Appendix: For Online Publication Only

A Predictions

In this appendix, we present two simple models to generate predictions about what might happen in our information treatments.

Selfish Agents

First, we solve the subgame perfect equilibrium assuming agents have no fairness concerns and care only about their own earnings. While a large literature suggests that we should not expect the point predictions of such a model to hold, the comparative static predictions of what happens as information changes across treatments might still be illuminating.

In this model, whenever the buyer has information on the seller's cost C, either in *Buyer Knows* or *Complete Information*, the buyer offers $P = C$, which is accepted by the seller. This yields completely unequal payoffs with the buyer receiving 100% of the surplus and inequality of 100%.

When the buyer has no information on seller's cost C, either in *Seller Knows* or *Neither Knows*, the buyer's profit maximizing offer is $P = 30$ (the larger possible value of C). These offers are accepted by all sellers.[26] In these treatments, the surplus of the buyer is 100% of total surplus when $C = 30$, 75% when $V = 90$ and $C = 10$ and 67% when $V = 70$ and $C = 10$. On average, the share of surplus for the buyers is 85.4% and the share of surplus for the sellers is 14.6%, which yields inequality of 70.8%.[27]

Therefore, the self-interested subgame perfect equilibrium predicts that: (1) information to the seller is irrelevant to outcomes (and therefore being informed has no value to the seller), (2) the buyer's share of surplus increases when they are informed rather than uninformed, and (3) inequality is higher when the buyer has information. As shown in

[26] For any value, V, the buyer essentially decides between offering a price P of 10 or 30. An offer of $P = 10$ generates an automatic 50% rejection rate (whenever the cost of the seller is 30) and hence an expected profit of $\frac{V-10}{2}$. An offer of $P = 30$ is accepted with certainty and generates profits $V - 30$, which is larger than $\frac{V-10}{2}$ for $V > 50$.

[27] Note these outcomes are nearly identical if we assume sellers reject offers of $P = C$, in which case buyers offer P that are 1 unit higher and the shares of surplus going to each player change only slightly.

Section 4, we find that all three of these comparative statics are inconsistent with our data.

Fehr-Schmidt Inequity Aversion

Second, we solve for play assuming agents have fairness preferences, as in Fehr and Schmidt (1999). In that model, the relevant parameters are α (denoting disutility from disadvantageous inequality) and β (denoting disutility from advantageous inequality). When subject i receives x_i and subject j receives x_j, utility for subject i takes the form:

$$u_i = x_i - \alpha_i \max\{x_j - x_i, 0\} - \beta_i \max\{x_i - x_j, 0\} \tag{1}$$

Fehr and Schmidt (1999) adopts the assumptions that for all agents $\beta_i \leq \alpha_i$ and $0 \leq \beta_i < 1$ (since, if $\beta_i \geq 1$, individual i would burn their own money to achieve equality).

As we do above, we can solve for the optimal behavior of buyers and sellers if sellers have utility as in equation (1) with parameters known to the buyer.[28]

In *Complete Information*, the buyer chooses the minimum P such that the seller will accept the offer. To do this, the buyer finds the P that sets the seller's utility from accepting the offer to be equal to 0, which is what the seller would get if he rejects the offer. A few lines of algebra shows that the optimal offer is $P = C + \frac{\alpha_i}{1+2\alpha_i}(V - C)$. The second term, $\frac{\alpha_i}{1+2\alpha_i}(V - C)$, serves to both decrease inequality and compensate the seller for the inequality. This offer yields $\frac{1+\alpha_i}{1+2\alpha_i}$ surplus to the buyer and $\frac{\alpha_i}{1+2\alpha_i}$ surplus to the seller, which yields inequality of $1 - \frac{2\alpha_i}{1+2\alpha_i}$.

When the buyer is uninformed and the seller is informed, in *Seller Knows*, the buyer must choose between the optimal price when the seller has a cost of 30, which will always be accepted, or the optimal price when the seller has a cost of 10, which will only be accepted half of the time. As in the previous section, given that V is never less than 70, the buyer always prefers acting as if $C = 30$ so the offer will be accepted. This suggests an optimal offer of $P = 30 + \frac{\alpha_i}{1+2\alpha_i}(V - 30)$. Whenever $C = 30$, this offer yields an average surplus to the buyer of $1 - \frac{\alpha_i}{1+2\alpha_i}$ surplus to the buyer and $\frac{\alpha_i}{1+2\alpha_i}$ surplus to the seller (as in the case above). When $V = 90$ and $C = 10$, however, the surplus is $0.75 - 0.75(\frac{\alpha_i}{1+2\alpha_i})$

[28] We can also assume buyers have utility of the same form, but so long as $\beta_i < 0.5$, they will always prefer to offer the lowest possible p that is accepted; if $\beta_i \geq 0.5$, the buyer offers a 50-50 split.

to the buyer and $0.25 + 0.75(\frac{\alpha_i}{1+2\alpha_i})$ to the seller. When $V = 70$ and $C = 10$, the surplus is $0.67 - 0.67(\frac{\alpha_i}{1+2\alpha_i})$ to the buyer and $0.33 + 0.67(\frac{\alpha_i}{1+2\alpha_i})$ to the seller.[29] This yields an average surplus of $0.854 - 0.854(\frac{\alpha_i}{1+2\alpha_i})$ to the buyer and $0.146 + 0.854(\frac{\alpha_i}{1+2\alpha_i})$ to the seller, which yields inequality of $0.708 - 0.854(\frac{2\alpha_i}{1+2\alpha_i})$.

When the seller is uninformed, we have to decide how to model the beliefs of the seller about V. One could imagine a signaling game where the seller infers something about V from the offer P. For the purposes of this exercise, we instead make the simpler assumption that the seller cares about expected inequality and will accept an offer that yields positive utility in expectation. When only the seller is uninformed, in *Buyer Knows*, this simplifies to the same offer as in *Complete Information* but with V replaced by the expectation of V, which is 80. The offer is therefore $P = C + \frac{\alpha_i}{1+2\alpha_i}(80 - C)$. Averaging over the four cases, we see that the buyer receives a surplus of $1 - \frac{99}{96}\frac{\alpha_i}{1+2\alpha_i}$, the seller receives surplus of $\frac{99}{96}\frac{\alpha_i}{1+2\alpha_i}$, and inequality is $1 - \frac{99}{96}\frac{2\alpha_i}{1+2\alpha_i}$. This is very similar to the payoffs in *Complete Information*, with $\frac{99}{96}$ replacing 1 to account for the fact that the seller receives a slightly larger share of the pie on average.[30]

When neither are informed, in *Neither Knows*, we assume the buyer always makes the same offer, $P = 30 + \frac{\alpha_i}{1+2\alpha_i}(80 - 30)$. Averaging over the four cases, we see that the buyer receives an average surplus of $\frac{41}{48} - \frac{85}{96}\frac{\alpha_i}{1+2\alpha_i}$, and the seller receives an average surplus of $\frac{7}{48} + \frac{85}{96}\frac{\alpha_i}{1+2\alpha_i}$, which yields inequality of $\frac{34}{48} - \frac{85}{96}\frac{2\alpha_i}{1+2\alpha_i}$. This is very similar to the payoffs in *Buyer Knows*.

Taken together, these results suggest that when agents have less information: (1) the seller's share of surplus increases, (2) the buyer's share of surplus decreases, and (3) inequality decreases. As shown in Section 4, we find that all three of these comparative statics are inconsistent with our data.

[29] Here we assume $\alpha \leq 0.5$ or else the buyer would be offering more than 50% of the surplus.

[30] This increase is because, relative to *Complete Information*, the seller gets extra surplus when $V = 70$ (when the pie is smaller) and less surplus when $V = 90$ (when the pie is bigger). These differences mechanically give the seller a slightly larger share of the pie on average.

B Additional Tables, Regressions, and Robustness Checks

Appendix B provides supporting tables and figures for the results shown in the main text.

- Appendix B.1 presents supporting figures and regression tables for results from Section 4.1 showing that inequality is larger when less information is available.
- Appendix B.2 shows that results presented in Section 4.1 are robust to alternate definitions of inequality share.
- Appendix B.3 presents supporting figures and regression tables for results from Sections 4.2.1–4.2.4 showing that offers are less generous and unfair offers are more likely to be accepted when less information is available.

B.1 Inequality, Buyer Share, Seller Share, and Total Share

Table B1 reports the *Inequality Share*, *Buyer Share*, *Seller Share*, and *Total Share*, and *Rejection Rate* data for all subjects. This table shows that the results from Section 4.1 are robust to analyzing data from all 30 rounds. The top panel shows the data for all 30 rounds, the middle panel shows the data for the first 10 rounds, and—for ease of comparison—the third panel reproduced the analysis with the data from the last 10 rounds (i.e., results in this panel are identical to the results in Table 2). The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game). The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role).[31] We consequently have 1870 observations for the first 10 rounds and for the last 10 rounds; we have 5610 observations when we analyze all 30 rounds.

Appendix Table B2 shows results from a regression, that clusters by both buyer and seller, testing whether we observe treatment differences between corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game) for data from all subjects for the last 10 rounds. These regressions correspond to the statistical significance reported in Table 2 in Section 4.1.

[31] See Appendix Table B2, Appendix Table B3, and Appendix Table B4, for the corresponding regression tables for the last 10 rounds, all 30 rounds, and the first 10 rounds, respectively.

Table B1: Inequality Share, Buyer Share, Seller Share, Total Share, and Rejection Rate

	All 30 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	12.38	49.00	36.77	85.78	14.22
Seller Knows	19.38***	51.51	33.88	85.39	14.61
Buyer Knows	20.60***	51.81	32.13**	83.95	16.05
Neither Knows	23.23***	51.67	31.67**	83.33	16.67
	First 10 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	14.86	48.16	33.40	81.56	18.44
Seller Knows	18.72	49.57	32.98	82.55	17.45
Buyer Knows	21.69**	49.86	30.14	80.00	20.00
Neither Knows	20.09*	47.26	31.87	79.13	20.87
	Last 10 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	10.22	49.22	39.00	88.22	11.78
Seller Knows	20.14***	53.83*	35.11*	88.94	11.06
Buyer Knows	20.60***	54.89**	34.50**	89.39	10.61
Neither Knows	24.98***	54.19*	31.90***	86.09	13.91

Notes: Table 2 reports on data from all subjects. *Inequality Share* $= \frac{max\{\pi_B - \pi_S, 0\}}{V-C}$. *Buyer Share* $= \frac{\pi_B}{V-C}$. *Seller Share* $= \frac{\pi_S}{V-C}$. *Total Share* $= \frac{\pi_B + \pi_S}{V-C}$ is the sum of *Buyer Share* and *Seller Share*. The rejection rate is also reported. Values are reported in percentage points. *Total Share* is less than 100% since some offers are rejected by the seller and lead to both players getting 0. *Rejection Rate* is the percentage of offers that are rejected and is equal to $1-$*Total Share*. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role). For the first 10 and last 10 rounds, we therefore have 1870 observations and for the complete 30 rounds we have 5610 observations. See Appendix Table B2, Appendix Table B3, and Appendix Table B4, for the corresponding regression tables for the last 10 rounds, all 30 rounds, and the first 10 rounds, respectively. Significance: * p<0.1, ** p<0.05, *** p<0.01.

$$Share_{B,S} = \beta_0 + \beta_1 SellerKnows_{B,S} + \beta_2 BuyerKnows_{B,S} + \beta_3 NeitherKnows_{B,S} + \epsilon_{B,S} \quad (2)$$

All values are reported in percentage points. Results from Column (3) show that inequality share is higher when less information is available. When information is absent from either the buyer or the seller (SK and BK, respectively) the inequality share is approximately 10 percentage points larger than in the *Complete Information* treatment. When information is absent from both the buyer and the seller (NK) the inequality share is approximately 15 percentage points larger than in the *Complete Information* treatment.

Table B2: Last 10 Rounds: Buyer Share, Seller Share, Inequality Share, and Total Share

Dependent Variable:	**Buyer Share**	**Seller Share**	**Inequality Share**	**Total Share**
	(1)	(2)	(3)	(4)
Seller Knows (SK)	4.607*	-3.893*	9.916***	0.714
	(2.542)	(2.003)	(2.266)	(3.897)
Buyer Knows (BK)	5.665**	-4.499**	10.378***	1.166
	(2.328)	(2.031)	(2.276)	(3.718)
Neither Knows (NK)	4.965*	-7.101***	14.752***	-2.135
	(2.656)	(2.488)	(2.752)	(3.996)
Constant	49.223***	38.999***	10.224***	88.222***
	(1.761)	(1.663)	(1.666)	(2.993)
Test SK=NK p-value:	0.895	0.139	0.072	0.435
Test BK=NK p-value:	0.780	0.236	0.105	0.339
Number of Clusters	187	187	187	187
Observations	1870	1870	1870	1870
R-Squared	0.00976	0.0219	0.0614	0.00154

Notes: Table B2 reports on data from all subjects for the last 10 rounds. See Table 2 for definitions of *Buyer Share*, *Seller Share*, *Inequality Share* and *Total Share*. Values are reported in percentage points. Regressions test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game). Standard errors clustered by buyer and seller are in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table B3 shows the results with the same regression framework (see equation 2) presented above using data from all subjects for all 30 rounds. These regressions correspond to the statistical significance reported in the top panel of Appendix Table B1 showing data from all 30 rounds. Consistent with results from the last 10 rounds, regres-

sions in Column (3) show that inequality share is larger when less information is available. When either the buyer or the seller is uninformed (SK and BK, respectively) the inequality share is approximately 7–8 percentage points larger than in the *Complete Information* treatment. When neither the buyer nor the seller is informed (NK) the inequality share is almost 11 percentage points larger.

Table B3: All 30 Rounds: Buyer Share, Seller Share, Inequality Share, and Total Share

Dependent Variable:	**Buyer Share**	**Seller Share**	**Inequality Share**	**Total Share**
	(1)	(2)	(3)	(4)
Seller Knows (SK)	2.502	-2.890	7.005***	-0.388
	(2.400)	(1.926)	(2.136)	(3.723)
Buyer Knows (BK)	2.809	-4.641**	8.219***	-1.832
	(2.221)	(2.092)	(2.185)	(3.717)
Neither Knows (NK)	2.661	-5.106**	10.850***	-2.444
	(2.282)	(2.457)	(2.518)	(3.543)
Constant	49.004***	36.773***	12.377***	85.778***
	(1.439)	(1.626)	(1.575)	(2.650)
Test SK=NK p-value:	0.951	0.295	0.116	0.559
Test BK=NK p-value:	0.952	0.838	0.290	0.862
Number of Clusters	187	187	187	187
Observations	5610	5610	5610	5610
R-Squared	0.00213	0.0114	0.0320	0.000766

Notes: Table B3 reports on data from all subjects for all 30 rounds. See Table 2 for definitions of *Buyer Share*, *Seller Share*, *Inequality Share* and *Total Share*. Values are reported in percentage points. Regressions test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game). Standard errors clustered by buyer and seller are in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table B4 shows the results for the same regression framework (see equation 2) presented above using data from all subjects for first 10 rounds. These regressions correspond to the statistical significance reported in the middle panel of Appendix Table B1. We see that directionally, less information increases the inequality share. These results are significant for the BK treatment and marginally significant for the NK treatment—below we present evidence that there is significant learning between the first 10 and last 10 rounds of the experiment.

In the main paper, we focus our attention to the last 10 rounds of the game to explore the behavior of experienced agents. Table B5 shows clear evidence that subjects learn with

Table B4: First 10 Rounds: Buyer Share, Seller Share, Inequality Share, and Total Share

Dependent Variable:	**Buyer Share**	**Seller Share**	**Inequality Share**	**Total Share**
	(1)	(2)	(3)	(4)
Seller Knows (SK)	1.415	-0.418	3.861	0.998
	(2.546)	(2.060)	(2.560)	(3.720)
Buyer Knows (BK)	1.699	-3.254	6.837**	-1.556
	(2.614)	(2.312)	(2.779)	(3.928)
Neither Knows (NK)	-0.897	-1.528	5.233*	-2.425
	(2.720)	(2.678)	(2.834)	(3.840)
Constant	48.158***	33.397***	14.856***	81.556***
	(1.529)	(1.727)	(1.944)	(2.622)
Test SK=NK p-value:	0.447	0.635	0.605	0.375
Test BK=NK p-value:	0.402	0.501	0.576	0.830
Number of Clusters	187	187	187	187
Observations	1870	1870	1870	1870
R-Squared	0.00154	0.00395	0.0121	0.00114

Notes: Table B4 reports on data from all subjects for the first 10 rounds. See Table 2 for definitions of *Buyer Share*, *Seller Share*, *Inequality Share* and *Total Share*. Values are reported in percentage points. Regressions test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game). Standard errors clustered by buyer and seller are in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1.

experience. In a regression that clusters by both buyer and seller and drops the middle 10 rounds, we test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game) interacted with whether the data was from the last 10 rounds of the game rather than the first 10 rounds of the game.

$$\begin{aligned} Share_{B,S} = \beta_0 + & \beta_1 SellerKnows_{B,S} \times Last10Rounds_{B,S} + \\ & \beta_2 BuyerKnows_{B,S} \times Last10Rounds_{B,S} + \\ & \beta_3 NeitherKnows_{B,S} \times Last10Rounds_{B,S} + \\ & \beta_4 SellerKnows_{B,S} + \beta_5 BuyerKnows_{B,S} + \beta_6 NeitherKnows_{B,S} + \\ & \beta_7 Last10Rounds_{B,S} + \epsilon_{B,S} \end{aligned} \tag{3}$$

Table B5: First vs. Last 10 Rounds: Learning

Dependent Variable:	**Buyer Share**	**Seller Share**	**Inequality Share**	**Total Share**
	(1)	(2)	(3)	(4)
Seller Knows × Last 10 Rounds	3.191	-3.475**	6.055***	-0.284
	(2.149)	(1.678)	(2.141)	(3.002)
Buyer Knows × Last 10 Rounds	3.966*	-1.245	3.541	2.721
	(2.117)	(1.618)	(2.315)	(2.763)
Neither Knows × Last 10 Rounds	5.863**	-5.573***	9.519***	0.290
	(2.621)	(1.799)	(2.241)	(3.656)
Seller Knows (SK)	1.415	-0.418	3.861	0.998
	(2.547)	(2.060)	(2.561)	(3.720)
Buyer Knows (BK)	1.699	-3.254	6.837**	-1.556
	(2.615)	(2.313)	(2.779)	(3.929)
Neither Knows (NK)	-0.897	-1.528	5.233*	-2.425
	(2.720)	(2.678)	(2.834)	(3.841)
Last 10 Rounds	1.065	5.602***	-4.631***	6.667***
	(1.541)	(1.218)	(1.602)	(2.274)
Constant	48.158***	33.397***	14.856***	81.556***
	(1.529)	(1.728)	(1.944)	(2.623)
Number of Clusters	187	187	187	187
Observations	3740	3740	3740	3740
R-Squared	0.0125	0.0178	0.0352	0.0117

Notes: Table B5 reports on data from all subjects for the first and last 10 rounds. Regressions test whether we observe learning between the first and last 10 rounds across treatments compared to the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. Standard errors clustered by buyer and seller are in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1.

As described in our experimental procedure (see Section 3.1), results are from 374 subjects across 20 sessions (i.e., 12 sessions run at the Wharton Behavioral Lab and 8 sessions run at the Stanford Economics Research Lab). Appendix Table B6 replicates Appendix Table B1 showing results for participants at Wharton and at Stanford separately. The p-values come from a regression framework testing if results are statistically significant different between sessions run at the two schools clustering by buyer and seller. The paucity of p-values less than 0.1 provides support for footnote 14 and shows that differences between participants at the two schools are not statistically significant.

$$Share_{B,S} = \beta_0 + \beta_1 Wharton_{B,S} + \epsilon_{B,S} \tag{4}$$

Table B6: By School: Inequality Share, Buyer Share, Seller Share, and Total Share

	Inequality Share			**Buyer Share**			**Seller Share**			**Total Share**		
All 30 Rounds	Stan.	Whar.	p	Stan.	Whar.	p	Stan.	Whar.	p	Stan.	Whar.	p
CI	12.45	12.33	0.97	47.59	49.95	0.44	35.19	37.83	0.43	82.78	87.78	0.37
SK	20.37	18.65	0.55	51.88	51.23	0.87	32.96	34.57	0.45	84.83	85.80	0.86
BK	23.49	18.60	0.11	53.54	50.62	0.37	30.62	33.17	0.34	84.17	83.79	0.94
NK	20.48	25.34	0.20	49.58	53.27	0.29	31.25	31.99	0.84	80.83	85.26	0.37
First 10 Rounds												
CI	16.08	14.04	0.61	47.42	48.65	0.71	31.47	34.68	0.36	78.89	83.33	0.42
SK	18.70	18.73	0.99	50.09	49.19	0.83	33.91	32.29	0.48	84.00	81.48	0.64
BK	24.35	19.86	0.27	50.95	49.10	0.66	27.55	31.93	0.13	78.50	81.03	0.65
NK	16.61	22.76	0.12	44.84	49.12	0.34	30.66	32.80	0.59	75.50	81.92	0.27
Last 10 Rounds												
CI	8.97	11.06	0.52	46.71	50.90	0.27	37.74	39.84	0.55	84.44	90.74	0.34
SK	19.20	20.84	0.59	52.35	54.93	0.50	34.15	35.81	0.48	86.50	90.74	0.43
BK	23.88	18.34	0.09	57.66	52.97	0.11	33.84	34.96	0.65	91.50	87.93	0.41
NK	22.04	27.24	0.22	51.42	56.32	0.21	32.08	31.76	0.93	83.50	88.08	0.41

Notes: Table B6 reports on data from all subjects from sessions run at Stanford (Stan.) and Wharton (Whar.) separately. *Inequality Share* $= \frac{max\{\pi_B - \pi_S, 0\}}{V-C}$. *Buyer Share* $= \frac{\pi_B}{V-C}$. *Seller Share* $= \frac{\pi_S}{V-C}$. *Total Share* $= \frac{\pi_B + \pi_S}{V-C}$ is the sum of *Buyer Share* and *Seller Share*. The rejection rate is also reported. Values are reported in percentage points. *Total Share* is less than 100% since some offers are rejected by the seller and lead to both players getting 0. The p-values come from a regression framework testing if results were statistically significant different between sessions ran at Stanford and Wharton in which we include each transaction once and cluster by buyer and seller.

Appendix Table B7 replicates Appendix Table B1 with estimates coming from a regression framework (see equation 2) in which we include each transaction once and cluster

by session. The stars represent statistical significance based on the regression framework, testing whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game). This provides support for footnote 14 and shows that results are robust to using session clusters.

Table B7: With Session Clustering: Inequality Share, Buyer Share, Seller Share, Total Share, and Rejection Rate

	All 30 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	12.38	49.00	36.77	85.78	14.22
Seller Knows	19.38***	51.51	33.88**	85.39	14.61
Buyer Knows	20.60***	51.81	32.13***	83.95	16.05
Neither Knows	23.23***	51.67	31.67**	83.33	16.67
	First 10 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	14.86	48.16	33.40	81.56	18.44
Seller Knows	18.72*	49.57	32.98	82.55	17.45
Buyer Knows	21.69**	49.86	30.14*	80.00	20.00
Neither Knows	20.09	47.26	31.87	79.13	20.87
	Last 10 Rounds				
Treatment:	**Inequality Share**	**Buyer Share**	**Seller Share**	**Total Share**	**Rejection Rate**
Complete Information	10.22	49.22	39.00	88.22	11.78
Seller Knows	20.14***	53.83**	35.11**	88.94	11.06
Buyer Knows	20.60***	54.89**	34.50***	89.39	10.61
Neither Knows	24.98***	54.19**	31.90***	86.09	13.91

Notes: Table B7 reports on data from all subjects with clustered standard errors at the session level. *Inequality Share* $= \frac{max\{\pi_B - \pi_S, 0\}}{V-C}$. *Buyer Share* $= \frac{\pi_B}{V-C}$. *Seller Share* $= \frac{\pi_S}{V-C}$. *Total Share* $= \frac{\pi_B + \pi_S}{V-C}$ is the sum of *Buyer Share* and *Seller Share*. The rejection rate is also reported. Values are reported in percentage points. *Total Share* is less than 100% since some offers are rejected by the seller and lead to both players getting 0. *Rejection Rate* is the percentage of offers that are rejected and is equal to $1-$*Total Share*. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by session. Significance: * p<0.1, ** p<0.05, *** p<0.01.

B.2 Alternate Measures of Inequality Share

We find that a small number of buyers are "generous" and offer the seller the larger share of the pie. Generous offers occur mainly when the buyer is not informed of the seller's cost and occur less than 2.5% of the time when the buyer is informed, suggesting generous offers when the buyer is informed may reflect "mistakes" (e.g., a trembling hand).

Generous offers from buyers can be seen as increasing inequality at the transactional level or reducing inequality at the market level (by giving more surplus to sellers, who are usually disadvantaged). As mentioned in footnote 11, here we define two alternative inequality share measures to account for those two interpretations.

- *Absolute Inequality Share* $= \frac{|\pi_B - \pi_S|}{V-C}$ is the absolute difference between the buyer and seller's earnings divided by the total surplus and measures transaction-level inequality.
- *Difference Inequality Share* $= \frac{\pi_B - \pi_S}{V-C}$ is the difference in earnings between buyers and sellers divided by the total surplus, which is allowed to be negative, and measures market-level inequality.

Our main result, that inequality is higher when less information is available, is robust to both alternative definitions. Appendix Table B8 provides the key and alternative measures of inequality: *Inequality Share* (the definition of inequality discussed in the main text), *Absolute Inequality Share* (measuring transactional-level inequality), and *Difference Inequality Share* (measuring market-level inequality). This table provides support for footnote 14 and shows that results are robust to these two alternative measures of inequality. Values are reported in percentage points. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game) from a regression framework (see equation 2).

Appendix Table B9 shows the results with the same regression framework (see equation 2) presented above using data from all subjects for all 30 rounds for the 3 definitions of inequality share. These regressions correspond to the statistical significance reported in the top panel of Appendix Table B8. Column (1) shows results described in section 4.1 (and Table B3) for ease of comparison. Columns (2) and (3) shows the regression results using the alternative definitions of inequality share. Consistent with our main definition,

Table B8: Alternate Measures of Inequality Share

	All 30 Rounds		
Treatment:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
Complete Information	12.38	12.52	12.23
Seller Knows	19.38***	21.14***	17.62**
Buyer Knows	20.60***	21.51***	19.68***
Neither Knows	23.23***	26.46***	20.00**
	First 10 Rounds		
Treatment:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
Complete Information	14.86	14.95	14.76
Seller Knows	18.72	20.84**	16.59
Buyer Knows	21.69**	23.67***	19.71*
Neither Knows	20.09*	24.79***	15.39
	Last 10 Rounds		
Treatment:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
Complete Information	10.22	10.22	10.22
Seller Knows	20.14***	21.56***	18.72***
Buyer Knows	20.60***	20.82***	20.39***
Neither Knows	24.98***	27.66***	22.29***

Notes: Table B8 provides the key and alternative measures of inequality. *Inequality Share* $= \frac{max\{\pi_B - \pi_S, 0\}}{V-C}$ is the definition of inequality discussed in the main text. Two alternative measures of inequality are shown as well. *Absolute Inequality Share* $= \frac{|\pi_B - \pi_S|}{V-C}$ is the absolute difference between the buyer and seller's earnings divided by the total surplus and measures transactional-level inequality. *Difference Inequality Share* $= \frac{\pi_B - \pi_S}{V-C}$ is the difference in earnings between buyers and sellers divided by the total surplus, which is allowed to be negative, and measures market-level inequality. Values are reported in percentage points. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role). For the first 10 and last 10 rounds, we therefore have 1870 observations, and for the complete 30 rounds we have 5610 observations. See Appendix Table B9, Table B10, and Table B11 for corresponding regression tables for all 30 rounds, the first 10 rounds, and last 10 rounds, respectively. Significance: * p<0.1, ** p<0.05, *** p<0.01.

when information is absent from either the buyer (SK), the seller (BK), or both (NK) the inequality share is larger than in the *Complete Information* treatment.

Table B9: All 30 Rounds: Alternate Measures of Inequality Share

Dependent Variable:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
	(1)	(2)	(3)
Seller Knows (SK)	7.005***	8.618***	5.391**
	(2.136)	(2.061)	(2.255)
Buyer Knows (BK)	8.219***	8.988***	7.450***
	(2.185)	(2.244)	(2.192)
Neither Knows (NK)	10.850***	13.934***	7.767**
	(2.518)	(2.398)	(3.152)
Constant	12.377***	12.523***	12.231***
	(1.575)	(1.604)	(1.550)
Test SK=NK p-value:	0.116	0.017	0.458
Test BK=NK p-value:	0.290	0.039	0.920
Number of Clusters	187	187	187
Observations	5610	5610	5610
R-Squared	0.0320	0.0494	0.0155

Notes: Table B9 reports on data from all subjects for all 30 rounds. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role). Significance: *** p<0.01, ** p<0.05, * p<0.1.

Appendix Table B10 replicates the results in Appendix Table B9 using data from all subjects for the first 10 rounds, implementing the same regression framework (see equation 2). These regressions correspond to the statistical significance reported in the middle panel of Appendix Table B8. Consistent with our main definition of inequality share, we see that directionally, less information is associated with a larger inequality share across all three definitions.

Appendix Table B11 replicates the results in Table B9 using data from all subjects for the last 10 rounds implementing the same regression framework (see equation 2). These regressions correspond to the statistical significance reported in the bottom panel of Appendix Table B8. Consistent with our main definition of inequality share, less information is associated with a larger inequality share across all three definitions.

Table B10: First 10 Rounds: Alternate Measures of Inequality Share

Dependent Variable:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
	(1)	(2)	(3)
Seller Knows (SK)	3.861	5.889**	1.833
	(2.560)	(2.454)	(2.760)
Buyer Knows (BK)	6.837**	8.720***	4.953*
	(2.779)	(2.859)	(2.989)
Neither Knows (NK)	5.233*	9.836***	0.630
	(2.834)	(2.833)	(3.793)
Constant	14.856***	14.950***	14.761***
	(1.944)	(1.949)	(1.940)
Test SK=NK p-value:	0.605	0.122	0.752
Test BK=NK p-value:	0.576	0.704	0.278
Number of Clusters	187	187	187
Observations	1870	1870	1870
R-Squared	0.0121	0.0256	0.00513

Notes: Table B10 reports on data from all subjects for the first 10 rounds. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role). Significance: *** p<0.01, ** p<0.05, * p<0.1.

Table B11: Last 10 Rounds: Alternate Measures of Inequality Share

Dependent Variable:	**Inequality Share**	**Absolute Inequality Share**	**Difference Inequality Share**
	(1)	(2)	(3)
Seller Knows (SK)	9.916***	11.333***	8.499***
	(2.266)	(2.168)	(2.400)
Buyer Knows (BK)	10.378***	10.592***	10.164***
	(2.276)	(2.265)	(2.294)
Neither Knows (NK)	14.752***	17.439***	12.066***
	(2.752)	(2.567)	(3.243)
Constant	10.224***	10.224***	10.224***
	(1.666)	(1.666)	(1.666)
Test SK=NK p-value:	0.072	0.012	0.278
Test BK=NK p-value:	0.105	0.006	0.553
Number of Clusters	187	187	187
Observations	1870	1870	1870
R-Squared	0.0614	0.0849	0.0389

Notes: Table B11 reports on data from all subjects for the last 10 rounds. The stars test whether we observe treatment differences between the corresponding treatment and the *Complete Information* treatment (i.e., the ultimatum game), which we treat as a control for these tests. The estimates come from a regression framework in which we include each transaction once and cluster by buyer and seller (of which there are 187 in each role). Significance: *** p<0.01, ** p<0.05, * p<0.1.

B.3 Buyer's Offer and Seller's Acceptance Rate

Appendix Figure B1 summarizes the results presented in Sections 4.2.1–4.2.4. The two major reasons that the absence of information reduces inequality: (1) buyers offers are lower when sellers are uninformed, and (2) conditional on offers, sellers are (at least directionally) more likely to accept when information is absent.

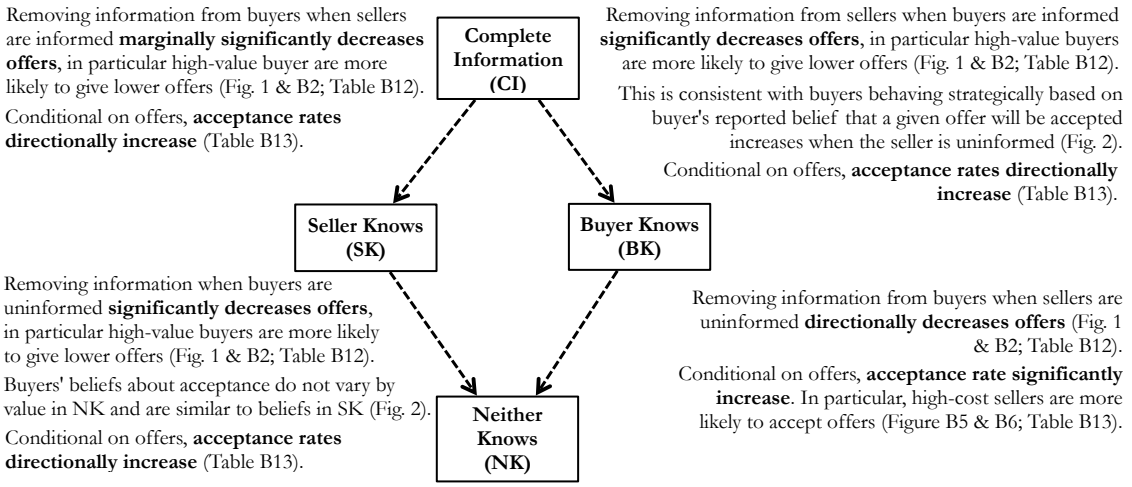
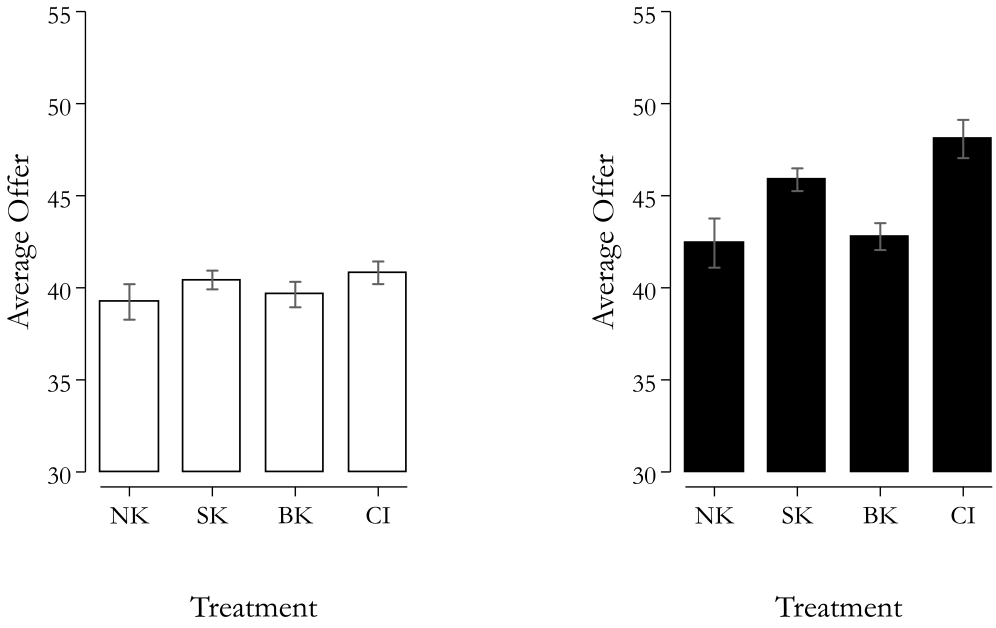


Figure B1: Effect of Removing Buyers' and Sellers' Information

Notes: Figure B1 summarizes the two major reasons the absence of information leads to more inequality: (1) buyers make lower offers when sellers are uninformed, and (2) conditional on offers, sellers are (at least directionally) more likely to accept when information is absent. Also see Figure 1 and Appendix Figure B6.

Appendix Figure B2 replicates Figure 1 in Section 4.2.1 using data from all 30 rounds. This figure shows buyers' average offer by treatment and buyer value. Panel A shows the average offer by treatment for buyers with a value of 70 while Panel B shows the average offer by treatment for buyers with a value of 90. Buyers do not have information on sellers' costs in NK and SK but know sellers' costs in BK and CI. Consistent with results using only the last 10 rounds, buyers, particularly high-value buyers, make lower offers when sellers are uninformed. This amounts to high-value buyers masquerading as low-value buyers when sellers are uninformed.

Figure B3 compares offers in SK to offers in CI when the seller has a cost of 10 and

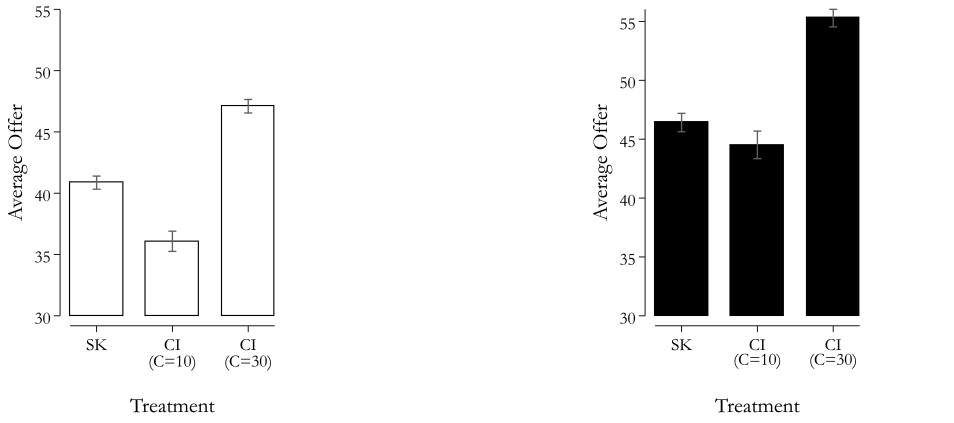


(a) Value=70 (b) Value=90

Figure B2: Buyers' Offers by Treatment and Value (All 30 Rounds)

Notes: Figure B2 shows buyers' average offer for all 30 rounds. Panel A shows the average offer by treatment for buyers with a value of 70 while Panel B shows the average offer by treatment for buyers with a value of 90. Buyers do not have information on sellers' costs in NK and SK but know sellers' costs in BK and CI. Buyers, particularly high-value buyers, make lower offers when sellers are uninformed. This amounts to high-value buyers masquerading as low-value buyers when sellers are uninformed. Robust standard error bars clustered at the buyer level are shown around each mean.

when the seller has a cost of 30 (splitting by the buyer's value across the panels). This figure supports results in section 4.2.1 showing that the offers in *Seller Knows* are more similar to offers in *Complete Information* when sellers have a cost of 10 than when sellers have a cost of 30; suggesting that uninformed buyers may act as if they are facing a seller with a cost of 10—perhaps suspecting that sellers will give buyers the benefit of the doubt and be more willing to accept low offers when the buyer is uninformed.



(a) Value=70 (b) Value=90

Figure B3: Complete Information (CI) vs. Seller Knows (SK): Buyers' Offers by Treatment and Value (Last 10 Rounds)

Notes: Figure B3 compares offers in SK to offers in CI when the seller has a cost of 10 and when the seller has a cost of 30 (splitting by the buyer's value across the panels). Robust standard error bars clustered at the buyer level are shown around each mean.

Appendix Table B12 shows results from a regression that clusters by the buyer and compares buyers' offers when buyers or sellers are uninformed. Results for all 30 rounds are shown in columns (1)–(3), and results for the last 10 rounds are shown in columns (4)–(6). All values are reported in percentage points. The treatments being compared in the panel's regressions are shown at the top of each panel. These regressions correspond to the results reported in Section 4.2.1.

$$Offer_B = \beta_0 + \beta_1 Treatment_B + \epsilon_{B,S} \tag{5}$$

In Section 4.2.2, we show that—consistent with making lower offers when sellers are uninformed—buyers report believing that uninformed sellers are more likely to accept low offers. As stated in footnote 19, Appendix Figure B4 presents the CDF of offers used to elicit beliefs and shows that more than 95% of the mass of the offers lies between 20–55 experimental units and more than 99% of the mass of the offers lies between 20–60 experimental units.

As described in Section 4.2.3, Appendix Figure B5 and Appendix Figure B6 show the seller's acceptance rate by treatment and cost for all 30 rounds and the last 10 rounds, respectively. Offers are binned in 10-unit increments. Results show that for low-cost sellers ($C = 10$), there is no significant difference in the seller's acceptance rate between the *Buyer Knows* and *Neither Knows* treatments. However, high-cost sellers ($C = 30$) are more likely to accept the same offer when buyers are uninformed.

Appendix Table B13 shows results from a regression that clusters by buyer and compares sellers' acceptance rates controlling for the buyer's offer and seller's cost when buyers or sellers are uninformed. Results for all 30 rounds are shown in columns (1)–(3), and results for the last 10 rounds are shown in columns (4)–(6). All values are reported in percentage points. The treatments being compared in the panel's regressions are shown at the top of each panel. These regressions correspond to the results reported in Section 4.2.3.

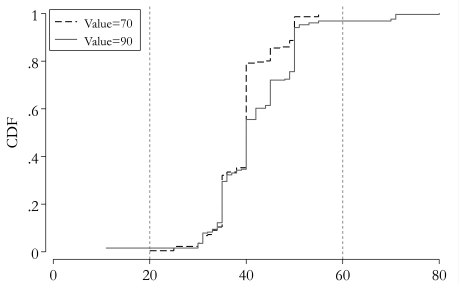
$$Accept_B = \beta_0 + \beta_1 Treatment_B + \epsilon_{B,S} \tag{6}$$

Finally, Appendix Table B14 shows the results for a two-sample Kolmogorov–Smirnov (KS) test for equality of distributions between the distribution of sellers' belief and the actual distribution of the buyer having $V = 70$ when the seller's cost is $C = 10$ and $C = 30$ in the *Neither Knows* and *Buyer Knows* conditions. These tests correspond to the results reported in Figure 3 in Section 4.2.4. The tests show the seller's belief and the actual distribution of the buyer being $V = 70$ are significantly different from each other, suggesting that sellers are giving buyers the benefit of the doubt.

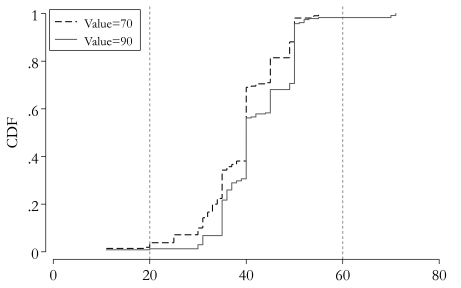
Table B12: Regressions: Offer Conditional on Value

	All 30 Rounds			Last 10 Rounds		
	SK vs CI					
	All	Value=70	Value=90	All	Value=70	Value=90
	(1)	(2)	(3)	(4)	(5)	(6)
Seller Knows (SK)	-1.287	-0.390	-2.210*	-1.941*	-0.681	-4.077***
	(0.916)	(0.800)	(1.212)	(0.982)	(0.909)	(1.178)
Constant	44.236***	40.814***	48.079***	45.520***	41.544***	50.490***
	(0.772)	(0.617)	(1.041)	(0.798)	(0.735)	(0.882)
Number of Buyers (Clusters)	92	92	92	92	91	92
Observations	2760	1470	1290	920	490	430
R-Squared	0.00637	0.000936	0.0171	0.0179	0.00351	0.0864
	NK vs BK					
	All	Value=70	Value=90	All	Value=70	Value=90
	(1)	(2)	(3)	(4)	(5)	(6)
Neither Knows (NK)	-0.392	-0.401	-0.353	-1.387	-0.957	-1.766
	(1.272)	(1.189)	(1.525)	(1.291)	(1.263)	(1.603)
Constant	41.225***	39.632***	42.780***	42.263***	40.657***	43.720***
	(0.634)	(0.693)	(0.731)	(0.713)	(0.759)	(0.804)
Number of Buyers (Clusters)	95	95	95	95	95	95
Observations	2850	1414	1436	950	453	497
R-Squared	0.000418	0.000492	0.000323	0.00676	0.00375	0.0101
	BK vs CI					
	All	Value=70	Value=90	All	Value=70	Value=90
	(1)	(2)	(3)	(4)	(5)	(6)
Buyer Knows (BK)	-3.011***	-1.181	-5.299***	-3.257***	-0.887	-6.770***
	(0.999)	(0.927)	(1.272)	(1.070)	(1.056)	(1.194)
Constant	44.236***	40.814***	48.079***	45.520***	41.544***	50.490***
	(0.772)	(0.617)	(1.041)	(0.798)	(0.735)	(0.882)
Number of Buyers (Clusters)	94	94	94	94	93	94
Observations	2820	1440	1380	940	483	457
R-Squared	0.0226	0.00438	0.0639	0.0335	0.00324	0.137
	NK vs SK					
	All	Value=70	Value=90	All	Value=70	Value=90
	(1)	(2)	(3)	(4)	(5)	(6)
Neither Knows (NK)	-2.116*	-1.192	-3.442**	-2.703**	-1.163	-4.459***
	(1.209)	(1.093)	(1.475)	(1.219)	(1.143)	(1.591)
Constant	42.949***	40.423***	45.869***	43.579***	40.862***	46.413***
	(0.494)	(0.510)	(0.620)	(0.572)	(0.535)	(0.781)
Number of Buyers (Clusters)	93	93	93	93	93	93
Observations	2790	1444	1346	930	460	470
R-Squared	0.0188	0.00830	0.0435	0.0382	0.0106	0.0885

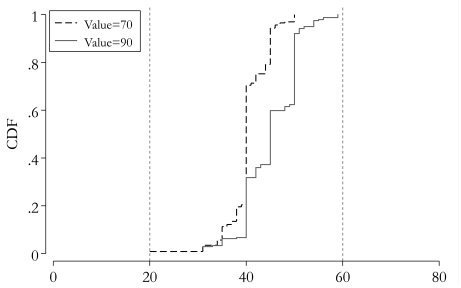
Notes: Table B12 compares buyers' offers when buyers or sellers are uninformed for all 30 rounds, in columns (1)–(3), and for the last 10 rounds, in columns (4)–(6). Significance: *** p<0.01, ** p<0.05, * p<0.1.



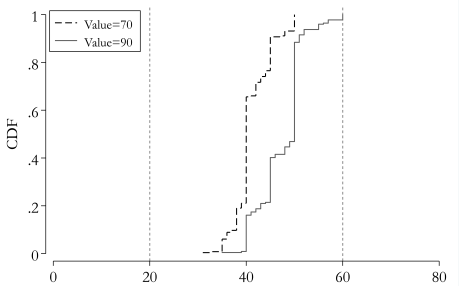
(a) Neither Knows, Cost=10



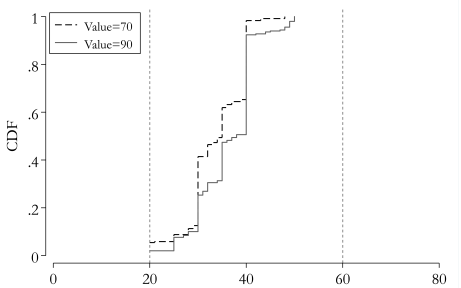
(b) Neither Knows, Cost=30



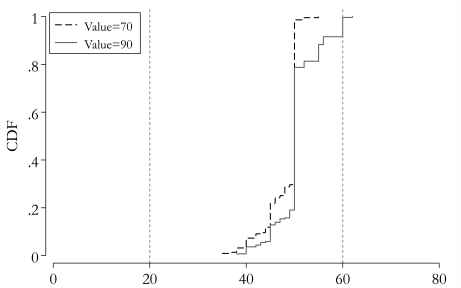
(c) Seller Knows, Cost=10



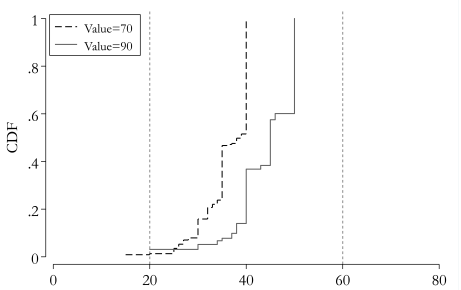
(d) Seller Knows, Cost=30



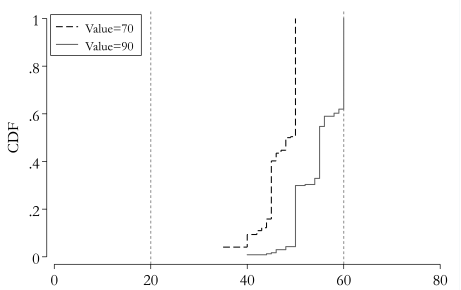
(e) Buyer Knows, Cost=10



(f) Buyer Knows, Cost=30



(g) Complete Information, Cost=10



(h) Complete Information, Cost=30

Figure B4: CDF of Offers Used to Elicit Beliefs

Notes: Figure B4 presents the CDF of offers used to elicit beliefs and shows that more than 95% of the mass of the offers lies between 20–55 experimental units and more than 99% of the mass of the offers lies between 20–60 experimental units.

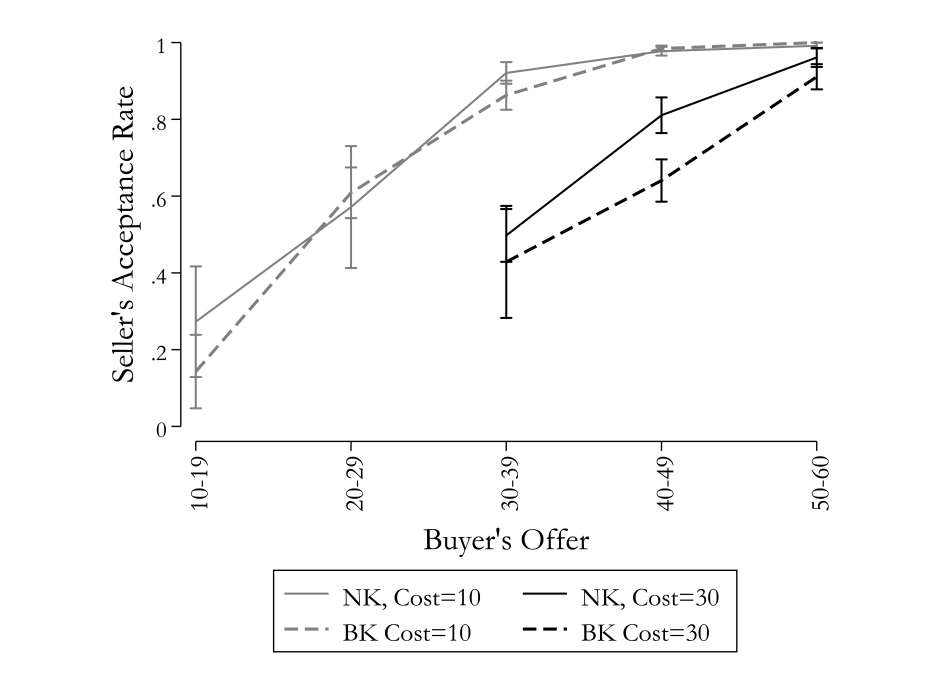


Figure B5: Sellers' Acceptance Rates
Buyer Knows (BK) vs. Neither Knows (NK)
(All 30 Rounds)

Notes: Figure B5 shows the seller's acceptance rate by treatment and cost for all 30 rounds. Offers are binned in 10-unit increments. Results show that for low-cost sellers ($C = 10$), there is no significant difference in the seller's acceptance rate between the *Buyer Knows* and *Neither Knows* treatments. However, high-cost sellers ($C = 30$) are more likely to accept the same offer when buyers are uninformed. Appendix Figure B6 shows consistent results for the last 10 rounds. Robust standard error bars clustered at the seller level are shown around each mean.

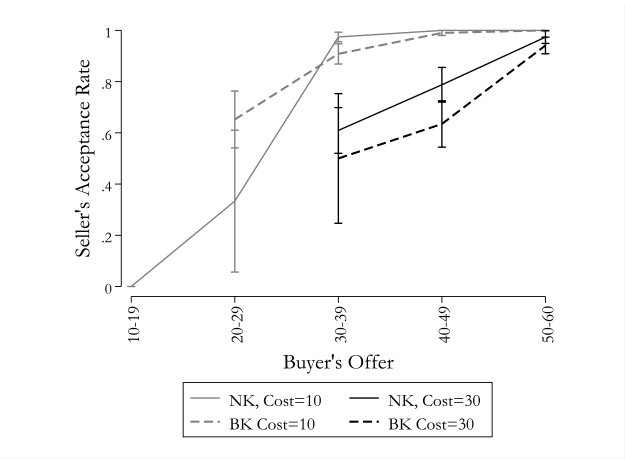


Figure B6: Buyer Knows (BK) vs. Neither Knows (II): Sellers' Acceptance Rates
(Last 10 Rounds)

Notes: Figure B6 shows the seller's acceptance rate by treatment and cost for the last 10 rounds. Offers are binned in 10-unit increments for the last 10 rounds. Results show that for low-cost sellers ($C = 10$), there is no significant difference in the sellers' acceptance rates between the *Buyer Knows* and *Neither Knows* treatments. However, high-cost sellers ($C = 30$) are more likely to accept the same offer when buyers are uninformed. Robust standard error bars clustered at the seller level are shown around each mean.

Table B13: Regressions: Acceptance Rates Conditional on Offer

	All 30 Rounds			Last 10 Rounds		
	SK vs CI					
	All	Cost=10	Cost=30	All	Cost=10	Cost=30
	(1)	(2)	(3)	(4)	(5)	(6)
Seller Knows (SK)	0.025	0.024	0.026	0.028	0.048	0.005
	(0.034)	(0.025)	(0.049)	(0.041)	(0.034)	(0.067)
Number of Sellers (Clusters)	92	92	92	92	92	92
Observations	2760	1371	1389	920	450	470
R-Squared	0.258	0.259	0.234	0.270	0.312	0.231
	NK vs BK					
	All	Cost=10	Cost=30	All	Cost=10	Cost=30
	(1)	(2)	(3)	(4)	(5)	(6)
Neither Knows (NK)	0.074**	0.022	0.136***	0.072**	0.025	0.142**
	(0.029)	(0.024)	(0.047)	(0.032)	(0.031)	(0.066)
Number of Sellers (Clusters)	95	95	95	95	95	95
Observations	2850	1478	1372	950	480	470
R-Squared	0.265	0.248	0.245	0.293	0.283	0.259
	BK vs CI					
	All	Cost=10	Cost=30	All	Cost=10	Cost=30
	(1)	(2)	(3)	(4)	(5)	(6)
Buyer Knows (BK)	0.010	0.062*	-0.043	0.024	0.065	-0.012
	(0.035)	(0.036)	(0.040)	(0.033)	(0.040)	(0.041)
Number of Sellers (Clusters)	94	94	94	94	94	94
Observations	2820	1436	1384	940	461	479
R-Squared	0.200	0.238	0.171	0.235	0.238	0.235
	NK vs SK					
	All	Cost=10	Cost=30	All	Cost=10	Cost=30
	(1)	(2)	(3)	(4)	(5)	(6)
Neither Knows (NK)	0.044	0.006	0.083	0.034	0.015	0.055
	(0.032)	(0.020)	(0.053)	(0.036)	(0.018)	(0.067)
Number of Sellers (Clusters)	93	93	93	93	93	93
Observations	2790	1413	1377	930	469	461
R-Squared	0.306	0.172	0.254	0.302	0.304	0.222

Notes: Table B13 compares sellers' acceptance rates controlling for the buyer's offer and seller's cost when buyers or sellers are uninformed for all 30 rounds, in columns (1)–(3), and for the last 10 rounds, in columns (4)–(6). Robust standard errors clustered at the seller level are shown in parentheses. Significance: *** p<0.01, ** p<0.05, * p<0.1.

Table B14: Seller Beliefs vs Reality: Kolmogorov-Smirnov Equality of Distribution Test

Seller Beliefs vs Reality: Neither Knows (NK)							
Treatment:	**Belief**	**p-value**	**Actual**	**p-value**	**Combined**	**p-value**	**Exact p-value**
NK, cost = 10	0.427	0.000	-0.479	0.000	0.479	0.000	0.000
NK, cost = 30	0.451	0.000	-0.487	0.000	0.487	0.000	0.000
Seller Beliefs vs Reality: Buyer Knows (BK)							
Treatment:	**Belief**	**p-value**	**Actual**	**p-value**	**Combined**	**p-value**	**Exact p-value**
BK, cost = 10	0.447	0.000	-0.476	0.000	0.476	0.000	0.000
BK, cost = 30	0.406	0.000	-0.480	0.000	0.480	0.000	-0.000

Notes: Table B14 shows the results for a two-sample Kolmogorov–Smirnov (KS) test for equality of distributions between that the distribution of sellers' belief and the actual distribution of the buyer being $V = 70$ when the seller's cost is $C = 10$ and $C = 30$ in the *Neither Knows* and *Buyer Knows* conditions. Test shows the seller's belief and the actual distribution of the buyer being $V = 70$ are significantly different from each other for both, suggesting the sellers are giving buyers the benefit of the doubt.

C Experimental Instructions

Prior to participating in the study, subjects consent to participate. The study consisted of four parts. In part 1, subjects played a take-it-or-leave-it offer game for 30 rounds. After that, subjects answered additional questions that depended on their treatment and role. Table C1 shows these additional questions.

Table C1: Additional Experimental Questions

		Buyer				Seller			
		II	**SK**	**BK**	**CI**	**II**	**SK**	**BK**	**CI**
Part 1	Offer Game (30 Rounds)	✓	✓	✓	✓	✓	✓	✓	✓
Part 2	Given available information, report the probability offers got accepted. (10 Rounds)	✓	✓	✓	✓				
	For each cost and offer, report the probability that the buyer had $V = 70$. (10 Rounds)					✓		✓	
	Questions to assess seller's perception of a fair offer. (10 Questions)						✓		✓
	Given 50% probability of being assigned a risky payoff (X-30 with 50% and X-10 with 50%) versus non-risky payoff (70-X), what is your ideal X? (1 Round)						✓		✓
	Choose between your ideal X and another option with a different X. (Some options contain additional pay.) (4 Rounds)						✓		✓
Part 3	Buyer (seller) will choose between seeing or not seeing the cost of the seller (value of the buyer) in each of the last 10 rounds of the bargaining game. (Some options contain additional pay.) (10 Rounds)	✓	✓			✓		✓	
	Buyer (seller) will choose between letting their partner see or not see their value (cost) in each of the last 10 rounds of the bargaining game. (Some options contain additional pay.) (10 Rounds)			✓			✓		
Part 4	Show results and reveal payment	✓	✓	✓	✓	✓	✓	✓	✓

Notes: Table C1 shows the additional questions that each type of subject answered after the offer game (part 1). Only data from part 1 and buyer's data from part 2, in which all subjects in the role of buyer performed the same task, are used in this paper.

Participants in all four treatments were provided the following instructions about the game:

This is a study of individual decision-making and behavior. Money earned will be paid to you in cash at the end of this study.

In addition to your $5 show up fee, you will be paid a $10.50 completion fee when you finish the study, and you will be paid in cash your earnings from one randomly selected round of the trading game, which is described below.

TRADING GAME

In this study, you will play a trading game 30 times. The trading game involves buyers and sellers. You will either be a seller or a buyer and will be in that role for the entire study. In each round of the trading game, you will be randomly paired with a buyer (if you are a seller) or a seller (if you are a buyer) and will only be able to trade with that person in that round.

In each round of the trading game, you will be randomly paired with a new buyer or seller.

In each round of the trading game, the buyer has the opportunity to buy a good from the seller. In each round, the good has a value to the buyer and a cost to the seller to produce. These values and costs are denoted in experimental units.

Each experimental unit is worth $0.50.

If the good is not bought, both the buyer and the seller earn 0 experimental units in that round of the trading game.

If the good is bought, the buyer earns the buyer's value of good in that round minus the price paid to the seller in that round in experimental units, and the seller earns the price paid to the seller in that round minus the cost of producing the good in that round in experimental units.

COSTS AND VALUES

At the start of each round of the trading game, the computer randomly selects the seller's cost of producing the good and the buyer's value of the good.

The seller's cost of producing the good in each round will be either 10 experimental units or 30 experimental units, each with a 50% probability of being randomly selected in each round of the trading game.

The buyer's value of the good in each round will be either 70 experimental units or 90 experimental units, each with a 50% probability of being randomly selected in each round of the trading game.

EACH ROUND OF THE TRADING GAME

At the start of each round of the trading game, buyers and sellers will be paired for the opportunity to trade.

Each seller will be told his or her randomly selected cost of producing the good for the round, and each buyer will be told his or her randomly selected value of the good for the round.

[***Complete Information*** **Treatment Only:**] Each seller will be told the buyer's value of the good and each buyer will be told the seller's cost of producing the good.

[***Seller Knows*** **Treatment Only:**] Each seller will be told the buyer's value of the good. Buyers will not be told the seller's cost of producing the good.

[***Buyer Knows*** **Treatment Only:**] Each buyer will be told the seller's cost of producing the good. Sellers will not be told the buyer's value of the good.

[***Neither Knows*** **Treatment Only:**] Sellers will not be told the buyer's value of the good. Buyers will not be told the seller's cost of producing the good.

Then, the buyer will offer a price in experimental units for the good. This is the only offer the buyer can make. This offer price must be less than or equal to the buyer's value of the good.

Then, the seller can accept or reject the price offered by the buyer. An offer price that is less than the seller's cost of producing the good must be rejected.

If the seller rejects the price, that round of the game is over and each player earns 0 experimental units in that round.

If the seller accepts the price, then the good is traded at that price. The buyer earns the buyer's value of the good in that round minus the price. The seller earns the price minus the seller's cost of producing the good in that round.

After the seller decides whether to accept or reject the price, the round ends. You will be shown your experimental earnings for that round.

As noted above, in each round, the buyer can only offer one price and the seller can only accept or reject the offer.

The identity of all buyers and sellers will remain anonymous. No other participant will ever know what decisions you have made or how much money you earned in the study.

SUMMARY

Once again:

- You will play a trading game 30 times.
- You are a seller or buyer and will remain in that role for all 30 rounds.
- In each round you will be randomly paired with a new buyer or seller.
- In each round the seller will have a cost of producing the good, C, which is either 10 or 30 experimental units, each with a 50% probability of being randomly selected in each round.
- In each round the buyer will have a value of the good, V, which is either 70 or 90 experimental units, each with a 50% probability of being randomly selected in each round.
- Sellers will not be told the buyer's value of the good. Buyers will not be told the seller's cost of producing the good.
- In each round, the buyer can offer a price for the good, P.
- In each round, the seller can accept or reject that price.
- If the price is rejected, then in that round the buyer and the seller each earn 0 experimental units.
- If the price is accepted, then in that round the buyer earns the buyer's value of the good minus the price, V–P, and the seller earns the price minus the seller's cost of producing the good, P–C.
- One randomly selected round of the trading game will be chosen for payment and each experimental unit earned in that round is worth $0.50.

- Earnings will be paid in cash at the end of the study.
- The identity of all buyers and sellers will remain anonymous. No other participant will ever know what decisions you have made or how much money you earned in the study.

During the experiment, please do not use your phone or take out any reading material.

When we start the study, you will find out whether you are a buyer or a seller. Half of you will be buyers and half of you will be sellers. During each round, you will see a waiting screen while other participants make their decisions. Specifically, when we start the experiment, the sellers will see a waiting screen while the buyers make their decisions. Then, the buyers will see a waiting screen while the sellers make their decisions.

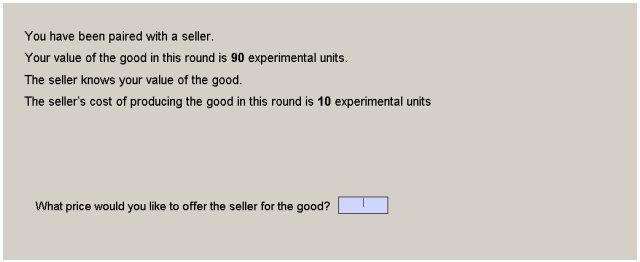
The experiment proceeds at the pace of the slowest participant. Therefore, after you have made your decision, please make sure to click any button on the screen promptly.

Figure C1 presents the buyer's offer decision screen in panel (a) and the seller's decision screen to accept or reject the offer in panel (b) for the *Complete Information* treatment. Figure C3 presents the respective buyer and seller's decision screens for the *Neither Knows* treatment. After the seller's decision is made, payoff outcomes were revealed. Figure C2 presents the buyer's and seller's outcome screens in the *Complete Information* treatment and Figure C4 presents the outcome screens in the *Neither Knows* treatment.

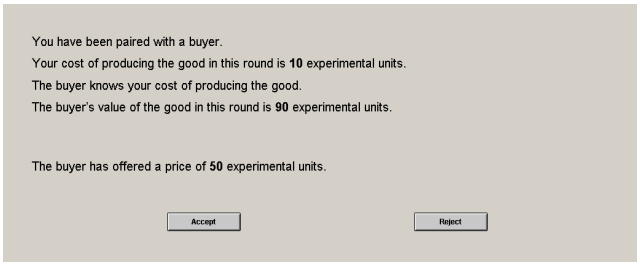
After participants finished the game, they proceeded to part 2 of the study where buyers were asked, using a Becker-DeGroot-Marschak (BDM) method, to report the probability that an offer was accepted. Buyers were provided the following instructions:

You will now be asked a series of questions about one of the last 10 rounds of the trading game and you will earn money based on your answers.

For one of the last 10 rounds of the trading game, you will be shown, one at a time, the value of each buyer, the cost of the seller, and the price the buyer offered for this session of the study.

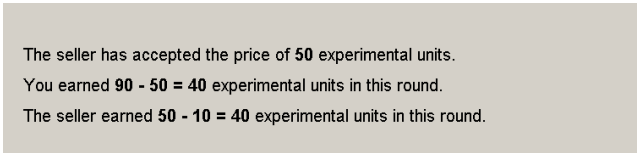


(a) Buyer's Offer Decision Screen

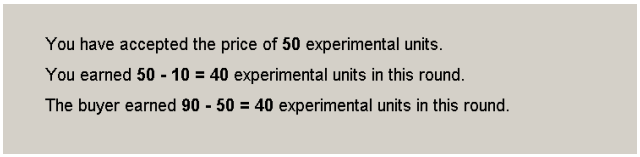


(b) Seller's Acceptance Decision Screen

Figure C1: Complete Information Treatment Decision Screens

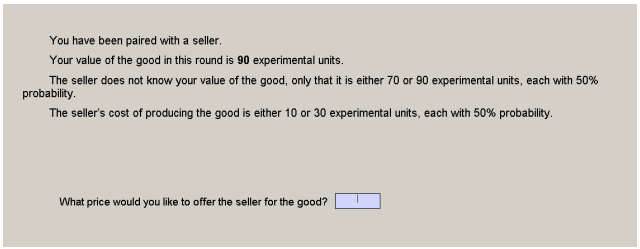


(a) Buyer's Outcome Screen

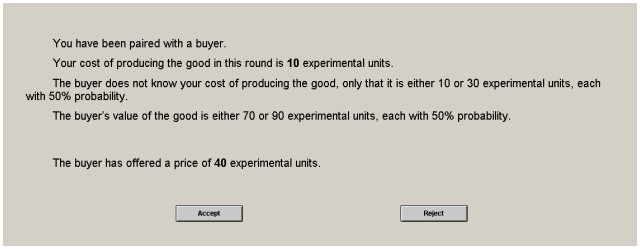


(b) Seller's Outcome Screen

Figure C2: Complete Information Treatment Outcome Screens

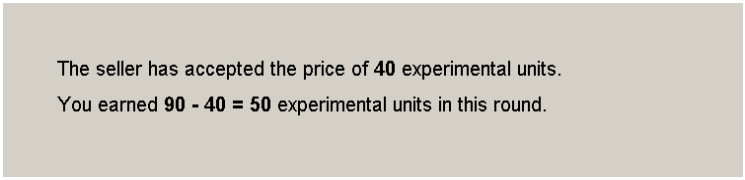


(a) Buyer's Offer Decision Screen

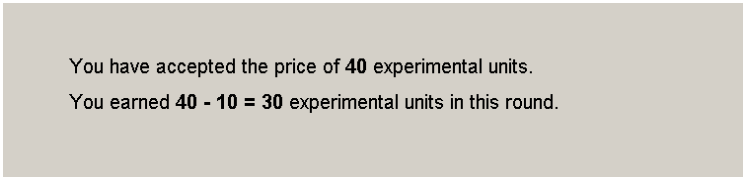


(b) Seller's Acceptance Decision Screen

Figure C3: Neither Knows Treatment Decision Screens



(a) Buyer's Outcome Screen



(b) Seller's Outcome Screen

Figure C4: Neither Knows Treatment Outcome Screens

For each value, cost, and offer, you will be asked to report the probability this offer got accepted.

This probability will be a percentage that can be from 0 to 100.

You will be paid based on the accuracy of your answer.

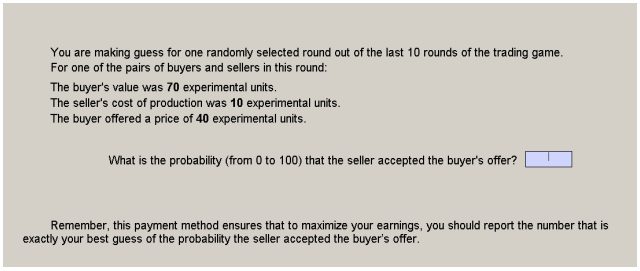
For one randomly selected choice, you will have the opportunity to earn $5. You will either be paid $5 if the seller accepted the buyer's offer or you will be paid $5 with the probability of a random number between 0 and 100.

You must decide how high the random number needs to be for you to be indifferent between getting paid by the random number of by the seller accepting the offer.

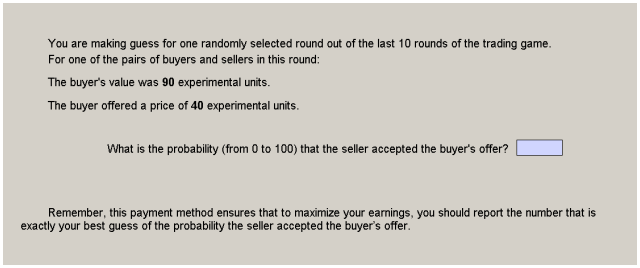
For each guess, the computer will pick a random number between 1 and 100. If the random number the computer picks is above the number you have chose, then you will earn $5 with the probability of the random selected number. If the random number is equal to or below the number you have selected, you will earn $5 if the seller accepted the offer.

This payment method ensures that to maximize your earnings, you would report the number that is exactly your best guess of the probability the seller accepted the buyer's offer.

Figure C5 presents the buyer's belief reporting screen for the *Complete Information treatment* in panel (a) and for the *Neither Knows* treatment in panel (b).



(a) Buyer's Belief Reporting Screen in the *Complete Information* treatment



(b) Buyer's Belief Reporting Screen in the *Neither Knows* treatment

Figure C5: Buyer's Belief Reporting Screens