Econ 219A
Psychology and Economics: Foundations
(Lecture 4, Stefano's part)

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Outline

1. Social Preferences: Gift Exchange in the Field II
2. Social Preferences: The Workplace
3. Social Preferences: Charitable Giving
4. Methodology: Field Experiments

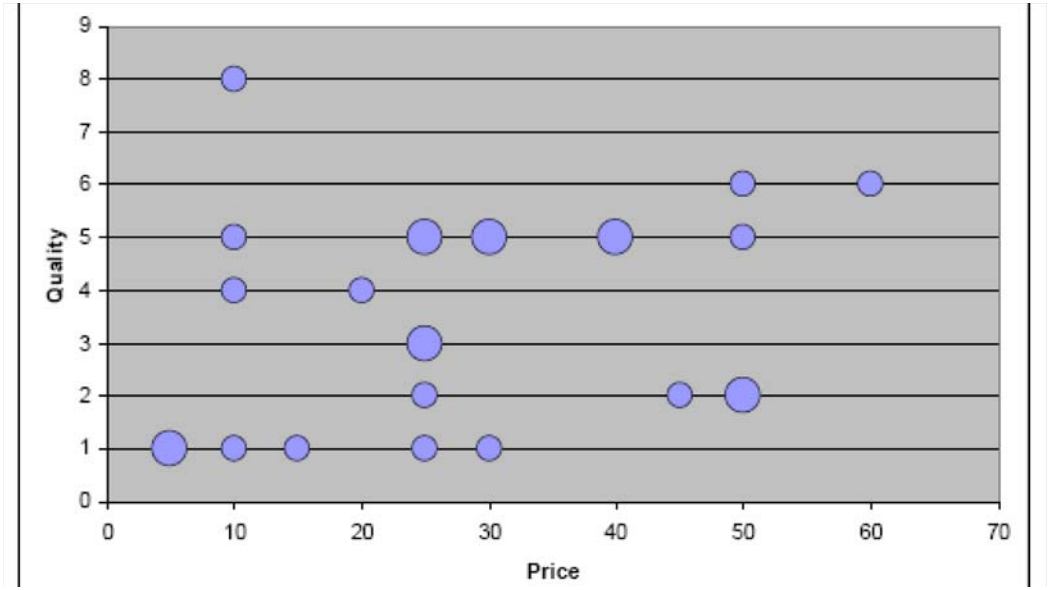
1 Social Preferences: Gift Exchange in the Field II

- **List (JPE, 2006).** Test of social preferences from sellers to buyers
- Context: sports card fairs –> Buyers buying a particular (unrated) card from dealers
- Compare effect of laboratory versus field setting
- *Treatment I-R.* Clever dual version to the **Fehr-Kirchsteiger-Riedl (1993)** payoffs
  - Laboratory setting, abstract words
  - Buyer pay $p \in \{5, 10, ...\}$ and dealer sells card of quality $q \in [.1, 1]$

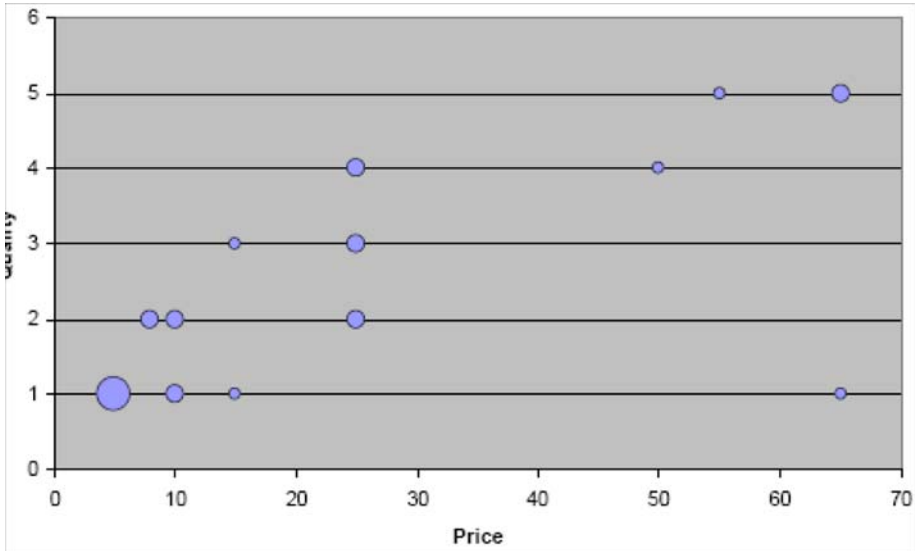
  - Buyer payoff is $(80 - p)\, q$
  - Dealer payoff is $p - c(q)$, with $c(q)$ convex (but small)

- Standard model: $p^* = 5$ (to satisfy IR), $q^*(p) = 0.1$ for all p

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

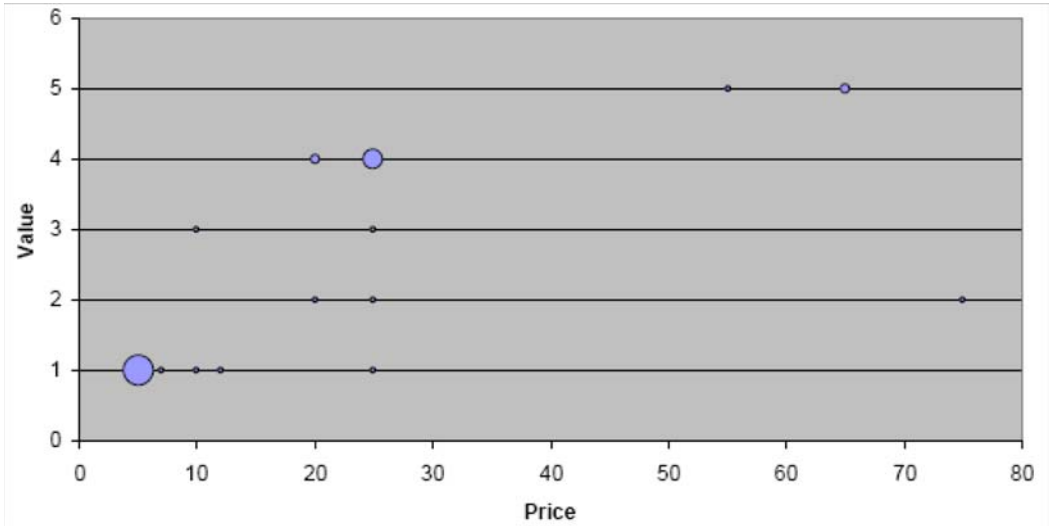


- *Treatment I-RF.* Similar result (with more instances of $p = 5$) when payoffs changed to
  - Buyer payoff is $v(q) - p$
  - Dealer payoff is $p - c(q)$, with $c(q)$ convex (but small)
  - $v(q)$ estimated value of card to buyer, $c(q)$ estimate cost of card to dealer

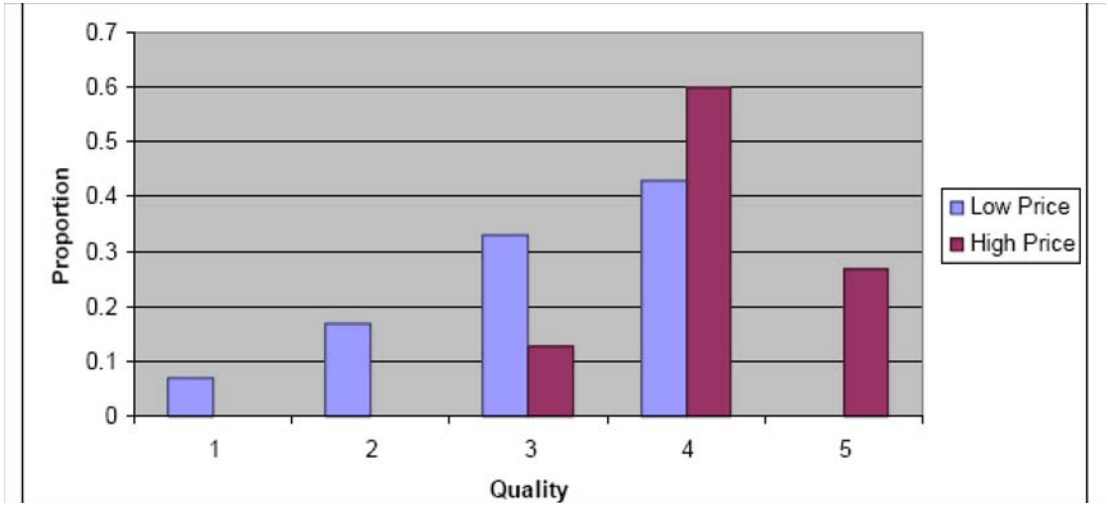


- *Treatment II-C.* Same as Treatment I-RF, except that use context (C) of Sports Card

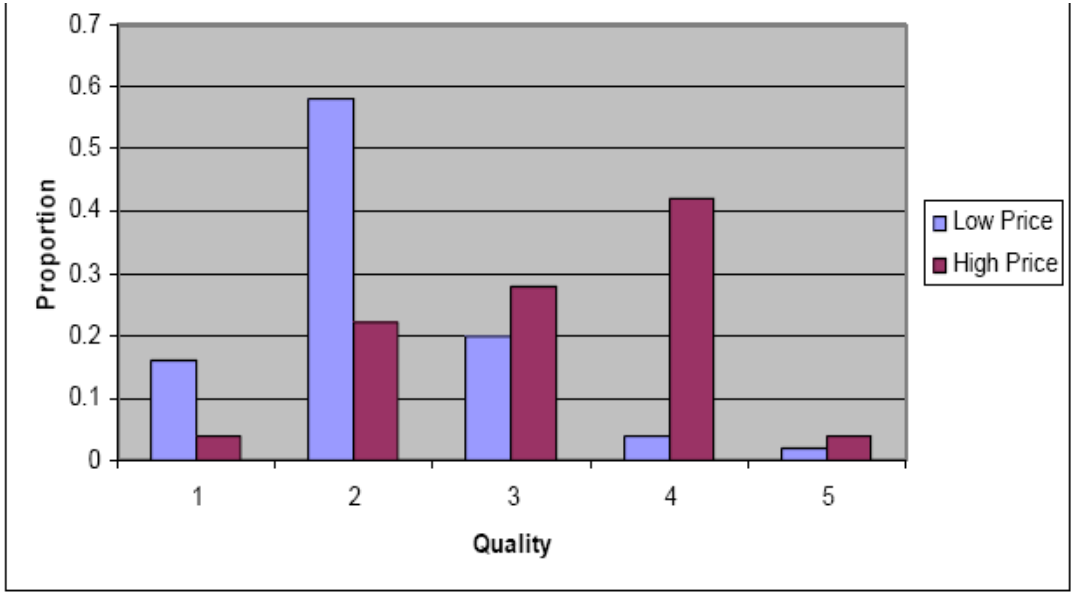
- Relatively similar results



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



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



- However, "gift exchange" behavior depends on who the dealer is
  - Local dealer (frequent interaction): Strong "gift exchange"
  - Non-Local dealer (frequent interaction): No "gift exchange"

- This appears to be just rational behavior

- *Treatment IV.* –> Test a ticket market before (*IV-NG*) and after (*IV-AG* and *IV-G*) introduction of certification
  - No "gift exchange" in absence of certification(*IV-NG*)
  - "gift exchange" only for local dealers

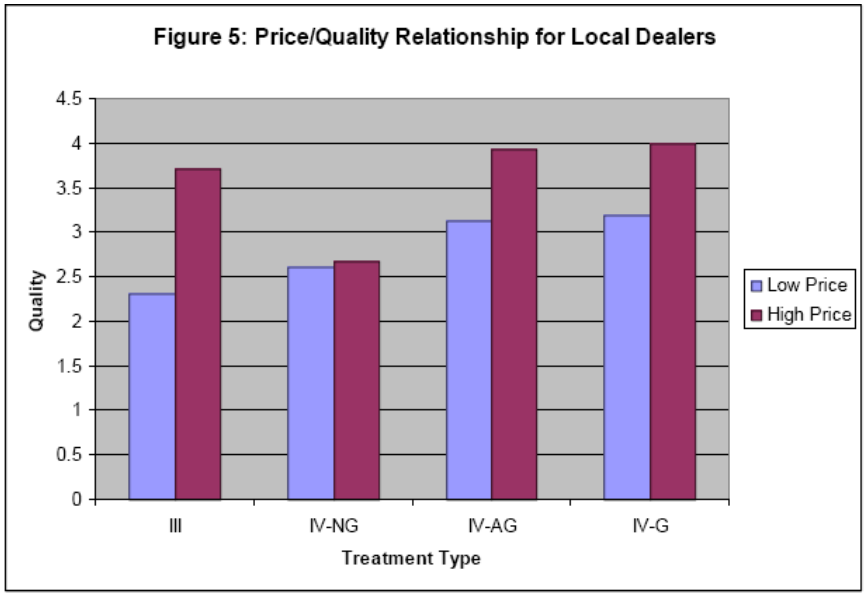


Figure 5: Price/Quality Relationship for Local Dealers
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Quality
III
IV-NG
IV-AG
IV-G
Treatment Type
Low Price
High Price

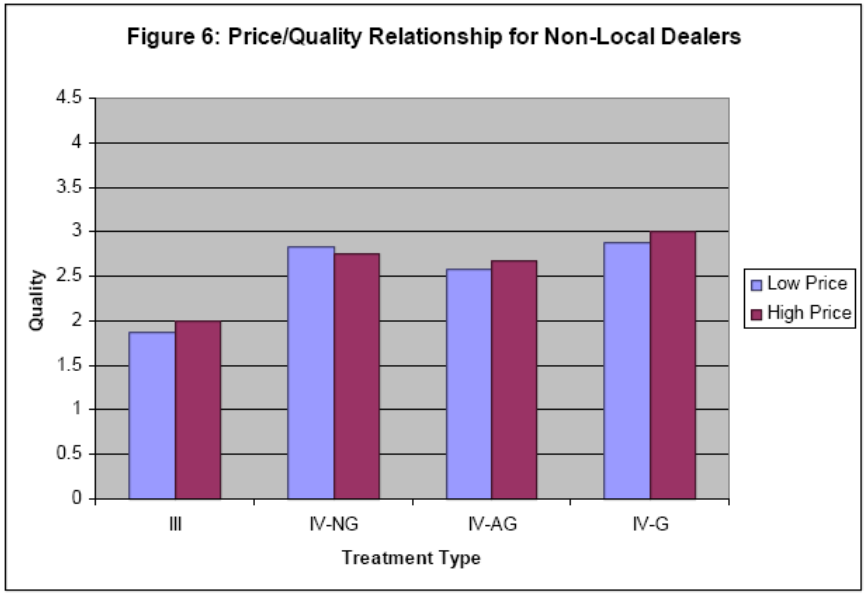


Figure 6: Price/Quality Relationship for Non-Local Dealers
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Quality
III
IV-NG
IV-AG
IV-G
Treatment Type
Low Price
High Price

Table 1. Experimental Design

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

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

Table 3: Marginal Effects Estimates for the Sellers' Quality[a,b]

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

[a]Dependent variable is the sellers' product quality given to the buyer. IV-P pools IV-AG and IV-G data. θ is the monetary gift exchange estimate, computed as $\hat{c}v(q)/\hat{c}P$.
[b]t-ratios (in absolute value) are beneath marginal effect estimates.
^ Significant at the .05 level.
* Significant at the .10 level.

Table 4: Marginal Effects Estimates for the Sellers' Quality Split by Dealer Type[a,b,c]

	Treatment Type								
Variable	**III_L**	**III_N**	**IV-NG_L**	**IV-NG_N**	**IV-AG_L**	**IV-AG_N**	**IV-G_L**	**IVG_N**	**IV-P_L**
Price	0.03^	0.004	0.002	-0.005	0.04^	0.003	0.04^	0.003	0.04^
	(8.6)	(0.7)	(0.2)	(0.5)	(2.1)	(0.3)	(2.7)	(0.1)	(4.8)
Constant	0.6^	0.6^	1.6^	1.8^	1.7^	1.5^	1.8^	1.8*	1.8^
	(4.1)	(4.6)	(5.0)	(5.2)	(5.2)	(4.6)	(5.0)	(1.7)	(10.0)
θ	$0.31^	$0.01	$0.02	-$0.006	$0.32	$0.02	$0.42	$0.03	$0.35^
	(5.2)	(0.5)	(0.4)	(0.5)	(1.4)	(0.6)	(1.5)	(0.1)	(2.1)
Person Random Effects	YES	YES	YES	YES	YES	YES	YES	YES	YES
N	70	30	36	24	30	24	20	16	50

- Conclusion on gift exchange and social preferences
  - Reciprocation and gift exchange are present in field-type setting (Falk)
  - They disappear fast (Gneezy-List)...
  - ...Or maybe not (Kube et al.)
  - They are stronger on the negative than on the positive side (Kube et al.)
  - Not all individuals display them – not dealers, for example (List)
  - Laboratory settings may (or may not) matter for the inferences we derive

2 Social Preferences: The Workplace

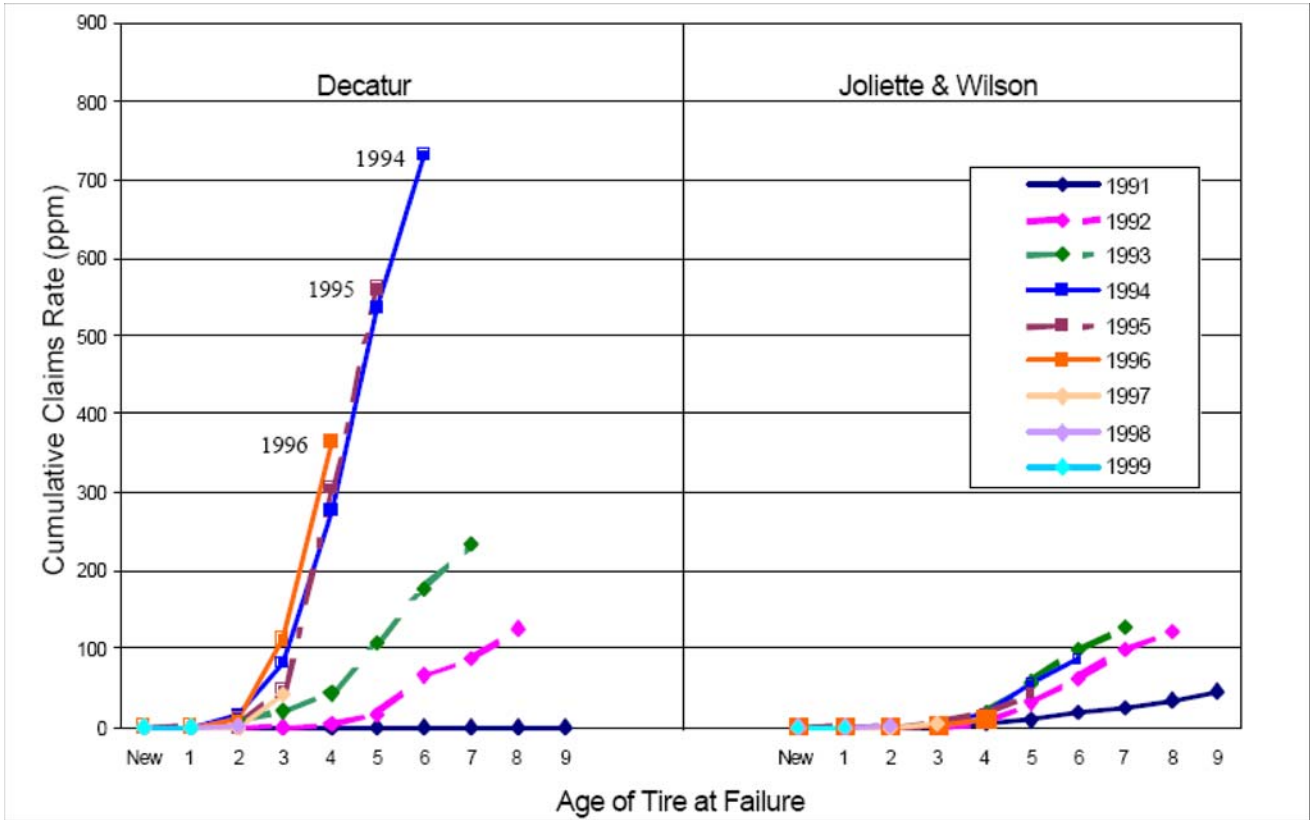
- In the workplace, do workers respond in kind to generous behavior by employers?

- Basis for some efficiency wage models
  - Natural Experiment: Krueger-Mas (2004)
  - Field Experiment on Social Preferences: Bandiera-Barankay-Rasul (2005)
  - Field Experiments on Gift Exchange: Kube-Marechel-Puppe and Gneezy-List

- **Krueger-Mas (JPE, 2004).**

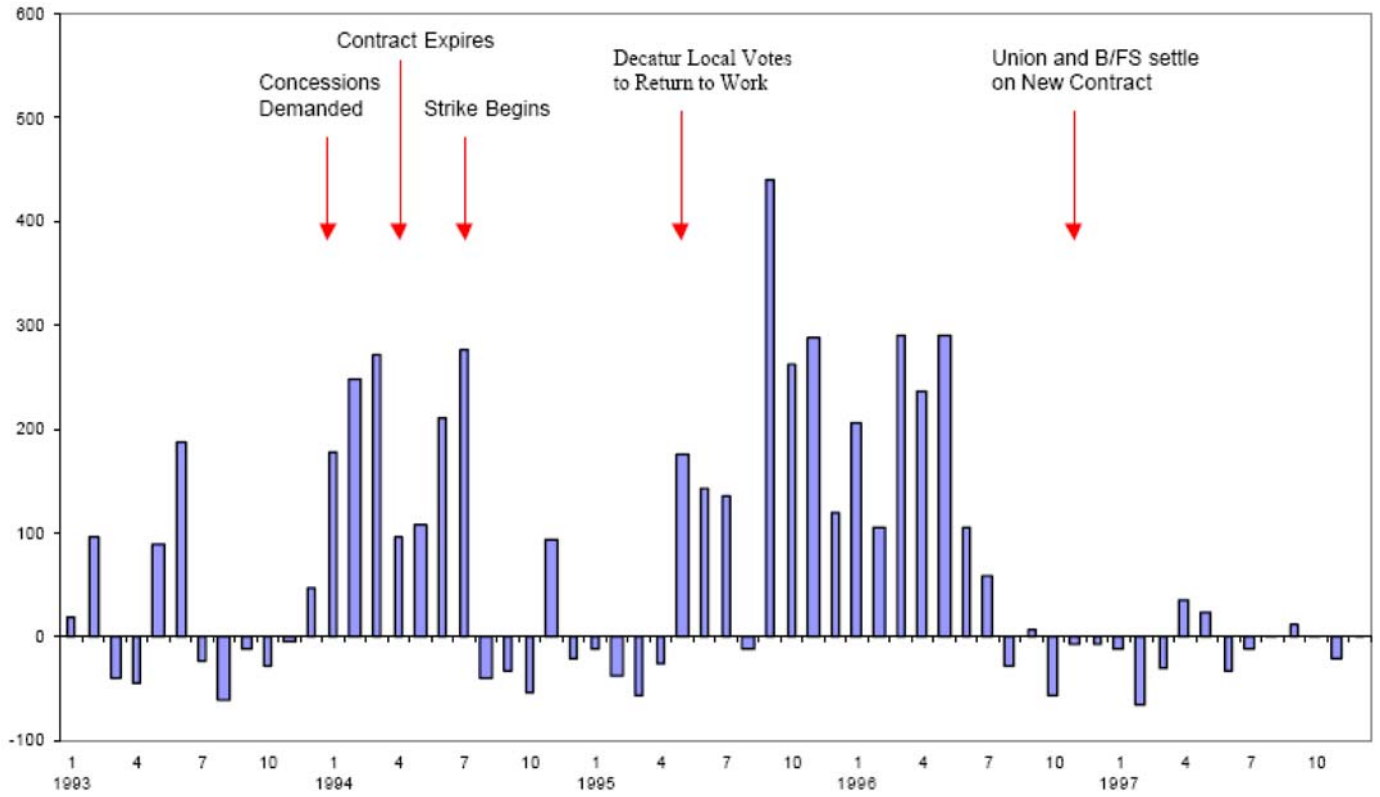
- Setting:
  - Unionized Bridgestone-Firestone plant
  - Workers went on strike in July 1994
  - Replaced by replacement workers
  - Union workers gradually reintegrated in the plant in May 1995 after the union, running out of funds, accepted the demands of the company
  - Agreement not reached until December 1996

- Do workers sabotage production at firm?
  - Examine claims per million tires produced in plants affected
  - Compare to plant not affected by strike (Joliette&Wilson)



- Ten-fold increase in number of claims
- Similar pattern for accidents with fatalities
- Possible explanations:
  - Lower quality of replacement workers
  - Boycotting / negative reciprocity by unionized workers
- Examine the timing of the claims

Figure 8: Difference in the Number of Complaints per million Tires Produced by Month: Decatur Plant minus Joliette and Wilson Plants.



Source: Authors' calculations based on NHTSA complaints data. Records with missing data are excluded.

- Two time periods with peak of claims:
  - Beginning of Negotiation Period
  - Overlap between Replacement and Union Workers
- Quality not lower during period with replacement workers
- Quality crisis due to Boycotts by union workers
- Claims back to normal after new contract settled
- Suggestive of extreme importance of good employer-worker relations

- **Bandiera-Barankay-Rasul (QJE, 2005).**
- Test for impact of social preferences in the workplace
- Use personnel data from a fruit farm in the UK
- Measure productivity as a function of compensation scheme
- Timeline:
  - First 8 weeks of the 2002 picking season –> Fruit-pickers compensated on a relative performance scheme
    - Per-fruit piece rate is decreasing in the average productivity.
    - Workers that care about others have incentive to keep the productivity low
  - Next 8 weeks –> Compensation switched to flat piece rate per fruit
  - Switch announced on the day change took place

- Dramatic 50 percent increase in productivity

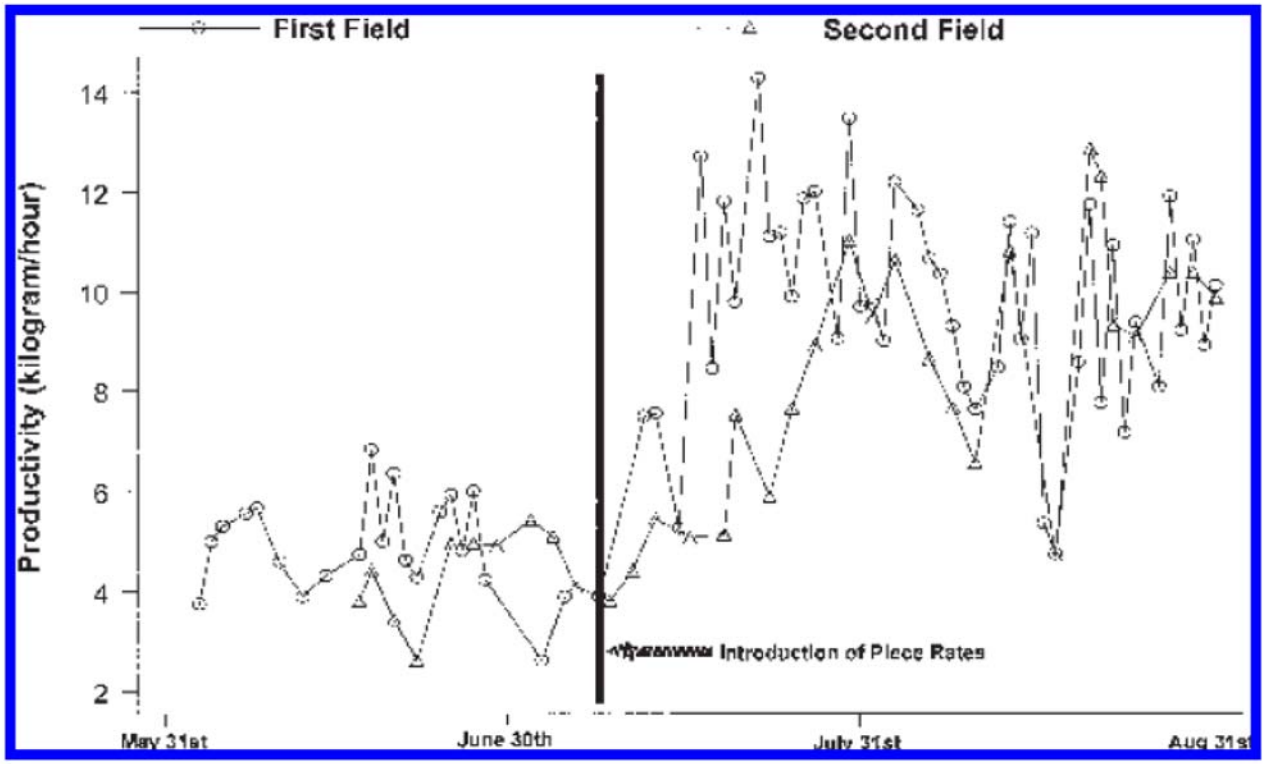


FIGURE I
Productivity (kilogram/hour) over the Season

- No other significant changes

	Relative incentives	Piece rates	Difference
Worker productivity (kg/hr)	5.01	7.98	
	(.243)	(.208)	2.97***
	[4.53, 5.49]	[7.57, 8.39]	
Kilos picked per day	Confidential		23.2***
Hours worked per day	Confidential		−.475
Number of workers in same field	41.1	38.1	−3.11
	(2.38)	(1.29)	
Daily pay	Confidential		1.80
Unit wage per kilogram picked	Confidential		−.105***

*** denotes significance at 1 percent. Sample sizes are the same as those used for the productivity regressions. Standard errors and confidence intervals take account of the observations being clustered by field-day. Productivity is measured in kilograms per hour. Daily pay refers to pay from picking only. Both daily pay and the unit wage per kilogram picked are measured in UK Pounds Sterling. Some information in the table cannot be shown due to confidentiality requirements.

- Is this due to response to change in piece rate?
  - No, piece rate went down –> Incentives to work less (susbt. effect)

- Results robust to controls

- Results are stronger the more friends are on the field

	(1a) Relative incentives	(1b) Relative incentives	(2a) Piece rates	(2b) Piece rates
Share of workers in the field who are friends	−1.68***	−5.52**	.072	1.17
	(.647)	(2.36)	(.493)	(1.60)
Share of workers in the field who are friends × number of workers in same field		1.60**		−.285
		(.684)		(.501)
Number of workers in same field		.182		.085
		(.117)		(.069)
Marginal effect of group size (at mean friends' share)		.236**		.076
		(.110)		(.065)
Worker fixed effects	Yes	Yes	Yes	Yes
Field fixed effects	Yes	Yes	Yes	Yes
Other controls	Yes	Yes	Yes	Yes
Adjusted R^2	.3470	.3620	.3065	.3081
Number of observations (worker-field-day)	2860	2860	4400	4400

- Two Interpretations:
  - Social Preferences:
    - Work less to help others
    - Work even less when friends benefit, since care more for them
  - Repeated Game
    - Enforce low-effort equilibrium
    - Equilibrium changes when switch to flat pay
- Test: Observe results for tall plant where cannot observe productivity of others (raspberries vs. strawberries)

- Compare Fruit Type 1 (Strawberries) to Fruit Type 2 (Raspberries)
  - No effect for Raspberries

DEPENDENT VARIABLE = LOG OF WORKER'S PRODUCTIVITY
(KILOGRAM PICKED PER HOUR PER FIELD-DAY)
ROBUST STANDARD ERRORS REPORTED IN PARENTHESES, ALLOWING FOR CLUSTERING AT FIELD-DAY LEVEL

	(1) Fruit type 2	(2) Fruit type 1	(3) Fruit types 1 and 2 combined
Piece rate dummy (P_t)	−.063	.483***	
	(.129)	(.094)	
Piece rate × fruit type 2			−.100
			(.095)
Piece rate × fruit type 1			.490***
			(.092)

- –> No Pure Social Preferences. However, can be reciprocity

- Important to control for repeated game effects –> Next papers

3 Social Preferences: Charitable Giving

- Andreoni (2004). Excellent survey of the theory and evidence

- Stylized facts:
  - US Giving very large: 1.5 to 2.1 percent GDP!
  - Most giving by individuals (Table 1)

Table 1
Sources of Private Philanthropy, 2002

Source of gifts	Billions of dollars	Percent of total
Individuals	183.7	76.3
Foundations	26.9	11.2
Bequests	18.1	7.5
Corporations	12.2	5.1
Total for all Sources	240.9	100

Source: Giving USA, 2003

- – Giving fairly constant over time (Figure 1)

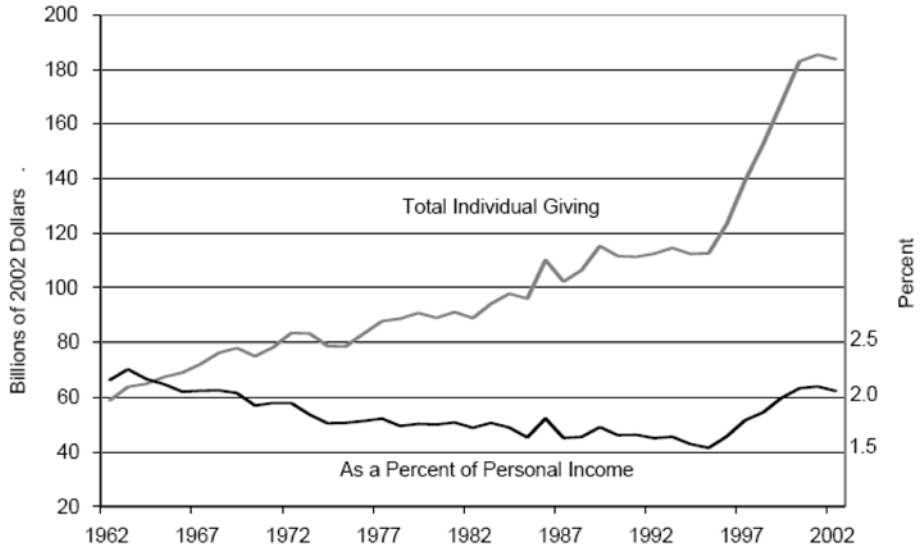


Figure 1: Trends in Individual Giving.
Source: Giving USA 2003.

- Giving by income, age, and education (Table 2 – no controls)
  - Giving as percent of income fairly stable
  - Increase for very rich (tax incentives matter here)

Table 2
Private philanthropy by income, age, and education of the giver, 1995

	Percent of households who give	Average amount given by those who give	Percent of household income
All contributing households	68.5	1,081	2.2
Household Income			
under $10,000	47.3	324	4.8
10,000–19,000	51.1	439	2.9
20,000–29,999	64.9	594	2.3
30,000–39,999	71.8	755	2.2
40,000–49,999	75.3	573	1.3
50,000–59,999	85.5	1,040	1.9
60,000–74,999	78.5	1,360	2.0
75,000-99,999	79.7	1,688	2.0
100,000 or above	88.6	3,558	3.0

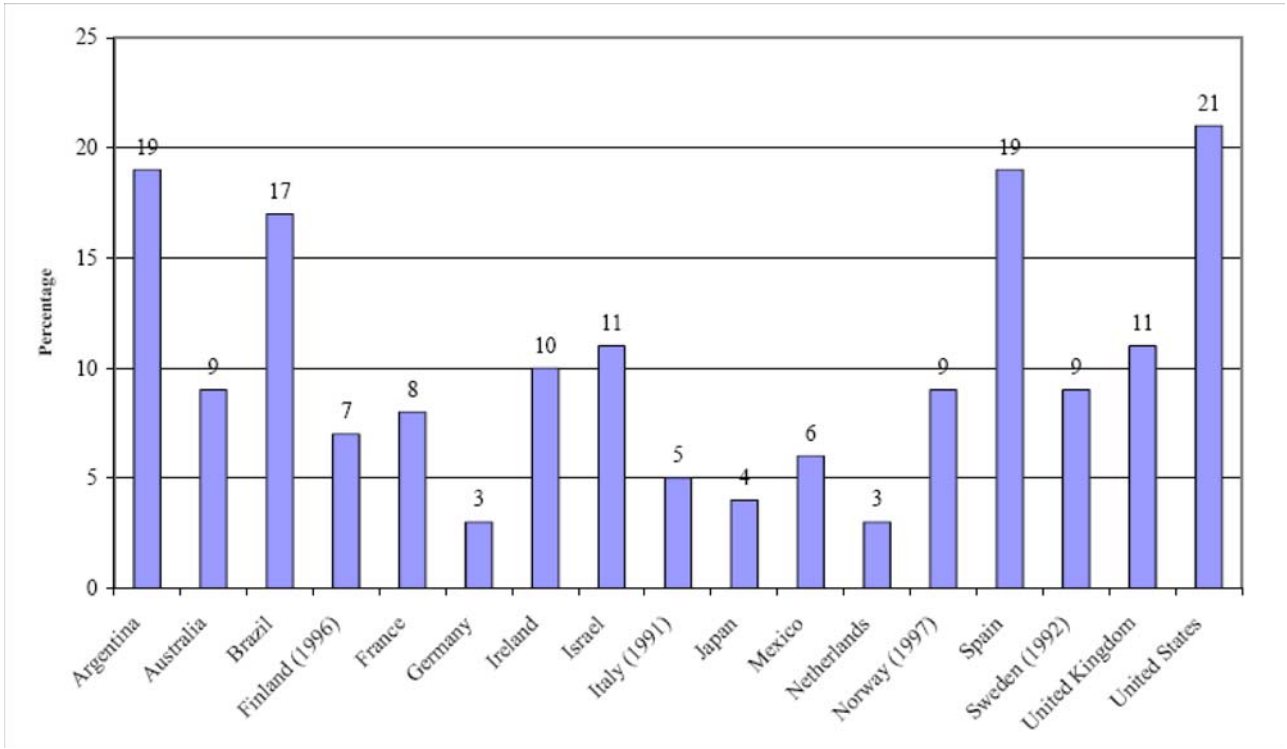
- Giving to whom? (Table 3)
  - Mostly for religion
  - Also: human services, education, health
  - Very little international donations

Table 3
Private Philantropy by Type of Charitable Organization, 1995.

Type of Charity	Percent of Households who give	Average amount given by those who give	Percent of total household contributions
Arts, culture and humanities	9.4	221	2.6
Education	20.3	335	9.0
Environment	11.5	110	1.6
Health	27.3	218	8.1
Human Services	25.1	285	9.5
International	3.1	293	1.1
Private and community foundations	6.1	196	1.4
Public or Societal benefit	10.3	127	1.7
Recreation	7.0	161	1.4
Religious	48.0	946	59.4
Youth Development	20.9	140	3.8
Other	2.1	160	0.3

Source: Author's calculations, data from Independent Sector, Giving and Volunteering, 1995.

- Compare to giving in other countries (Figure 2)
  - In US non-profits depend more on Charitable contributions



- What else do we know?

- Until 1990s, very limited research on charitable giving

- Then:

  1. Evidence by Jim Andreoni and others on fund-raising, and especially on crwoding out prediction (see below)

  2. Field experiments by John List and others

- Focus on Field Experiments. First paper: **List and Lucking-Reiley (2002)** focuses on seed money
  - Capital campaign to raise money for computer center at Univ. Central Florida
  - 3,000 letters assign to 6 treatments
  - Randomization of seed money, i.e., how much money was already raised
  - Randomization of whether refund promised if threshold not matched

TABLE 1
RESULTS OF THE FIELD EXPERIMENT

	10	10R	33	33R	67	67R
	A. Experimental Design					
Number of solicitations mailed	500	500	500	500	500	500
Seed money (%)	10%	10%	33%	33%	67%	67%
Seed money ($)	$300	$300	$1,000	$1,000	$2,000	$2,000
Refund offered?	no	yes	no	yes	no	yes
	B. Results					
Number of contributions	17	20	33	31	42	40
Participation rate	3.4%	4.0%	6.6%	6.2%	8.4%	8.0%
Total contributions	$202	$379	$805	$863	$1,485	$1,775
Mean amount given	$11.88	$18.95	$24.39	$27.84	$35.36	$44.38
Standard error of mean amount	$2.27	$3.13	$2.50	$4.59	$2.26	$6.19

- Huge effect of the seed money, less so of refund

- Interpretation: Presumably signalling of quality

- More recent work: **Landry et al. (QJE, 2006)**
  - Door-to-door fund-raising as oposed to mailer
  - Test different form of solicitation
    * Seed Money or not
    * Lottery or not
  - Examines also features of solicitor

- Main finding: Female attractiveness matters, male attractiveness does not

TABLE IV

DICHOTOMOUS CONTRIBUTION DECISION AND SOLICITOR CHARA

	Model A	Model B	Model C	Model D	Model E
Overall constant—VCM is baseline	0.27**	0.28**	0.25**	0.27**	0.26**
	(0.03)	(0.08)	(0.07)	(0.08)	(0.07)
VCM with seed money	−0.11**	−0.08	−0.07	−0.06	−0.07
	(0.04)	(0.06)	(0.05)	(0.05)	(0.05)
Single-prize lottery	0.20**	0.19**	0.20**	0.21**	0.19**
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Multiple-prize lottery	0.15**	0.18**	0.20**	0.21**	0.20**
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Solicitor beauty rating		0.07**			
		(0.03)			
Beauty—male solicitor			−0.02	−0.03	−0.04
			(0.04)	(0.04)	(0.04)
Beauty—female solicitor			0.12**	0.13**	0.12**
			(0.04)	(0.04)	(0.04)

- What does this teach us about charitable giving in general? That more affects giving than just pure altruism

- Charitable giving important phenomenon – How do we understand it?
- **Model 1.** Social preferences: Giving because caring for welfare of others
- Problem (i): Amounts given off relative to lab experiments
- Problem (ii): Model predicts crowding out of giving:
  - If government spends on income of needy group, corresponding one-on-one decrease in giving
  - Evidence of crowding out: Limited crowd-out
- Problem (iii): Model predicts giving to one highest-value charity—Instead we observe dispersion across charities
- Problem (iv): In-person or phone requests for giving raise much more than impersonal requests (mail)

- **Model 2.** Andreoni (1994): Warm-Glow or Impure altruism.
  - Agent gets utility $v(g)$ directly from giving
  - Utility $v(g)$ sharply concave

- Can explain (i), (ii), and (iii) – See Problem Set 3

- Does not directly explain (iv) – Can assume though that warm-glow is triggered more by in-person giving

- **Model 3.** Giving is due to social pressure
  - Pay a disutility cost S if do not give when asked
  - No disutility cost if can avoid to meet the solicitor

- Can explain (i), (ii), and (iii): Give small amounts to charities, mostly because asked

- Can also explain (iv): Give more in higher social pressure environments

- Key prediction differentiating Models 2 and 3:
  - Model 2: Agent seeks giving occasions to get warm glow
  - Model 3: Agents avoids giving occasions to avoid social pressure

- **DellaVigna, List, and Malmendier (2009)**: Test prediction

What Motivates Charitable Giving?

- Americans give over $150bn to charities each year (Andreoni, 2004)
- Previous field evidence on factors that affect the amount of giving (seed money, characteristics of fund-raiser), but limited field evidence on key questions:

* *Why* do people give at all?

* Is giving necessarily *welfare-enhancing* for the giver?

Second question hard to answer with reduced-form estimates

Reasons for Giving and Welfare

1. Consumers *like giving*
   - Consumers care about worthy causes or get utility from act of giving
     - **Altruism (pure or impure)**
   - Giving is welfare-increasing for giver
2. Consumers *dislike saying no to giving requests.*
   - Consumer prefer giving to saying no when asked, but would prefer not being asked (and not give)
     - **Social pressure (social norms, shame/guilt, signaling)**
   - Giving not necessarily welfare-increasing for giver
   - Professional fund-raisers extract funds

   → This paper: Design to separate the two reasons and estimate welfare effects in the context of door-to-door campaigns

This Paper

- Model of giving with altruism and social pressure
  - Consumer may receive advance notice of fundraiser
  - Consumer can avoid (or seek) fundraiser at a cost
  - Consumer decides whether to give (if at home)
- Field experiment: door-to-door fundraiser
  - Control group: standard fundraiser

This Paper

- Model of giving with altruism and social pressure
  - Consumer may receive advance notice of fundraiser
  - Consumer can avoid (or seek) fundraiser at a cost
  - Consumer decides whether to give (if at home)
- Field experiment: door-to-door fundraiser
  - Control group: standard fundraiser
  - Flyer Treatment: flyer on doorknob on day before provides advance notice about hour of visit

Flyer Layout

This Paper

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Flyer Layout with and without Opt-Out

LA RABIDA
CHILDREN'S HOSPITAL

Fundraising Campaign for La Rabida Children's Hospital

Fundraisers will visit this address tomorrow (/) between and to raise funds for La Rabida Children's Hospital.

☐ Check this box if you **Do not want to be disturbed.**

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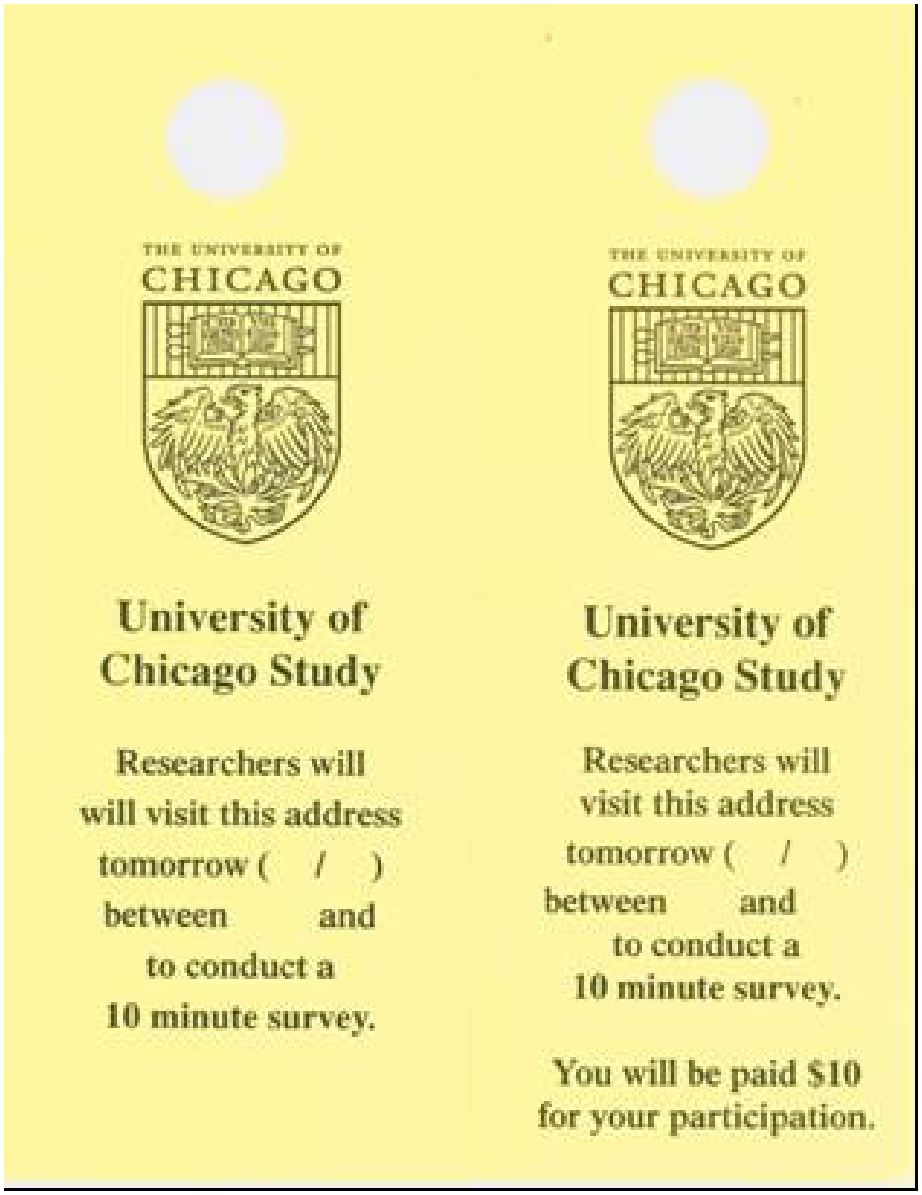
Survey Flyers



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  - Survey Treatments: Administer surveys with varying payment and duration and with or without flyers → to structurally estimate parameters.
- Structural estimates of parameters of model

Methodological Contribution

- Close interplay of model and experiment
  1. Use model to design treatments
  2. Estimate effects of treatment
  3. Estimate model parameters using empirical moments
- Compare to mostly reduced-form field evidence in Psychology and Economics (DellaVigna, forthcoming), especially in field experiments (Harrison and List, 2004)
- Parameter estimates allow for generalization to other contexts, welfare and policy evaluations

Literature

- Charitable-giving literature
  - Observational Data: Andreoni (1989, 1990, 2004)
  - Field Experiments: List and Lucking-Reiley (2002); Croson and Shang (2006); Landry et al. (2006); Ariely, Bracha, and Meier (forthcoming)
- Experimental literature
  - Dictator Games: Forsythe et al. (1994)
  - Social preference models: Charness and Rabin (2002); Fehr and Gächter (2000)
  - Dictator Games with sorting: Dana, Weber, Kuang (2006); Lazear, Malmendier, Weber (2009); Grossman (2007)
- Social Pressure
  - Psychology Experiments: Asch (1951); Milgram (1963)
  - Models: Akerlof (1991)
  - Field evidence: Garicano, Palacios-Huerta, Prendergast (2005); Falk and Ichino (2006); Mas and Moretti (forthcoming); Gerber, Green, and Larimer (2008)

- **Model**

- Giving game with giver and fund-raiser. Timing:
  - *Stage 1*:
    - No Flyer: Giver at home with probability $h = h_0$
    - Flyer:
      - Giver sees flyer with probability r
      - Can alter probability of being at home h from baseline h_0 at cost $c(h)$, with $c(h_0) = 0$, $c'(h_0) = 0$, and $c''(\cdot) > 0$
  - *Stage 2*:
    - Fund-raiser visits home of giver:
      - If giver at home (w/ prob. h), in-person donation $g^* \geq 0$
      - If saw flyer (w/ prob. r), donation via mail $g_m^* \geq 0$

- Utility function of giver:

$$U(g) = u(W - g - g_m) + av(g + \theta g_m, G_{-i}) - s(g)$$

- Agent cares about:
  - Private consumption $u(W - g - g_m)$, with $u'(\cdot) > 0$ and $u''(\cdot) \leq 0$
  - Giving to charity $av(\cdot, G_{-i})$, with $v'_g(\cdot,\cdot) > 0$, $v''_{g,g}(\cdot,\cdot) < 0$, $\lim_{g\to\infty} v'_g(g,\cdot) = 0$, and $v(0, G_{-i}) = 0$.

- Two special cases for $v(g, G_{-i})$:
  - *Pure altruism* (Charness and Rabin 2002, Fehr and Gächter, 2000): $v(g, G_{-i}) = v(g + \theta g_m + G_{-i})$, a is altruism parameter
  - *Warm glow* (Andreoni, 1989 and 1990): $v(g, G_{-i}) = v(g)$, a is weight on warm glow

- Giving via mail is less attractive ($\theta < 1$): less warm glow, cost of giving,...

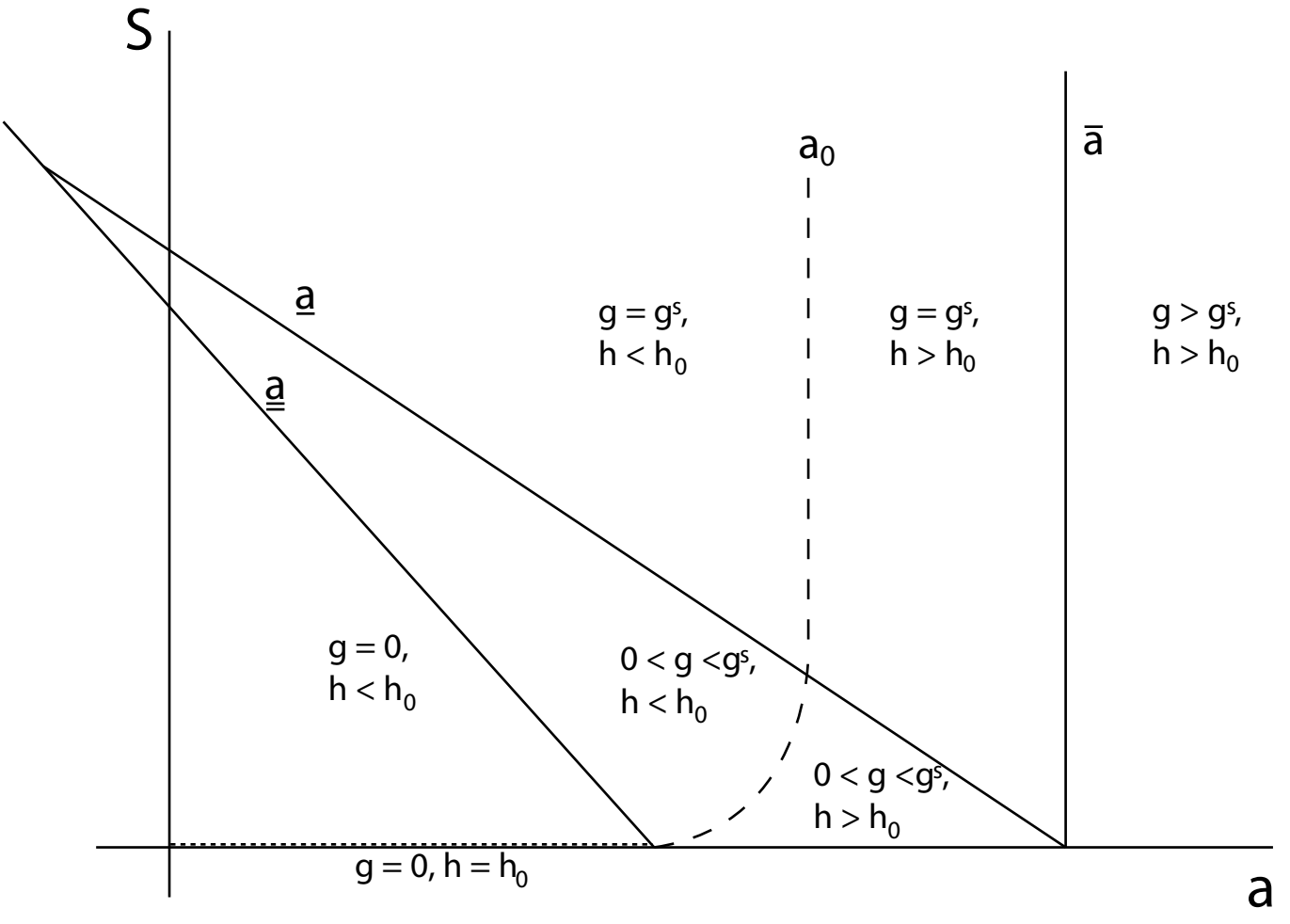
- Social Pressure $s(g) = S(g^s - g) \cdot \mathbf{1}_{g<g^s} \geq 0$
  - Social pressure $s = 0$ if not at home or if giving $g \geq g^s$ (socially acceptable amount)
  - Social pressure $s > 0$ for giving $g < g^s$, decreasing in g
- Captures identity (Akerlof and Kranton, 2000), social norms, or self-signalling (Bodner and Prelec, 2002; Grossman, 2007)
- Psychology evidence:
  - Tendency to conformity and obedience (Milgram, 1952 and Asch, 1957)
  - Effect stronger for face-to-face interaction

- **Second-stage Maximization (Giving)**

- **Lemma 1a. (Conditional Giving In Person).** *There is a unique optimal donation $g^*(a, S)$ (conditional on being at home), which is weakly increasing in a and takes the form: (i) $g^*(a, S) = 0$ for $a \leq \underline{\underline{a}}$; (ii) $0 < g^*(a, S) < g^s$ for $\underline{\underline{a}} < a < \underline{a}$; (iii) $g^*(a, S) = g^s$ for $\underline{a} \leq a \leq \bar{a}$; (iv) $g^*(a, S) > g^s$ for $a > \bar{a}$.*

- No giving via mail when at home

- **Lemma 1b (Conditional Giving Via Mail).** *There is a unique optimal donation via mail $g_m^*(a)$ (conditional on not being at home), which is weakly increasing in a and takes the form: (i) $g_m^*(a) = 0$ for $a < a_m$; (ii) $g_m^*(a) > 0$ for $a \geq a_m$; (iii) for all levels of a, $g_m^*(a) \leq g^*(a; S)$.*


S
a
a_0
$\bar{a}$
$\underline{a}$
$\underline{\underline{a}}$
g = g^s, h < h_0
g = g^s, h > h_0
g > g^s, h > h_0
g = 0, h < h_0
0 < g < g^s, h < h_0
0 < g < g^s, h > h_0
g = 0, h = h_0

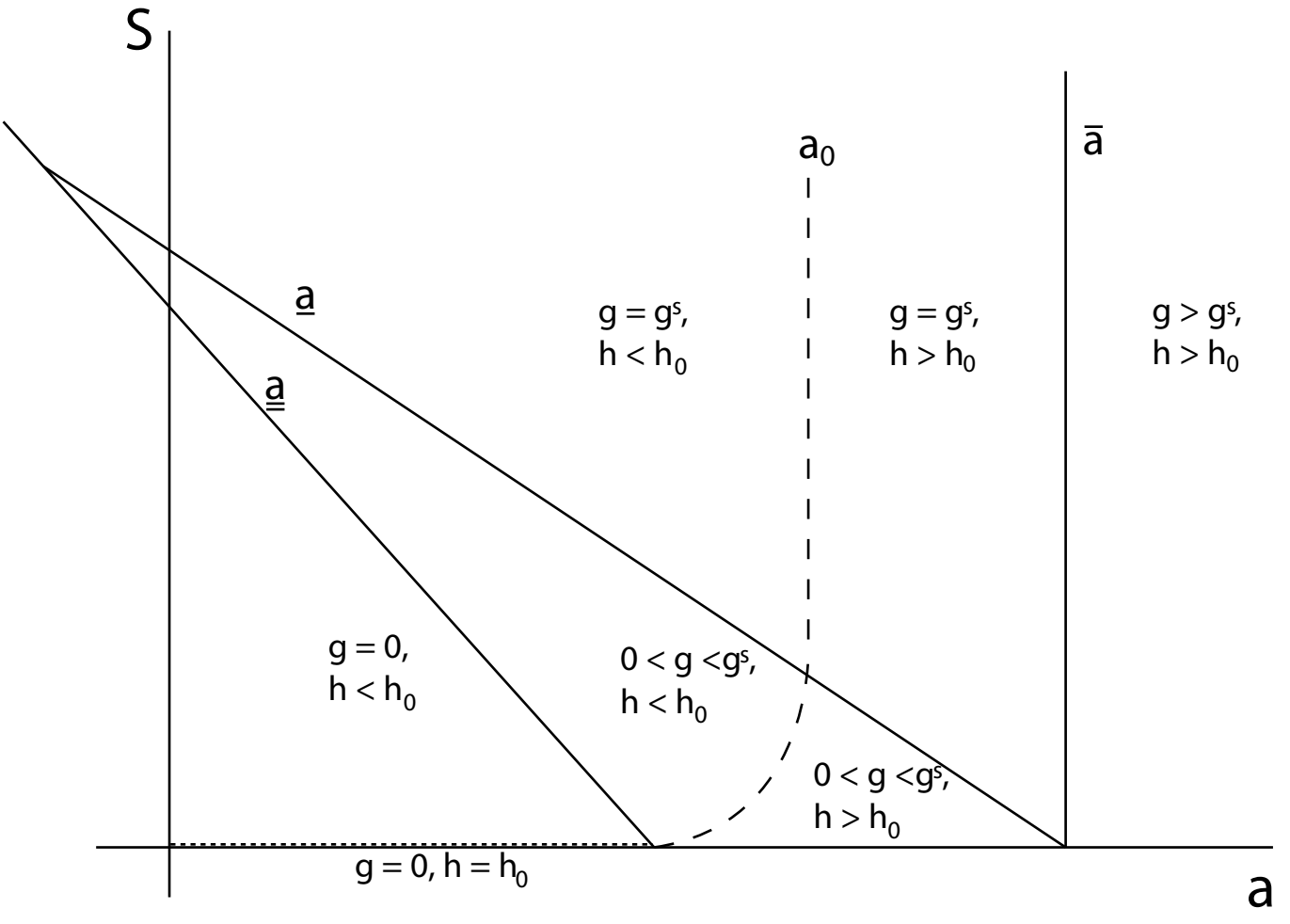
- **First-Stage Maximization (Presence at Home)**

- Probability of being at home h:
  - **Control (NF) Treatment** ($r = 0$): Exogenous, $h = h_0$
  - **Flyer (F) Treatment** ($r > 0$): Choose $h \in [0, 1]$ at cost $c(h)$

- **Lemma 2 (Presence at Home).** *There is a unique optimal probability of being at home* $h^*(a, S)$
  - *For* $S = 0$ *(no social pressure),* $h^*(a, 0) = h_0$ *for* $a \leq \underline{\underline{a}}$ *and* $h^*(a, 0) > h_0$.
  - *For* $S > 0$ *(social pressure),* $h^*(a, S) < h_0$ *for* $a \leq \underline{\underline{a}}$; *there is unique* $a_0(S) \in (\underline{\underline{a}}, \bar{a})$ *such that* $h^*(a_0(S)) = h_0$.

- *Giving due to altruism* –> $h > h_0$ (Seek being at home)

- *Giving due to social pressure* –> $h < h_0$ (Avoid being at home)


S
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g = g^s, h < h_0
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g > g^s, h > h_0
g = 0, h < h_0
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0 < g < g^s, h > h_0
g = 0, h = h_0

- **Opt-Out (O) Treatment**
  - Flyer + Consumers can tell the charity not to disturb
  - Cost of probability of home:

$$C(h) = \begin{cases} 0 & \text{if } h = 0 \\ c(h) & \text{if } h > 0 \end{cases}$$

  - Still costly to remain at home, but no cost to keep charity out
  - (Notice: Never want to set $0 < h < h_0$)

- **Lemma 3 (Opt-Out Decision).** *For $S = 0$ (no social pressure), the agent never opts out for any a. For $S > 0$ (social pressure), the agent opts out for sufficiently low altruism, $a < a_0(S)$.*

- Allow for heterogeneity in altruism a, with $a \sim F$

- Two special cases:
  - *Altruism and No Social Pressure* (*A-NoS*, $S = 0$ and $F\left(\underline{\underline{a}}\right) < 1$)
  - *Social Pressure and Limited Altruism* (*S-NoA*, $S > 0$ and $F\left(\underline{\underline{a}}\right) = 1$)

- **Proposition 1.** *The probability* $P(H)$ *of home presence is*
  - *A-NoS:* $P(H)_F = P(H)_{OO} > P(H)_{NF}$
  - *S-NoA:* $P(H)_{NF} > P(H)_F > P(H)_{OO}$

- **Proposition 2.** *The unconditional probability* $P(G)$ *of giving is*
  - *A-NoS:* $P(G)_F = P(G)_{OO} > P(G)_{NF}$
  - *S-NoA:* $P(G)_{NF} > P(G)_F > P(G)_{OO}$

Experimental Design

- Fund-raising for two charities:
  - La Rabida Children's Hospital in Chicago
  - East Carolina Hazard Center (ECU)
  - Ask survey respondents to rank 5 charities:
    - La Rabida – Rank 3.95 (out of 5)
    - Donate Life – Rank 3.79
    - Seattle Children's Hospital – Rank 3.47
    - Chicago Historical Society – Rank 2.96
    - ECU – Rank 2.54
  - Similar ranking when ask preferred charity for a $1 donations "an anonymous sponsor has pledged to give": 147 out of 255 prefer La Rabida
  - Two charities: La Rabida (Best shot for altruism), ECU (Low likely altruism)

Experimental Design

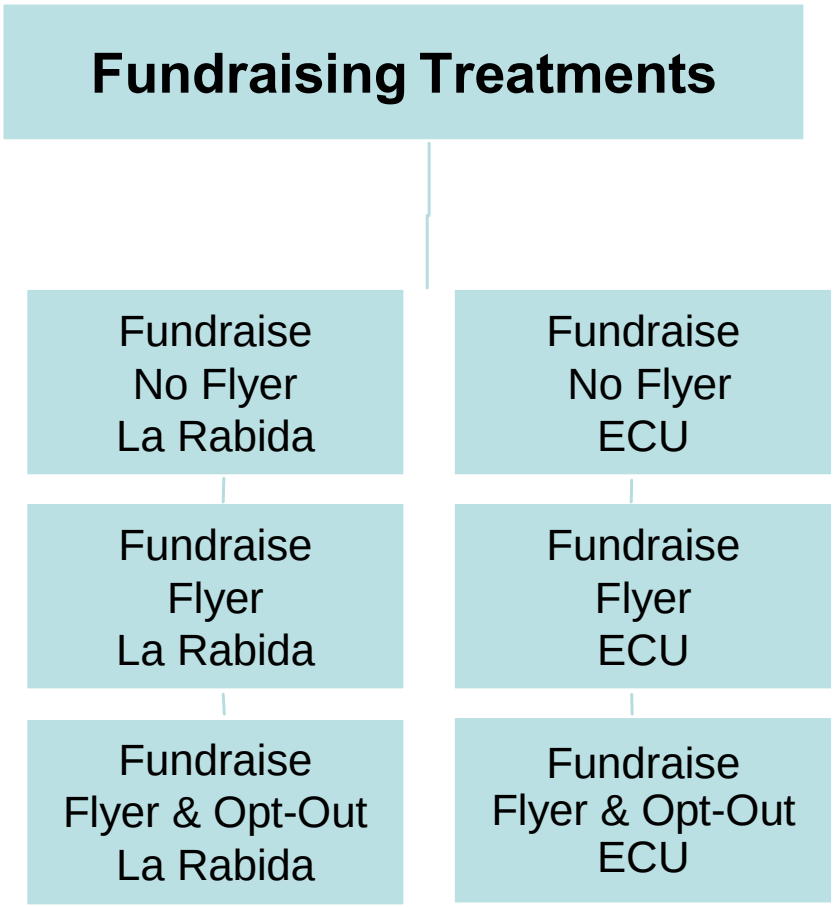
- Door-to-Door Fund-raising
  - Chosen because easier to provide notice of future drive
  - How Common? Use survey to ask respondents
    - Did people “come to your door to raise money for a charity” in past 12 months?
      - 73 percent of 177 respondents had door-to-door visit
      - Compare to 84 percent for phone, 95 percent for mail
    - Did you give at least once in past 12 months?
      - 40 percent for door-to-door
      - Compare to 27 percent for phone, 53 percent for mail
    - How much did you give in past 12 months?
      - $26 for door-to-door ($26 if not capped at $1,000)
      - $59 for phone ($89 if not capped), $114 by mail ($897 if not capped)
  - Summary: Common method, Small amounts given

Experimental Design

- Recruitment and Training: 48 solicitors and surveyors
  - undergraduate students at the University of Chicago, UIC, and Chicago State University
  - Interviewed, trained at UoC
  - assigned to multiple treatments (→ fixed effects)
  - aware of different charities but not of treatment
- Time and Place:
  - Saturdays and Sundays between April 27, 2008 and October 18, 2008
  - Hours between 10am and 5pm
  - Towns around Chicago: Burr Ridge, Flossmoor, Kenilworth, Lemont, Libertyville, Oak Brook, Orland Park, Rolling Meadows, and Roselle

Randomization

- Randomization
  - within a solicitor-day observations (4h/6h shifts per day) and
  - at the street level within a town
- Treatment sample is unbalanced
  - overweighted flyer/non-flyer treatments
    - Baseline: 3,166
    - Flyer: 3,433 (760 indicate only visit in next 2 weeks – no difference)
    - Flyer with Opt-Out: 1,070
  - overweighted La Rabida relative to ECU
    - ECU: 2,707
    - La Rabida: 4,962
- Different treatments in different periods ➔ randomization is conditional on solicitor and day fixed effects.


Fundraising Treatments
Fundraise
No Flyer
La Rabida
Fundraise
No Flyer
ECU
Fundraise
Flyer
La Rabida
Fundraise
Flyer
ECU
Fundraise
Flyer & Opt-Out
La Rabida
Fundraise
Flyer & Opt-Out
ECU

Estimation Strategy

- Estimate treatment effects conditioning on solicitor, town, and day fixed effects

$$y_{i,j,t,h} = \alpha + \Gamma T_{i,j,t,h} + \eta_i + \varphi_j + \lambda_t + BX_{i,j,t,h} + \varepsilon_{i,j,t,h}$$

- Obtain estimate for baseline treatment from same regression without any controls.
- Estimate impact for
  - Probability of answering door
  - Probability of giving
  - (Implied Conditional probability of giving)
  - Probability of large versus small giving

Table 1. Summary Statistics

Panel A: Fund-Raising Treatments

Variable:	Share of Households Answering the Door			Share of Households Giving		
Sample:	Pooled	ECU	La Rabida	Pooled	ECU	La Rabida
	(1)	(2)	(3)	(4)	(5)	(6)
Baseline (No-Flyer) Treatment	0.409	0.4228	0.4032	0.0629	0.0507	0.0680
Flyer Treatment	0.3755	0.3998	0.3628	0.0585	0.0460	0.0650
Flyer with opt out Treatment	0.3355	0.3503	0.3175	0.0514	0.0289	0.0788
N	N = 7669	N = 2707	N = 4962	N = 7669	N = 2707	N = 4962

Panel B: Survey Treatments

Variable:	Share of Households Answering the Door	Share of Households Completing the Survey
	(1)	(2)
No-Flyer ($0/10min) Treatment	0.4135	0.0972
Flyer ($0/10min) Treatment	0.3681	0.1186
Flyer ($0/5min) Treatment	0.3933	0.1711
Flyer ($10/10min) Treatment	0.4156	0.1719
N	N = 1866	N = 1866

Notes:

* significant at 10%; ** significant at 5%; *** significant at 1%

Figure 4a. Frequency of Answering the Door

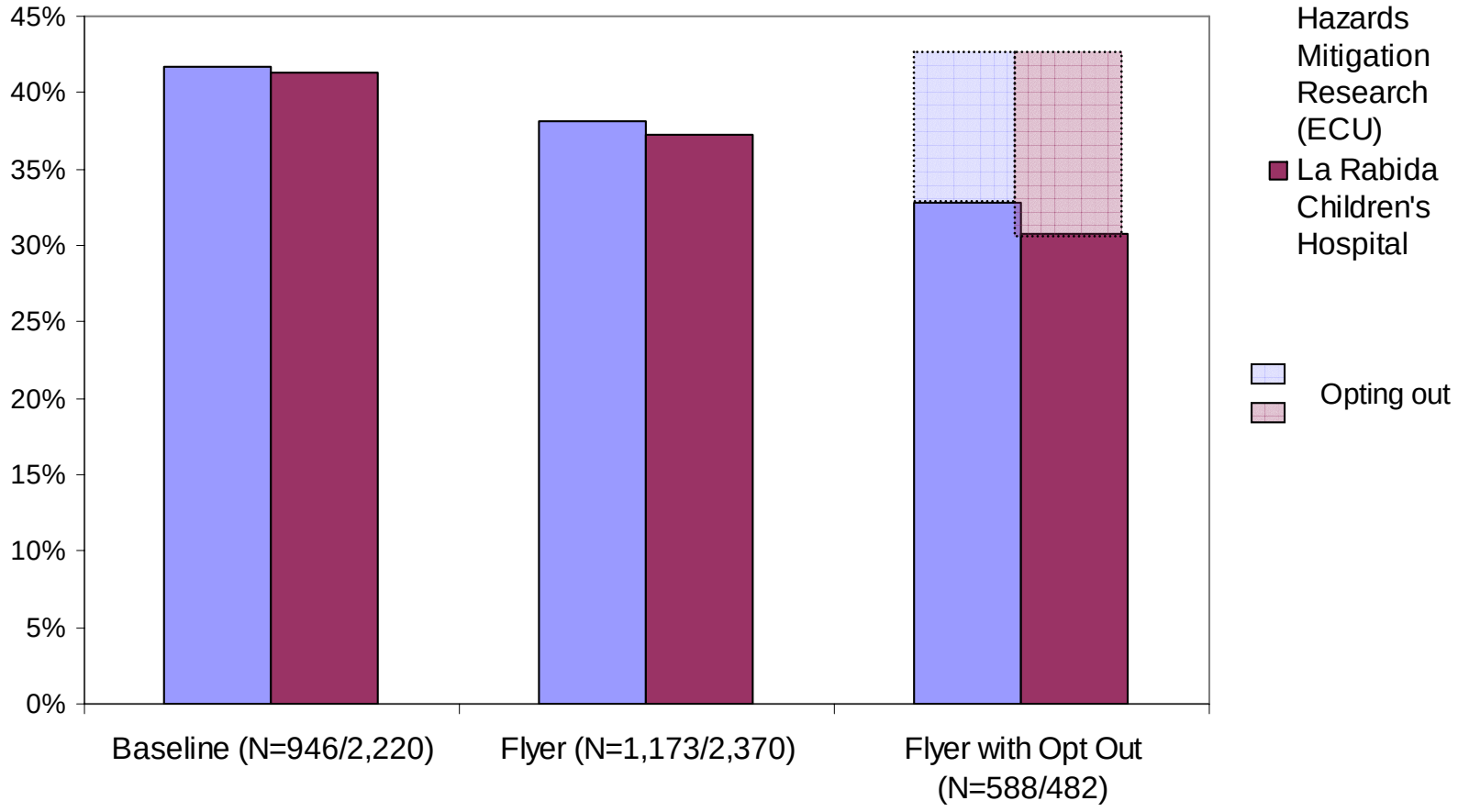


Figure 4b. Frequency of (Unconditional) Giving

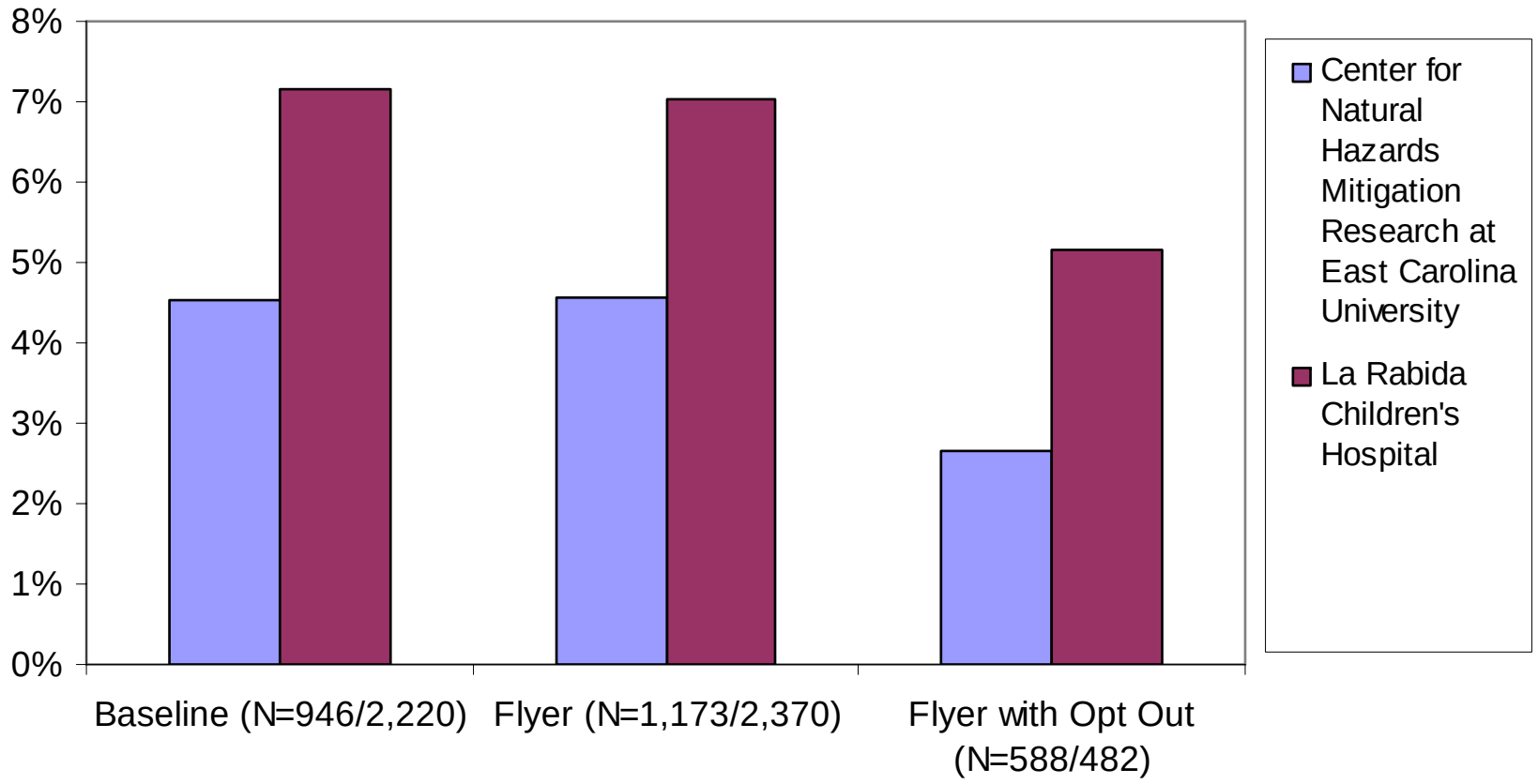


Figure 4c. Frequency of Giving Conditional on Answering The Door

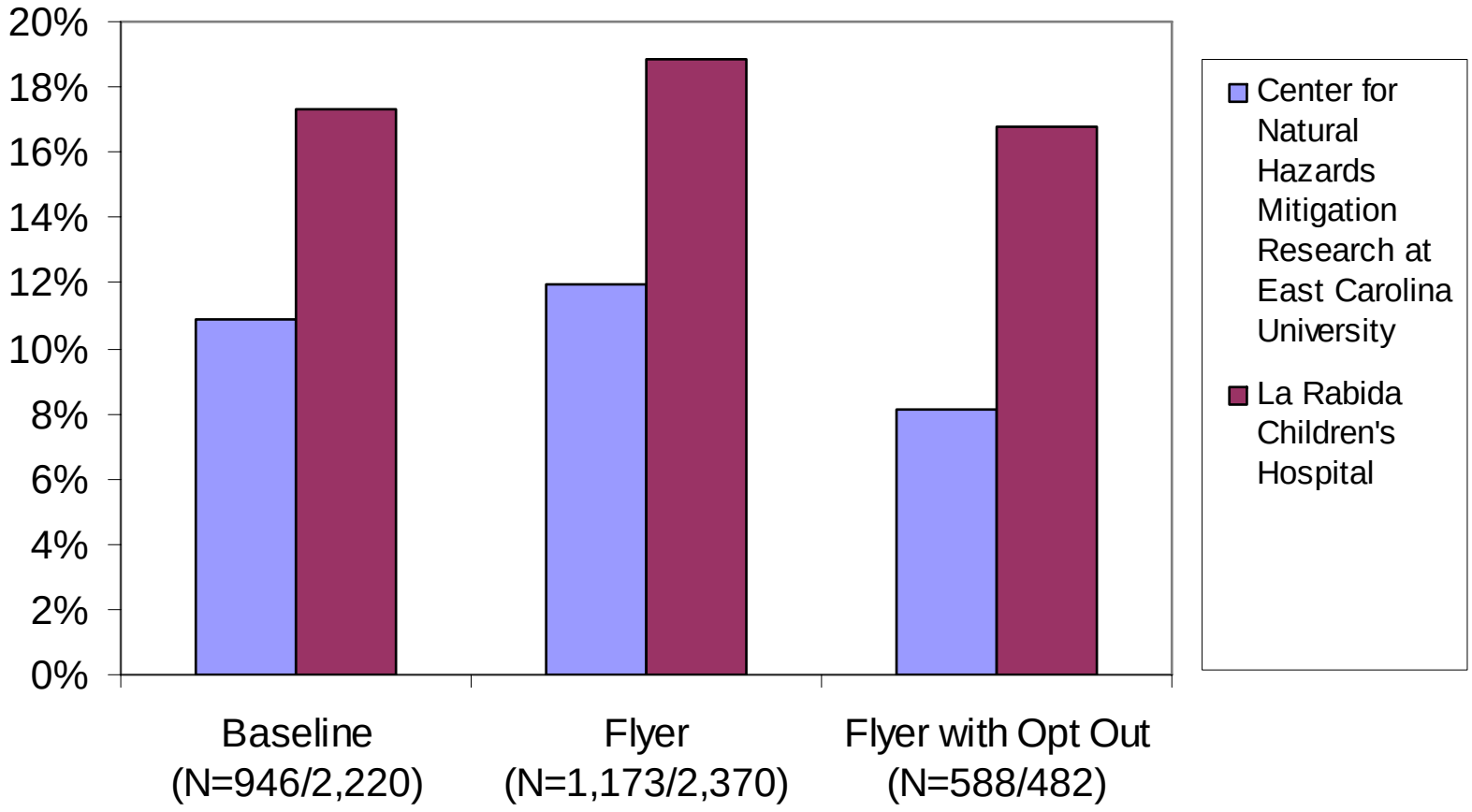


Table 2. Results for Fund-Raising Treatments

Specification:	OLS Regressions					
Dep. Var.:	Indicator for Answering the Door			Indicator for Giving		
Sample:	Pooled	ECU	La Rabida	Pooled	ECU	La Rabida
	(1)	(2)	(3)	(4)	(5)	(6)
Flyer Treatment	-0.038	-0.0323	-0.0397	-0.0013	0.0034	-0.0014
	(0.0139)***	(0.0324)	(0.0150)**	(0.0062)	(0.0070)	(0.0080)
Flyer with opt out Treatment	-0.0946	-0.0902	-0.1019	-0.0174	-0.0173	-0.0155
	(0.0193)***	(0.0276)***	(0.0313)***	(0.0079)**	(0.0099)*	(0.0135)
Mean of Dep. Var. for Baseline Group	0.409	0.4228	0.4032	0.0629	0.0507	0.068
Control Variables:						
Solicitor-Date Fixed Effects	X	X	X	X	X	X
N	N = 7669	N = 2707	N = 4962	N = 7669	N = 2707	N = 4962

Notes: Estimates for a linear probability model, with standard errors clustered by solicitor-date in parenthesis. The omitted treatment is the Baseline No-Flyer fund-rasigin treatment. The regressions include controls for solicitor-date fixed effects, as well as a 0-10 rating
* significant at 10%; ** significant at 5%; *** significant at 1%

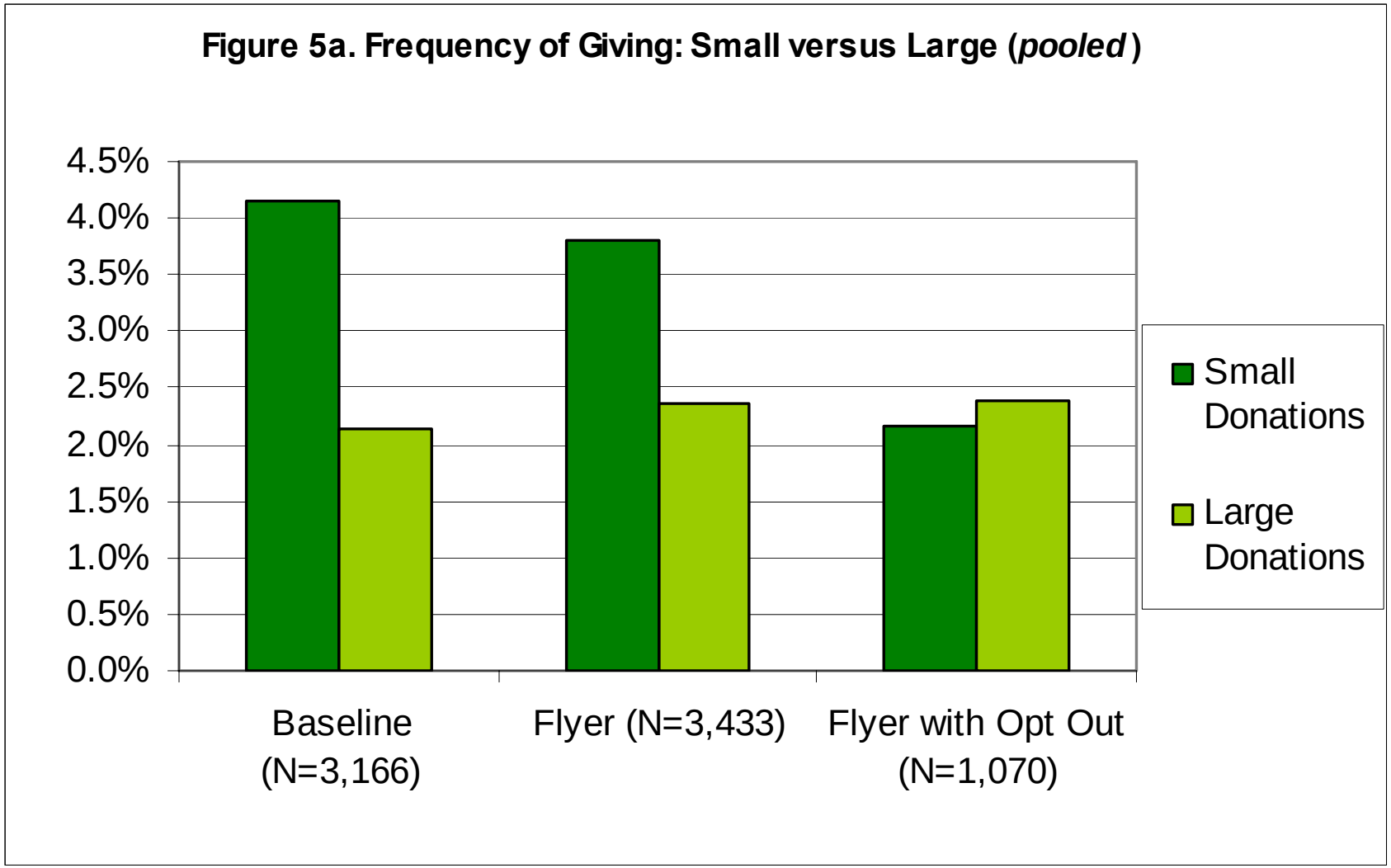
Interpretation of results

- Result 1: $P(H)_{NF} > P(H)_{F} > P(H)_{OO}$
  - Proposition 1: Support for social pressure
- Result 2: $P(G)_{F} = P(G)_{NF}$
  - Proposition 2: Consistent with heterogeneous population with both social pressure and altruism
  - Reconcile with Result 1? Social pressure reduces presence at home even among non-givers
- Result 3: $P(G)_{F} > P(G)_{OO}$
  - Proposition 2: Support for social pressure, not for signaling
- Result 4: $P(G|H)_{F} > P(G|H)_{NF}$
  - Proposition 3: Consistent with any model
- Further Tests:
  - Proposition 4: small vs. large donations
  - Proposition 5: donations via mail and Internet

- **Evidence by Donation Size:**

Social pressure more likely to yield small donations

Use median donation size ($10) as cut-off point



- **Evidence by Donation Size:**

Effect on whole distribution → Opt-Out lowers small giving

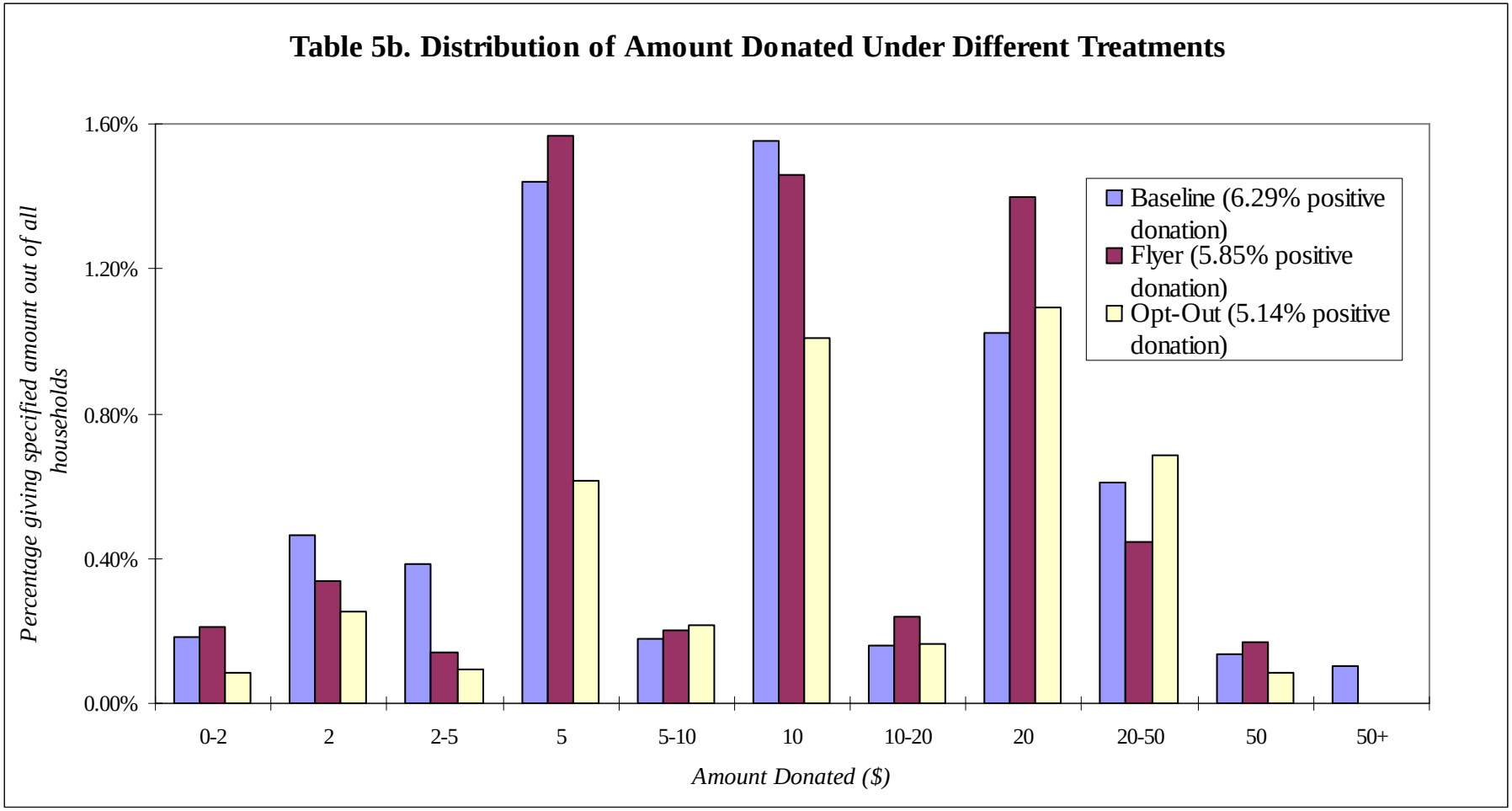


Table 2. Results for Fund-Raising Treatments

Specification:				
Dep. Var.:	**Indicator for Giving Small Amount (≤ $10)**	**Indicator for Giving Large Amount (> $10)**	**Indicator for Giving Prior to Crisis (9/1/2008)**	**Indicator for Giving Post Crisis (9/1/2008)**
Sample:	Pooled		Pooled	
	(7)	(8)	(9)	(10)
Flyer Treatment	-0.0034 (0.0052)	0.0021 (0.0035)	-0.0043 (0.0071)	0.0182 (0.0097)*
Flyer with opt out Treatment	-0.0197 (0.0076)**	0.0023 (0.0051)	-0.019 (0.0100)*	-0.0075 (0.0121)
Mean of Dep. Var. for Baseline Group	0.0414	0.0215	0.0677	0.0267
Control Variables:				
Solicitor-Date Fixed Effects	X	X	X	X
N	N = 7669	N = 7669	N = 6115	N = 1554

Notes: Estimates for a linear probability model, with standard errors clustered by solicitor-date in parenthesis. The omitted treatment is the Baseline No-Flyer fund-rasigin treatment. The regressions include controls for solicitor-date fixed effects, as well as a 0-10 rating of home values in the block.

* significant at 10%; **

- **Giving via mail and Internet:**

  Altruism → Giving via mail in response to flyer

  Warm Glow → Also if warm glow in impersonal giving

  Social pressure → No giving via mail

Number of Households Giving (Mail/Internet)	
ECU	La Rabida
(7)	(8)
Zero donations across all treatments	One ($25) donation across all treatments
N = 2707	N = 4962

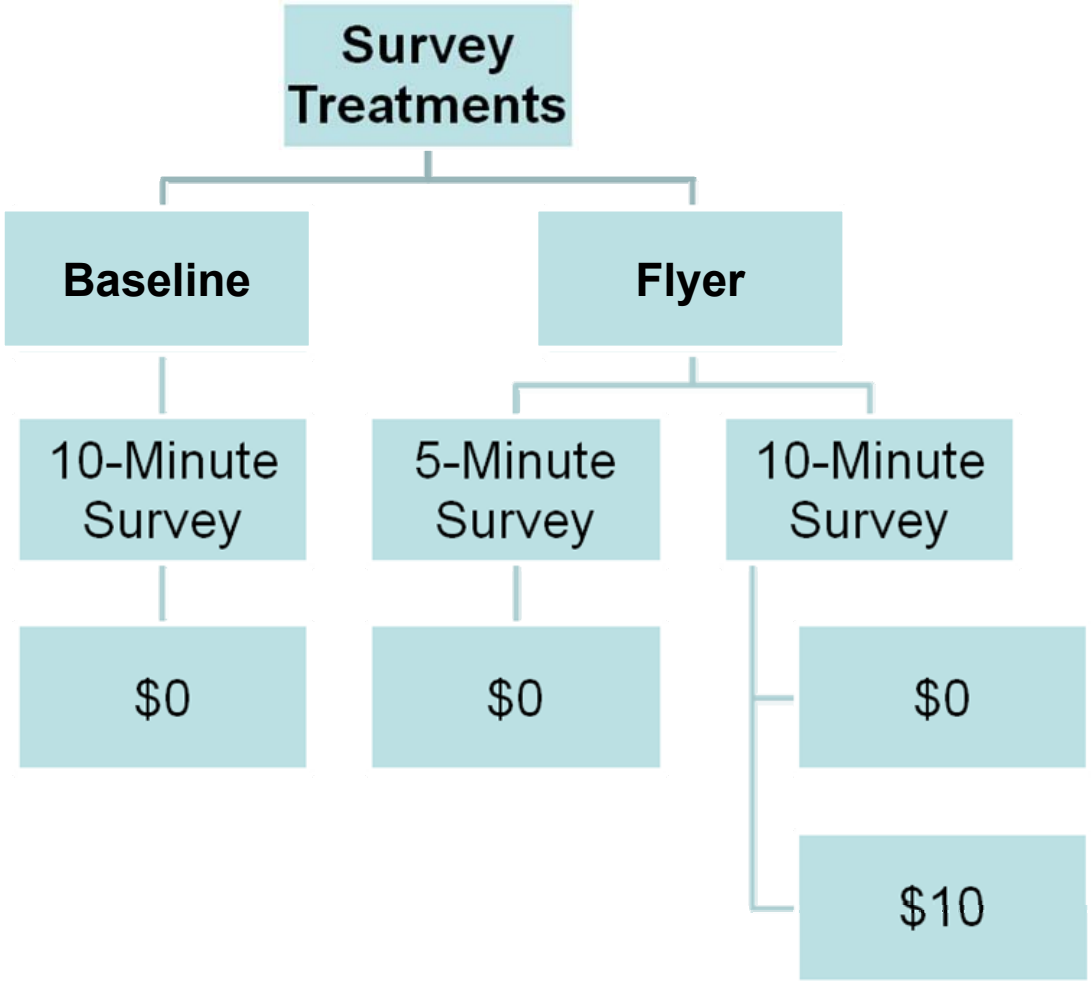
Summary of Results

1. Flyer reduces the share of households at home by 10% (simple flyer) to 25% (flyer with opt-out box)
2. Simple flyer does not affect giving
3. Flyer with opt-out box reduces giving by 30%
4. Reduction in giving exclusively for small donations (donations < $10)
5. Flyer induces no donations via mail or internet
6. Overall reduction of level of giving after financial crisis

- **Interpretation**:
  - Results 1, 3-5 point to social pressure
  - Result 2 points to altruism also playing a role
  - Result 3 not consistent with self- or social signaling

Survey Treatments

- Results of fundraiser do not allow us to estimate underlying altruism and social pressure parameters
  - Unobserved cost of adjustment *c(h)*
- Solution: estimate elasticity with respect to monetary incentives
- Survey treatments with varying compensation and duration


Survey Treatments
Baseline
Flyer
10-Minute Survey
5-Minute Survey
10-Minute Survey
$0
$0
$0
$10

Survey

THE UNIVERSITY OF CHICAGO

Household Charitable Giving Survey

Important: All questions contained in this questionnaire are strictly confidential.

Surveyor ID:_____ **Date of Survey:**_____
Time of Survey:_____

Gender: ☐ M ☐ F

Date of Birth (M/D/Y): / /

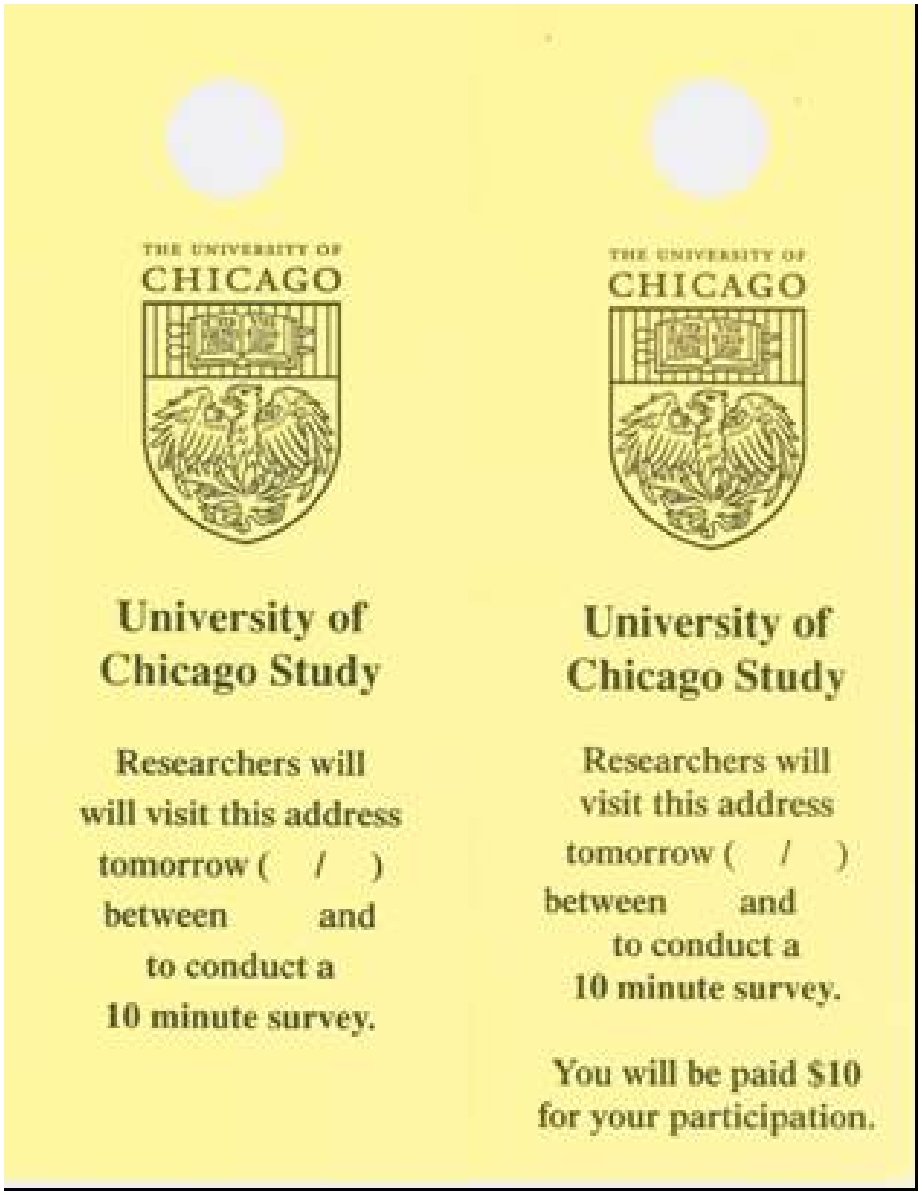
Marital status: ☐ Single ☐ Married ☐ Separated ☐ Divorced ☐ Widowed ☐ Other:_____

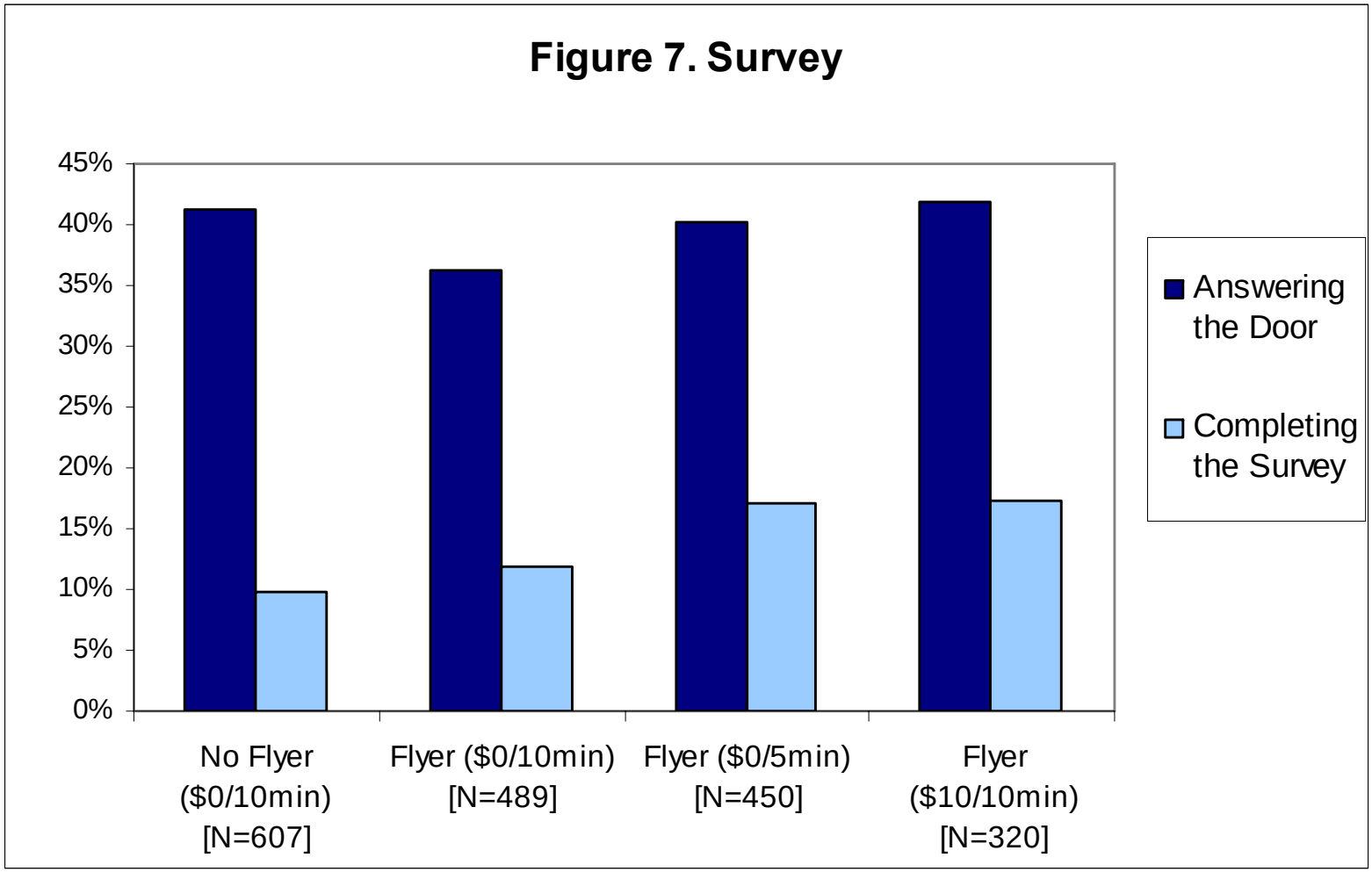
Number of children: ☐ none ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more

Ethnicity/Race: ☐ Caucasian/White ☐ African American/Black ☐ Hispanic ☐ South Asian ☐ other Asian ☐ Arab
☐ Native American ☐ Native Hawaiian / Pacific Islander ☐ Other:_____

Education: ☐ Some High School ☐ High School Diploma ☐ Some College ☐ College Diploma ☐ Graduate School

Survey Flyers





- **Survey Results:**

Higher payment (lower duration)
increases proportion at home by 10% (insig.)
increases survey completion by 70% (significant)

Table 3. Results for Survey Treatments

Specification:	OLS Regressions	
Dependent Variable:	Indicator for Answering the Door	Indicator for Completing Survey
	(1)	(2)
Flyer ($0/10min) Treatment	-0.0514	-0.0041
	(0.0385)	(0.0262)
Flyer ($0/5min) Treatment	-0.0107	0.0716
	(0.0328)	(0.0229)***
Flyer ($10/10min) Treatment	0.0044	0.0752
	(0.0416)	(0.0278)**
Mean of Dep. Var. for No Flyer ($0/10min)	0.4135	0.0972
Control Variables:		
Randomization Fixed Effects	X	X
N	N = 1866	N = 1866

- **Structural estimates (Minimum-distance estimator)**

- Minimize distance between predicted moments $m(\vartheta)$ and observed ones $\hat{m}$:

$$\min_{\vartheta} (m(\vartheta) - \hat{m})' W (m(\vartheta) - \hat{m})$$

- Moments $m(\vartheta)$:
  1. Probability of opening the door $(P(H)_j^c,\ j = F, NF, OO,\ c = LaR, Ecu)$
  2. Probability of checking opt-out box $(P(OO)_{OO}^c, c = LaR, Ecu)$
  3. Probability of giving at all, and giving an amount range $(P(G)_j^c, j = F, NF, OO, c = LaR, Ecu)$
  4. Probability of opening door in survey $(P(H)_j^S,\ j = NF, F^{\$0m10}, F^{\$0m5}, F^{\$10m10})$
  5. Probability of filling survey $(P(S)_j^S, j = NF, F^{\$0m10}, F^{\$0m5}, F^{\$10m10})$

- Weighting matrix W diagonal of inverse of variance-covariance matrix

- Parametric assumption to estimate the model:
  1. Consumption utility linear: $u(W-g) = W-g$
  2. Altruism function $av(g, G_{-i}) = a \log(G+g)$
  3. Binary giving decision: $g \in \{0, \bar{g}\}$, with $\bar{g} \geq g^s$
  4. Altruism a is distributed $N(\mu, \sigma)$
  5. Acceptable donation $g^S = \$10$ (median)
  6. Cost function $c(h) = (h-h_0)^2/2\eta$
  7. No mail giving ($\theta = 0$)

- Marginal utility of giving: $-1 + a/(G+g)$

- Parameters ϑ:
  1. h_0—probability of being at home in no-flyer conditions
  2. r—probability of observing and remembering the flyer
  3. η—responsiveness of the probability of being at home to the utility of being at home
  4. μ_a^c $(c = LaR, Ecu)$—mean of the distribution F of the altruism α
  5. σ_α^c $(c = LaR, Ecu)$—standard deviation of $F(\alpha)$
  6. G—curvature of altruism/warm glow function
  7. S^c $(c = LaR, Ecu)$—social pressure associated with not giving
  8. μ^S—mean of the distribution F^S from which the utility of the survey is drawn
  9. σ^S—standard deviation of F^S
  10. S^S—social pressure associated with saying no
  11. v^S—value of an hour of time completing a survey

- Identification:
  - Prob. being at home h_0 <– Control group
  - Prob. seeing flyer r <– Share opting out
  - Utility of doing survey μ^S and σ^S <– Share completing survey
  - Value of time v^S <– Comparison of effect of \$10 payment and 5 minute duration
  - Elasticity of home presence η <– Share opening door in survey for different payments
  - Altruism parameters μ^c, σ^c, G <– Given η, share giving different amounts
  - Social pressure parameters S^i and S^S <– Share opening door and giving

- Results:
  - Can identify fairly precisely auxiliary parameters
  - Elasticity η implies cost of altering probability of being home by 10 (20) p.p. of \$0.12 (\$0.48)
  - Altruism $av\left(g, G_{-i}\right)$: More mass in right tail for La Rabida
  - Social pressure cost significant and higher for La Rabida than ECU
  - Decomposition of giving:
    * 80 to 90 percent of giving due to warm glow
    * BUT: Up to 40 percent of donors would prefer to avoid fund-raiser
  - Welfare: On average, fund-raiser lowers utility

Table 4. Model Estimation: Empirical Moments and Estimated Moments

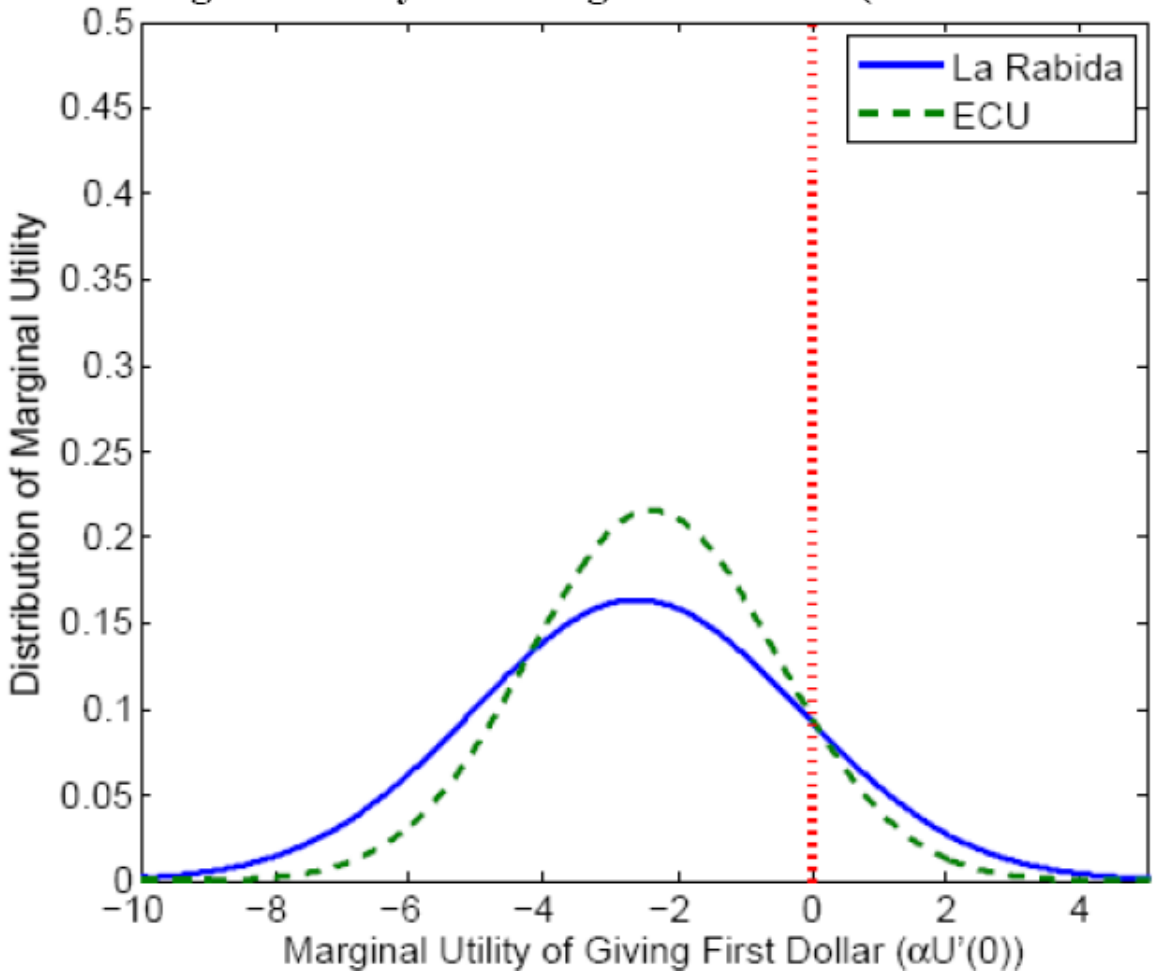
Specification:	Minimum-Distance Estimates			
Charity	La Rabida Charity		ECU Charity	
Moments for Charity	Empirical Moments	Estimated Moments	Empirical Moments	Estimated Moments
Moments	(1)	(2)	(3)	(4)
P(Home) No Flyer	0.4131	0.4141	0.4174	0.4141
P(Home) Flyer	0.3728	0.3737	0.3813	0.4012
P(Home) Opt-Out	0.3071	0.3138	0.3286	0.3139
P(Opt Out) Opt-Out	0.1202	0.0898	0.0988	0.0935
P(Giving) No Flyer	0.0716	0.0756	0.0454	0.0466
P(Giving) Flyer	0.0703	0.0683	0.0456	0.0452
P(Giving) Opt-Out	0.0516	0.0573	0.0267	0.0353
Additional Moments (not shown)				
P(0<Giving<10), P(Giving=10), P(10<Giving<=20), P(20<Giving<=50), P(Giving>50) in Treatments NF, F, OO	X	X	X	X
N	N = 4962	N = 4962	N = 2707	N = 2707
	P(Home)		P(Do Survey)	
Moments for Survey	Empirical Moments	Estimated Moments	Empirical Moments	Estimated Moments
Moments	(1)	(2)	(3)	(4)
No Flyer $0, 10min	0.4136	0.4141	0.1025	0.0958
Flyer $0, 10min	0.3576	0.3734	0.1024	0.1086
Flyer $0, 5min	0.4132	0.3974	0.1815	0.1844
Flyer $10, 10min	0.4035	0.3941	0.1719	0.1742
N	N = 1866	N = 1866	N = 1866	N = 1866

Table 5. Minimum-Distance Estimates of Model Parameters

Specification:	Minimum-Distance Estimates			
Outcome:	La Rabida Charity	ECU Charity	Survey Completion	
	(1)	(2)	(3)	
Panel A. Parameter Estimates				
Common Parameters				
Prob. Opening Door (h)			0.4141	
			(0.0057)	
Prob. Observing Flyer (r)			0.2422	
			(0.0196)	
Elasticity of Home Presence (eta)			0.0428	
			(0.0136)	
Implied Cost of Altering Prob. Home by 10 pp.			$0.12	
Charity Parameters			***Survey Parameters***	
Mean Weight on Altruism Function	-15.0830	-12.9120	**Mean Utility (in $) of Doing 10-Minute Survey**	-26.0180
	(2.5922)	(4.6315)		(7.9301)
Std. Dev. of Weight on Altruism Function	23.0110	17.4510	**Std. Dev. of Utility of Doing Survey**	26.2780
	(1.9652)	(2.1876)		(10.8940)
Curvature of Altruism Function (G)	9.4304		**Value of Time of One-Hour Survey**	136.4600
	(5.3695)			(50.1440)
Social Pressure Cost of Giving 0 in Person	3.9039	1.2506	**Social Pressure Cost of Saying No to Survey**	6.7259
	(0.7027)	(0.9770)		(2.1007)

Implied distribution of marginal utility of giving (with no social pressure)

Figure 8a. Marginal Utility of Giving First Dollar (No Social Pressure)



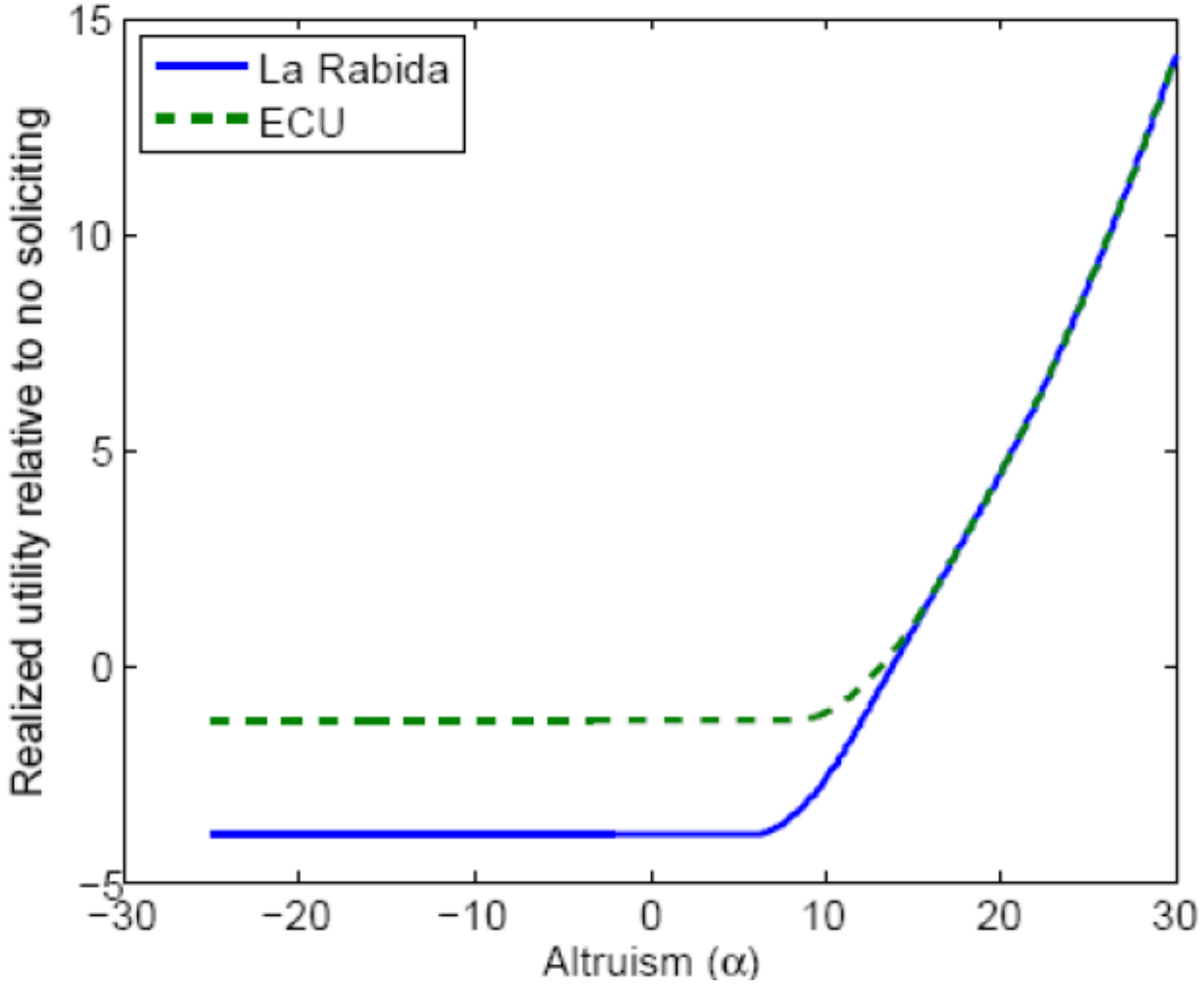
Decomposition of giving: Altruism vs. Social Pressure

Table 6. Decomposition of Giving and Welfare Implications

Specification:	Minimum-Distance Estimates	
Charity:	La Rabida Charity	ECU Charity
	(1)	(2)
Panel A. Decomposition of Giving		
Share of Givers Who Would Give	0.7850	0.8899
With No Social Pressure	(0.0666)	(0.0770)
Share of Givers who Seek	0.5718	0.5979
The Fund-raiser	(0.0497)	(0.1152)
Amount Given Including	0.9022	0.3956
Social Pressure (Predicted)	(0.0472)	(0.0609)
Amount Given with No	0.7000	0.3430
Social Pressure (Predicted)	(0.0447)	(0.0578)
Share of Amount Given Due to	0.7759	0.8672
Altruism (Predicted)	(0.0292)	(0.0930)

Welfare: Does a fund-raiser increase utility for the giver?

Figure 9b. Overall Utility of Fund-Raiser as function of Altruism



Welfare

1. Low-altruism households pay social pressure cost
2. High-altruism households get benefit
3. Since the former dominate, on net negative welfare
4. Negative welfare effects can be lowered with flyers and (especially) opt-out

Panel B. Welfare Implications

Average Welfare from Fund-Raising (No Flyer, h0=1)	-2.3306	-0.7473
	(0.2945)	(0.8816)
Average Welfare from Fund-Raising (No Flyer, Estimated h0)	-0.9651	-0.3095
	(0.1232)	(0.3657)
Average Welfare from Fund-Raising (Flyer, Estimated h0, r=1)	-0.3332	-0.1801
	(0.2154)	(0.3241)
Average Welfare from Fund-Raising (Opt-Out, Estimated h0, r=1)	0.7922	0.2650
	(0.3177)	(0.1338)

Conclusions

- Test of welfare effects of giving in context of door-to-door fundraiser
- Flyer with information about upcoming fundraiser
  - Reduces the share of households at home by 10-25%
  - Reduces the share of households giving by 30% **only if** opt-out box is included (otherwise no effect)
  - Reduction in giving only in small donations (< $10)
- Evidence of social pressure and some evidence of altruism
- Welfare: Door-to-door fund-raising on average welfare-diminishing for potential givers
- Revisit tax-advantaged status of contributions for high-pressure fund-raising?

Implications

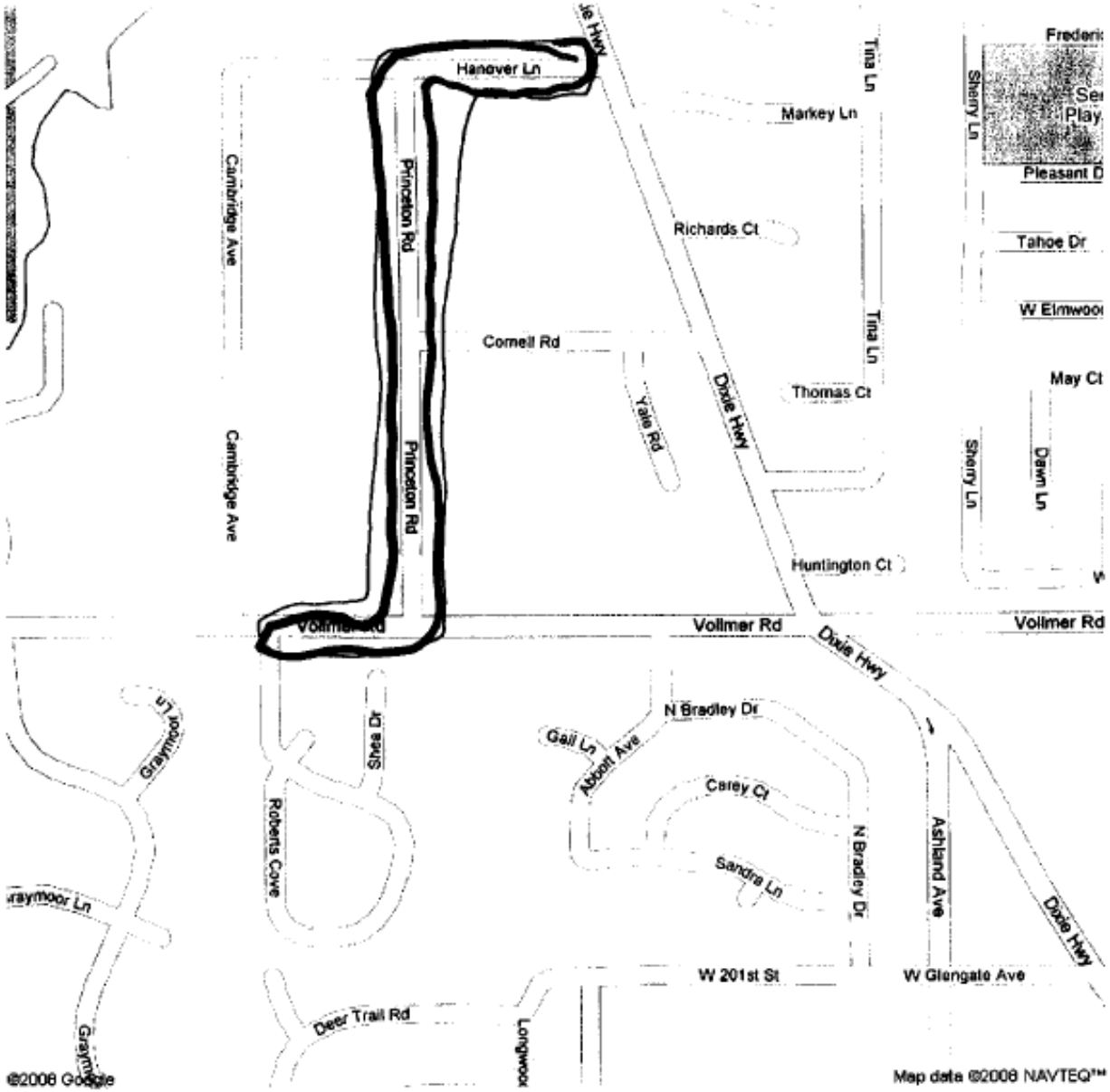
- Caveat: Door-to-door may not be representative of overall giving.
  - However, likely similar to other solicitations under pressure such as phone.
- Work in progress:
  - Use similar methodology for voting: why do people lie about turnout (‘yes, I voted!’)?
  - Use methodology to estimate relative importance of social pressure versus altruism for different charities

Google Maps

Address **Flossmoor, IL**

ECU

Sunday 3-4 PM



ECU

Sunday April 27th
3-4pm

REMEMBER THAT THE HOUSE NUMBERS MIGHT NOT BE IN ORDER!!

Number	Street	Comments
1844	Princeton Rd	
1841	Princeton Rd	
1840	Princeton Rd	
1820	Princeton Rd	
1825	Princeton Rd	
1816	Princeton Rd	
1802	Princeton Rd	
1751	Princeton Rd	
1740	Princeton Rd	
1730	Princeton Rd	
1656	Princeton Rd	
1650	Princeton Rd	
1639	Princeton Rd	
1644	Princeton Rd	
1632	Princeton Rd	
1635	Princeton Rd	
1842	Hanover Rd	
1843	Hanover Rd	
1832	Hanover Rd	
1827	Hanover Rd	
1811	Hanover Rd	Red brick at the end of road
1910	Hanover Rd	
1911	Hanover Rd	
1936	Vollner Rd	
1930	Vollner Rd	

House Number:	1635		
Exact Time Approached:	3:21		
☐ Check if flyer still on door		☐ Check if flyer ON GROUND	
☐ Check if "Do Not Disturb" box is CHECKED			
☑ Check if NO ANSWER			
Respondent Sex	☐M	☐F	
Respondent Age (est.)			
Respondent Race	☐ White ☐ AA ☐ Hispanic ☐ East Asian ☐ South Asian ☐ Other:		
Amount donated	$		
Did respondent see FLYER?	☐ Yes ☐ No ☐ Forgot to ask		
Comments			

Princeton Rd

House Number:	1637		
Exact Time Approached:	3:23		
☐ Check if flyer still on door		☐ Check if flyer ON GROUND	
☐ Check if "Do Not Disturb" box is CHECKED			
☐ Check if NO ANSWER			
Respondent Sex	☐M	☑F	
Respondent Age (est.)	??		
Respondent Race	☐ White ☐ AA ☐ Hispanic ☐ East Asian ☐ South Asian ☐ Other:		
Amount donated	$ 0		
Did respondent see FLYER?	☐ Yes ☐ No ☐ Forgot to ask		
Comments	Never opened the door. Asked who I was and then left		

Script For Solicitor

- (*If a minor answers the door, please ask to speak to a parent. Never enter a house.)*
- Hi, my name is _____. I am a **student volunteering for the University of Chicago** visiting Chicago area households today on behalf of **La Rabida Children's Hospital [*the East Carolina University Center for Natural Hazards Research*].**
- (*Hand brochure to the resident.)*
- La Rabida is one of Illinois' foremost children's hospitals, dedicated to caring for **children with chronic illnesses, disabilities, or who have been abused or neglected**. La Rabida's mission is to provide **family-centered care that goes beyond a child's medical needs** to help them experience as normal a childhood as possible **- regardless of a family's ability to pay**. La Rabida is a non-profit organization.

  [*The ECU Center provides support and coordination for research on natural hazard risks, such as hurricanes, tornadoes, and flooding. The ECU Center's mission is to reduce the loss of life and property damages due to severe weather events through research, outreach, and public education work.*]

Script For Solicitor (*continued*)

- To **help La Rabida [*the ECU Center*] fulfill its mission**, we are collecting contributions for La Rabida Children's hospital [*the ECU Center for Natural Hazards Research*] today.
- **Would you like to make a contribution today?**
- (*If you receive a contribution, please write a receipt that includes their **name and contribution amount**.)*
- [*AFTER they decide whether or not to give*]: If I may ask you one quick question - did you see our flyer on your door yesterday? [*Record answer in log*]
- If you have questions regarding La Rabida [*the ECU Center*] or want additional information, there is a phone number and web site address provided in this brochure.
- Thank you.

4 Methodology: Field Experiments

- Field Experiments combine advantages of field studies and natural experiments:
  - Field setting (External Validity)
  - Randomization (Internal Validity)
- Common in Development, Public, Psychology and Economics, (Labor)
- Uncommon in IO (except for Demand estimation), Corporate Finance, Asset Pricing, Macro
- Difficulties: large sample (costly) and getting approval for implementation

- What to do if planning one?

- **Advice 1.** Read how-to manuals and previous field experiments
  - Recommendation 1: **Harrison-List (JEL, 2003), soon also a book**
    * Categorizes field experiments
    * Also, John List's website: Link to many field experiments
  - Recommendation 2: **Duflo-Glennerster-Kremer (NBER, 2006)**
    * Great discussion of practical issues: Power, Compliance, Sample Size,...
    * Targeted toward development

- **Advice 2.** Choose what type of Experiment
  - *Large-Scale Experiment.* Example: Bandiera et al. (2005)
    - More common in Development
    - Need to convince company or organization (World Bank, Government)
    - Need substantial funding
    - Example among students:
      - Damon Jones: field experiment on tax preparers
      - However (also Damon): H&R Block experiment fell through after 1-year plans

- Safeway (research center at Stanford to set up collaborations, Kristin Kiesel in charge)

- *Small-Scale Experiment.* Example: Falk (2008)
  - More common in Psychology and Economics
  - Need to convince non-profit or small company
  - Limited funds needed – often company will pay
  - Example among students:
    - Dan Acland: projection bias and gym attendance
    - Vinci Chow: commitment devices for on-line computer game play
    - Pete Fishman: small video store randomized advertising

- **Advice 3.** Need two components:
  1. Interesting economic setting:
     - Charity, Gym, Village in Kenya
     - Does Video Games matter? Yes, increasingly so
  2. Economic model to test
     - Examples: Self-control, reciprocity, incentives
     - Avoid pure data-finding experiments
     - Insurance. If you can, pick a case where 'either' result is interesting
     - Best scenario: Do a field experiment tied to a model to infer parameters

- **Advice 4.** Two key issues: Power calculations and Pilots
  - *Power calculations.* Will your sample size be enough?
    * Crucial to do ex ante to avoid wasting time and money
    * Simple case:
      · Assume outcome binary variable, dep.variable is share p doing 1 (Ex: giving to charity, taking up comm. device)
      · Standard error will be $\sqrt{p\left(1-p\right)/n}$
      · Example: $p = .5$, s.e. is .05 with $n = 100$, .025 with $n = 400$
  - *Pilots.* So many things can go wrong – try to do small pilot
    * Use to spot problems in implementation
    * Do not use pilot as data analysis (sample too small)

- **Advice 5.** Other practical issues:
  - Mostly refer to **Duflo-Glennerster-Kremer (NBER, 2006)**
  - Approval from Humans Subjects!
    * At Berkeley, takes about 2 months
    * More about this later
  - Keep in mind implementation of randomization
    * Example: Cross Designs hard to implement correctly
    * Example: **Green-Gerber (APSR, 2001)** on voter turnout:
      · cross-randomize phone calls, mailings, in-person visits
      · Hard to implement –> Lead to loss of randomization

    * OK to do if requires just computerized implementation (ex: loan offers)

- Monitor what happens in the field *continuously*
- Build in data redundancy to catch measurement error or implementation problems
    * Example: 'Did you see a flyer on the door?' in DellaVigna-List-Malmendier (2009)

- **Advice 6.** Start looking soon for funding
  - Funding harder to obtain for graduate students
  - Good options:
    * IBER: $1,000 administered quickly (one week or so)
    * Russel Sage Small Grant Program: $5,000 ($2,500 for paying subjects) (two to three months)
    * NSF dissertation improvement grant website (http://www.nsf.gov/funding/pg
    * Look at CVs of assistant professors in your field or job market students (Jonas' advice)
    * Ask your advisor –> May know of some funding sources