?
- What % of bidders mostly overbid?
- What % of bids are overbids?

(Using data with bidding history.)

Table VII. Market Amplification

		Observations	(Percent)
Auction-level sample			
Does the <u>auction</u> end up overbid?	No	78	56.52%
	Yes	60	43.48%
	Total	138	100.00%
Bidder-level sample			
Does the <u>bidder</u> <u>ever</u> overbid?	No	670	83.02%
	Yes	137	16.98%
	Total	807	100.00%

Table VII. Market Amplification

		Observations	(Percent)
Bidder-level sample			
Does the <u>bidder</u> <u>mostly</u> overbid?	No	715	88.60%
(more than 50%)	Yes	92	11.40%
	Total	807	100.00%
Bid-level sample			
Is the <u>bid</u> an over-bid?	No	2,101	89.29%
	Yes	252	10.71%
	Total	2,353	100.00%

Overbidding is defined using the final price.

Note

- Inherent to the nature of auctions: Bidders making *any* kind of upward-biasing “mistake” is most likely to be the winner.
 - Models of shopping cost / search cost.
- “Generalizes” winner’s curse.
 - Alternative motivation for success of (online) auctions.

Market Amplification

1. Selection: We have shown already that biased consumers *more* likely, not less likely to transact.
2. Experience / Sorting: Does market experience reduce the bias?
 - Use eBay's "feedback score" to measure market experience.
 - Helps to disentangle standard versus non-standard explanations.

- Main result uses *Menu Choice* comparison: bidders could have bought at buy-it-now price
- Inattention / memory – When updating bid, bidders taken directly to webpage to increase bid
- Easy to forget existence of buy-it-now price
- Caveat:
 - Here do not estimate average inattention in population
 - Sorting of most inattentive bidders into high bids

7 Next Lecture

- Next lecture in two weeks!
- Limited Attention
 - in financial markets
- Menu Effects
- Choice Overload