The Bidder's Curse

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Web Appendix

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A. Cross-Sectional Data: Construction of the Data Set

The full list of all items contained the cross-sectional data set (data set 2) as well as the complete search strings are shown in Online-Appendix Table 1.

Online-Appendix Table 2 presents a matrix that summarizes the data construction and composition, starting from the initial number of dowloaded auctions to the final list used in the empirical analysis.

B. Cross-Sectional Data: Results on Demographics

With our cross-sectional data, we also explore differences in overbidding by demographics. While we do not observe *bidder* demographics directly, our data includes objects associated with a *consumer* demographic. To examine gender differences, we compare for example perfumes of the same brand for men and women. As shown in Online-Appendix 3, the frequency of overbidding is higher for products that target men than for those targeting women, though the difference is not large (38 percent versus 33 percent) and, in aggregate, not significant (s.e.= 5.03 percent). We also examine differences by target age groups, comparing toys for kids (Elmo), teenagers (games and playstations), and adults (electronics). We find no systematic differences. Comparing books of liberal versus conservative authors (Obama versus O'Reilly), we find again no systematic pattern. Finally, to capture the impact of income, we compare the prices for cheap versus expensive products, such as financial software (Quicken 2007 Basic versus Home Business). Again, overbidding is significant in each category and not systematically correlated with the price level. Overall, we do not detect any significant correlation with features of the target consumer. Overbidding is sizeable within each demographic subset.

As discussed above, the larger-scale cross-sectional data comes at the cost of some loss of control over the setting. In particular, differently from the Cashflow 101 data, we cannot be sure about the availability of the same buy-it-now prices in the future or about differences in seller reputation between the auction and the fixed price listings.

C. Cross-Sectional Data: Results on Price Level

Our cross-sectional data allows us to test whether overbidding frequencies are lower for more expensive items. The scatterplots in Online-Appendix Figure I show the share of bidders that overbid for each price level, as determined by the corresponding fixed price. Panel A uses the full data across all items in the cross-sectional data. Panel B shows overbidding by price level separately for different item categories. We find no significant relation between price level and overbidding.

D. Choice experiment

We conducted a choice experiment with 99 students at the Stanford Behavioral Laboratory on April 17, 2006. Subjects had to choose among three items from our Cashflow 101 data based on their description, namely, two randomly drawn auction descriptions and one of the two professional buy-it-now descriptions. Seller identification and prices were removed from the description, as was the indication of auction versus fixed price. Subjects were asked which of three items they would prefer to purchase, assuming that prices and listing details such as remaining time and number of bids were identical. The choice was hypothetical, and there was no payment conditional on the subjects' choice. The same three listings were shown to all subjects but the order of the descriptions was randomized, following the scheme shown in Online-Appendix Table 4. We used three different ways to number the items, depending on the order: as A, B, C, as 1, 2, 3, or as i, ii, iii. One example and detailed instructions are included below.

As discussed in Section 4.1 of the main paper, three subjects did not provide answers. Among the remaining subjects, 35 percent expressed indifference, 50 percent chose the offer of the professional retailer, and 15 percent preferred one of the two auction items. When asked to explain their choice, the 14 students who chose an auction item most commonly said that the fixed price offer provided too much information – a reaction that may have been driven by time pressure in the six-minute experiment. Students who chose the retailer's offer most commonly mentioned the retailer's money-back-guarantee and more professional layout. Hence, it is unlikely that unobserved quality difference explain the bidding behavior.

Onnline-Appendix Table 1. List of All Items in Cross-sectional Data

Item Category		Number of Auctions		
		Download 1	Download 2	Download 3
Consumer electronics	Nokia N93 cell phone	7	2	2
	Motorola V3 Razr cell phone (gold)	14	7	9
	Motorola KRZR K1 cell phone (black)	4	0	2
	Motorola KRZR K1 cell phone (blue)	3	0	0
	Garmin StreetPilot c330 Vehicle GPS Navigator	12		
	Garmin StreetPilot c550 Vehicle GPS Navigator	2		
	1GB Apple iPod Shuffle (pink)	3	8	0
	1GB Apple iPod Shuffle (blue)	11	4	4
	1GB Apple iPod Shuffle (orange)	7	3	4
	1GB Apple iPod Shuffle (green)	5	1	1
	4GB Apple iPod Nano (blue)	30	2	3
	4GB Apple iPod Nano (green)	17	0	2
	4GB Apple iPod Nano (pink)	24	3	5
	4GB Apple iPod Nano (silver)	31	3	5
	80GB Apple iPod (black)	21	5	1
	80GB Apple iPod (white)	6	1	0
	30GB Microsoft Zune (black)		17	24
	30GB Microsoft Zune (white)		11	4
	XM2Go AC power cord for MyFi, Helix, Inno, Nexus		1	
	Texas Instruments TI-89 Titanium graphing calculator		16	15
	Texas Instruments TI-83 Plus graphing calculator		11	14
	InFocus Play Big 480p IN72 DLP projector		3	0
	Bose Lifestyle 48 speaker system (black)		0	4
	Garmin StreetPilot c320 Vehicle GPS Navigator		7	9
	Kenwood KDC-MP2032 automotive CD player		0	
	Canon PowerShot SD600 6 megapixel digital camera		0	2
	Canon PowerShot SD630 6 megapixel digital camera		1	3
	Canon PowerShot SD900 10 megapixel digital camera		8	2
	Canon PowerShot A630 8 megapixel digital camera		4	8
	T-Mobile Sidekick 3 cell phone		11	17
Computer hardware	Western Digital My Book 500GB external hard drive	21	10	10
	Western Digital My Book 400GB external hard drive	1		
	Western Digital My Book 320GB external hard drive	2		
	Sandisk 4GB Secure Digital Ultra USB flash drive	15		
	D-Link DI-524 wireless router	9	0	3
	Linksys WRT300N wireless router	7	6	10
	Omni Verifone 3750 credit card terminal	4		
	Nurit 2085 credit card terminal	3		
	Sandisk 1GB Cruzer Micro U3 USB flash drive		29	
	Belkin F5D7230 wireless router		8	5
	HP Laser Jet 3050 All in One printer/copy/scanner/fax		17	7
	Lexmark P450 photo printer		0	1
	Linksys WUSB11 wireless USB network adaptor		3	3
	Linksys WRE54G wireless router		5	7
	Netgear WGR614 wireless router		5	5
	Netgear WGR624 wireless router		0	4
Financial software	QuickBooks Premier Accountant Edition 2007	1		
	QuickBooks Premier Accountant Edition 2007 (5-User)	0		
	Quicken Basic 2007	38	8	5
	Quicken Deluxe 2007	12		
	Quicken Home Business 2007	28	5	6
	H&R Block Taxcut 2006 Premium Federal and State	44		
	QuickBooks Payroll 2007	2	2	1

Sports equipment	Callaway HX Tour golf balls (6 dozen)	11	0	
	Titleist Pro V1 golf balls (4 dozen)	3		
	Titleist Pro V1 golf balls (2 dozen)	2		
	Omron HJ-112 Premium digital pedometer		18	11
	Super Gym 3000 Total Fitness Model exercise machine		2	5
	Oakley Wisdom ski goggles (khaki, gold, iridium)		0	
	Oakley Wisdom ski goggles		0	
	Bones Reds skateboard bearings		4	1
Personal care products	Braun 8995 electric shaver	4	2	19
	Braun 8985 electric shaver	19	8	13
	T3 Tourmaline hair dryer		0	
	Farouk Chi Turbo Big 2” ceramic flat iron hair straightener		0	
	Murad Acne Complex kit		6	8
	Farouk Chi 1” ceramic flat iron hair straightener		12	22
	Farouk Chi 1” ceramic flat iron hair straightener (red)		1	
	T3 Tourmaline ceramic flat iron hair straightener		1	4
	Oral-B Vitality Sonic rechargeable toothbrush		8	8
	Oral-B Sonic S-320 power toothbrush		1	14
	Oral-B Professional Care 7850 DLX power toothbrush		9	8
	Oral-B Professional Care 9400 Triumph power toothbrush		25	31
	Sonicare 7300 power toothbrush		0	17
	Bumble & Bumble Hair Tonic (8oz)		5	11
	Norelco 8140 Speed XL shaver		5	4
	Proactive Renewing Cleanser		17	1
Perfume / cologne	Lovely by Sarah Jessica Parker perfume (3.4oz)	3	9	6
	Calvin Klein Eternity Cologne for Men (3.4oz)	6	9	5
	Calvin Klein Eternity Perfume for Women (3.4oz)	9	3	18
	Escada Island Kiss perfume		2	7
Toys / games	PlayStation3 Sixaxis wireless controller	12	4	10
	Nintendo Wii Play: 9 games, wireless remote, & nunchuck	3		
	Xbox 360 wireless controller	23	6	14
	Tickle Me Elmo TMX	61	10	14
	Parker Brothers Monopoly Here & Now		3	2
	Nintendo DS Super Mario Brothers game		1	2
Books	*You on a Diet* , by Craig Wynett and Lisa Mehmet	41	28	31
	The Audacity of Hope , by Barack Obama	11	4	5
	Culture Warrior , by Bill O'Reilly	14	6	1
	For One More Day , by Mitch Albom	6	1	1
	The Secret , by Rhonda Byrne	70	51	60
	The Best Life Diet , by Bob Greene	33	16	19
Cosmetics	Lancome Fatale mascara (black, full size)		6	2
	Lancome Definicils mascara (black, full size)		10	3
Home products	Roomba Scheduler 4230 robotic vacuum cleaner		5	16
	Yankee Housewarmer Christmas-cookie-scented candle (22oz)		3	5
Automotive products	Inline auto ignition spark plug tester		3	6
DVDs	*Teenage Mutant Ninja Turtles The Movie* DVD		0	0
	Scrubs Complete Fourth Season on DVD		10	12
	Lost First Season on DVD		10	10
	Grey's Anatomy Second Season on DVD		6	5
	Lost Second Season on DVD		10	11
Total		715	567	649

Online-Appendix Table 2. Sample Construction of Cross-Sectional Data

	Download 1 (Feb. 22)	Download 2 (Apr. 25)	Download 3 (May 23)	Total
Initially downloaded auctions	1,136	1,643	1,084	3,863
Auctions not retrieved at auction ending time (removed by eBay; outages in internet connection)	107	582	18	707
Ended before BINs downloaded	0	107	0	107
Auctions with no bids	307	378	372	1,057
Auctions in non-US currency	1	0	22	23
Auctions for items not on list	6	14	23	43
Final list of auctions (pre-matching)	715	562	649	1,926

Online-Appendix Table 3. Overbidding by Demographics in Cross-Sectional Data

The sample consists of all auctions matched to buy-it-now prices for the same item, available at the end of the auction period. Male products are electric shavers (Braun 8995/8985, Norelco 8140xl), hair tonics (Bumble & Bumble), colognes (Calvin Klein Eternity), and dark iPods (blue, green, silver); female products are hair straighteners (Fourk Chi, T3 Tourmaline), cosmetics (Lancôme Fatale/Definicils mascara), perfumes (Calvin Klein Eternity, Lovely Jessica Parker, Escada Island Kiss), and bright iPods (pink). Products for kids are toys (Tickle Me Elmo), for teenagers games and playstations (Super Mario Brothers, Sixaxis Wireless PS3 Controller, Wireless Xbox 360 Controller), and for adults all consumer electronics. The book "Audacity of Hope" by Obama is liberal, the book "Cultural Warriors" by O'Reilly conservative. Price level comparisons are made with financial software (Quicken 2007 Basic vs Home Business), navigation systems (Garmin C320, C330, and C550), iPods (shuffle, nano, and 80gb), and digital cameras (Canon A630, SD600, and SD630).

	Without Shipping		With Shipping	
Target Consumer	Sample	Percent Overbidding	Sample	Percent Overbidding
Male	212	38%	165	45%
Female	160	33%	136	29%
Kids	85	28%	68	54%
Teenagers	72	61%	58	31%
Adults	435	39%	364	37%
Liberal	20	40%	18	17%
Conservative	21	33%	16	38%
Cheap	114	45%	98	36%
Expensive	159	38%	133	48%
More expensive	34	41%	26	35%
Most expensive	10	40%	9	56%

Online-Appendix Table 4. Choice Experiment

The order in which subjects received the item descriptions varies by Ordering and is indicated in *italics* below the number of subjects choosing that description.

	Ordering 1	Ordering 2	Ordering 3	Aggregate
First item description	14 *(retailer)*	2 *(individual 1)*	3 *(individual 2)*	
Second item description	1 *(individual 1)*	5 *(individual 2)*	19 *(retailer)*	
Third item description	1 *(individual 2)*	15 *(retailer)*	2 *(individual 1)*	
Indifferent	14	11	9	34
Did not answer	0	1	2	3
Total	30	34	35	99
Total (answered)	30	33	33	96
Percent Indifferent	47%	33%	27%	35%
Percent Preferring Retailer Item	47%	45%	58%	50%
Percent Preferring Auction Item	7%	21%	15%	15%

Online-Appendix Figure I: Overbidding by Price Level

The following graphs show the share of bidders that overbid for each price level. Price levels are determined by the matching fixed price for each item. Panel A shows overbidding by price level across all items that have a matching fixed price in the cross-sectional data, and Panel B shows overbidding by price level separately for different item categories.

Panel A. Overbidding across All Items



Panel B. Overbidding by Item Category

