

## Other Regarding Preferences

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## Other regarding (or social) preferences

- In the standard economic model, people are selfish
- Care only about their own consumption
- Means that they do exhibit any
  - Altruism
  - Sense of fairness
  - Reciprocity/Spite
  - Envy
  - Aversion to inequality
- This seems like a very restrictive assumption

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## Some Thought Experiments

- Would you pay for your kids to go to college?
- If you had \$100 to distribute at an orphanage with 10 orphans, would you prefer that one orphan got \$100 or all 10 got \$10?
- Would you quit your job if you found out that the guy next to you was being paid 20% more for the same job?
- Would you pay money to punish someone who had cheated you, even if you would not recover any of that money?

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## These are Important Questions

- How do we support co-operation in society?
  - A group that fight together are more likely to repel invader
  - But, if everyone else is fighting, you would prefer to stay at home
  - How do we have societies that support costly co-operation?
  - Easier if people have a sense of fairness, and are prepared to punish cheaters
- If I am a firm, how should I structure the way I pay my workers?
  - People may judge their pay relative to others
- If my happiness depends on my relative position in society, how will an economy evolve
  - Keeping up with the Jones
  - Is an unequal society an unhappy society?

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## Social Preferences vs Repeated Games

- One thing to bear in mind: selfish people may **look like** they have social preferences in repeated settings
  - I may pay for my kids to go to college because I think that they will support me in my old age
  - I may treat you nicely today so that you will treat me nicely tomorrow
  - I may punish someone who cheats me today in order to prevent people cheating people tomorrow
- Important to disentangle these two effects.

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## Two Workhorses in the Study of Social Preferences

- Ultimatum Game
- Dictator Game

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## The Ultimatum Game

- Sequential game with two players
  - Player 1 proposes how to split \$7 dollars themselves and player 2
  - Player 2 can either accept the split, or reject, in which case both parties get nothing
- Subgame perfect Nash Equilibrium
  - Player 2 accepts any offer that gives them a strictly positive amount
  - Player 1 offer \$7-e

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## So What Happens?

- Experimental aside:
  - Player 1's strategy is simple
    - Just has to propose a split
  - Player 2's strategy is complicated
    - Mapping from each possible offer from player 1 to a decision {accept, reject}
- We would like to observe strategy, not just their response to player 1's offer.
- We use the strategy method
  - Ask player 2 to report what they would do for each offer of player 1

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## So What Happens [Guth et al 1982]?

Table 1  
Consistency of payoff demands in two games

Trade of subject	$a_1$ = demand of player 1	$a_2$ = demand of player 2	$a_1 + a_2$ = total of demands	Consistency
1	4.00	3.00	7.00	0
2	3.50	2.50	6.00	0
3	3.25	3.25	6.50	0
4	4.00	3.00	7.00	0
5	3.50	3.50	7.00	0
6	4.00	3.00	7.00	0
7	4.00	3.00	7.00	0
8	3.50	3.50	7.00	0
9	3.50	3.50	7.00	0
10	3.50	3.50	7.00	0
11	3.50	3.50	7.00	0
12	3.50	3.50	7.00	0
13	3.50	3.50	7.00	0
14	3.50	3.50	7.00	0
15	3.50	3.50	7.00	0
16	4.00	3.00	7.00	0
17	4.00	3.00	7.00	0
18	4.00	3.00	7.00	0
19	3.00	4.00	7.00	0
20	3.50	3.50	7.00	0
21	3.25	3.25	6.50	0
22	4.00	3.00	7.00	0
23	4.00	3.00	7.00	0
24	3.50	3.50	7.00	0
25	4.00	3.00	7.00	0
26	3.50	3.50	7.00	0
27	3.50	3.50	7.00	0
28	4.00	3.00	7.00	0
29	3.50	3.50	7.00	0
30	3.50	3.50	7.00	0
31	4.00	3.00	7.00	0
32	4.00	3.00	7.00	0
33	4.00	3.00	7.00	0
34	3.50	3.50	7.00	0
35	4.00	3.00	7.00	0
36	7.00	3.50	10.50	0
37	4.00	3.50	7.50	0

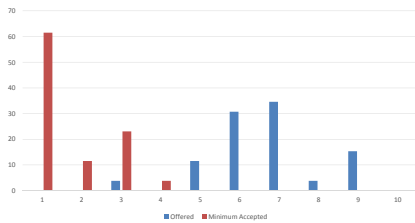
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## So What Happens?

1. Player 1 offers more than 7-e
  - This could be explained by selfish preferences
    - If they offer 7-e, will get rejected
  - Or by a preference for fairness
2. Player 2 will reject positive offers
  - Cannot be explained by selfish preferences
  - Or by pure altruism
  - Need something else

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## Your Data



- Class Mean: Keep \$6.65
- Class Mean: Accept \$1.69
- Class Acceptance Rate: 15%

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## Selected Participants

- Person A
  - Torin Collier-Mark
- Person B
  - Madeline Kau

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### Robustness Tests (Oosterbeek et al 2004)

Table 1. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min.	Max.
Year of publication	75	1992.4	3.00	1982	2001
Year of experiment	28	1995.9	3.37	1988	1998
Pie size as USD	57	37.32	86.92	33	400
100% pie size in USD/GDP per capita	57	0.4527	2.554	0.0034	17.62
Number of observations	74	31.57	22.99	3	112
Offered percentage of pie	75	40.54	8.94	0	40
Rejection rate	66	16.20	10.74	0	40
Diagnosis first/unique round	75	0.75	0.44	0	1
Diagnosis strategy verified	75	0.16	0.37	0	1
Diagnosis erroneous students	75	0.64	0.48	0	1

Note: In annual data we use weighted descriptive statistics; descriptive statistics in italic are weighted by number of observations of studies.

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### Robustness Tests (Oosterbeek et al 2004)

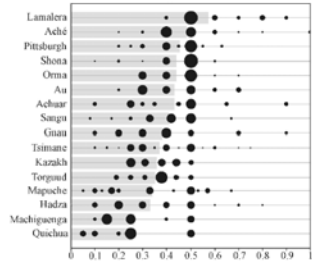
Table 1. Descriptive statistics by country

Country	N	Mean offer	SD	Min	Max	100% pie size in USD/GDP per capita	100% pie size in USD/GDP per capita	100% pie size in USD/GDP per capita	100% pie size in USD/GDP per capita
Austria	1	39.21	16.10	35	11	-0.59	0.32	6.78	129.92
Bahamas	1	37.00	0.00	37	37	0.00	0.00	0.00	0.00
Chile	1	34.00	6.70	23	45	1.10	0.23	5.94	489.0
Denmark	2	34.50	7.50	8	78	0.00	0.00	0.00	0.00
France	3	40.24	30.78	71	48	-0.15	0.23	5.97	139.18
Germany	1	36.70	9.52	47	35	-1.30	0.38	6.75	134.66
Honduras	1	45.70	23.05	47	35	-1.30	0.38	6.75	134.66
Indonesia	4	46.63	14.63	30	60	0.00	0.00	0.00	0.00
Israel	1	45.71	17.73	14	71	0.00	0.00	0.00	0.00
Japan	3	44.73	19.27	46	54	-1.58	0.42	5.52	132.05
Yugoslavia	1	44.83	36.47	27	76	-0.40	0.30	7.07	42.48
Korea	1	44.00	4.00	27	64	0.00	0.00	0.00	0.00
Nigeria	2	35.00	3.00	35	35	0.00	0.00	0.00	0.00
Netherlands	2	42.25	9.24	80	38	-0.55	0.56	5.80	133.81
Poland	2	40.50	11.50	30	51	0.00	0.00	0.00	0.00
Portugal	1	31.00	0.00	31	31	0.00	0.00	0.00	0.00
Peru	1	34.00	4.00	16	64	1.70	0.05	6.54	209.2
Romania	2	36.95	23.00	30	60	0.16	0.16	7.52	204.1
Slovakia	3	43.17	12.47	37	53	-0.55	0.23	6.97	409.5
Spain	1	36.66	29.17	51	37	0.60	0.34	5.70	89.02
Sweden	1	35.23	18.18	71	31	-1.35	0.66	6.78	134.66
Tanzania	4	37.50	19.21	64	34	0.00	0.00	0.00	0.00
UK	2	34.33	23.33	80	35	0.10	0.44	6.19	127.4
US East	23	40.54	17.15	91	40	1.11	0.50	6.70	1794.5
US West	4	42.64	9.41	91	40	1.11	0.50	6.70	1794.5
Zimbabwe	2	43.00	8.50	30	51	0.00	0.00	0.00	0.00

Note: 100% pie size in USD/GDP per capita is calculated as 100% of the country's GDP divided by the number of observations. ALLTS is country's score on Legatum's institutional-quality control dimension (higher values signify more respect for individual rights). TRUST is percentage of country's population saying that most people can be trusted (World Values Survey). GDP is country's score on 1-10 scale on investment that competitors in good (World Values Survey). GDP per capita is year to 1990 (World Bank). GDP index is the income of households per capita for all areas and all population (base year to 1990) (UNDP World Income inequality data base).

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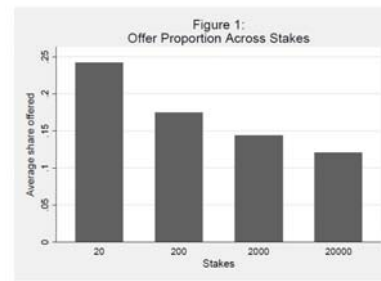
### Robustness Tests (Henrich et al 2005)



- Small scale, isolated societies
- Graph shows distribution of offers in the ultimatum game

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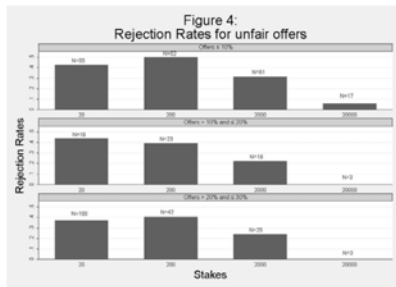
### Robustness Tests (Andersen et al. 2011)



- 20 Rupee=1.6 hrs work
- 20,000 Rupee 1600 hrs work

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### Robustness Tests (Andersen et al. 2011)



- Rejection rates fall to near zero when pie is a year's wages

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### Dictator Game

- How do we tell whether player 1 is worried about rejection, or has social preferences?
- Take away the action of player 2
- This is the dictator game: player 1 gets to split the pie
- Player 2 get no say
- In most experiments, player 1 still sends significant amount
- But can be affected by framing, anonymity, etc.

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