APPENDICES (FOR ONLINE PUBLICATION ONLY)

A   Additional Results

Table A.1: *Tokens* version, robustness regression results

	linear probability model of choosing:			
	Low allocation (1)	Equal allocation (2)	High allocation (3)	O-equity allocation (4)
Panel 1: Sample restricted to attention check 1				
N-equity $\implies$ *X allocation*	0.16***	0.19***	0.17***	0.19***
	(0.02)	(0.02)	(0.02)	(0.02)
N	5278	5278	5278	5278
Panel 2: Sample restricted to attention check 2				
N-equity $\implies$ *X allocation*	0.16***	0.20***	0.18***	0.20***
	(0.02)	(0.02)	(0.02)	(0.02)
N	4900	4900	4900	4900
Panel 3: Sample restricted to attention checks 1 and 2				
N-equity $\implies$ *Low allocation*	0.17***	0.20***	0.18***	0.20***
	(0.02)	(0.02)	(0.02)	(0.02)
N	4732	4732	4732	4732
Panel 4: Sample restricted to the first set of decisions participants face				
N-equity $\implies$ *X allocation*	0.18***	0.22***	0.20***	0.21***
	(0.02)	(0.02)	(0.02)	(0.02)
N	2800	2800	2800	2800
Scenario FEs	yes	yes	yes	yes

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered by subject and shown in parentheses. The results are from a linear probability model of choosing the allocation noted in the column header. **N-equity** $\implies$ **X allocation** is an indicator for the N-equity allocation being the X allocation. Scenario FEs include indicators for Scenarios A–G. Data are from the decisions of subjects in Scenarios A–G of the *Tokens* version. The data are further restricted to subjects who did not indicate disagreement when asked if they answered questions carefully, did not indicate disagreement when asked if they understood the study payments, and did not indicate agreement when asked if they answered questions randomly (i.e., pass attention check 1) in Panel 1; subjects who always choose the Equal allocation in Scenario A (i.e., pass attention check 2) in Panel 2; subjects who pass both attention checks in Panel 3; and the first set of 13 decisions (i.e., either all of their small-token decisions or all of their large-token decisions) that each subject made in Panel 4.

Figure A.1: *Tokens* version, allocation choices in additional scenarios

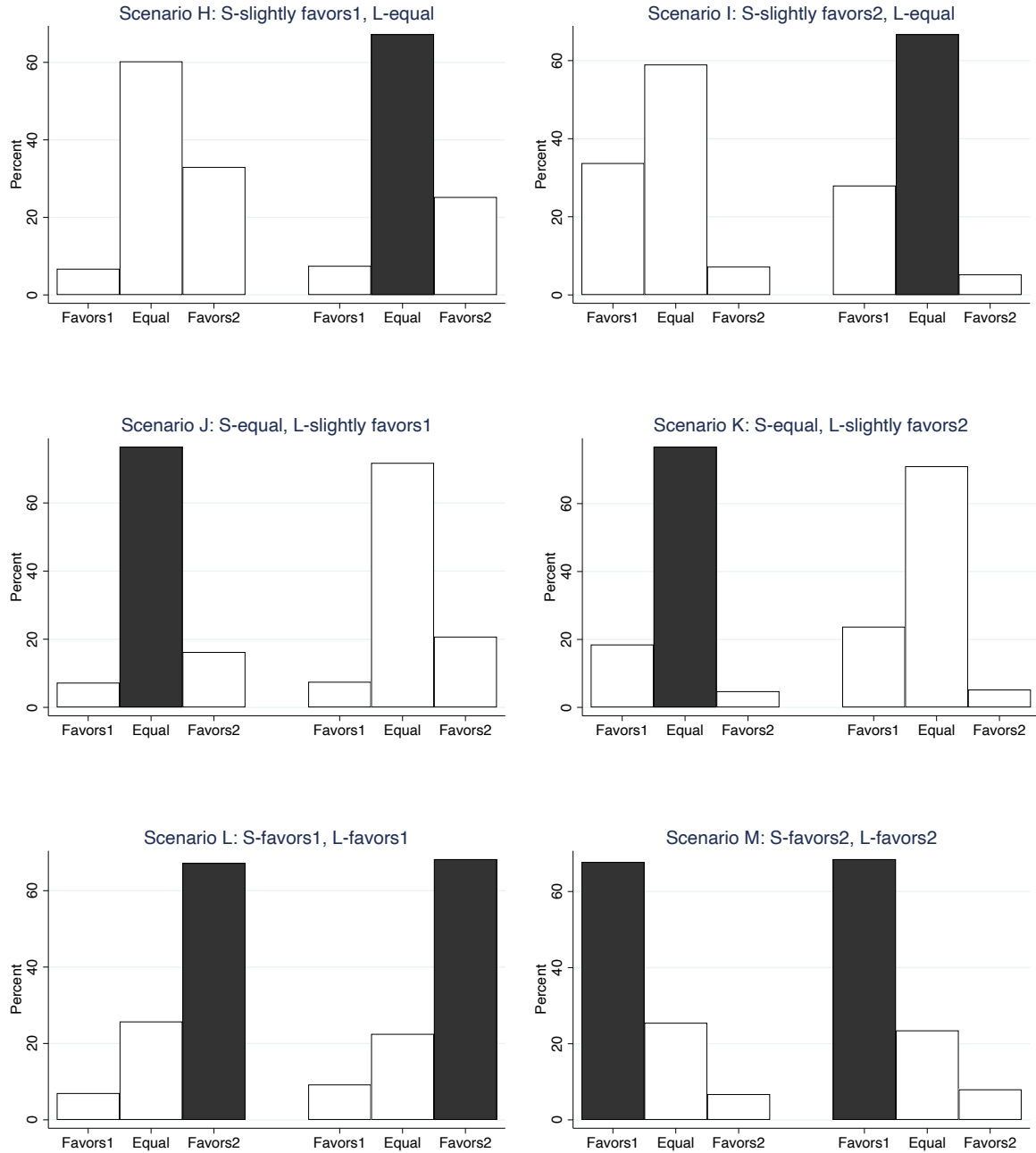Black shaded bar indicates allocation that achieves narrow equity

Table A.2: Additional study versions, regression results

| | Linear probability model of choosing the: | | | |
	Favors1 allocation	Equal allocation	Favors2 allocation	O-equity allocation
Panel 1: Tokens Cognitive Screen version				
N-equity $\implies$ X allocation	0.11***	0.13***	0.11***	0.09***
	(0.02)	(0.02)	(0.02)	(0.02)
N	3976	3976	3976	3976
Panel 2: Tokens High Stakes version, High-Stakes Decisions				
N-equity $\implies$ X allocation	0.13***	0.09***	0.12***	0.11***
	(0.02)	(0.02)	(0.02)	(0.02)
N	2388	2388	2388	2388
Panel 3: Tokens High Stakes Version, Baseline Decisions				
N-equity $\implies$ X allocation	0.12***	0.11***	0.11***	0.13***
	(0.02)	(0.02)	(0.02)	(0.02)
N	2786	2786	2786	2786
Panel 4: Tokens Adding version, Adding Decisions				
N-equity $\implies$ X allocation	0.06***	0.09***	0.05**	0.07***
	(0.02)	(0.02)	(0.02)	(0.02)
N	2388	2388	2388	2388
Panel 5: Tokens Adding version, Baseline Decisions				
N-equity $\implies$ X allocation	0.11***	0.06***	0.06***	0.10***
	(0.02)	(0.02)	(0.02)	(0.02)
N	2786	2786	2786	2786
Panel 6: Tokens First Person version				
N-equity $\implies$ X allocation	0.11***	0.09***	0.08***	0.10***
	(0.02)	(0.02)	(0.01)	(0.01)
N	5600	5600	5600	5600
Scenario FEs	yes	yes	yes	yes

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered by subject and shown in parentheses. The results are from a linear probability model of choosing the allocation noted in the column header. **N-equity $\implies$ X allocation** is an indicator for the allocation that achieves N-equity being the *X* allocation. Scenario FEs include indicators for Scenarios A–G. Data are from the decisions of subjects in Scenarios A–G of the version noted in the panel (except for Panels 2 and 4 since there is no Scenario A in those versions).

Table A.3: Additional study versions, when restricting to the set of participants who pass both attention checks, regression results

	Linear probability model of choosing the:			
	Favors1 allocation	Equal allocation	Favors2 allocation	O-equity allocation
Panel 1: Tokens Cognitive Screen version				
N-equity $\implies$ X allocation	0.21***	0.21***	0.17***	0.18***
	(0.03)	(0.03)	(0.03)	(0.03)
N	1638	1638	1638	1638
Panel 2: Tokens High Stakes version, High-Stakes Decisions				
N-equity $\implies$ X allocation	0.16***	0.13***	0.14***	0.15***
	(0.03)	(0.03)	(0.03)	(0.03)
N	1728	1728	1728	1728
Panel 3: Tokens High Stakes Version, Baseline Decisions				
N-equity $\implies$ X allocation	0.12***	0.13***	0.13***	0.14***
	(0.03)	(0.03)	(0.03)	(0.03)
N	2016	2016	2016	2016
Panel 4: Tokens Adding version, Adding Decisions				
N-equity $\implies$ X allocation	0.08***	0.12***	0.06***	0.09***
	(0.03)	(0.03)	(0.02)	(0.03)
N	1620	1620	1620	1620
Panel 5: Tokens Adding version, Baseline Decisions				
N-equity $\implies$ X allocation	0.14***	0.11***	0.09***	0.14***
	(0.03)	(0.02)	(0.02)	(0.02)
N	1890	1890	1890	1890
Panel 6: Tokens First Person version				
N-equity $\implies$ Low allocation	0.18***	0.20***	0.18***	0.20***
	(0.03)	(0.03)	(0.02)	(0.03)
N	2170	2170	2170	2170
Scenario FEs	yes	yes	yes	yes

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered by subject and shown in parentheses. The results are from a linear probability model of choosing the allocation noted in the column header. **N-equity $\implies$ X allocation** is an indicator for the N-equity allocation being the allocation noted in the column header. Scenario FEs include indicators for Scenarios A–G. Data are from the decisions of subjects, who pass both attention checks detailed in Appendix Table A.1, in Scenarios A–G of the version noted in the panel (except for Panels 2 and 4 since there is no Scenario A in those versions).

Figure A.2: *Money & Time* version, allocation choices for each main scenario

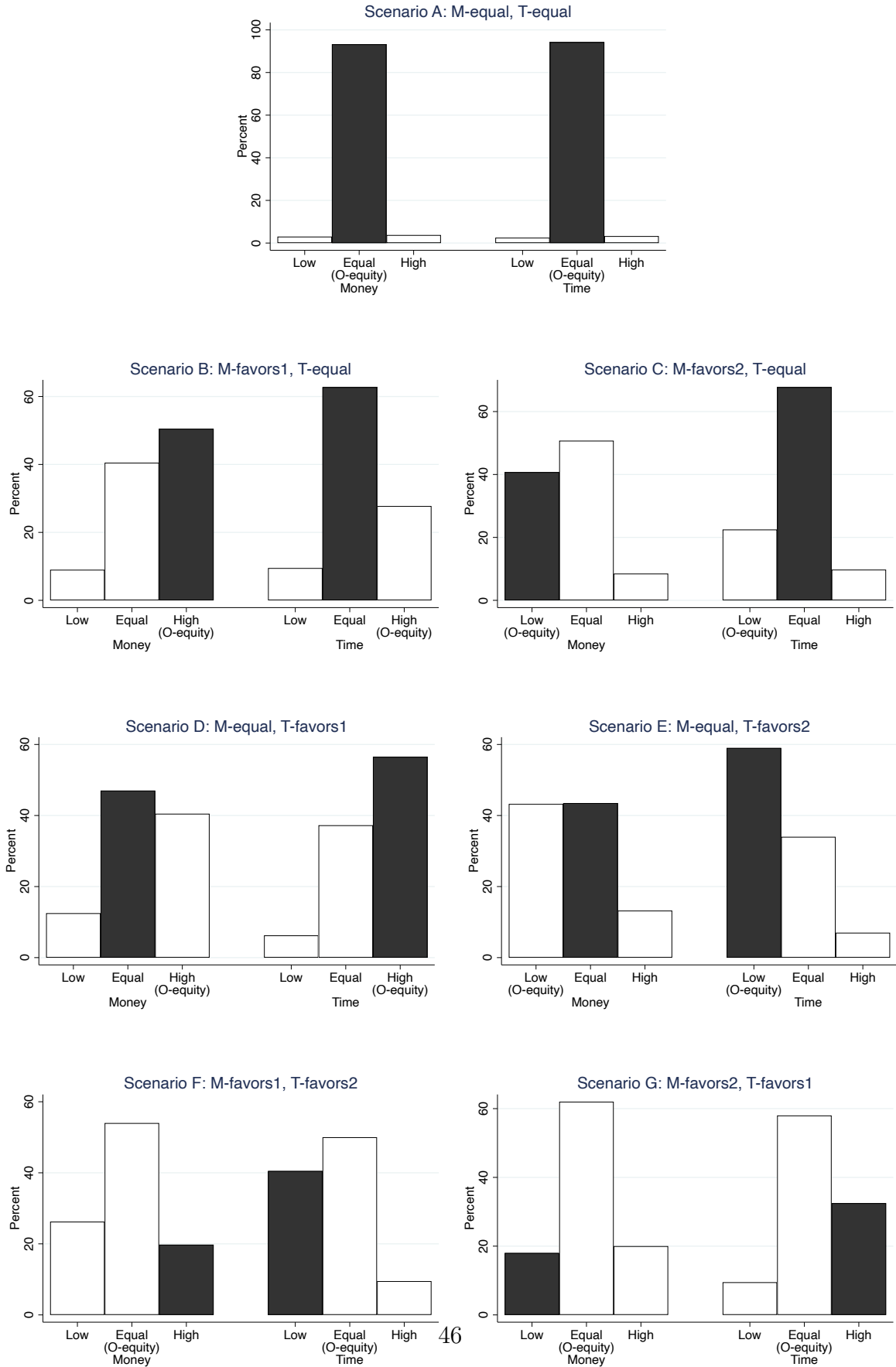Black shaded bar indicates allocation that achieves narrow equity

Table A.4: *Money & Time* version, main regression results

	Low allocation (1)	Equal allocation (2)	High allocation (3)	O-equity allocation (4)
Panel 1: Money-Time version				
N-equity $\implies$ X allocation	0.14***	0.15***	0.15***	0.18***
	(0.01)	(0.01)	(0.01)	(0.012
N	5600	5600	5600	5600
Panel 2: Money-Time version, social appropriateness decisions				
N-equity $\implies$ X allocation	0.37***	0.16***	0.40***	0.44***
	(0.03)	(0.02)	(0.03)	(0.03)
N	5600	5600	5600	5600
Panel 3: Money-Time, First Person version				
N-equity $\implies$ X allocation	0.09***	0.07***	0.05***	0.08***
	(0.01)	(0.01)	(0.01)	(0.01)
N	5600	5600	5600	5600
Panel 4: Money-Time, Uncertainty version				
N-equity $\implies$ X allocation	0.09***	0.09***	0.11***	0.10***
	(0.02)	(0.01)	(0.02)	(0.01)
N	5600	5600	5600	5600
Panel 5: Money-Time version, social appropriateness decisions				
N-equity $\implies$ X allocation	0.20***	0.09***	0.24***	0.22***
	(0.04)	(0.02)	(0.03)	(0.03)
N	5600	5600	5600	5600
Scenario FEs	yes	yes	yes	yes

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered by subject and shown in parentheses. In Panels 1, 3, and 4, the results are from a linear probability model of choosing the allocation noted in the column header. In Panels 2 and 5, the results are from an OLS regression of the social appropriateness of choosing the allocation noted in the column header (on a 1–4 scale). **N-equity $\implies$ X allocation** is an indicator for the N-equity allocation being the X allocation. Scenario FE are indicators for each scenario in which overall equity can be achieved. Data are from the decisions of subjects in the scenarios in which overall equity can be achieved of the version noted in the panel.

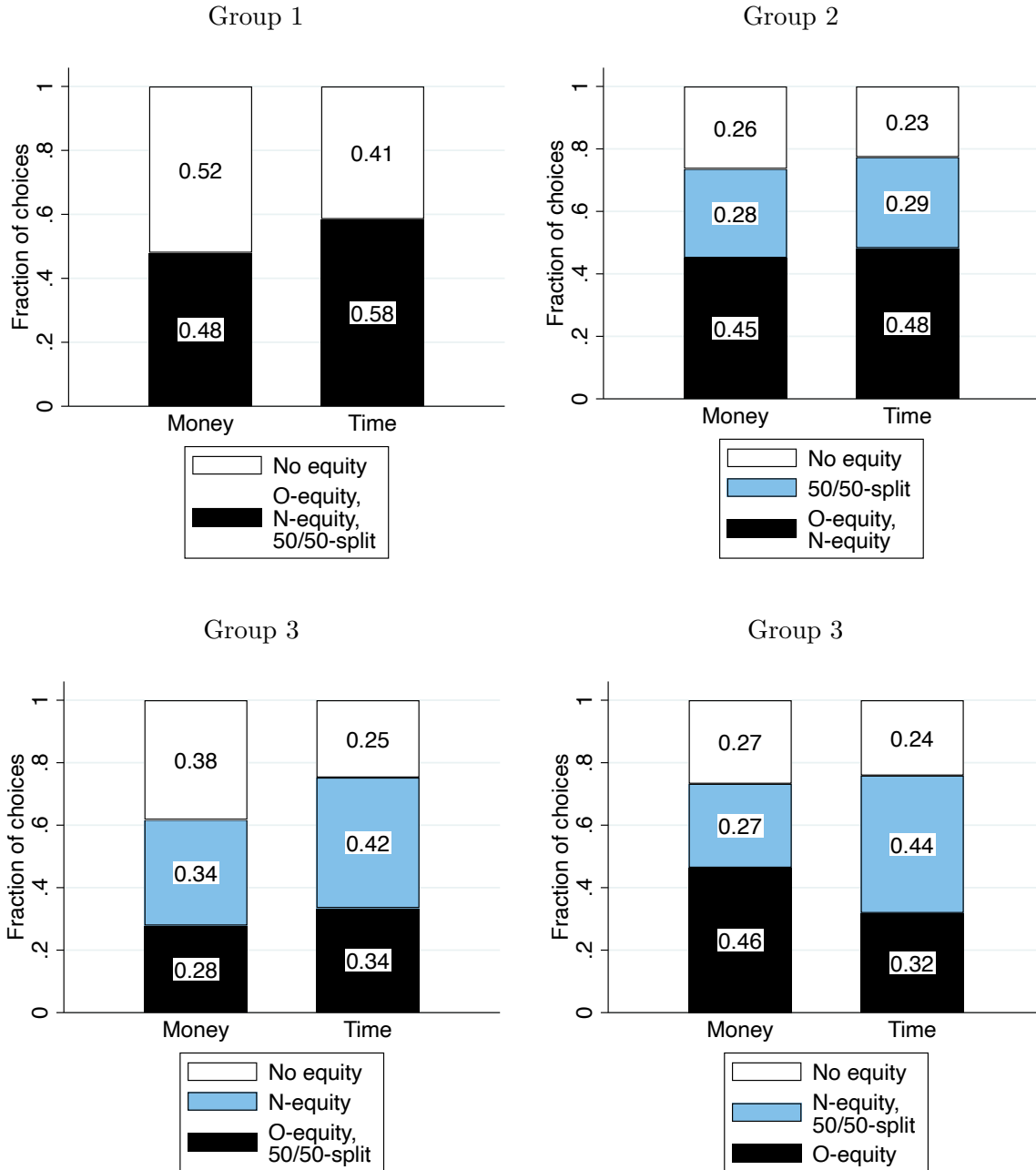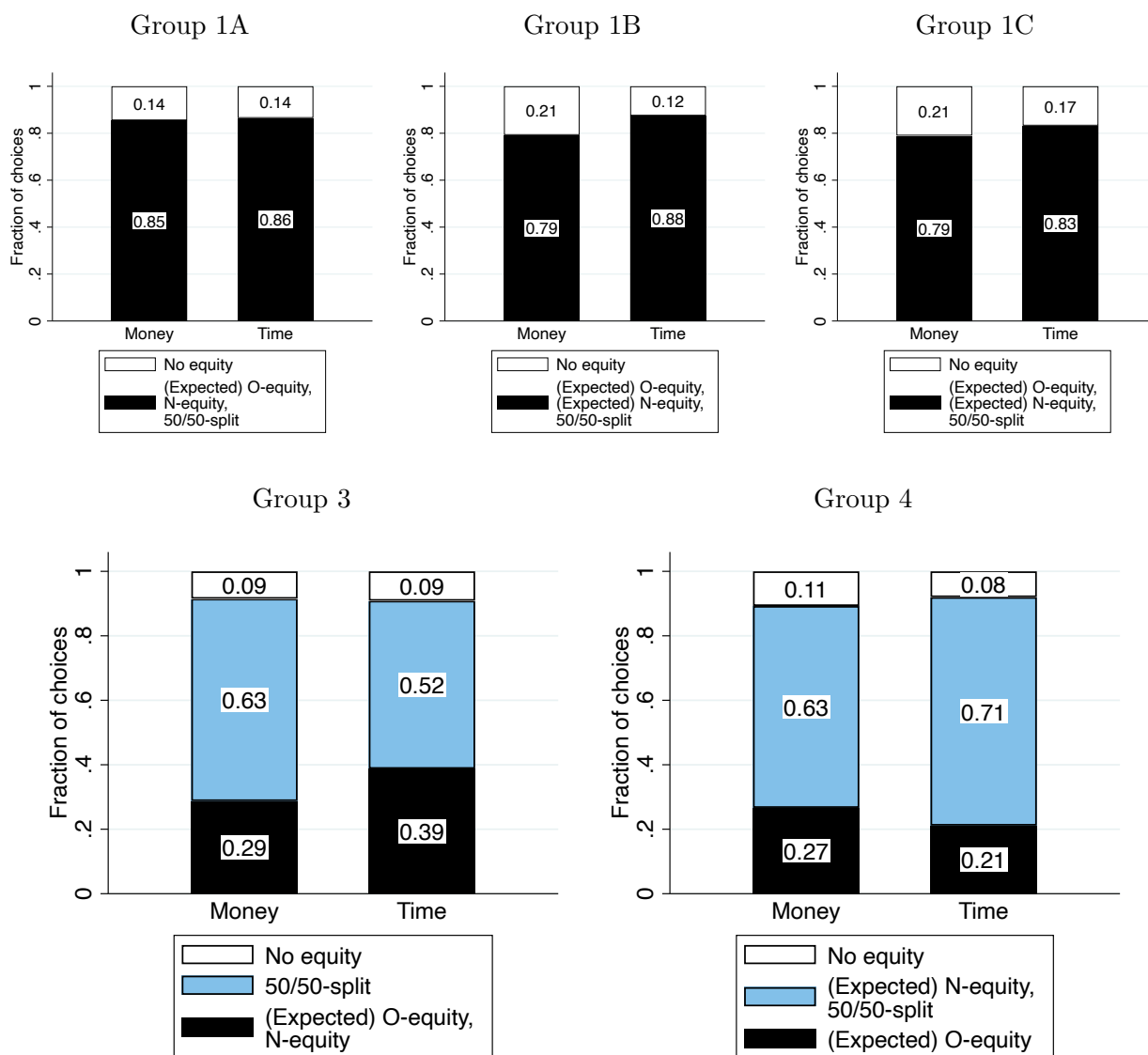Figure A.3: *Money & Time, First-Person* version, allocation choices

Group 1

Group 2

Group 3

Group 3

Figure A.4: *Money & Time, Uncertain Endowments* version, allocation choices

B Additional Design Details

Table B.1: Endowment sets for each additional scenario in *Tokens* version

| Endowment For | | Endowment Difference (P1 – P2) in | | | Labels |
The First Participant (P1)	The Second Participant (P2)	Small Tokens	Large Tokens	Total Payoffs	
140 small tokens, 70 large tokens	120 small tokens, 70 large tokens	+20	0	+20 cents	**Scenario H**: S-slightly favors1, L-equal
140 small tokens, 70 large tokens	160 small tokens, 70 large tokens	−20	0	−20 cents	**Scenario I**: S-slightly favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 60 large tokens	0	+10	+20 cents	**Scenario J**: S-equal, L-slightly favors1
140 small tokens, 70 large tokens	140 small tokens, 80 large tokens	0	−10	−20 cents	**Scenario K**: S-equal, L-slightly favors2
140 small tokens, 70 large tokens	100 small tokens, 50 large tokens	+40	+20	+80 cents	**Scenario L**: S-favors1, L-favors1
140 small tokens, 70 large tokens	180 small tokens, 90 large tokens	−40	−20	-80 cents	**Scenario M**: S-favors2, L-favors2

The table displays the endowments for the first participant and for the second participant as well as the resulting endowment differences in each main scenario. Each small token is worth 1 cent, and each large token is worth 2 cents. In each small token decision, subjects choose between taking away from the first/second participant either: 20/60 small tokens, 40/40 small tokens, or 60/20 small tokens. In each large token decision, subjects choose between taking away from the first/second participant either: 10/30 large tokens, 20/20 large tokens, or 30/10 large tokens.

Table B.2: Equity arising from allocations in each additional scenario in *Tokens* version:

	Small-Token Allocations:			Large-Token Allocations:		
	Favors1 (1)	Equal (2)	Favors2 (3)	Favors1 (4)	Equal (5)	Favors1 (6)
Scenario H: S-slightly favors1, L-equal		50/50-split			50/50-split, N-equity	
Scenario I: S-slightly favors2, L-equal		50/50-split			50/50-split, N-equity	
Scenario J: S-equal, L-slightly favors1		50/50-split, N-equity			50/50-split	
Scenario K: S-equal, L-slightly favors2		50/50-split, N-equity			50/50-split	
Scenario L: S-favors1, L-favors1		50/50-split	N-equity		50/50-split	N-equity
Scenario M: S-favors2, L-favors2	N-equity	50/50-split		N-equity	50/50-split	

The table shows the type of equity arising from each possible allocation that a social planner may choose in each of the additional scenarios (see Table B.1 for details on the endowments in each additional scenario). The Favors1 Allocation takes away 20/60 cents from the first/second participant, the Equal allocation takes away 40/40 cents from the first/second participant, and the Favors2 allocation takes 60/20 cents from the first/second participant. Small-Token allocations take away these cents by taking away the corresponding number of small tokens, and Large-Token allocations take away these cents by taking away the corresponding number of large tokens. O-equity implies that both participants end up with equal total payoffs. N-equity implies that both participants end up with equal numbers of small (large) tokens from small-token (large-token) decision. A 50/50-split implies that a small-token (large-token) decision takes away an equal number of small (large) tokens from both participants—regardless of how many tokens they end up with.

Table B.3: Scenarios in the *Tokens, High Stakes* version

Endowment For		Endowment Difference (P1 – P2) in			
The First Participant (P1)	The Second Participant (P2)	Small Tokens	Large Tokens	Total Payoffs	Labels
140 small tokens, 70 large tokens	140 small tokens, 70 large tokens	0	0	0 cents	**Scenario A** S-equal, L-equal
140 small tokens, 70 large tokens	100 small tokens, 70 large tokens	+40	0	+40 cents	**Scenario B**: S-favors1, L-equal
140 small tokens, 70 large tokens	180 small tokens, 70 large tokens	−40	0	−40 cents	**Scenario C**: S-favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 50 large tokens	0	+20	+40 cents	**Scenario D**: S-equal, L-favors1
140 small tokens, 70 large tokens	140 small tokens, 90 large tokens	0	−20	−40 cents	**Scenario E**: S-equal, L-favors2
140 small tokens, 70 large tokens	100 small tokens, 90 large tokens	+40	−20	0 cents	**Scenario F**: S-favors1, L-favors2
140 small tokens, 70 large tokens	180 small tokens, 50 large tokens	−40	+20	0 cents	**Scenario G**: S-favors2, L-favors1
140 small tokens, 70 large tokens	100 small tokens, 70 large tokens	+40	0	+200 cents	**Scenario B-High**: S-favors1, L-equal
140 small tokens, 70 large tokens	180 small tokens, 70 large tokens	−40	0	−200 cents	**Scenario C-High**: S-favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 50 large tokens	0	+20	+200 cents	**Scenario D-High**: S-equal, L-favors1
140 small tokens, 70 large tokens	140 small tokens, 90 large tokens	0	−20	−200 cents	**Scenario E-High**: S-equal, L-favors2
140 small tokens, 70 large tokens	100 small tokens, 90 large tokens	+40	−20	0 cents	**Scenario F-High**: S-favors1, L-favors2
140 small tokens, 70 large tokens	180 small tokens, 50 large tokens	−40	+20	0 cents	**Scenario G-High**: S-favors2, L-favors1

The table displays the endowments for the first participant and for the second participant as well as the resulting endowment differences in each main scenario. In Scenarios A to G, each small token is worth 1 cent, and each large token is worth 2 cents. In Scenarios B-High to G-High, each small token is worth 5 cents, and each large token is worth 10 cents. In each small token decision, subjects choose between taking away from the first/second participant either: 20/60 small tokens, 40/40 small tokens, or 60/20 small tokens. In each large token decision, subjects choose between taking away from the first/second participant either: 10/30 large tokens, 20/20 large tokens, or 30/10 large tokens.

Table B.4: Scenarios in the *Tokens, Adding* version

Endowment For		Endowment Difference (P1 – P2) in			
The First Participant (P1)	The Second Participant (P2)	Small Tokens	Large Tokens	Total Payoffs	Labels
140 small tokens, 70 large tokens	140 small tokens, 70 large tokens	0	0	0 cents	**Scenario A**: S-equal, L-equal
140 small tokens, 70 large tokens	100 small tokens, 70 large tokens	+40	0	+40 cents	**Scenario B**: S-favors1, L-equal
140 small tokens, 70 large tokens	180 small tokens, 70 large tokens	−40	0	−40 cents	**Scenario C**: S-favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 50 large tokens	0	+20	+40 cents	**Scenario D**: S-equal, L-favors1
140 small tokens, 70 large tokens	140 small tokens, 90 large tokens	0	−20	−40 cents	**Scenario E**: S-equal, L-favors2
140 small tokens, 70 large tokens	100 small tokens, 90 large tokens	+40	−20	0 cents	**Scenario F**: S-favors1, L-favors2
140 small tokens, 70 large tokens	180 small tokens, 50 large tokens	−40	+20	0 cents	**Scenario G**: S-favors2, L-favors1
140 small tokens, 70 large tokens	100 small tokens, 70 large tokens	+40	0	+40 cents	**Scenario B-Add**: S-favors1, L-equal
140 small tokens, 70 large tokens	180 small tokens, 70 large tokens	−40	0	−40 cents	**Scenario C-Add**: S-favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 50 large tokens	0	+20	+40 cents	**Scenario D-Add**: S-equal, L-favors1
140 small tokens, 70 large tokens	140 small tokens, 90 large tokens	0	−20	−40 cents	**Scenario E-Add**: S-equal, L-favors2
140 small tokens, 70 large tokens	100 small tokens, 90 large tokens	+40	−20	0 cents	**Scenario F-Add**: S-favors1, L-favors2
140 small tokens, 70 large tokens	180 small tokens, 50 large tokens	−40	+20	0 cents	**Scenario G-Add**: S-favors2, L-favors1

The table displays the endowments for the first participant and for the second participant as well as the resulting endowment differences in each main scenario. Each small token is worth 1 cent, and each large tokens is worth 2 cents. In Scenarios A to G, in each small token decision, subjects choose between taking away from the first/second participant either: 20/60 small tokens, 40/40 small tokens, or 60/20 small tokens; and in each large token decision, subjects choose between taking away from the first/second participant either: 10/30 large tokens, 20/20 large tokens, or 30/10 large tokens. In Scenarios B-Add to G-Add, in each small token decision, subjects choose between giving the first/second participant either: 20/60 additional small tokens, 40/40 additional small tokens, or 60/20 additional small tokens; and in each large token decision, subjects choose between giving the first/second participant either: 10/30 additional large tokens, 20/20 additional large tokens, or 30/10 additional large tokens.

Table B.5: Scenarios in the *Tokens, First Person* version

Endowment For		Endowment Difference (Subject – Other) in			
Subject	Other Participant	Small Tokens	Large Tokens	Total Payoffs	Labels
140 small tokens, 70 large tokens	140 small tokens, 70 large tokens	0	0	0 cents	**Scenario A:** S-equal, L-equal
140 small tokens, 70 large tokens	100 small tokens, 70 large tokens	+40	0	+40 cents	**Scenario B**: S-favors1, L-equal
140 small tokens, 70 large tokens	180 small tokens, 70 large tokens	−40	0	−40 cents	**Scenario C**: S-favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 50 large tokens	0	+20	+40 cents	**Scenario D**: S-equal, L-favors1
140 small tokens, 70 large tokens	140 small tokens, 90 large tokens	0	−20	−40 cents	**Scenario E**: S-equal, L-favors2
140 small tokens, 70 large tokens	100 small tokens, 90 large tokens	+40	−20	0 cents	**Scenario F**: S-favors1, L-favors2
140 small tokens, 70 large tokens	180 small tokens, 50 large tokens	−40	+20	0 cents	**Scenario G**: S-favors2, L-favors1
140 small tokens, 70 large tokens	120 small tokens, 70 large tokens	+20	0	+20 cents	**Scenario H**: S-slightly favors1, L-equal
140 small tokens, 70 large tokens	160 small tokens, 70 large tokens	−20	0	−20 cents	**Scenario I**: S-slightly favors2, L-equal
140 small tokens, 70 large tokens	140 small tokens, 60 large tokens	0	+10	+20 cents	**Scenario J**: S-equal, L-slightly favors1
140 small tokens, 70 large tokens	140 small tokens, 80 large tokens	0	−10	−20 cents	**Scenario K**: S-equal, L-slightly favors2
140 small tokens, 70 large tokens	100 small tokens, 50 large tokens	+40	+20	+80 cents	**Scenario L**: S-favors1, L-favors1
140 small tokens, 70 large tokens	180 small tokens, 90 large tokens	−40	−20	-80 cents	**Scenario M**: S-favors2, L-favors2

The table displays the endowments for the decision-making subject and for the other participant as well as the resulting endowment differences in each scenario. Each small token is worth 1 cent, and each large token is worth 2 cents. In each small token decision, subjects choose between taking away from themselves/the other participant either: 20/60 small tokens, 40/40 small tokens, or 60/20 small tokens. In each large token decision, subjects choose between taking away from themselves/the other participant either: 10/30 large tokens, 20/20 large tokens, or 30/10 large tokens.

Table B.6: Scenarios in the *Money-Time* version

Endowment For		Endowment Diff (P1 – P2) in			
Participant 1	Participant 2	Money	Time	Total Payoffs	Labels
200 cents, $T - 60t$	200 cents, $T - 60t$	0	0	0	**Scenario A:** M-equal, T-equal
200 cents, $T - 60t$	200 cents $- \Delta$, $T - 60t$	$+\Delta$	0	$+\Delta$	**Scenario B**: M-favors1,T-equal
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t$	$-\Delta$	0	$-\Delta$	**Scenario C**: M-favors2, T-equal
200 cents, $T - 60t$	200 cents, $T - 60t - \Delta$	0	$+\Delta$	$+\Delta$	**Scenario D**: M-equal, T-favors1
200 cents, $T - 60t$	200 cents, $T - 60t + \Delta$	0	$-\Delta$	$-\Delta$	**Scenario E**: M-equal, T-favors2
200 cents, $T - 60$	200 cents $- \Delta$, $T - 60t + \Delta$	$+\Delta$	$-\Delta$	0	**Scenario F**: M-favors1, T-favors2
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t - \Delta$	$-\Delta$	$+\Delta$	0	**Scenario G**: M-favors2, T-favors1
200 cents, $T - 60t$	200 cents $- \frac{1}{2}\Delta$, $T - 60t$	$+\frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	**Scenario H**: M-slightly favors1, T-equal
200 cents, $T - 60t$	200 cents $+ \frac{1}{2}\Delta$, $T - 60t$	$-\frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	**Scenario I**: M-slightly favors2, T-equal
200 cents, $T - 60t$	200 cents, $T - 60t - \frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	$+\frac{1}{2}\Delta$	**Scenario J**: M-equal, T-slightly favors1
200 cents, $T - 60t$	200 cents, $T - 60t + \frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	$-\frac{1}{2}\Delta$	**Scenario K**: M-equal, T-slightly favors2
200 cents, $T - 60t$	200 cents $- \Delta$, $T - 60t - \Delta$	$+\Delta$	$+\Delta$	$+2\Delta$	**Scenario L**: M-favors1, T-favors1
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t + \Delta$	$-\Delta$	$-\Delta$	-2Δ	**Scenario M**: M-favors2, T-favors2

The table displays the endowments for the first participant and the second participant as well as the resulting endowment differences in each scenario. In each money decision, subjects choose between taking away from the first/second participant either: M_{10}/M_{50} cents, M_{30}/M_{30} cents, or M_{50}/M_{10} cents. In each time decision, subjects choose between taking away from the first/second participant either: 10t/50t, 30t/30t, or 10t/50t units of time, which is associated with having to complete an additional 10/50 tasks, 30/30 tasks, or 10/50 tasks, respectively. In money, $\Delta = M_{50} - M_{10}$, which is denominated in cents. In time, $\Delta = 50t - 10t = 40t$, and thus the amount of time associated with having to complete an additional 40 tasks.

Table B.7: Scenarios in the *Money-Time, First Person* version

Endowment For		Endowment Diff (You - Other) in			
You	Other Participant	Money	Time	Total Payoffs	Labels
200 cents, $T - 60t$	200 cents, $T - 60t$	0	0	0	**Scenario A:** M-equal, T-equal
200 cents, $T - 60t$	200 cents $- \Delta$, $T - 60t$	$+\Delta$	0	$+\Delta$	**Scenario B**: M-favors1,T-equal
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t$	$-\Delta$	0	$-\Delta$	**Scenario C**: M-favors2, T-equal
200 cents, $T - 60t$	200 cents, $T - 60t - \Delta$	0	$+\Delta$	$+\Delta$	**Scenario D**: M-equal, T-favors1
200 cents, $T - 60t$	200 cents, $T - 60t + \Delta$	0	$-\Delta$	$-\Delta$	**Scenario E**: M-equal, T-favors2
200 cents, $T - 60$	200 cents $- \Delta$, $T - 60t + \Delta$	$+\Delta$	$-\Delta$	0	**Scenario F**: M-favors1, T-favors2
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t - \Delta$	$-\Delta$	$+\Delta$	0	**Scenario G**: M-favors2, T-favors1
200 cents, $T - 60t$	200 cents $- \frac{1}{2}\Delta$, $T - 60t$	$+\frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	**Scenario H**: M-slightly favors1, T-equal
200 cents, $T - 60t$	200 cents $+ \frac{1}{2}\Delta$, $T - 60t$	$-\frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	**Scenario I**: M-slightly favors2, T-equal
200 cents, $T - 60t$	200 cents, $T - 60t - \frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	$+\frac{1}{2}\Delta$	**Scenario J**: M-equal, T-slightly favors1
200 cents, $T - 60t$	200 cents, $T - 60t + \frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	$-\frac{1}{2}\Delta$	**Scenario K**: M-equal, T-slightly favors2
200 cents, $T - 60t$	200 cents $- \Delta$, $T - 60t - \Delta$	$+\Delta$	$+\Delta$	$+2\Delta$	**Scenario L**: M-favors1, T-favors1
200 cents, $T - 60t$	200 cents $+ \Delta$, $T - 60t + \Delta$	$-\Delta$	$-\Delta$	-2Δ	**Scenario M**: M-favors2, T-favors2

The table displays the endowments for the decision-making subject and for the other participant as well as the resulting endowment differences in each scenario. In each money decision, subjects choose between taking away from the first/second participant either: M_{10}/M_{50} cents, M_{30}/M_{30} cents, or M_{50}/M_{10} cents. In each time decision, subjects choose between taking away from the first/second participant either: 10t/50t, 30t/30t, or 10t/50t units of time, which is associated with having to complete an additional 10/50 tasks, 30/30 tasks, or 10/50 tasks, respectively. In money, $\Delta = M_{50} - M_{10}$, which is denominated in cents. In time, $\Delta = 50t - 10t = 40t$, and thus the amount of time associated with having to complete an additional 40 tasks.

Table B.8: Scenarios in the *Money-Time, Uncertain Endowments* version

| Endowment For | | (Expected) Endowment Diff (P1 – P2) in | | | |
Participant 1	Participant 2	Money	Time	Total Payoffs	Labels
200 cents, $T - 60t$	$E(M) = 200$ cents, $T - 60t$	0	0	0	**Scenario A1:** E(M-equal), T-equal
200 cents, $T - 60t$	200 cents, $E(T) = T - 60t$	0	0	0	**Scenario A2:** M-equal, E(T-equal)
200 cents, $T - 60t$	$E(M) = 200$ cents, $E(T) = T - 60t$	0	0	0	**Scenario A3:** E(M-equal), E(T-equal)
200 cents, $T - 60t$	200 cents $- \Delta$, $E(T) = T - 60t$	$+\Delta$	0	$+\Delta$	**Scenario B:** M-favors1, E(T-equal)
200 cents, $T - 60t$	200 cents $+ \Delta$, $E(T) = T - 60t$	$-\Delta$	0	$-\Delta$	**Scenario C:** M-favors2, E(T-equal)
200 cents, $T - 60t$	$E(M) = 200$ cents, $T - 60t - \Delta$	0	$+\Delta$	$+\Delta$	**Scenario D:** E(M-equal), T-favors1
200 cents, $T - 60t$	$E(M) = 200$ cents, $T - 60t + \Delta$	0	$-\Delta$	$-\Delta$	**Scenario E:** E(M-equal), T-favors2
200 cents, $T - 60t$	200 cents $- \frac{1}{2}\Delta$, $E(T) = T - 60t$	$+\frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	**Scenario H:** M-slightly favors1, E(T-equal)
200 cents, $T - 60t$	200 cents $+ \frac{1}{2}\Delta$, $E(T) = T - 60t$	$-\frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	**Scenario I:** M-slightly favors2, E(T-equal)
200 cents, $T - 60t$	$E(M) = 200$ cents, $T - 60t - \frac{1}{2}\Delta$	0	$+\frac{1}{2}\Delta$	$+\frac{1}{2}\Delta$	**Scenario J:** E(M-equal), T-slightly favors1
200 cents, $T - 60$	$E(M) = 200$ cents, $T - 60t + \frac{1}{2}\Delta$	0	$-\frac{1}{2}\Delta$	$-\frac{1}{2}\Delta$	**Scenario K:** E(M-equal), T-slightly favors2

The table displays the endowments for the first participant and the second participant as well as the resulting endowment differences in each scenario. In each money decision, subjects choose between taking away from the first /second participant either: M_{10}/M_{50} cents, M_{30}/M_{30} cents, or M_{50}/M_{10} cents. In each time decision, subjects choose between taking away from the first/second participant either: 10t/50t, 30t/30t, or10t/50t units of time that is associated with having to complete an additional 10/50 tasks, 30/30 tasks, or 10/50 tasks, respectively. In money, $\Delta = M_{50} - M_{10}$, which is denominated in cents. In time, $\Delta = 50t - 10t = 40t$, and thus the amount of time associated with having to complete an additional 40 tasks. $E(M) = X$ indicates a money endowment that involves uncertainty but is equal to, in expectation, X. $E(T) = Y$ indicates a time endowment that involves uncertainty but is equal to, in expectation, Y.

C Additional Discussion

C.1 Results from the *Tokens, Final Allocation 1* version and the *Tokens, Final Allocation 2* version

For those interested in examining whether narrow equity concerns—even if confounded with a 50/50-split—persist in environments without endowments, we ran the *Tokens, Final Allocation 1* version and the *Tokens, Final Allocation 2* version. In the *Tokens, Final Allocation 1* version, we remove endowments from the payoff component that subjects can influence. When subjects make small-token (large-token) decisions, they directly choose how many small (large) tokens go to each subject (i.e., endowments only influence the other type of token). In the *Tokens, Final Allocation 2* version, we eliminate the role of endowments altogether. Subjects choose between allocation choices that directly determine the number of small tokens and large tokens for both participants.

Those who encouraged us to consider an environment without endowments were also interested in a further simplification of the decision environments. Consequently, in these study versions, subjects faced fewer scenarios (five rather than 13) and faced each scenario more times (four times rather than twice, both as a social planner and as the first participant). Second, to proceed to make choices in these study versions, subjects had to correctly answer all three screening questions that are detailed in in our description of the *Tokens, Cognitive Screen* version (see Section 4.4). Design and implementation details for the *Tokens, Final Allocation 1* version are detailed in Appendix D.6 and for the *Tokens, Final Allocation 2* version are detailed in Appendix D.7.

The results from these studies—across a range of decisions made either from a social planner or first-party perspective—are all consistent with the presence of narrow equity concerns. Since narrow equity concerns always imply the same allocation choice (i.e., the Equal allocation), we can no longer ask whether narrow equity concerns result in different allocation choices when subjects make small-token and large-token decisions. However, as shown in Appendix Table C.1, we can confirm that subjects frequently choose an allocation that achieves narrow equity over other allocations, even allocations that achieve overall equity.

Table C.1: Fraction choosing each allocation in *Tokens Final Allocation 1* version and *Tokens Final Allocation 2* version

	Small-token decisions					Large-token decisions				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel 1: Tokens Final Allocation 1 version, Social-Planner Decisions										
Favors1 allocation	0.19	0.18	0.11	0.37	0.62	0.19	0.18	0.13	0.49	0.64
Equal allocation (Narrow Equity)	0.29	0.51	0.85	0.50	0.27	0.22	0.37	0.86	0.40	0.24
Favors2 allocation	0.52	0.31	0.04	0.13	0.11	0.59	0.44	0.02	0.11	0.11
N	340	340	340	340	340	340	340	340	340	340
Panel 2: Tokens Final Allocation 1 version, First-Person Decisions										
Favors1 allocation	0.47	0.45	0.37	0.63	0.71	0.44	0.44	0.37	0.66	0.74
Equal allocation (Narrow Equity)	0.28	0.39	0.60	0.30	0.20	0.29	0.36	0.60	0.25	0.20
Favors2 allocation	0.26	0.16	0.03	0.07	0.09	0.27	0.20	0.03	0.09	0.06
N	340	340	340	340	340	340	340	340	340	340
Panel 3: Tokens Final Allocation 2 version, Social-Planner Decisions										
Favors1 allocation	0.26	0.26	0.60	0.23	0.27	0.58	0.26	0.53	0.26	0.40
Equal allocation (Narrow Equity)	0.67	0.29	0.27	0.69	0.32	0.31	0.41	0.36	0.47	0.48
Favors2 allocation	0.07	0.45	0.13	0.09	0.41	0.12	0.33	0.11	0.27	0.12
N	337	337	337	337	337	337	337	337	337	337
Panel 4: Tokens Final Allocation 2 version, First-Person Decisions										
Favors1 allocation	0.51	0.58	0.78	0.52	0.54	0.76	0.57	0.75	0.56	0.71
Equal allocation (Narrow Equity)	0.43	0.18	0.16	0.43	0.26	0.17	0.28	0.18	0.32	0.23
Favors2 allocation	0.06	0.23	0.06	0.04	0.19	0.07	0.15	0.07	0.12	0.07
N	337	337	337	337	337	337	337	337	337	337

The decisions in these study versions do not map to the Scenarios detailed in our other studies given the lack of endowments. In the *Tokens Final Allocation 1* version, in each small-token decision, the first participant is always endowed with 70 large tokens while the second participant is randomly endowed with 90, 80, 70, 60, or 50 in columns 1-5, respectively; and the subject must choose between giving the following number of small tokens to the first/second participant: 120/80 in the Favors1 allocation, 100/100 in the Equal allocation, or 80/120 in the Favors2 allocation. In the *Tokens Final Allocation 1* version, in each large-token decision, the same monetary values are involved in column 6/7/8/9/10 as column 1/2/3/4/5 but the small tokens are replaced with large tokens and vice-versa. In the *Tokens Final Allocation 2* version, all that differs is that the endowments are combined with the allocation choices so that the allocation choices are over the corresponding final allocations of small and large tokens.

C.2   Notes on the exchange rate procedure used in the *Money & Time* versions

In the *Money & Time* version, each subject is in the role of a social planner deciding about the payoffs of other participants, and so we need to elicit the subject's belief of the exchange rate that other participants face when trading-off money and tasks. Since social planners will be making decisions on behalf of these participants, it is the social planner's belief—not the participants' actual preferences—that is relevant for aggregating across money and time.[34] Consequently, we

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[34]Saying that it is the social planner's belief that is relevant assumes the social planner is benevolent and wants to maximize the utility of the two participants. To the extent that a social planner is paternalistic or not

ask subjects how much money the first participant should give up to avoid doing 10, 30, and 50 additional time-burning tasks. We elicit these values using incentivized multiple price lists. They are incentivized in that subjects' choices may be randomly selected to be implemented for their first participant. We then use these values to construct a "personalized" exchange rate for each subject that we apply to all of their decisions in the study.[35]

More specifically, this process (shown in detail in Appendix D.8) involves measuring the associated monetary cost of participants doing 10 additional tasks (denoted here as M_{10}) and doing 50 additional tasks (denoted here as M_{50}). We use these values to establish the exchange rate, namely the difference in money (denoted here as $\Delta M = M_{50} - M_{10}$) that is equivalent to a subject completing $\Delta T = 50 - 10 = 40$ additional tasks. As described below, this exchange rate allows us to set the value of the options in the money decisions equivalent to the value of the options in the time decisions.

In the time decisions, subjects must take away time by assigning the first and second participant: (1) 10 and 50 more tasks, respectively; (2) 30 more tasks each; or (3) 50 and 10 more tasks, respectively. In the money decisions, subjects choose between the first and second participant giving up: (1) M_{10} and M_{50} cents, respectively; (2) $\frac{M_{10}+M_{50}}{2}$ cents each; or (3) M_{50} and M_{10} cents, respectively.

We make four assumptions and decisions in using these price lists to construct exchange rates. First, we only use the first and third values (i.e., for 10 and 50 tasks) to determine the exchange rate, and we impose a linearity assumption when considering how participants value doing 30 additional tasks. Using the M_{10} and M_{50} values elicited from the multiple price lists are (see Appendix D.8 and Table B.6), we assume a linear exchange rate between money and time, implying that each subject views the first participant doing 30 additional tasks as equivalent to the first participant giving up $\frac{M_{10}+M_{50}}{2}$ cents. We made this assumption so that the total amount of money that each pair of participants must give up is the same for all money allocations (i.e., it is always $M_{10} + M_{50}$ cents), which helps us to focus on equity rather than efficiency concerns. Nonetheless, one might worry that if a subject's preference over time is not linear, we might fail to effectively normalize the money and time choices. In particular, we might be worried that subjects believe participants face convex costs of completing tasks, which might provide an efficiency rationale to equalize the number of tasks that the participants must complete. To address this potential concern, we can use our estimates from the M_{30} multiple price list, which asked about the monetary cost that the subject views as equivalent to doing 30 additional tasks. When we do this, we confirm that our results are robust to subjects whose multiple price list

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benevolent, their preferences might be more nuanced. Still, however, it is the social planner's preferred exchange rate, which is what we elicit, that is relevant for their subsequent decisions.

[35]We say the exchange rate is personalized in that we allow each subject to have a different belief about how participants in the study should trade off time-burning tasks and money, since subjects may differ in their views of the difficulty or time cost of time-burning tasks.

elicitations (i.e., M_{10}, M_{30}, and M_{50}) imply linear, concave, and convex costs of additional tasks.

Second, the price lists only identify bounds (i.e., rather than point estimates) of the trade-off between tasks and money. More specifically, our multiple price lists aim to estimate M_{10} and M_{50} but can only establish a range of valuations based on where subjects switch from choosing 10 additional tasks to sacrificing money. In particular, $M_{10} \in [\underline{M_{10}}, \overline{M_{10}}]$ and $M_{50} \in [\underline{M_{50}}, \overline{M_{50}}]$. Where $\overline{M_{10}}$ is the last monetary value for which the subject prefers to do 10 additional tasks and $\underline{M_{10}}$ is the first monetary value for which the subject prefers to give up that amount of money than do the 10 tasks (and similarly for M_{50}). To show that our results are not sensitive to how we choose M_{10} and M_{50} from these ranges, we randomly assigned half of our subjects the smallest possible $\Delta M = M_{50} - M_{10}$ (and thus the smallest possible exchange rate) allowed by their choices (i.e., we set $M_{10} = \overline{M_{10}}$ and $M_{50} = \underline{M_{50}}$). We randomly assigned the other half of our subjects the largest possible $\Delta M = M_{50} - M_{10}$ (and thus the largest possible exchange rate) allowed by their choices (i.e., we set $M_{10} = \underline{M_{10}}$ and $M_{50} = \overline{M_{50}}$). When we separately consider these two groups, we confirm that our results are robust to both types of calibrations including the smallest and largest exchange rates (and ΔM values).

Third, 25% of subjects do not report a strictly positive value for the first participant's time, which means we cannot calculate an exchange rate for these subjects. In particular, 25% of subjects answered the M_{10} and M_{50} multiple price lists to indicate that the marginal cost of additional tasks was too small, namely $\underline{M_{50}} \leq \overline{M_{10}}$. In these cases, we randomly assigned subjects values of (M_{10}, M_{50}) from either $(4, 52)$, $(12, 92)$, or $(24, 56)$. That said, our results are robust to including or excluding subjects with randomly assigned calibration values.

Fourth, we assume subjects adopt the same exchange rate for both the first and second participants that they face. More specifically, we ask subjects to complete multiple price lists for the first participant, whose endowment does not change across decisions, rather than asking them to complete multiple price lists for the second participant as well. One advantage of running our study on MTurk, however, is that all participants face similar market wages on the MTurk platform; their opportunity costs of spending more time on our study (namely, not being able to spend that time completing a different HIT on MTurk) are thus likely to be comparable. In addition, in the *Money & Time* and *Money & Time, Uncertain Endowments* versions of our study, there is no reason for subjects to hold different beliefs about the first and second participants since they are both anonymous MTurk workers.[36]

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[36]Such a concern might be more relevant in the *Money & Time, First Person* version of our study, where subjects are asked calibration values for themselves and could theoretically hold systematically different preferences about the value of time for the other participant. Indeed, participants may be motivated to hold different beliefs about the value of time for the other participant to justify allocations that benefit themselves. Contrary to viewing such a possibility as a concern, however, we view it as a factor that contributes to the *Money & Time, First Person* version being both a demanding and interesting test of our findings.

D   Experimental Instructions

There are ten study versions. Section D.1 presents the full instructions of the *Tokens* version. Section D.2 presents the full instructions of the *Tokens, Cognitive Screen* version. Section D.3 details how the *Tokens, High Stakes* version differs from the *Tokens* version. Section D.4 details how the *Tokens, Adding* version differs from the *Tokens* version. Section D.5 details how the *Tokens, First Person* version differs from the *Tokens* version. Section D.6 presents the full instructions of the *Tokens, Final Allocation 1* version. Section D.7 presents the full instructions of the *Tokens, Final Allocation 2* version. Section D.8 presents the full instructions of the *Money & Time* version. Section D.9 details how the *Money & Time, First Person* version differs from the *Money & Time* version. Section D.10 details how the *Money & Time, Uncertain Endowments* version differs from the *Money & Time* version.

D.1   Experimental Instructions: The *Tokens* version

After consenting to participate in the study, subjects are informed of the $4 study completion fee and of the opportunity to earn additional payment. Figure D.1 shows how this payment information is explained and the corresponding understanding question that each subject must answer correctly in order to proceed.

Figure D.1: Payment Information

Your Payment: For completing this study, you will receive a minimum payment of $4 within 24 hours. To complete this study, you will make a series of decisions -- followed by a short survey. Following certain instructions, you will be asked understanding questions. You must answer these understanding questions correctly in order to proceed to complete the study.

Understanding Question: Which of the following statements is true?

○ For completing this study, I will receive $4 within 24 hours.

○ For completing this study, I may or may not receive $4 within 24 hours.

○ For completing this study, I will receive no payment.

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The subjects then proceed to the study instructions. The subjects learn that they will make decisions for a future study involving two participants who are called their "first participant" and their "second participant." In particular, the subjects learn that they will have to choose between

options that require each of the two participants to give up some number of small tokens or large tokens. Figure D.2 shows how this information is explained and the corresponding understanding questions that each subject must answer correctly in order to proceed.

Figure D.2: Instructions and Understanding Questions

A Future Study: In a future study, other Mturk participants will be asked to answer a series of questions. As part of their payment, they will receive a random endowment of small tokens and large tokens. Before the participants complete the study, they will have to give up some of their tokens. At the end of the study, any tokens that a participant gets to keep are turned into cents and paid to that participant as a bonus. Each small token is worth 1 cent. Each large token is worth 2 cents.

Your Decisions: You will be paired with two randomly selected Mturk participants who will complete the future study. We will refer to your two Mturk participants as "your first participant" and "your second participant."

Your two participants will face one randomly selected scenario out of 26 possible scenairos that vary in how many tokens they are endowed with. We will refer to the randomly selected scenario as the "scenario-that-counts." For each of the 26 scenarios, you will be asked to choose between one of three allocations. Each allocation will specify how many small tokens each of your participants must give up out of their endowments of small tokens or how many large tokens each of your participants must give up out of their endowments of large tokens. The allocation you choose in the scenario-that-counts will then be implemented and thus determine how many small tokens and how many large tokens each of your participants gets to keep.

Understanding Question: In the scenario-that-counts, the allocation you choose...

- ○ will not influence how many tokens each of your participants gets to keep.
- ○ will determine how many tokens each of your participants gets to keep.
- ○ may or may not determine how many tokens each of your participants gets to keep.

Understanding Question: As a bonus, the participants will receive...

- ○ 1 cent for each small token and 1 cent for each large token that they get to keep.
- ○ 2 cents for each small token and 1 cent for each large token that they get to keep.
- ○ 1 cent for each small token and 2 cents for each large token that they get to keep.

Understanding Question: Consider a scenario where, relative to your second participant, your first participant will be endowed with a larger number of small tokens and a larger number of large tokens -- in particular:

Your first participant: will be endowed with **120** small tokens and **50** large tokens
Your second participant: will be endowed with **110** small tokens and **40** large tokens

If the allocation that is implemented requires your first participant to give up **40** small tokens and your second participant to give up **20** small tokens, how many tokens would each of your participants get to keep?

- ○ **Your first participant**: will get to keep **80** small tokens and **50** large tokens
  Your second participant: will get to keep **90** small tokens and **40** large tokens
- ○ **Your first participant**: will get to keep **120** small tokens and **10** large tokens
  Your second participant: will get to keep **110** small tokens and **20** large tokens
- ○ **Your first participant**: will get to keep **120** small tokens and **50** large tokens
  Your second participant: will get to keep **110** small tokens and **40** large tokens

The subjects then face 26 decisions, arising from 13 unique endowment sets. These 13 endowment sets only differ in the initial endowment of the second participant, since the first participant always has an initial endowment of 140 small tokens and 70 large tokens. See Tables 1 and B.1 for details on these endowment sets. While all subjects face the same decisions, the order of these 26 decisions is randomized at the subject level as follows. Each subject is randomized to either make the 13 small-token decisions first or the 13 large-token decisions first. Within each set of 13 decisions, the order of the endowments for the second participants are randomized. Figure D.3 shows an example of a small-token decision where the subject is asked to decide how many small tokens the first and second participant must give up. Figure D.4 shows an example of a large-token decision where the subject is asked to decide how many large tokens the first and second participant must give up.

Figure D.3: Example of a Small-Token Decision

Scenario 1 (out of 26)

Recall that participants will receive 1 cent for each small token and 2 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with the same number of small tokens and with a smaller number of large tokens** -- in particular:

Your first participant: will be endowed with **140** small tokens and **70** large tokens
Your second participant: will be endowed **140** small tokens and **90** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of your participants to give up?

○ **My first participant**: give up **20** small tokens
My second participant: give up **60** small tokens

○ **My first participant**: give up **40** small tokens
My second participant: give up **40** small tokens

○ **My first participant**: give up **60** small tokens
My second participant: give up **20** small tokens

Figure D.4: Example of a Large-Token Decision

Scenario 14 (out of 26)

Recall that participants will receive 1 cent for each small token and 2 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a smaller number of small tokens and with a smaller number of large tokens** -- in particular:

Your first participant: will be endowed with **140** small tokens and **70** large tokens
Your second participant: will be endowed **180** small tokens and **90** large tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of your participants to give up?

○ **My first participant**: give up **10** large tokens
My second participant: give up **30** large tokens

○ **My first participant**: give up **20** large tokens
My second participant: give up **20** large tokens

○ **My first participant**: give up **30** large tokens
My second participant: give up **10** large tokens

To complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their $4 completion payment and additional payment is distributed to their two participants (who participate in a future study) according to their choice in the allocation-that-counts.

D.2   Experimental Instructions *Tokens, Cognitive Screen* version

We recruited 400 Amazon Mechanical Turk to complete the *Tokens, Cognitive Screen* version in July 2020. A total of 284 subjects correctly answered the screening questions and completed this version of the study. The results support the prevalence of N-equity allocations.

After consenting to participate in the study, subjects are asked three screening questions that require them to correctly report the monetary value of: (i) 50 small tokens, (ii) 100 large tokens, and (iii) the sum of 140 small tokens and 40 large tokens. The subjects who answered one or more of these questions incorrectly were screened out of our study, did not participate further, and only received a $3.00 completion payment. The 284 subjects who answered all of these questions correctly were screened into our study, made 26 choices and received a $4.00 completion payment. The difference in completion payments—$3.00 versus $4.00—was known to subjects when they are answering the screening questions. Figure D.5 shows how this information is explained and the corresponding screening questions. For the 284 subjects who are screened into our study, they view a decision screen explaining that they will now make additional choices (see Figure D.6 and then face the exact same decision screens as those detailed in our main *Tokens* version (see Appendix D.1).

Figure D.5: Screening Questions

If you answer any of the following three questions incorrectly, you will NOT have the opportunity to earn any bonus payment from this study.

If you answer all three questions correctly, you will guarantee yourself a bonus payment of at least $1.00.

In this study, you will make decisions that involve small tokens and large tokens.

Each small token is equal to 1 cent.

Each large token is equal to 2 cents.

Given this, please answer the following three questions.

Understanding Question: How many cents are 100 small tokens worth?

50	100	150	200

Understanding Question: How many cents are 50 large tokens worth?

50	100	150	200

Understanding Question: How many cents are 140 small tokens and 40 large tokens worth?

100	180	220	320

Figure D.6: Payment Information

That's correct!

You will now make a series of decisions in Parts 1 and 2 -- followed by a short survey.

If you complete this study, you will receive a minimum payment from this HIT of $3.00 within 24 hours. Also:

- You are guaranteed to receive a bonus payment of at least $1.00, and

- Additional payments may result from your decisions in Parts 1 and 2. In particular, one of those two parts will be randomly selected as the part-that-counts. Any additional payment that results from the part-that-counts will be distributed in accordance with the instructions in that part.

Understanding Question: Which of the following statements is true?

> For completing this study, I will receive $3.00 within 24 hours. I will also receive a bonus payment of at least $1.00. Any additional payment that results from the part-that-counts will also be distributed.

> For completing this study, I will receive $3.00 within 24 hours. No additional payments may result.

> For completing this study, I will receive $3.00 within 24 hours. Also, the decisions I make in Parts 1 and 2 cannot influence any additional payments from this study.

D.3   Experimental Instructions: The *Tokens, High Stakes* version

We recruited 199 Amazon Mechanical Turk participants to complete the *Tokens, High Stakes* version in April 2020. After consenting to participate in the study, subjects are informed of the $3 study completion fee and of the opportunity to earn additional payment. Figure D.7 shows how this payment information is explained and the corresponding understanding question that each subject must answer correctly in order to proceed.

Figure D.7: Payment Information

Your Payment: For completing this study, you will receive a minimum payment of $3 within 24 hours. To complete this study, you will make a series of decisions -- followed by a short survey. Following certain instructions, you will be asked understanding questions. You must answer these understanding questions correctly in order to proceed to complete the study.

Understanding Question: Which of the following statements is true?

For completing this study, I will receive $3 within 24 hours.

For completing this study, I may or may not receive $3 within 24 hours.

For completing this study, I will receive no payment.

The subjects then proceed to the study instructions. The subjects learn that they will make decisions for a future study involving two participants who are called their "first participant" and their "second participant." In particular, the subjects learn that they will have to choose between options that result in each participants receiving some number of small tokens or large tokens. Figure D.8 shows how this information is explained and the corresponding understanding questions that each subject must answer correctly in order to proceed.

Figure D.8: Instructions and Understanding Questions

A Future Study: In a future study, other Mturk participants will be asked to answer a series of questions. As part of their payment, they will receive a random endowment of small tokens and large tokens. Before the participants complete the study, they will have to give up some of their tokens. At the end of the study, any tokens that a participant gets to keep are turned into cents and paid to that participant as a bonus. Each small token is worth some number of cents, and each large token is worth some number of cents.

Your Decisions: You will be paired with two randomly selected Mturk participants who will complete the future study. We will refer to your two Mturk participants as "your first participant" and "your second participant."

Your two participants will face one randomly selected scenario out of 26 possible scenarios that vary in how many tokens they are endowed with. We will refer to the randomly selected scenario as the "scenario-that-counts." For each of the 26 scenarios, you will be asked to choose between one of three allocations. Each allocation will specify how many small tokens each of your participants must give up out of their endowments of small tokens or how many large tokens each of your participants must give up out of their endowments of large tokens. The allocation you choose in the scenario-that-counts will then be implemented and thus determine how many small tokens and how many large tokens each of your participants gets to keep.

Understanding Question: In the scenario-that-counts, the allocation you choose...

will not influence how many tokens each of your participants gets to keep.

will determine how many tokens each of your participants gets to keep.

may or may not determine how many tokens each of your participants gets to keep.

Understanding Question: In the scenario-that-counts, if each small token is worth 1 cent and each large token is worth 2 cents, the participants will receive, as a bonus, ...

1 cent for each small token and 1 cent for each large token that they get to keep.

5 cents for each small token and 10 cents for each large token that they get to keep.

1 cent for each small token and 2 cents for each large token that they get to keep.

Understanding Question: In the scenario-that-counts, if each small token is worth 5 cents and each large token is worth 10 cents, the participants will receive, as a bonus, ...

> 1 cent for each small token and 1 cent for each large token that they get to keep.

> 5 cents for each small token and 10 cents for each large token that they get to keep.

> 1 cent for each small token and 2 cents for each large token that they get to keep.

Understanding Question: Consider a scenario where, relative to your second participant, your first participant will be endowed with a larger number of small tokens and a larger number of large tokens -- in particular:

> **Your first participant**: will be endowed with **120** small tokens and **50** large tokens
> **Your second participant**: will be endowed with **110** small tokens and **40** large tokens

If the allocation that is implemented requires your first participant to give up **40** small tokens and your second participant to give up **20** small tokens, how many tokens would each of your participants get to keep?

> **Your first participant**: will get to keep **80** small tokens and **50** large tokens
> **Your second participant**: will get to keep **90** small tokens and **40** large tokens

> **Your first participant**: will get to keep **120** small tokens and **10** large tokens
> **Your second participant**: will get to keep **110** small tokens and **20** large tokens

> **Your first participant**: will get to keep **120** small tokens and **50** large tokens
> **Your second participant**: will get to keep **110** small tokens and **40** large tokens

The subjects then face 26 decisions, arising from 13 unique endowment sets. These 13 endowment sets only differ in the initial endowment of the second participant, since the first participant always has an initial endowment of 140 small tokens and 70 large tokens. See Table B.3 for details on these endowment sets. While all subjects face the same decisions, the order of these 26 decisions is randomized at the subject level as follows. First, each subject is randomized to either face the 14 baseline decisions of the 12 high-stakes decisions first. Second, within each set of these decisions, each subject is randomized to either either face the small-token decisions or the large-token decisions first. Third, within each set of those decisions, the order of the endowments for the second participants are randomized. Figure D.9 shows an example of a small-token baseline decision, Figure D.10 shows an example of a large-token baseline decision, Figure D.11 shows an example of a small-token high-stakes decision, and Figure D.12 shows an example of a large-token high-stakes decision.

Figure D.9: Example of a Small-Token Baseline Decision

Scenario 1 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a larger number of small tokens and with a smaller number of large tokens** -- in particular:

    Your first participant: will be endowed with **110** small tokens and **55** large tokens

    Your second participant: will be endowed with **70** small tokens and **75** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of your participants to give up?

My first participant: give up **20** small tokens
My second participant: give up **60** small tokens

My first participant: give up **40** small tokens
My second participant: give up **40** small tokens

My first participant: give up **60** small tokens
My second participant: give up **20** small tokens

Figure D.10: Example of a Large-Token Baseline Decision

Scenario 8 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a smaller number of small tokens and with a larger number of large tokens** -- in particular:

Your first participant: will be endowed with **110** small tokens and **55** large tokens

Your second participant: will be endowed with **150** small tokens and **35** large tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of your participants to give up?

My first participant: give up **10** large tokens
My second participant: give up **30** large tokens

My first participant: give up **20** large tokens
My second participant: give up **20** large tokens

My first participant: give up **30** large tokens
My second participant: give up **10** large tokens

Figure D.11: Example of a Small-Token High-Stakes Decision

Scenario 20 (out of 26)

If this is the scenario-that-counts, participants will receive 5 cents for each small token and 10 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with the same number of small tokens and with a larger number of large tokens** -- in particular:

Your first participant: will be endowed with **110** small tokens and **55** large tokens

Your second participant: will be endowed with **110** small tokens and **35** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of your participants to give up?

My first participant: give up **20** small tokens
My second participant: give up **60** small tokens

My first participant: give up **40** small tokens
My second participant: give up **40** small tokens

My first participant: give up **60** small tokens
My second participant: give up **20** small tokens

Figure D.12: Example of a Large-Token High-Stakes Decision

Scenario 21 (out of 26)

If this is the scenario-that-counts, participants will receive 5 cents for each small token and 10 cents for each large token that they get to keep.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with the same number of small tokens and with a larger number of large tokens** -- in particular:

    Your first participant: will be endowed with **110** small tokens and **55** large tokens

    Your second participant: will be endowed with **110** small tokens and **35** large tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of your participants to give up?

My first participant: give up **10** large tokens
My second participant: give up **30** large tokens

My first participant: give up **20** large tokens
My second participant: give up **20** large tokens

My first participant: give up **30** large tokens
My second participant: give up **10** large tokens

To complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their $3 completion payment and additional payment is distributed to their two participants (who participate in a future study) according to their choice in the allocation-that-counts.

D.4 Experimental Instructions: The *Tokens, Adding* version

We recruited 199 Amazon Mechanical Turk participants to complete the *Tokens, Adding* version in April 2020. After consenting to participate in the study, subjects are informed of the $3 study completion fee and of the opportunity to earn additional payment. Figure D.13 shows how this payment information is explained and the corresponding understanding question that each subject must answer correctly in order to proceed.

Figure D.13: Payment Information

Your Payment: For completing this study, you will receive a minimum payment of $3 within 24 hours. To complete this study, you will make a series of decisions -- followed by a short survey. Following certain instructions, you will be asked understanding questions. You must answer these understanding questions correctly in order to proceed to complete the study.

Understanding Question: Which of the following statements is true?

> For completing this study, I will receive $3 within 24 hours.

> For completing this study, I may or may not receive $3 within 24 hours.

> For completing this study, I will receive no payment.

The subjects then proceed to the study instructions. The subjects learn that they will make decisions for a future study involving two participants who are called their "first participant" and their "second participant." In particular, the subjects learn that they will have to choose between options that result in each participants receiving some number of small tokens or large tokens. Figure D.14 shows how this information is explained and the corresponding understanding questions that each subject must answer correctly in order to proceed.

Figure D.14: Instructions and Understanding Questions

A Future Study: In a future study, other Mturk participants will be asked to answer a series of questions. As part of their payment, they will receive a bonus that is solely determined by the number of small tokens and large tokens they end up with. Each small token is worth 1 cent, and each large token is worth 2 cents. They will start with a random endowment of small tokens and large tokens.

Your Decisions: You will be paired with two randomly selected Mturk participants who will complete the future study. We will refer to your two Mturk participants as "your first participant" and "your second participant."

Your two participants will face one randomly selected scenario out of 26 possible scenarios that vary in how many tokens they are endowed with. We will refer to the randomly selected scenario as the "scenario-that-counts." For each of the 26 scenarios, you will be asked to choose between one of three allocations. Each allocation will specify changes to the number of small tokens each of your participants will end up with or changes to the number of large tokens each of your participants will end up with. The allocation you choose in the scenario-that-counts will then be implemented and determine how many small tokens and how many large tokens each of your participants will end up with.

Understanding Question: In the scenario-that-counts, the allocation you choose...

will not influence how many tokens each of your participants ends up with.

will determine how many tokens each of your participants ends up with.

may or may not determine how many tokens each of your participants ends up with.

Understanding Question: In the scenario-that-counts, if each small token is worth 1 cent and each large token is worth 2 cents, the participants will receive, as a bonus, ...

1 cent for each small token and 1 cent for each large token that they end up with.

5 cents for each small token and 10 cents for each large token that they end up with.

1 cent for each small token and 2 cents for each large token that they end up with.

Understanding Question: Consider a scenario where, relative to your second participant, your first participant will be endowed with a larger number of small tokens and a larger number of large tokens -- in particular:

Your first participant: will be endowed with **120** small tokens and **50** large tokens
Your second participant: will be endowed with **110** small tokens and **40** large tokens

If the allocation chosen in the scenario-that-counts requires your first participant to give up **40** small tokens from their endowment of small tokens and your second participant to give up **20** small tokens from their endowment of small tokens, how many tokens would each of your participants end up with?

Your first participant: will end up with **80** small tokens and **50** large tokens
Your second participant: will end up with **90** small tokens and **40** large tokens

Your first participant: will end up with **120** small tokens and **10** large tokens
Your second participant: will end up with **110** small tokens and **20** large tokens

Your first participant: will end up with **120** small tokens and **50** large tokens
Your second participant: will end up with **110** small tokens and **40** large tokens

Understanding Question: Consider a scenario where, relative to your second participant, your first participant will be endowed with a larger number of small tokens and a larger number of large tokens -- in particular:

Your first participant: will be endowed with **120** small tokens and **50** large tokens
Your second participant: will be endowed with **110** small tokens and **40** large tokens

If the allocation chosen in the scenario-that-count requires your first participant to get an additional **20** large tokens and your second participant to get an additional **10** large tokens, how many tokens would each of your participants end up with?

Your first participant: will end up with **140** small tokens and **50** large tokens
Your second participant: will end up with **120** small tokens and **40** large tokens

Your first participant: will end up with **120** small tokens and **70** large tokens
Your second participant: will end up with **110** small tokens and **50** large tokens

Your first participant: will end up with **120** small tokens and **50** large tokens
Your second participant: will end up with **110** small tokens and **40** large tokens

The subjects then face 26 decisions, arising from 13 unique endowment sets. These 13 endowment sets only differ in the initial endowment of the second participant, since the first participant always has an initial endowment of 140 small tokens and 70 large tokens. See Table B.4 for details on these endowment sets. While all subjects face the same decisions, the order of these 26 decisions is randomized at the subject level as follows. First, each subject is randomized to either face the 14 baseline decisions of the 12 adding decisions first. Second, within each set of these decisions, each subject is randomized to either either face the small-token decisions or the large-token decisions first. Third, within each set of those decisions, the order of the endowments for the second participants are randomized. Figure D.15 shows an example of a small-token baseline decision, Figure D.16 shows an example of a large-token baseline decision, Figure D.17 shows an example of a small-token adding decision, and Figure D.18 shows an example of a large-token adding decision.

Figure D.15: Example of a Small-Token Baseline Decision

Scenario 1 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they end up with.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a smaller number of small tokens and with a larger number of large tokens** -- in particular:

    Your first participant: will be endowed with **140** small tokens and **70** large tokens
    Your second participant: will be endowed with **180** small tokens and **50** large tokens

If this is the scenario-that-counts, how would you like to change the number of small tokens each of your participants ends up with?

    My first participant: give up **20** small tokens
    My second participant: give up **60** small tokens

    My first participant: give up **40** small tokens
    My second participant: give up **40** small tokens

    My first participant: give up **60** small tokens
    My second participant: give up **20** small tokens

Figure D.16: Example of a Large-Token Baseline Decision

Scenario 8 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they end up with.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a smaller number of small tokens and with a larger number of large tokens** -- in particular:

> **Your first participant**: will be endowed with **140** small tokens and **70** large tokens
> **Your second participant**: will be endowed with **180** small tokens and **50** large tokens

If this is the scenario-that-counts, how would you like to change the number of large tokens each of your participants ends up with?

> **My first participant:** give up **10** large tokens
> **My second participant:** give up **30** large tokens

> **My first participant:** give up **20** large tokens
> **My second participant:** give up **20** large tokens

> **My first participant:** give up **30** large tokens
> **My second participant:** give up **10** large tokens

Figure D.17: Example of a Small-Token Adding Decision

Scenario 15 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they end up with.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a smaller number of small tokens and with the same number of large tokens** -- in particular:

    Your first participant: will be endowed with **140** small tokens and **70** large tokens

    Your second participant: will be endowed with **180** small tokens and **70** large tokens

If this is the scenario-that-counts, how would you like to change the number of small tokens each of your participants ends up with?

My first participant: gets an additional **20** small tokens
My second participant: gets an additional **60** small tokens

My first participant: gets an additional **40** small tokens
My second participant: gets an additional **40** small tokens

My first participant: gets an additional **60** small tokens
My second participant: gets an additional **20** small tokens

Figure D.18: Example of a Large-Token Adding Decision

Scenario 22 (out of 26)

If this is the scenario-that-counts, participants will receive 1 cent for each small token and 2 cents for each large token that they end up with.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be endowed with a larger number of small tokens and with a smaller number of large tokens** -- in particular:

    Your first participant: will be endowed with **140** small tokens and **70** large tokens
    Your second participant: will be endowed with **100** small tokens and **90** large tokens

If this is the scenario-that-counts, how would you like to change the number of large tokens each of your participants ends up with?

> **My first participant:** gets an additional **10** large tokens
> **My second participant:** gets an additional **30** large tokens

> **My first participant:** gets an additional **20** large tokens
> **My second participant:** gets an additional **20** large tokens

> **My first participant:** gets an additional **30** large tokens
> **My second participant:** gets an additional **10** large tokens

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To complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their $3 completion payment and additional payment is distributed to their two participants (who participate in a future study) according to their choice in the allocation-that-counts.

D.5 Experimental Instructions: The *Tokens, First Person* version

We recruited 400 Amazon Mechanical Turk participants to complete the *Tokens, First Person* version in April 2019.

In the *Tokens, First Person* version, the subjects who make decisions are assigned to the role of the first participant, so each decision involves allocating small or large tokens between oneself and another study participant assigned to the role of the second participant. More specifically, for the *Tokens, First Person* version, all that differs from the *Tokens* version (see Appendix D.1) is the perspective subjects must take when they are making decisions.

Thus, the corresponding differences are shown in the following figures: Figure D.19 shows how the instructions are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed; Figure D.20 shows an example of a small-token decision; and Figure D.21 shows an example of a large-token decision.

Figure D.19: Instructions and Understanding Questions

A Future Study: In a future study, other Mturk participants will be asked to answer a series of questions. As part of their payment, they will receive a random endowment of small tokens and large tokens. Before the participants complete the study, they will have to give up some of their tokens.

Your Decisions: You will be paired with one randomly selected Mturk participant who will complete the future study. We will refer to this participant as "your partner." Your partner will face one randomly selected scenario out of 26 possible scenarios that vary in how many tokens they are endowed with. We will refer to the randomly selected scenario as the "scenario-that-counts." For each of the 26 scenarios, you will be asked to choose between one of three allocations. Each allocation will specify how many small tokens you and your partner must give up or how many large tokens you and your partner must give up. The allocation you choose in the scenario-that-counts will then be implemented and thus determine how many small tokens and how many large tokens each of you gets to keep.

Bonus Payments: At the end of the study, any tokens you and your partner get to keep are turned into cents and paid to you and your partner, respectively, as a bonus. Each small token will be turned into 1 cent. Each large token will be turned into 2 cents.

Understanding Question: In the scenario-that-counts, the allocation you choose...

- ○ will not influence how many tokens you and your partner get to keep.
- ○ will determine how many tokens you and your partner get to keep.
- ○ may or may not determine how many tokens you and your partner get to keep.

Understanding Question: As a bonus, you and your partner will receive...

- ○ 1 cent for each small token and 1 cent for each large token that you and your partner get to keep, respectively.
- ○ 2 cents for each small token and 1 cent for each large token that you and your partner get to keep, respectively.
- ○ 1 cent for each small token and 2 cents for each large token that you and your partner get to keep, respectively.

Understanding Question: Consider a scenario where, relative to your partner, you will be endowed with a larger number of small tokens and a larger number of large tokens -- in particular:

    You: will be endowed with **120** small tokens and **50** large tokens
    Your partner: will be endowed with **110** small tokens and **40** large tokens

If the allocation that is implemented requires you to give up **40** small tokens and your partner to give up **20** small tokens, how many tokens would each of you get to keep?

- ○ **You**: will get to keep **80** small tokens and **50** large tokens
  Your partner: will get to keep **90** small tokens and **40** large tokens
- ○ **You**: will get to keep **120** small tokens and **10** large tokens
  Your partner: will get to keep **110** small tokens and **20** large tokens
- ○ **You**: will get to keep **120** small tokens and **50** large tokens
  Your partner: will get to keep **110** small tokens and **40** large tokens

Figure D.20: Example of a Small-Token Decision

Scenario 15 (out of 26)

Recall that you and your partner will receive 1 cent for each small token and 2 cents for each large token that you and your partner get to keep, respectively.

If this is the scenario-that-counts, relative to your partner, **you will be endowed with a smaller number of small tokens and with a larger number of large tokens** -- in particular:

You: will be endowed with **140** small tokens and **70** large tokens
Your partner: will be endowed **180** small tokens and **50** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of you to give up?

○ **You**: give up **20** small tokens
Your partner: give up **60** small tokens

○ **You**: give up **40** small tokens
Your partner: give up **40** small tokens

○ **You**: give up **60** small tokens
Your partner: give up **20** small tokens

Figure D.21: Example of a Large-Token Decision

Scenario 1 (out of 26)

Recall that you and your partner will receive 1 cent for each small token and 2 cents for each large token that you and your partner get to keep, respectively.

If this is the scenario-that-counts, relative to your partner, **you will be endowed with a larger number of small tokens and with a smaller number of large tokens** -- in particular:

You: will be endowed with **140** small tokens and **70** large tokens
Your partner: will be endowed **100** small tokens and **90** large tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of you to give up?

○ **You**: give up **10** large tokens
Your partner: give up **30** large tokens

○ **You**: give up **20** large tokens
Your partner: give up **20** large tokens

○ **You**: give up **30** large tokens
Your partner: give up **10** large tokens

After the study is completed, each subject receives their $4 completion payment and additional payment is distributed to them and the second participant (who participates in a future study) according to their choice in the allocation-that-counts.

D.6 Experimental Instructions *Tokens, Final Allocation 1* version

We recruited 400 Amazon Mechanical Turk to complete the *Tokens, Final Allocation 1* version in March 2019. A total of 340 subjects correctly answered the screening questions and completed this version of the study. The results support the prevalence of N-equity allocations.

After consenting to participate in the study, subjects are asked three screening questions that require them to correctly report the monetary value of: (i) 50 small tokens, (ii) 100 large tokens, and (iii) the sum of 140 small tokens and 40 large tokens. The 60 subjects who answered one or more of these questions incorrectly were screened out of our study, did not participate further, and only received a $1.50 completion payment. The 340 subjects who answered all of these questions correctly were screened into our study, made 20 choices and received a $3.00 completion payment. The difference in completion payments—$1.50 versus $3.00—was known to subjects when they are answering the screening questions. Subjects who are screened into our study may also receive a bonus if the randomly selected decision is one of the decisions when the subject is in the role of the first participant. Figure D.22 shows how this information is explained and the corresponding screening questions.

Figure D.22: Screening Questions

If you answer any of the following three questions incorrectly, you will NOT have the opportunity to earn any bonus payment from this study.

If you answer all three questions correctly, you will guarantee yourself a bonus payment of at least $1.50.

In this study, you will make decisions that involve small tokens and large tokens.

Each small token is equal to 1 cent.

Each large token is equal to 2 cents.

Given this, please answer the following three questions.

Understanding Question: How many cents are 100 small tokens worth?

| 50 | 100 | 150 | 200 |
| ○ | ○ | ○ | ○ |

Understanding Question: How many cents are 50 large tokens worth?

| 50 | 100 | 150 | 200 |
| ○ | ○ | ○ | ○ |

Understanding Question: How many cents are 140 small tokens and 40 large tokens worth?

| 100 | 180 | 220 | 320 |
| ○ | ○ | ○ | ○ |

Among the participants who are screened into our study, Figure D.23 shows additional payment information for this study and the corresponding understanding question that each subject must answer correctly in order to proceed.

That's correct!

You will now make a series of decisions in Parts 1 and 2 -- followed by a short survey.

If you complete this study, you will receive a minimum payment from this HIT of $1.50 within 24 hours. Also:

- You are guaranteed to receive a bonus payment of at least $1.50, and

- Additional payments may result from your decisions in Parts 1 and 2. In particular, one of those two parts will be randomly selected as the part-that-counts. Any additional payment that results from the part-that-counts will be distributed in accordance with the instructions in that part.

Understanding Question: Which of the following statements is true?

○ For completing this study, I will receive $1.50 within 24 hours. I will also receive a bonus payment of at least $1.50. Any additional payment that results from the part-that-counts will also be distributed.

○ For completing this study, I will receive $1.50 within 24 hours. No additional payments may result.

○ For completing this study, I will receive $1.50 within 24 hours. Also, the decisions I make in Parts 1 and 2 cannot influence any additional payments from this study.

The subjects then proceed to the study instructions about Part 1 (out of the two parts) in the study. Part 1 is randomly determined to either involve 10 "first-person" decisions or 10 "social planner" decisions. Moreover, within each set of these 10 decisions, we randomize, for each subject: whether the subject makes the small-token or large-token decisions first, and the order of decisions within each set of five.

If Part 1 involves the "first-person" decisions, Figure D.24 shows how the instructions are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed. If Part 2 involves "first-person" decisions, all that would differ is the references to Part 1 would be replaced with references to Part 2.

Figure D.24: First-Person Decisions: Instructions and Understanding Questions

Instructions for Part 1 out of 2

At the end of this study, if Part 1 is randomly selected as the part-that-counts, the following will occur:

You will be paired with one randomly selected Mturk participant who will complete a future study. We will refer to this Mturk participant as "your partner."

You and your partner will receive bonus payments that result from one randomly selected scenario out of 10 possible scenarios. We will refer to the randomly selected scenario as the "scenario-that-counts." In particular, at the end of the study, you and your partner will each be given the number of small tokens and large tokens that results from the scenario-that-counts. Any tokens that you and your partner are given will be turned into cents and paid to you and your partner, respectively, as bonus payments. Each small token will be turned into 1 cent. Each large token will be turned into 2 cents.

How many tokens you and you partner are given will, in part, depend on your decisions. In particular, for each of the 10 scenarios, you will be asked to choose between one of three allocations. In some scenarios, it has been randomly determined how many small tokens you and your partner will be given, and which allocation you choose will determine how many large tokens you and your partner will be given. In other scenarios, it has been randomly determined how many large tokens you and your partner will be given, and which allocation you choose will determine how many small tokens you and your partner will be given.

Understanding Question: If Part 1 is randomly selected as the part-that-counts, the allocation you choose in the scenario-that-counts ...

- ○ will not influence how many tokens you and your partner are given.

- ○ will influence how many tokens you and your parnter are given.

- ○ may or may not influence how many tokens you and your partner are given.

Understanding Question: If Part 1 is randomly selected as the part-that-counts, you and your partner will receive...

- ○ 1 cent for each small token and 1 cent for each large token that are given to you and your partner, respectively.

- ○ 2 cents for each small token and 1 cent for each large token that are given to you and your partner, respectively.

- ○ 1 cent for each small token and 2 cents for each large token that are given to you and your partner, respectively.

Understanding Question: Consider a scenario where, relative to your partner, you are given a larger number of large tokens -- in particular:

You: will be given **50** large tokens
Your partner: will be given **40** large tokens

If an allocation is implemented that gives you **40** small tokens and your partner **20** small tokens, how many tokens would each of you be given?

- ○ **You**: will be given **40** small tokens only
Your partner: will be given **20** small tokens only

- ○ **You**: will be given **50** large tokens only
Your partner: will be given **40** large tokens only

- ○ **You**: will be given **40** small tokens and **50** large tokens
Your partner: will be given **20** small tokens and **40** large tokens

If Part 2 involves the "social-planner" decisions, Figure D.25 shows how the instructions are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed. If Part 2 involves "first-person" decisions, all that would differ is the references to Part 1 would be replaced with references to Part 2.

Figure D.25: Social-Planner Decisions: Instructions and Understanding Questions

Instructions for Part 2 out of 2

At the end of this study, if Part 2 is randomly selected as the part-that-counts, the following will occur:

You will be paired with two randomly selected Mturk participants who will complete a future study. We will refer to your two Mturk participants as "your first participant" and "your second participant."

Your participants will receive bonus payments that result from one randomly selected scenario out of 10 possible scenarios. We will refer to the randomly selected scenario as the "scenario-that-counts." In particular, at the end of the study, your participants will each be given the number of small tokens and large tokens that results from the scenario-that-counts. Any tokens that your participants are given will be turned into cents and paid to them as bonus payments. Each small token will be turned into 1 cent. Each large token will be turned into 2 cents.

How many tokens your participants are given will, in part, depend on your decisions. In particular, for each of the 10 scenarios, you will be asked to choose between one of three allocations. In some scenarios, it has been randomly determined how many small tokens your participants will be given, and which allocation you choose will determine how many large tokens they will be given. In other scenarios, it has been randomly determined how many large tokens your participants will be given, and which allocation you choose will determine how many small tokens they will be given.

Understanding Question: If Part 2 is randomly selected as the part-that-counts, the allocation you choose in the scenario-that-counts ...

○ will not influence how many tokens are given to each of your participants.

○ will influence how many tokens are given to each of your participants.

○ may or may not influence how many tokens are given to each of your participants.

Understanding Question: If Part 2 is randomly selected as the part-that-counts, your participants will receive...

○ 1 cent for each small token and 1 cent for each large token that they are given.

○ 2 cents for each small token and 1 cent for each large token that they are given.

○ 1 cent for each small token and 2 cents for each large token that they are given.

Understanding Question: Consider a scenario where, relative to your second participant, your first participant is given a larger number of large tokens -- in particular:

Your first participant: will be given **50** large tokens
Your second participant: will be given **40** large tokens

If an allocation is implemented that gives your first participant **40** small tokens and your second participant **20** small tokens, how many tokens would each of your participants be given?

○ **Your first participant**: will be given **40** small tokens only
Your second participant: will be given **20** small tokens only

○ **Your first participant**: will be given **50** large tokens only
Your second participant: will be given **40** large tokens only

○ **Your first participant**: will be given **40** small tokens and **50** large tokens
Your second participant: will be given **20** small tokens and **40** large tokens

The 10 decisions participants make in each part are as follows. In each small-token decision, the first participant is always endowed with 70 large tokens while the second participant is randomly endowed with either 50, 60, 70, 80, or 90 large tokens. Subjects must choose to give: (1) 120 small tokens to the first participant and 80 small tokens to the second participant; (2) 100 small tokens to each; or (3) 80 small tokens to the first participant and 120 small tokens to the second participant. In each large-token decision, the first participant is always endowed with 140 large tokens while the second participant is randomly endowed with either 100, 120, 140, 160, or 180 small tokens. Subjects must choose to give: (1) 60 large tokens to the first participant and 40 large tokens to the second participant; (2) 50 large tokens to each; or (3) 40 large tokens to the first participant and 60 large tokens to the second participant. Also, Figure D.26 shows an example of a first-person small-token decision; Figure D.27 shows an example of a first-person large-token decision; Figure D.28 shows an example of a social-planner small-token decision; and Figure D.29 shows an example of a social planner large-token decision.

Figure D.26: Example of a First-Person Small-Token Decision

Scenario 1 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, relative to your partner, **you will be given the same number of large tokens** -- in particular:

You: will be given **70** large tokens
Your partner: will be given **70** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of you to be given?

○ **You**: **120** small tokens
Your partner: **80** small tokens

○ **You**: **100** small tokens
Your partner: **100** small tokens

○ **You**: **80** small tokens
Your partner: **120** small tokens

Figure D.27: Example of a First-Person Large-Token Decision

Scenario 6 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, relative to your partner, **you will be given the same number of small tokens** -- in particular:

You: will be given **140** small tokens
Your partner: will be given **140** small tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of you to be given?

○ **You**: **60** large tokens
Your partner: **40** large tokens

○ **You**: **50** large tokens
Your Partner: **50** large tokens

○ **You**: **40** large tokens
Your partner: **60** large tokens

Figure D.28: Example of a Social-Planner Small-Token Decision

Scenario 6 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be given a larger number of large tokens** -- in particular:

Your first participant: will be given **70** large tokens
Your second participant: will be given **50** large tokens

If this is the scenario-that-counts, then how many small tokens would you like for each of your participants to be given?

○ **My first participant**: **120** small tokens
My second participant: **80** small tokens

○ **My first participant**: **100** small tokens
My second participant: **100** small tokens

○ **My first participant**: **80** small tokens
My second participant: **120** small tokens

Figure D.29: Example of a Social-Planner Large-Token Decision

Scenario 1 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, relative to your second participant, **your first participant will be given the same number of small tokens** -- in particular:

Your first participant: will be given **140** small tokens
Your second participant: will be given **140** small tokens

If this is the scenario-that-counts, then how many large tokens would you like for each of your participants to be given?

○ **My first participant**: **60** large tokens
My second participant: **40** large tokens

○ **My first participant**: **50** large tokens
My second participant: **50** large tokens

○ **My first participant**: **40** large tokens
My second participant: **60** large tokens

To complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their \$1.50 completion payment, their guaranteed additional payment of \$1.50, and additional payment is distributed to either them and their second participant (who participants in a future study) or to their two participants (who participate in a future study) according to their choice in the allocation-that-counts.

D.7 Experimental Instructions for *Tokens, Final Allocation 2* version

We recruited 400 Amazon Mechanical Turk to complete the *Tokens, Final Allocation 2* version of our study in October 2019. A total of 337 subjects correctly answered the screening questions and completed this version of the study.

After consenting to participate in the study, subjects are asked three screening questions that require them to correctly report the monetary value of: (i) 50 small tokens, (ii) 100 large tokens, and (iii) the sum of 140 small tokens and 40 large tokens. The 63 subjects who answered one or more of these questions incorrectly were screened out of our study, did not participate further, and only received a $1.50 completion payment. The 337 subjects who answered all of these questions correctly were screened into our study, made 20 choices and received a $3.00 completion payment. The difference in completion payments—$1.50 versus $3.00—was known to subjects when they are answering the screening questions. Subjects who are screened into our study may also receive a bonus if the randomly selected decision is one of the decisions when the subject is in the role of the first participant. Figure D.30 shows how this information is explained and the corresponding screening questions.

Figure D.30: Screening Questions

In this study, you will make decisions that involve small tokens and large tokens.

Each small token is equal to 1 cent.

Each large token is equal to 2 cents.

Given this, please answer the following three questions.

Understanding Question: How many cents are 100 small tokens worth?

50	100	150	200
○	○	○	○

Understanding Question: How many cents are 50 large tokens worth?

50	100	150	200
○	○	○	○

Understanding Question: How many cents are 140 small tokens and 40 large tokens worth?

100	180	220	320
○	○	○	○

Among the participants who are screened into our study, Figure D.31 shows additional payment information for this study and the corresponding understanding question that each subject must answer correctly in order to proceed.

Figure D.31: Payment Information

That's correct!

You will now make a series of decisions in Parts 1 and 2 -- followed by a short survey.

If you complete this study, you will receive a minimum payment from this HIT of $1.50 within 24 hours. Also:

- You are guaranteed to receive a bonus payment of at least $1.50, and

- Additional payments may result from your decisions in Parts 1 and 2. In particular, one of those two parts will be randomly selected as the part-that-counts. Any additional payment that results from the part-that-counts will be distributed in accordance with the instructions in that part.

Understanding Question: Which of the following statements is true?

○ For completing this study, I will receive $1.50 within 24 hours. I will also receive a bonus payment of at least $1.50. Any additional payment that results from the part-that-counts will also be distributed.

○ For completing this study, I will receive $1.50 within 24 hours. No additional payments may result.

○ For completing this study, I will receive $1.50 within 24 hours. Also, the decisions I make in Parts 1 and 2 cannot influence any additional payments from this study.

The subjects then proceed to the study instructions about Part 1 (out of the two parts) in the study. Part 1 is randomly determined to either involve 10 "first-person" decisions or 10 "social planner" decisions. Moreover, within each set of these 10 decisions, we randomize, for each subject: whether the subject makes the small-token or large-token decisions first, and the order of decisions within each set of five.

If Part 1 involves the "first-person" decisions, Figure D.32 shows how the instructions are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed. If Part 2 involves "first-person" decisions, all that would differ is the references to Part 1 would be replaced with references to Part 2.

Figure D.32: First-Person Decisions: Instructions and Understanding Questions

At the end of this study, if Part 1 is randomly selected as the part-that-counts, the following will occur:

You will be paired with one randomly selected Mturk participant who will complete a future study. We will refer to this Mturk participant as "your partner."

You and your partner will receive bonus payments that result from one randomly selected scenario out of 10 possible scenarios. We will refer to the randomly selected scenario as the "scenario-that-counts." In particular, at the end of the study, you and your partner will each be given the number of small tokens and large tokens that results from the scenario-that-counts. Any tokens that you and your partner are given will be turned into cents and paid to you and your partner, respectively, as bonus payments. Each small token will be turned into 1 cent. Each large token will be turned into 2 cents.

How many tokens you and you partner are given will, in part, depend on your decisions. In particular, for each of the 10 scenarios, you will be asked to choose between one of three allocations. In some scenarios, it has been randomly determined how many small tokens you and your partner will be given, and which allocation you choose will determine how many large tokens you and your partner will be given. In other scenarios, it has been randomly determined how many large tokens you and your partner will be given, and which allocation you choose will determine how many small tokens you and your partner will be given.

Understanding Question: If Part 1 is randomly selected as the part-that-counts, the allocation you choose in the scenario-that-counts ...

- ○ will not influence how many tokens you and your partner are given.

- ○ will influence how many tokens you and your parnter are given.

- ○ may or may not influence how many tokens you and your partner are given.

Understanding Question: If Part 1 is randomly selected as the part-that-counts, you and your partner will receive...

- ○ 1 cent for each small token and 1 cent for each large token that are given to you and your partner, respectively.

- ○ 2 cents for each small token and 1 cent for each large token that are given to you and your partner, respectively.

- ○ 1 cent for each small token and 2 cents for each large token that are given to you and your partner, respectively.

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If Part 2 involves the "social-planner" decisions, Figure D.33 shows how the instructions are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed. If Part 2 involves "first-person" decisions, all that would differ is the references to Part 1 would be replaced with references to Part 2.

Figure D.33: Social-Planner Decisions: Instructions and Understanding Questions

Instructions for Part 2 out of 2

At the end of this study, if Part 2 is randomly selected as the part-that-counts, the following will occur:

You will be paired with two randomly selected Mturk participants who will complete a future study. We will refer to your two Mturk participants as "your first participant" and "your second participant."

Your participants will receive bonus payments that result from one randomly selected scenario out of 10 possible scenarios. We will refer to the randomly selected scenario as the "scenario-that-counts." In particular, at the end of the study, your participants will each be given the number of small tokens and large tokens that results from the scenario-that-counts. Any tokens that your participants are given will be turned into cents and paid to them as bonus payments. Each small token will be turned into 1 cent. Each large token will be turned into 2 cents.

How many tokens your participants are given will, in part, depend on your decisions. In particular, for each of the 10 scenarios, you will be asked to choose between one of three allocations. In some scenarios, it has been randomly determined how many small tokens your participants will be given, and which allocation you choose will determine how many large tokens they will be given. In other scenarios, it has been randomly determined how many large tokens your participants will be given, and which allocation you choose will determine how many small tokens they will be given.

Understanding Question: If Part 2 is randomly selected as the part-that-counts, the allocation you choose in the scenario-that-counts ...

○ will not influence how many tokens are given to each of your participants.

○ will influence how many tokens are given to each of your participants.

○ may or may not influence how many tokens are given to each of your participants.

Understanding Question: If Part 2 is randomly selected as the part-that-counts, your participants will receive...

○ 1 cent for each small token and 1 cent for each large token that they are given.

○ 2 cents for each small token and 1 cent for each large token that they are given.

○ 1 cent for each small token and 2 cents for each large token that they are given.

The 10 decisions participants make in each part are as follows. In each small-token decision, subjects must choose to give: (1) (70 large tokens, 120 small tokens) to the first participant and (X large tokens, 80 small tokens) to the second participant; (2) (70 large tokens, 100 small tokens) to the first participant and (X large tokens, 100 small tokens) to the second participant; or (3) (70 large tokens, 180 small tokens) to the first participant and (X large tokens, 120 small tokens) to the second participant. X randomly varies across these decisions to equal 50, 60, 70, 80, or 90 large tokens. In each large-token decision, Subjects must choose to give: (1) (140 small tokens, 60 large tokens) to the first participant and (Y small tokens, 40 large tokens) to the

second participant; (2) (140 small tokens, 50 large tokens) to the first participant and (Y small tokens, 50 large tokens) to the second participant; or (3) (140 small tokens, 40 large tokens) to the first participant and (Y small tokens, 60 large tokens) to the second participant. Y randomly varies across these decisions to equal 100, 120, 140, 160, or 180 small tokens. Also, Figure D.34 shows an example of a first-person small-token decision; Figure D.35 shows an example of a first-person large-token decision; Figure D.36 shows an example of a social-planner small-token decision; and Figure D.37 shows an example of a social planner large-token decision.

Figure D.34: Example of a First-Person Small-Token Decision

Scenario 1 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, then how many small tokens and large tokens would you like for each of you to be given?

○ **You:** 120 small tokens and 70 large tokens
Your partner: 80 small tokens and 90 large tokens

○ **You:** 100 small tokens and 70 large tokens
Your partner: 100 small tokens and 90 large tokens

○ **You:** 80 small tokens and 70 large tokens
Your partner: 120 small tokens and 90 large tokens

Figure D.35: Example of a First-Person Large-Token Decision

Scenario 6 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, then how many small tokens and large tokens would you like for each of you to be given?

○ **You:** 140 small tokens and 60 large tokens
Your partner: 180 small tokens and 40 large tokens

○ **You:** 140 small tokens and 50 large tokens
Your partner: 180 small tokens and 50 large tokens

○ **You:** 140 small tokens and 40 large tokens
Your partner: 180 small tokens and 60 large tokens

Figure D.36: Example of a Social-Planner Small-Token Decision

Scenario 1 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, then how many small tokens and large tokens would you like for each of your participants to be given?

○ **My first participant: 120 small tokens and 70 large tokens**
My second participant: 80 small tokens and 50 large tokens

○ **My first participant: 100 small tokens and 70 large tokens**
My second participant: 100 small tokens and 50 large tokens

○ **My first participant: 80 small tokens and 70 large tokens**
My second participant: 120 small tokens and 50 large tokens

Figure D.37: Example of a Social-Planner Large-Token Decision

Scenario 6 (out of 10)

Recall that each small token is equal to 1 cent and each large token is equal to 2 cents.

If this is the scenario-that-counts, then how many small tokens and large tokens would you like for each of your participants to be given?

○ **My first participant: 140 small tokens and 60 large tokens**
My second participant: 120 small tokens and 40 large tokens

○ **My first participant: 140 small tokens and 50 large tokens**
My second participant: 120 small tokens and 50 large tokens

○ **My first participant: 140 small tokens and 40 large tokens**
My second participant: 120 small tokens and 60 large tokens

To complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their $1.50 completion payment, their guaranteed additional payment of $1.50, and additional payment is distributed to either them and their second participant (who participants in a future study) or to their two participants (who participate in a future study) according to their choice in the allocation-that-counts.

D.8 Experimental Instructions: The *Money & Time* version

We recruited 400 Amazon Mechanical Turk participants to take the *Money & Time, Uncertain Endowments* version of the study between April and June of 2016. After consenting to participate in the study, these subjects are informed of the $4 study completion fee and of the opportunity to earn additional payment. Figure D.38 shows how this payment information is explained and the corresponding understanding question that each subject must answer correctly in order to proceed.

Figure D.38: Payment Information

Your Payment: For completing this study, you will receive a minimum payment of $4 within 24 hours. You may also have the chance to earn additional payment during the study. Any additional payment you earn for yourself will be distributed as a bonus payment within one week.

Sequence of Study: This study will involve 3 main parts -- Part 1, Part 2 and Part 3 -- followed by a short survey. Following certain instructions, you will be asked understanding questions. You must answer these understanding questions correctly in order to proceed to complete the study.

Understanding Question: Which of the following statements is true?

○ For completing this study, I will receive $4 within 24 hours, but I do NOT have a chance of earning any additional bonus payment.

○ For completing this study, I will receive $4 and any additional bonus payment within 24 hours.

○ For completing this study, I will receive $4 within 24 hours. I will also receive any additional bonus payment within one week of completing this study.

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In Part 1, subjects complete 10 time-burning tasks. Figure D.39 shows how time-burning tasks are explained and Figure D.40 shows an example of a time-burning task.

Figure D.39: Part 1 Instructions

Counting Questions: In Part 1, you must answer 10 counting questions.

Each counting question will contain 15 numbers, where each number is a "0" or "1". To answer a counting question, count the number of 0s, enter this number in the box on the bottom left side of the screen, and then push the arrow button to continue. In some cases, it may be easier to count the number of 1s and then subtract this number from 15.

If you do NOT answer a counting question correctly, you will be re-directed to enter in a new number. You cannot proceed from a given counting question until you enter in the correct number.

Please push the arrow to begin Part 1.

>>

Figure D.40: Part 1 Example of Time-Burning Task

You have correctly answered **0 out of 10** counting questions.

How many zeros are in the following string: 100000100000000?

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In Part 2, subjects learn that they will make decisions involving participants from a different version of this study who are called "allocators" (who we refer to in our main text and what follows as "first participants"). Subjects learn that they will make these decisions since they may be these allocators' "judge." In particular, the subjects learn that they must complete three multiple price lists, on behalf of the first participants, which trade off sacrificing money and doing more tasks. These price lists allows us to establish how much money each subject thinks the first participant should be willing to sacrifice to avoid completing an additional 10, 30, and 50 tasks. As explained in Appendix C.2, the decisions on these multiple price lists allow us to determine the values of M_{10} and M_{50} for each subject. Figure D.41 shows how these multiple price lists are explained and the corresponding understanding questions each subject must answer correctly to proceed to the first multiple price list. Figure D.42 shows the transition to the first multiple price list, and Figure D.43 shows the first multiple price list. The subsequent two price lists appear the same as the first, except that "10 tasks" is replaced with "30 tasks" in the second multiple price list and with "50 tasks" in the third multiple price list.

Figure D.41: Part 2 Instructions

Allocators: Allocators will be Mturk workers who will complete a different version of this study. Like you, Allocators will complete a Part 1 that involves answering counting questions. Unlike you, they will have to answer 60 (instead of 10) counting questions in Part 1 and will earn a "credited amount" of 200 cents from doing so. Any credited amount remaining at the end of the study will be given to Allocators as bonus payments.

Some of the Allocators' decisions will involve three lists. Each row on these lists represents one decision between solving more counting questions (the option on the LEFT) or giving up some of their credited amount of 200 cents (the option on the RIGHT).

Decision-that-Counts for Allocators: One decision that the Allocators make will be randomly selected and called the decision-that-counts. If the decision-that-counts comes from a row on one of these lists, the Allocators' decision on that row will be implemented with a 90% chance and will not be implemented with a 10% chance. If the Allocators' decision is not implemented, someone who completes this version of the study (which includes you) will be randomly selected to be the "Judge." The Judge's decision on that row would then be implemented.

Your Decisions: In Part 2 of the study, please indicate your preferred decision on each row of the lists in case you are randomly selected to be the Judge.

Below is an example of a list. Note that the option on the LEFT always involves Allocators answering 1 more counting question. The option on the RIGHT involves the Allocators instead giving up some amount of money from their credited amount of 200 cents. This amount of money decreases from 5 to 0 cents as you proceed down the list.

ALLOCATORS MUST ANSWER		ALLOCATORS MUST GIVE UP
1 COUNTING QUESTION	OR	5 CENTS
1 COUNTING QUESTION	OR	4 CENTS
1 COUNTING QUESTION	OR	3 CENTS
1 COUNTING QUESTION	OR	2 CENTS
1 COUNTING QUESTION	OR	1 CENTS
1 COUNTING QUESTION	OR	0 CENTS

To complete a list like the one above, you need to click on the row at which you would prefer to switch from choosing the option on the left to choosing the option on the right. For example, imagine you chose the option on the left for the first 4 rows and then chose to switch to the option on the right for the last 2 rows. Then, your completed list would look like the one shown below.

ALLOCATORS MUST ANSWER		ALLOCATORS MUST GIVE UP
1 COUNTING QUESTION	OR	5 CENTS
1 COUNTING QUESTION	OR	4 CENTS
1 COUNTING QUESTION	OR	3 CENTS
1 COUNTING QUESTION	OR	2 CENTS
1 COUNTING QUESTION	OR	1 CENTS
1 COUNTING QUESTION	OR	0 CENTS

Understanding Question: In Part 1, how many counting questions will the Allocators answer and how much will they be credited for doing so?

- ○ The Allocators will answer 10 counting questions in Part 1 and be credited 10 cents from doing so.
- ○ The Allocators will answer 60 counting questions in Part 1 and be credited 60 cents from doing so.
- ○ The Allocators will answer 60 counting questions in Part 1 and be credited 200 cents from doing so.

Understanding Question: Imagine that you completed a list in the manner shown above and the second row was randomly selected as the decision-that-counts. If the Allocators' decisions are not implemented and you are the randomly selected Judge ...

- ○ The Allocators would have to answer 1 more counting question and thus answer a total of 61 counting questions.
- ○ The Allocators would have to give up 1 cent from their credited amount and thus receive 199 cents as bonus payment.
- ○ The Allocators would have to give up 4 cents from their credited amount and thus receive 196 cents as bonus payment.

Understanding Question: Imagine that you completed a list in the manner shown above and the fifth row was randomly selected as the decision-that-counts. If the Allocators' decisions are not implemented and you are the randomly selected Judge ...

- ○ The Allocators would have to answer 1 more counting question and thus answer a total of 61 counting questions.
- ○ The Allocators would have to give up 1 cent from their credited amount and thus receive 199 cents as bonus payment.
- ○ The Allocators would have to give up 4 cents from their credited amount and thus receive 196 cents as bonus payment.

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Figure D.42: Part 2 Transition to First Multiple Price List

For List 1 (out of 3):

- The option on the LEFT will always involve the Allocators answering 10 more counting questions to avoid giving up any money from their credited amount of 200 cents.

- The option on the RIGHT will involve the Allocators giving up some amount of money from their credited amount of 200 cents to avoid answering 10 more counting questions. This amount of money will decrease from 100 to 0 cents as you proceed down the rows of the list.

>>

Figure D.43: Part 2 First Multiple Price List

Please indicate which option you prefer on each row by clicking on the row where you would like to switch fro
choosing the option on the left to choosing the option on the right.

(Note that you cannot click on the submit button until you have selected an answer.)

ALLOCATORS MUST ANSWER		ALLOCATORS MUST GIVE UP
10 COUNTING QUESTIONS	OR	100 CENTS
10 COUNTING QUESTIONS	OR	96 CENTS
10 COUNTING QUESTIONS	OR	92 CENTS
10 COUNTING QUESTIONS	OR	88 CENTS
10 COUNTING QUESTIONS	OR	84 CENTS
10 COUNTING QUESTIONS	OR	80 CENTS
10 COUNTING QUESTIONS	OR	76 CENTS
10 COUNTING QUESTIONS	OR	72 CENTS
10 COUNTING QUESTIONS	OR	68 CENTS
10 COUNTING QUESTIONS	OR	64 CENTS
10 COUNTING QUESTIONS	OR	60 CENTS
10 COUNTING QUESTIONS	OR	56 CENTS
10 COUNTING QUESTIONS	OR	52 CENTS
10 COUNTING QUESTIONS	OR	48 CENTS
10 COUNTING QUESTIONS	OR	44 CENTS
10 COUNTING QUESTIONS	OR	40 CENTS
10 COUNTING QUESTIONS	OR	36 CENTS
10 COUNTING QUESTIONS	OR	32 CENTS
10 COUNTING QUESTIONS	OR	28 CENTS
10 COUNTING QUESTIONS	OR	24 CENTS
10 COUNTING QUESTIONS	OR	20 CENTS
10 COUNTING QUESTIONS	OR	16 CENTS
10 COUNTING QUESTIONS	OR	12 CENTS
10 COUNTING QUESTIONS	OR	8 CENTS
10 COUNTING QUESTIONS	OR	4 CENTS
10 COUNTING QUESTIONS	OR	0 CENTS

In Part 3, subjects learn that they will again make decisions involving other participants. They also learn that these decisions will influence other participants who are called "recipients" (who we refer to in our main text and what follows as "second participants"). Figure D.44 shows how the instructions for Part 3 are explained and the corresponding understanding questions each subject must answer correctly to proceed to making their decisions in Part 3.

Figure D.44: Part 3 Instructions

Allocators and Recipients: Allocators and Recipients will be Mturk workers who will complete a different version of this study. As described earlier, the Allocators will be Mturk workers will have to answer 60 (instead of 10) counting questions in Part 1 and will earn a credited amount of 200 cents from doing so. Recipients, however, may have to answer a different number of counting questions in Part 1 and may earn a different credited amount from doing so.

In "money" scenarios, Allocators will be randomly matched with Recipients and told to indicate their preferred "money allocations." Money allocations indicate how much money the Allocators must give up from their credited amounts and how much money the Recipients must give up from their credited amounts to complete this study.

In "time" scenarios, Allocators will be randomly matched with Recipients and told to indicate their preferred "time allocations." Time allocations indicate how many additional counting questions the Allocators must answer and how many additional counting questions the Recipients must answer to complete this study.

Decision-that-Counts for Allocators and Recipients: One decision that the Allocators make will be randomly selected and called the decision-that-counts. If the decision-that-counts comes from one of the time or money scenarios, the Allocators' preferred allocation will be implemented with a 90% chance and not implemented with a 10% chance. If the Allocators' preferred allocation is not implemented, someone who completes this version of the study (which includes you) will be randomly selected to be the "Judge." The Judge's preferred allocation for the relevant scenario would then be implemented.

Your Decisions: In Part 3 of the study, please indicate your preferred allocation for each scenario in case you are randomly selected to be the Judge. Also, please evaluate whether each potential allocation that an Allocator could make is "very socially inappropriate," "somewhat socially inappropriate," "somewhat socially appropriate," or "very socially appropriate."

Evaluation-that-Counts for Your Bonus Payment: We will randomly select one potential allocation that an Allocator could make from one of the scenarios. Your evaluation of that potential allocation will be called your evaluation-that-counts. If your evaluation-that-counts was the same as the evaluation made by most Mturk workers who complete this study, you will receive $1 in bonus payment. Otherwise, you will receive no additional bonus payment.

Understanding Question: If you are the randomly selected Judge, in the scenario-that-counts ...

○ the Allocator's preferred allocation will be implemented.

○ your preferred allocation will be implemented.

○ your preferred allocation will be implemented with a 10% chance and the Allocator's preferred allocation will be implemented otherwise.

Understanding Question: Consider a scenario where, relative to their Recipients in that scenario, Allocators will earn a larger credited amount from answering a larger number of questions in Part 1 -- in particular:

Allocators: earn 200 cents from answering 60 counting questions
Recipients: earn 100 cents from answering 30 counting questions

If the money allocation that is implemented requires Allocators to give up 50 cents and Recipients to give up 20 cents, how much bonus payment will the Allocators and Recipients receive?

○ **Allocators**: 250 cents in bonus payment
Recipients: 120 cents in bonus payment

○ **Allocators**: 200 cents in bonus payment
Recipients: 100 cents in bonus payment

○ **Allocators**: 150 cents in bonus payment
Recipients: 80 cents in bonus payment

Understanding Question: Consider a scenario where, relative to their Recipients in that scenario, Allocators will earn a larger credited amount from answering a larger number of questions in Part 1 -- in particular:

Allocators: earn 200 cents from answering 60 counting questions
Recipients: earn 100 cents from answering 30 counting questions

If the time allocation that is implemented requires Allocators to answer an additional 10 questions and Recipients to answer an additional 20 questions, how many total questions will be answered by Allocators and Recipients?

○ **Allocators**: 70 questions in total
Recipients: 50 questions in total

○ **Allocators**: 60 questions in total
Recipients: 30 questions in total

○ **Allocators**: 50 questions in total
Recipients: 10 questions in total

Understanding Question: You will receive a bonus payment of $1 within one week...

○ only if your evaluation-that-counts is different than the most frequently given evaluation by other Mturk workers in this study.

○ only if your evaluation-that-counts is the same as the most frequently given evaluation by other Mturk workers in this study.

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Subjects then complete Part 3 by making 26 decisions, arising from 13 unique endowment sets. These 13 endowment sets only differ in the endowments of the second participants, since the first participants are always endowed with 200 cents from answering 60 tasks. The specific endowments of the second participants depend on the exchange rate measured from the multiple price lists, as described in Appendix C.2 and shown in Table B.6.

While all subjects face the same decisions, the order of these 26 decisions is randomized at the subject level as follows. Each subject is randomized to either make the 13 money decisions first or the 13 time decisions first. Within each set of 13 decisions, the order of the endowments for the second participants are also randomized. Figure D.45 shows an example of a money decision. Figure D.46 shows an example of a time decision. Note that each decision involves a money or time decision (i.e., subjects must select their preferred choice in the far right hand column of the decision screen) and a social appropriateness evaluation for all possible money or time choices (i.e., subjects must indicate their social appropriateness evaluations in the middle column of the decision screen).

Figure D.45: Example of a Money Decision

Scenario 15 (out of 26)

Relative to their Recipients in this scenario, **Allocators will earn the same credited amount from answering a larger number of questions in Part 1** -- in particular:

> **Allocators**: earn 200 cents from answering 60 counting questions
> **Recipients**: earn 200 cents from answering 40 counting questions

After completing Part 1 and being informed of the above, Allocators will decide between one of the **money allocations** below about how much they and their Recipients must give up, out of their credited amounts, to complete this study.

	Please indicate the extent to which each potential money allocation is socially appropriate.				Please select your preferred money allocation.
	very socially inappropriate	somewhat socially inappropriate	somewhat socially appropriate	very socially appropriate	(check one only)
Allocators: give up 56 cents **Recipients**: give up 96 cents	○	○	○	○	☐
Allocators: give up 76 cents **Recipients**: give up 76 cents	○	○	○	○	☐
Allocators: give up 96 cents **Recipients**: give up 56 cents	○	○	○	○	☐

Figure D.46: Example of a Time Decision

Scenario 1 (out of 26)

Relative to their Recipients in this scenario, **Allocators will earn the same credited amount from answering the same number of questions in Part 1** -- in particular:

     Allocators: earn 200 cents from answering 60 counting questions
     Recipients: earn 200 cents from answering 60 counting questions

After completing Part 1 and being informed of the above, Allocators will decide between one of the **time allocations** below about how many more counting questions they and their Recipients must answer to complete this study.

	Please indicate the extent to which each potential time allocation is socially appropriate.				Please select your preferred time allocation
	very socially inappropriate	somewhat socially inappropriate	somewhat socially appropriate	very socially appropriate	(check one only)
Allocators: answer **10** more **Recipients**: answer **50** more	○	○	○	○	☐
Allocators: answer **30** more **Recipients**: answer **30** more	○	○	○	○	☐
Allocators: answer **50** more **Recipients**: answer **10** more	○	○	○	○	☐

Finally, to complete the study, each subject must then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives the $4 completion payment and the following also occurs. First, subjects have a chance of being matched with participants from the *Money & Time, First Person* version of our study, and, if matched, there is a 10% chance that their choice will "overrule" a participant's choice from that study to determine the payoffs of the participants.[37] Second, one social appropriateness evaluation is randomly selected as the "evaluation-that-counts." If the subject's social appropriateness evaluation is the same as the modal social appropriateness evaluation of others in the evaluation-that-counts, the subject receives a $1 bonus payment. Making the incentives for the social appropriateness evaluation a coordination game among subjects allows us to identify social norms of appropriateness in the manner of Krupka and Weber (2013).

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[37]In practice, the randomly selected question from the *Money & Time, First Person* version was a row on one of the multiple price lists. The process by which subjects were selected for their decision to overrule what the participant chose in the *Money & Time, First Person* version is detailed in footnote 38.

D.9 Experimental Instructions: The *Money & Time, First Person* version

We recruited 400 Amazon Mechanical Turk participants to take the *Money & Time, First Person* version of the study in August of 2017. For this study, all that differs is that the subjects who make decisions are assigned to the role of the first participant, so each decision involves allocating money or time between oneself and another study participant assigned to the role of the second participant. More specifically, for the *Money & Time, First Person* version, all that differs from the *Money & Time* version (see Appendix D.8) is the number of tasks subjects must complete in Part 1 and the perspective subjects must take when they make decisions in Part 2 and 3.

In Part 1, rather than being asked to answer 10 tasks, subjects are asked to answer 60 tasks.

In Parts 2 and 3, rather than being asked to make decisions on behalf of participants from a different version of this study, subjects make decisions as the first participants.

Figure D.47 shows how the instructions for Part 2 are explained and the corresponding understanding questions that each subject must answer correctly to proceed to the multiple price lists. Figure D.48 shows the transition to the first multiple price list, and Figure D.49 shows the first multiple price list. The subsequent two price lists appear the same as the first, except that "10 tasks" is replaced with "30 tasks" in the second multiple price list and with "50 tasks" in the third multiple price list.

Figure D.47: Part 2 Instructions

In Part 2, you will now make decisions involving three lists. Each row on a list represents one decision between solving more counting questions (the option on the LEFT) or giving up some of your credited amount of 200 cents (the option on the RIGHT).

Decision-that-Counts: One decision that you will make will be randomly selected and called the decision-that-counts. If the decision-that-counts comes from a row on one of these lists, your decision on that row will be implemented with a 90% chance and will not be implemented with a 10% chance. If your decision is not implemented, someone who completes another version of this study will be randomly selected to be the "Judge." The Judge's decision on that row would then be implemented.

Your Decisions: In Part 2 of the study, please indicate your preferred decision on each row of the lists.

Below is an example of a list. Note that the option on the LEFT always involves you answering 1 more counting question. The option on the RIGHT involves you instead giving up some amount of money from your credited amount of 200 cents. This amount of money decreases from 5 to 0 cents as you proceed down the list.

I MUST ANSWER		I MUST GIVE UP
1 COUNTING QUESTION	OR	5 CENTS
1 COUNTING QUESTION	OR	4 CENTS
1 COUNTING QUESTION	OR	3 CENTS
1 COUNTING QUESTION	OR	2 CENTS
1 COUNTING QUESTION	OR	1 CENTS
1 COUNTING QUESTION	OR	0 CENTS

To complete a list like the one above, you need to click on the row at which you would prefer to switch from choosing the option on the left to choosing the option on the right. For example, imagine you chose the option on the left for the first 4 rows and then chose to switch to the option on the right for the last 2 rows. Then, your completed list would look like the one shown below.

I MUST ANSWER		I MUST GIVE UP
1 COUNTING QUESTION	OR	5 CENTS
1 COUNTING QUESTION	OR	4 CENTS
1 COUNTING QUESTION	OR	3 CENTS
1 COUNTING QUESTION	OR	2 CENTS
1 COUNTING QUESTION	OR	1 CENTS
1 COUNTING QUESTION	OR	0 CENTS

Understanding Question: Imagine that you completed a list in the manner shown above, and the second row was randomly selected as the decision-that-counts. If your decision was implemented, what would happen?

I would have to answer 1 more counting question, and I would have to give up 4 cents from my credited amount of 200 cents (i.e., I would only receive 196 cents as a bonus payment).

I would not have to answer any more counting questions, and I would not have to give up any of my credited amount of 200 cents (i.e., I would receive 200 cents as a bonus payment).

I would not have to answer any more counting questions, but I would have to give up 4 cents from my credited amount of 200 cents (i.e., I would only receive 196 cents as a bonus payment).

I would have to answer 1 more counting question, but I would not have to give up any of my credited amount of 200 cents (i.e., I would receive 200 cents as a bonus payment).

Understanding Question: Imagine that you completed a list in the manner shown above, and the fifth row was randomly selected as the decision-that-counts. If your decision was implemented, what would happen?

I would have to answer 1 more counting question, and I would have to give up 1 cent from my credited amount of 200 cents (i.e., I would only receive 199 cents as a bonus payment).

I would not have answer to any more counting questions, and I would not have to give up any of my credited amount of 200 cents (i.e., I would receive 200 cents as a bonus payment).

I would not have to answer any more counting questions, but I would have to give up 1 cents from my credited amount of 200 cents (i.e., I would only receive 199 cents as a bonus payment).

I would have to answer 1 more counting question, but I would not have to give up any of my credited amount of 200 cents (i.e., I would receive 200 cents as a bonus payment).

Figure D.48: Transition to First Multiple Price List

For List 1 (out of 3):

 - The option on the LEFT will always involve you answering 10 more counting questions to avoid giving up any money from your credited amount of 200 cents.

- The option on the RIGHT will involve you giving up some amount of money from your credited amount of 200 cents to avoid answering 10 more counting questions. This amount of money will decrease from 100 to 0 cents as you proceed down the rows of the list.

Figure D.49: First Multiple Price List

Please indicate which option you prefer on each row by clicking on the row where you would like to switch from choosing the option on the left to choosing the option on the right.

(Note that you cannot click on the submit button until you have selected an answer.)

I MUST ANSWER		I MUST GIVE UP
10 COUNTING QUESTIONS	OR	100 CENTS
10 COUNTING QUESTIONS	OR	96 CENTS
10 COUNTING QUESTIONS	OR	92 CENTS
10 COUNTING QUESTIONS	OR	88 CENTS
10 COUNTING QUESTIONS	OR	84 CENTS
10 COUNTING QUESTIONS	OR	80 CENTS
10 COUNTING QUESTIONS	OR	76 CENTS
10 COUNTING QUESTIONS	OR	72 CENTS
10 COUNTING QUESTIONS	OR	68 CENTS
10 COUNTING QUESTIONS	OR	64 CENTS
10 COUNTING QUESTIONS	OR	60 CENTS
10 COUNTING QUESTIONS	OR	56 CENTS
10 COUNTING QUESTIONS	OR	52 CENTS
10 COUNTING QUESTIONS	OR	48 CENTS
10 COUNTING QUESTIONS	OR	44 CENTS
10 COUNTING QUESTIONS	OR	40 CENTS
10 COUNTING QUESTIONS	OR	36 CENTS
10 COUNTING QUESTIONS	OR	32 CENTS
10 COUNTING QUESTIONS	OR	28 CENTS
10 COUNTING QUESTIONS	OR	24 CENTS
10 COUNTING QUESTIONS	OR	20 CENTS
10 COUNTING QUESTIONS	OR	16 CENTS
10 COUNTING QUESTIONS	OR	12 CENTS
10 COUNTING QUESTIONS	OR	8 CENTS
10 COUNTING QUESTIONS	OR	4 CENTS
10 COUNTING QUESTIONS	OR	0 CENTS

Figure D.50 shows how the instructions for Part 3 are explained and the corresponding understanding questions that each subject must answer correctly to proceed to make their 26 decisions. Figure D.51 shows an example of a money decision. Figure D.52 shows an example of a time decision.

Figure D.50: Part 3 Instructions

Recipients: Recipients will be Mturk workers who will complete a different version of this study. While you had to solve 60 counting questions in Part 1 to earn a credited amount of 200 cents, Recipients may have to solve a different number of questions in Part 1 and may earn a different credited amount from doing so.

In "money" scenarios, you will be randomly matched with a Recipient and told to indicate your preferred "money allocation". Money allocations indicate how much money you must give up from your credited amount and how much money the Recipient must give up from their credited amount to complete this study.

In "time" scenarios, you will be randomly matched with a Recipient and told to indicate your preferred "time allocation". Time allocations indicate how many additional counting questions you must answer and how many additional counting questions the Receipient must answer to complete this study.

Decision-that-Counts: One decision that you make will be randomly selected and called the decision-that-counts. If the decision-that-counts comes from one of the time or money scenarios, your preferred allocation will be implemented with a 90% chance and will not be implemented with a 10% chance. If your preferred allocation is not implemented, someone who completes this version of the study will be randomly selected to be the "Judge." The Judge's preferred allocation for the relevant scenario would then be implemented.

Your Decisions: In Part 3 of the study, as an Allocator, please indicate your preferred allocation for each scenario.

Understanding Question: Consider a scenario where, relative to the Recipient in that scenario, you earned a larger credited amount from answering a larger number of questions in Part 1 -- in particular:

> **You**: earned 200 cents from answering 60 counting questions
> **Recipient:** earned 100 cents from answering 30 counting questions

If the money allocation that is implemented requires you to give up 50 cents and the Recipient to give up 20 cents, how much bonus payment will you and the Recipient receive?

> **You**: 250 cents in bonus payment
> **Recipient**: 120 cents in bonus payment

> **You**: 200 cents in bonus payment
> **Recipient**: 100 cents in bonus payment

> **You**: 150 cents in bonus payment
> **Recipient**: 80 cents in bonus payment

Understanding Question: Consider a scenario where, relative to the Recipient in that scenario, you earned a larger credited amount from answering a larger number of questions in Part 1 -- in particular:

> **You**: earned 200 cents from answering 60 counting questions
> **Recipient:** earned 100 cents from answering 30 counting questions

If the time allocation that is implemented requires you to answer an additional 10 questions and the Recipient to answer an additional 20 questions, how many total questions will be answered by you and the Recipient (including the questions you and the Recipient have already answered)?

> **You**: 70 questions
> **Recipient**: 50 questions

> **You**: 60 questions
> **Recipient**: 30 questions

> **You**: 50 questions
> **Recipient**: 10 questions

Figure D.51: Example of a Money Decision

Scenario 10 (out of 26)

Relative to the Recipient, **you earned a larger credited amount from answering the same number of questions in Part 1** -- in particular:

> **You:** earned 200 cents from answering 60 counting questions
> **Recipient:** earned 180 cents from answering 60 counting questions

Please select your preferred time allocation by deciding how many additional counting questions you and the Recipient will have to answer.

> **You:** answer **10** more
> **Recipient:** answers **50** more

> **You:** answer **30** more
> **Recipient:** answers **30** more

> **You:** answer **50** more
> **Recipient:** answers **10** more

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Figure D.52: Example of a Time Decision

Scenario 16 (out of 26)

Relative to the Recipient, **you earned the same credited amount from answering a smaller number of questions in Part 1** -- in particular:

> **You:** earned 200 cents from answering 60 counting questions
> **Recipient:** earned 200 cents from answering 80 counting questions

Please select your preferred time allocation by deciding how many additional counting questions you and the Recipient will have to answer.

> **You:** answer **10** more
> **Recipient:** answers **50** more

> **You:** answer **30** more
> **Recipient:** answers **30** more

> **You:** answer **50** more
> **Recipient:** answers **10** more

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After completing all 26 decisions in Part 3, one of their decisions is randomly selected as the decision-that-counts. If that decision required them to complete more tasks, they were then required to complete more tasks.[38]

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[38]In the decision-that-counts, subjects knew that their choice would be implemented with a 90% chance and

Finally, to complete the study, each subject must complete any additional tasks that they are required to complete according to the decision-that-counts and then answer a follow-up survey that collects demographic information.

After the study is completed, each subject receives their $6 completion payment as well as a bonus payment equal to any additional payment they earned from the decision-that-counts.[39] Note that the decision-that-counts was randomly selected from all of the decisions subjects made and that, in the decision-that-counts, subjects knew that their choice would be implemented with a 90% chance and would be replaced by the corresponding decision of a subject from another version of the study with a 10% chance.

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would be replaced by the corresponding decision of a subject from another version of the study with a 10% chance. The randomly selected decision turned out to be the row on the M_{50} multiple price list where the choice was between: (1) completing an additional 50 tasks or (2) giving up 92 cents. With a 90% chance, the subject had to complete an additional 50 tasks at the end of the study—if they chose (1)—or to forgo 92 cents and thus only receive 108 cents $(200 - 92)$ as bonus payment—if they chose (2). With a 10% chance, they had to forgo the 92 cents regardless of what they chose, because this was the option chosen by a subject who was randomly selected from the *Money & Time* and *Money & Time, Uncertain Endowments* versions.

[39]The completion fee and study length are higher in the *Money & Time, First Person* version than the other *Money & Time* versions, since subjects have to complete at least 60 time-burning tasks in this study version.

D.10 Experimental Instructions: The *Money & Time, Uncertain Endowments* version

We recruited 400 Amazon Mechanical Turk participants to take the *Money & Time, Uncertain Endowments* version of the study between April and June of 2016. For this study, all that differs from the *Money & Time* version (see Appendix D.8) is Part 3. In particular, Part 3 of the *Money & Time, Uncertain Endowments* version involves 22 decisions that are different than the 26 decisions in Part 3 of the *Money & Time* version. These 22 decisions arise from 11 unique endowment sets that only differ in the endowments of the second participants, since the first participants are always endowed with 200 cents from answering 60 tasks. See Table B.8 for details on these 11 endowment sets. Also, while every subject faces the same decisions, the order of these 22 decisions is randomized at the subject level as follows. Each subject is randomized to either make the 11 money decisions first or the 11 time decisions first. Within each set of 11 decisions, the order of the endowments for the second participants is also randomized. Figure D.53 shows how the instructions for Part 3 are explained and the corresponding understanding questions that each subject must answer correctly in order to proceed to make their 22 decisions. Figure D.54 shows an example of a money decision. Figure D.55 shows an example of a time decision.

Figure D.53: Part 3 Instructions

Allocators and Recipients: Allocators and Recipients will be Mturk workers who will complete a different version of this study. As described earlier, the Allocators will be Mturk workers who will have to answer 60 (instead of 10) counting questions in Part 1 and will earn a credited amount of 200 cents from doing so. Recipients, however, may have to answer a different number of counting questions in Part 1 and may earn a different credited amount from doing so.

In "money" scenarios, Allocators will be randomly matched with Recipients and told to indicate their preferred "money allocations." Money allocations indicate how much money the Allocators must give up from their credited amounts and how much money the Recipients must give up from their credited amounts to complete this study.

In "time" scenarios, Allocators will be randomly matched with Recipients and told to indicate their preferred "time allocations." Time allocations indicate how many additional counting questions the Allocators must answer and how many additional counting questions the Recipients must answer to complete this study.

When evaluating these scenarios, Allocators will be told the exact number of counting questions the Recipients will have to answer in Part 1 unless they are told that Recipients will have to answer an "unknown" number of counting questions. When Allocators are told the Recipients will have to answer an "unknown" number of counting questions, Allocators will know that there is an equal chance that the Recipients will have to answer 20, 40, 60, 80, or 100 counting questions. Similarly, Allocators will be told the exact credited amounts the Recipients will earn from answering counting questions unless they are told Recipients will earn "unknown" credited amounts. When Allocators are told the Recipients will earn "unknown" credited amounts from answering counting questions, Allocators will know that there is an equal chance that the Recipients will earn 196, 198, 200, 202, or 204 cents.

Decision-that-Counts for Allocators and Recipients: One decision that the Allocators make will be randomly selected and called the decision-that-counts. If the decision-that-counts comes from one of the time or money scenarios, the Allocators' preferred allocation will be implemented with a 90% chance and not implemented with a 10% chance. If the Allocators' preferred allocation is not implemented, someone who completes this version of the study (which includes you) will be randomly selected to be the "Judge." The Judge's preferred allocation for the relevant scenario would then be implemented.

Your Decisions: In Part 3 of the study, please indicate your preferred allocation for each scenario in case you are randomly selected to be the Judge. Also, please evaluate whether each potential allocation that an Allocator could make is "very socially inappropriate," "somewhat socially inappropriate," "somewhat socially appropriate," or "very socially appropriate."

Evaluation-that-Counts for Your Bonus Payment: We will randomly select one potential allocation that an Allocator could make from one of the scenarios. Your evaluation of that potential allocation will be called your evaluation-that-counts. If your evaluation-that-counts was the same as the evaluation made by most Mturk workers who complete this study, you will receive $1 in bonus payment. Otherwise, you will receive no additional bonus payment.

Figure D.54: Example of a Money Decision

Scenario 12 (out of 22)

Relative to their Recipients in this scenario, **Allocators will earn a potentially larger, smaller, or the same credited amount from answering a smaller number of questions in Part 1** -- in particular:

Allocators: earn 200 cents from answering 60 counting questions
Recipients: earn an unknown number of cents from answering 80 counting questions

After completing Part 1 and being informed of the above, Allocators will decide between one of the **money allocations** below about how much they and their Recipients must give up, out of their credited amounts, to complete this study.

	Please indicate the extent to which each potential money allocation is socially appropriate.				Please select your preferred money allocation.
	very socially inappropriate	somewhat socially inappropriate	somewhat socially appropriate	very socially appropriate	(check one only)
Allocators: give up **24** cents **Recipients**: give up **56** cents	○	○	○	○	☐
Allocators: give up **40** cents **Recipients**: give up **40** cents	○	○	○	○	☐
Allocators: give up **56** cents **Recipients**: give up **24** cents	○	○	○	○	☐

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Figure D.55: Example of a Time Decision

Scenario 1 (out of 22)

Relative to their Recipients in this scenario, **Allocators will earn a potentially larger, smaller, or the same credited amount from answering a larger number of questions in Part 1 -- in particular:**

Allocators: earn 200 cents from answering 60 counting questions
Recipients: earn an unknown number of cents from answering 20 counting questions

After completing Part 1 and being informed of the above, Allocators will decide between one of the **time allocations** below about how many more counting questions they and their Recipients must answer to complete this study.

	Please indicate the extent to which each potential time allocation is socially appropriate.				Please select your preferred time allocation.
	very socially inappropriate	somewhat socially inappropriate	somewhat socially appropriate	very socially appropriate	(check one only)
Allocators: answer 10 more **Recipients**: answer 50 more	○	○	○	○	☐
Allocators: answer 30 more **Recipients**: answer 30 more	○	○	○	○	☐
Allocators: answer 50 more **Recipients**: answer 10 more	○	○	○	○	☐