Fairness, Reciprocity, and Distributive Politics

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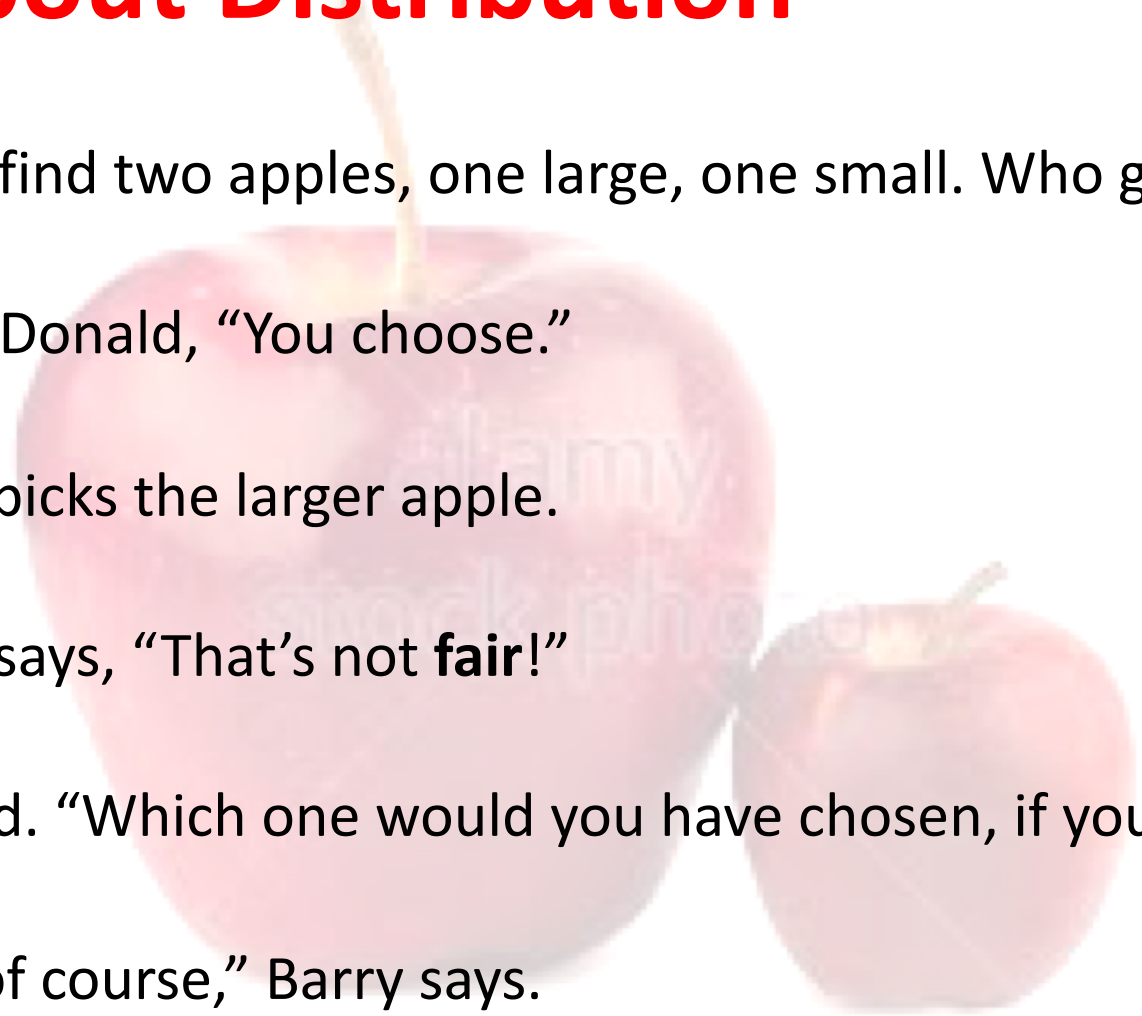
A Story About Distribution



Barack and Donald find two apples, one large, one small. Who gets the larger one?

Barack (Barry) tells Donald, “You choose.”

Donald (of course) picks the larger apple.

Barry is upset, and says, “That’s not **fair**!”

“Why?” asks Donald. “Which one would you have chosen, if you were choosing?”

“The smaller one, of course,” Barry says.

Donald replies, "Then what are you complaining about? That's the one you got!”

What is Fairness?

Fairness of Outcomes? If apples can't be split, neither division seems to violate a fairness-of-outcome criterion among possible outcomes.

Fairness of Process? No fairness-of-process concepts (impartiality, equal opportunity, etc.) suggests that the process of dividing apples was unfair.

Barry wasn't complaining about outcomes or process, but about **behavior** … and Donald was disingenuous at best in saying it was fair because Barry got the ***outcome*** he wanted.

How Should We Think About Fair Distribution?

What are the Implications For Distributive Politics?

- The term **"Fair Distribution"** has many important aspects:
  - Distribution of wealth or income – Outcomes
  - Political representation – Process

- Today I want to consider fairness in behavior, and specifically, ***reciprocity***
- Look at politicians – behavioral models of political leaders

First, let's consider economists' approaches to fair behavior

Fair Behavior

- Barry felt there was something unfair, given his view of how one should act

- Were his expectations reasonable?
  - Maybe or maybe not

- But given these expectations (and an other-regarding person could understandably have them), was Barry right to be upset about Donald's behavior?

Kindness, Gratitude, Reciprocity

- **Kindness** to other depends on how my action affects his or her payoff, relative to a reference payoff
  - What determines the "neutral" reference payoff?

- **Gratitude** is thankfulness (*I* is grateful to *J* for something)
  - "Thank heaven that it didn't rain during my visit to Corsica" (??)
  - Philosophers suggest that *J* must have the ability to consciously give a benefit

- **Reciprocity** is rewarding kindness (or unkindness)
  - Rabin (1993) – "people do not seek uniformly to help other people; rather, they do so according to how generous these other people are being"

People Do Act in This Way

- Camerer and Fehr ("When Does Economic Man Dominate Social Behavior?", *Science* 2006)

- **"Strong reciprocators"** reward others for cooperative, norm-abiding behavior and impose sanctions on others for norm violations
  - They are willing to bear the cost of rewarding or punishing even if they gain no individual material benefit from their acts
  - Punishing deviators leads to better equilibria

- Laboratory experiments have "documented the existence of a substantial share of strong reciprocators who exhibit [this] particular form of other-regarding behavior."

Modeling Kindness and Reciprocity

- We can use the concept of a **"psychological game"**, in contrast to a simple "material game" (Geanakoplos, Pearce, and Stacchetti [1989])

- **Payoffs to depend on players' beliefs as well as on their actions**

- Rabin (1993) – utility depends not only on material benefits, but also on reciprocated (un)kindness

$$u_i = \pi_i(\cdot) + (j\text{'s kindness}) \cdot [1+(i\text{'s kindness})]$$

Let's see how this works

Battle of the Sexes

Ida prefers to go to Opera,
Jim prefers to go to Boxing,
but they prefer to go out
together to the same event

Payoff Matrix		
Jim ⟶	Opera	Boxing
Ida ↓ Opera	2X, X	0, 0
Boxing	0, 0	X, 2X

Nash equilibrium – Each player's choice of action *a* maximizes his utility given the other player's action: (Opera, Opera) and (Boxing, Boxing)

Jim's Payoffs from Ida's Actions

Suppose Ida ***b**elieves* Jim is choosing b_j = **Boxing**. What are Jim's best and worst material payoffs from Ida's choice of action a_i ?

$\pi_j^{high} = 2X$ – Ida does what's best for Jim and agrees to see **Boxing**

$\pi_j^{low} = 2X$ – Ida says, "Why hurt myself? If he chooses **Boxing**, choosing **Opera** makes both of us worse off! I'll choose **Boxing** as the **Pareto-efficient** outcome."

$\pi_j^{min} = 0$ – Ida says, "If he wants boxing, I'll insist on **Opera**, though it hurts us both."

Kindness Relative to a Reference Point

$\pi_j^{equitable} = \frac{\pi_j^{high} + \pi_j^{low}}{2} = 2X$ is the reference point

$\pi_j(a_i, b_j) - \pi_j^e$ = Ida's kindness $\quad (f_i = \frac{\pi_j(a_i, b_j) - \pi_j^e}{\pi_j^{high} - \pi_j^{min}}$ = normalized measure)

f_i(**a_i=B, b_j=B**) = 0 (as **Boxing** is Ida's only Pareto choice)

f_i(**a_i= O, b_j= B**)= -1 (she believes Jim chose **Boxing**, but she chooses **Opera** nonetheless)

Why would she do this??

Hostile Equilibria

Jim believes that Ida is hostile – She chooses **Opera** when he believes that she knows he is choosing **Boxing** (and he is hostile since he believes she is choosing **Opera**)

Is this an equilibrium?

Ida's utility $u_i = \pi_i + f_j \cdot [1+f_i]$ where $f_j = -1$

Ida's possible material payoffs: π_i(**Opera, Boxing**) = **0** and π_i(**Boxing, Boxing**) = **X**

Her kindness payoff is **0** if she chooses **Opera** (with f_i(**O, B**)=-1) and **-1** if she chooses **Boxing** (f_i(**B, B**)=0)

Hence, if **X < 1**, she chooses **Opera**, motivated by her belief that Jim is hostile

Given the (self-fulfilling) beliefs about the other's hostility, each player is unwilling to cooperate if it means conceding to the other player

Cooperative Equilibria

A belief that the other is willing to cooperate is also self-reinforcing

(**Boxing**, **Boxing**) is a cooperative fair behavior equilibrium

(**Opera**, **Opera**) is a cooperative fair behavior equilibrium

Helping the other is helping myself, given the structure of the game,

so it's not intuitively surprising that fairness leads to good behavior

Back to Barry and Donald

Suppose the large apple is worth **2X** and the small one **X** to each of them

Donald would give payoffs of (**X**,**2X**) if he chose and Barry would give payoffs of (**X**,**2X**) if he chose

Moreover, Barry believes that fairness is giving the larger share to the other, i.e., the equitable payoff $\boldsymbol{\pi_j^e}$ **= 2X**

Hence, Barry views his behavior as the norm, neither kind nor unkind: $\pi_j(a_i) - \pi^e$ = **2X-2X** = 0 (and $f_{Barry} = 0$)

And, the Donald?

If we presume he knows Barry's beliefs about fairness (π_j^e **= 2X**), Donald is unkind

A material payoff of **X** to Barry implies that Donald's fairness f_{Donald}(**You Choose, Larger Apple**) is negative, which is why Barry is upset

Hence Barry's "kindness utility" $f_{Donald} \cdot [1+f_{Barry}] < 0$ and if **X** (his material payoff from the smaller apple) is small enough, it doesn't compensate him and his overall utility is lower

Donald's reply, "Then what are you complaining about? That's the one you got!" misses the point (and is disingenuous at best, given what we presume that Donald knows)

The Reference Point

- Clearly what is considered kind or unkind to *j* from *i*'s actions depends on the reference point, (or what we called the "equitable payoff")

- Is it simply the average of the best and worst possible payoffs to *j* from the set of Pareto efficient payoffs (as in Rabin)?

- Does it depend on social norms of acceptable behavior?

- Or, on what the "typical" person would do in a situation?
  - So that helpful behavior is kind if it is out of the ordinary
  - Giving up one's seat on a bus is not kind if everyone offers to do it (??)

Reciprocity in Politics

- Coalition building in legislative politics
  - Vote-trading or “logrolling” – you vote for my bill today, I’ll vote for yours tomorrow
  - This is often crucial to passing difficult legislation

- Vote-buying in elections
  - Voting for a candidate in exchange for an explicit payoff
  - This is different than voting for a candidate because his expected policies are preferred

- Gratitude to those who voted for a candidate
  - No agreed payoff, but candidate feels grateful to voters who elected her
  - People reciprocate kindness – why should leaders be different?

Instrumental versus Intrinsic Reciprocity

- **Instrumental** reciprocity – optimizing actions of selfish agents
  - Responding to kindness with kindness in order to sustain a profitable long-term relationship.
  - Or, to build a reputation for being a reliable partner.

- **Intrinsic** reciprocity (as in the above discussion) – my utility depends on the payoffs others get (in a specific way)
  - willingness to sacrifice one's own material consumption to increase the material consumption of others in response to kind behavior
  - willingness to sacrifice material consumption to decrease someone else's material consumption in response to unkind behavior.

Is Reciprocity in Politics Instrumental or Intrinsic?

- Dynamic coalition building (example 1) is instrumental

- Vote buying (example 2) seems to be instrumental – But, how does one enforce the deal?
  - Repeated interactions
  - Finan and Schechter (*Econometrica* 2012) – Vote-buying can be sustained by an intrinsic reciprocity: those who receive money feel the obligation to reciprocate
    - They show that politicians target reciprocal individuals.
  - (Intrinsic) Reciprocity of the voters well documented in the experimental literature

Do Political Leaders Show Intrinsic Reciprocity?

- Do they reciprocate only for instrumental (i.e., selfish) reasons?
  - More generally, do politicians exhibit “other-regarding behavior”
- Can behavioral economics help explain actions of political leaders?
- Standard view – by their nature, politicians are self-interested creatures, at least in the performance of their jobs
  - That is, they show no “other-regarding behavior”
  - Supposed “kindness” is motivated by re-election concerns
- But, we see (or appear to see) some politicians doing the “right thing”
  - Are well-performing term-limited leaders motivated only by reputation concerns?
  - Sense of duty or responsibility (“Why was I elected anyway?”)

The “Dictator” Game

- Apple story is a special example of a one-shot “dictator game” – one player chooses how much of a pot of resources to keep for himself and how much to give to the other

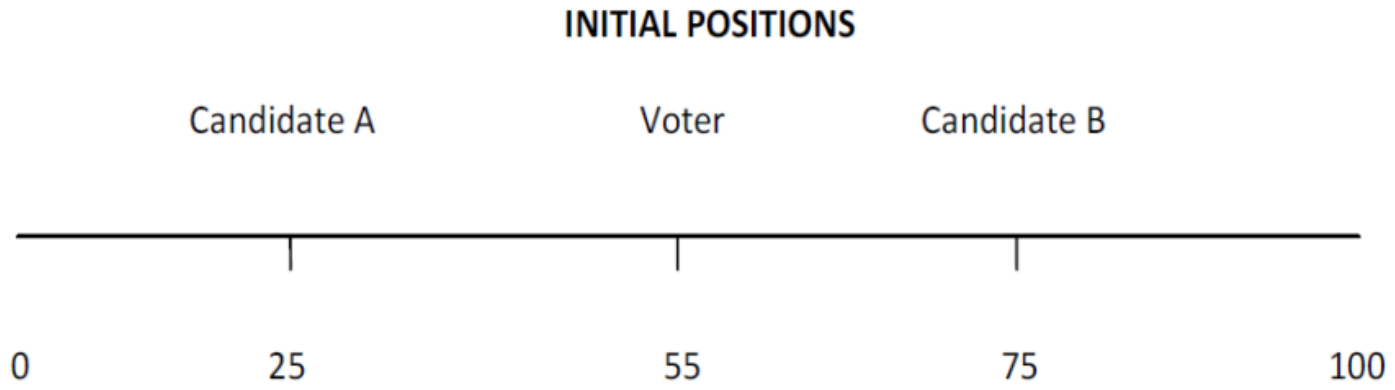
  In the lab, many proposers share some of pot

  In apple story, there is an earlier stage of choosing who is the dictator

- Drazen and Ozbay (2017) studied this general issue – How does the way one is chosen to be dictator affect generosity?
- Are elected leaders more generous than appointed ones?
  - Eliminate other motives, such as re-election
  - Eliminate differences in actions elected versus appointed leaders can take
  - Perceptions of legitimacy or selection effects

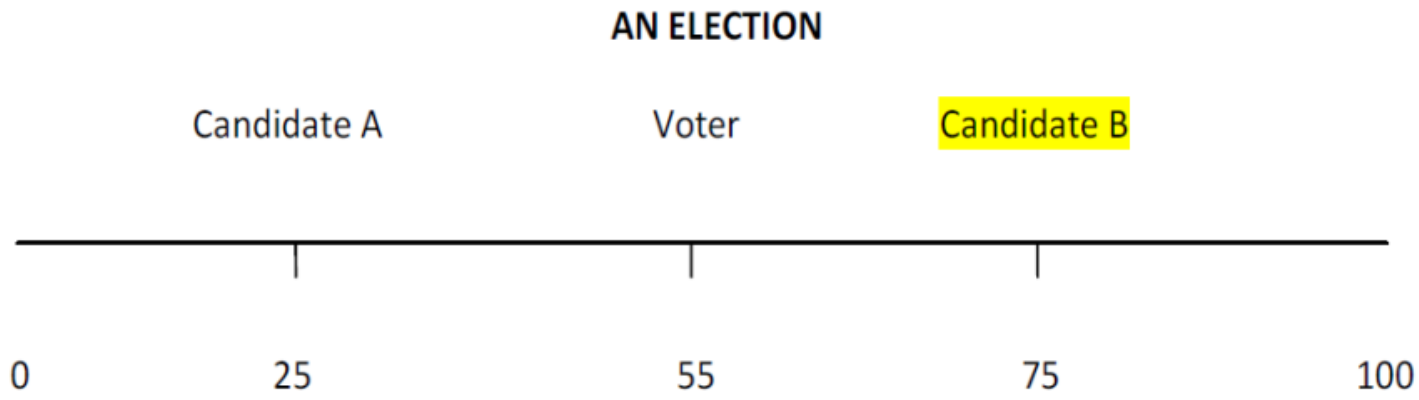
Elected vs Appointed Decision-Makers

- Groups of 3 – 2 candidates and one voter; voting is costless
  - Election treatment – voter chooses one candidate who then decides how to allocate resources
  - Appointment treatment – one candidate is chosen at random to decide how to allocate resources



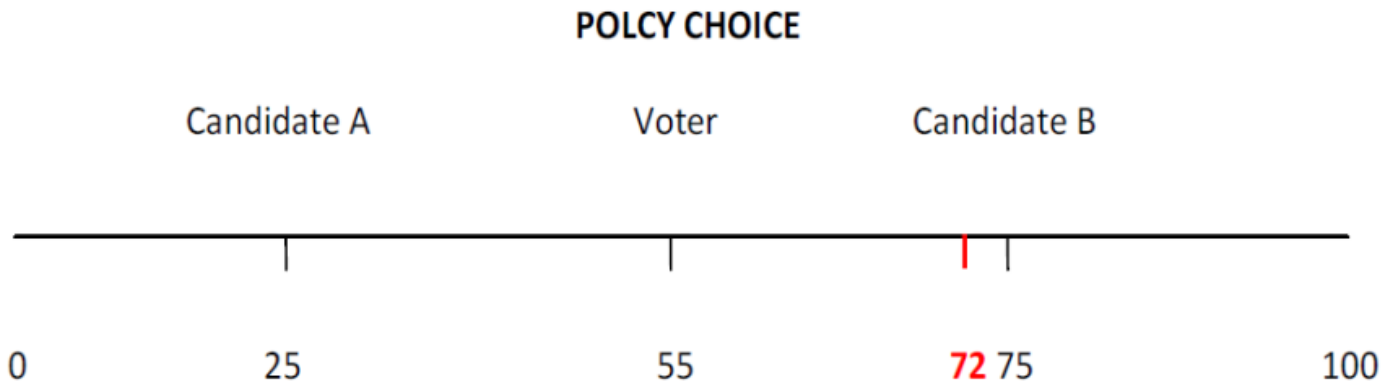
Elected vs Appointed Decision-Makers

- Groups of 3 – 2 candidates and one voter; voting is costless
  - Election treatment – voter chooses one candidate who then decides how to allocate resources
  - Suppose voter votes for candidate B



Elected vs Appointed Decision-Makers

- Groups of 3 – 2 candidates and one voter; voting is costless
  - Election treatment – voter chooses one candidate who then decides how to allocate resources
  - Candidate chooses a policy of 72, that is closer to voter's most preferred policy



Elected vs Appointed Decision-Makers

- Groups of 3 – 2 candidates and one voter; voting is costless
  - Election treatment – voter chooses one candidate who then decides how to allocate resources
  - Appointment treatment – one candidate is chosen at random to decide how to allocate resources
  - An example of a “gift-exchange” game
- Elected choosers are
  - more likely to share
  - give more when they share
  - favor the voter (while appointed leaders treat “voter” and losing candidate more equally)
- Having eliminated other explanations, we argue that differences reflect reciprocity towards those who put the leader in office

What Induces Reciprocity by Elected Leaders?

- In the first experiment, there was only one voter
  - Hence, the elected leader knew whose vote was pivotal
- Drazen and Ozbay (2018) – Groups of 5: 2 candidates, A and B, and 3 voters
  - Each gets $2 to start
  - Voters can vote A, B, or abstain
  - Voters are given ex-ante preferences over candidates – voters 1 and 2 get $1 if A is elected no matter how they voted; voter 3 gets $1 if B is elected
  - One-shot experiment where winning candidate has $30 to distribute among the voters
  - Two treatments – with costly voting ($2 to vote) and with costless voting
- What actions get rewarded?
  - Voting, when it is costly?
  - Voting for the winner?
  - Voting for the winner if it is your preference? If it is not your preference?
  - Being pivotal ex-post for the winner?

What Induces Reciprocity? Main Results

- Voting is the dominant strategy in the costless treatment, and abstention is the dominant strategy in the costly treatment. However, average amounts received with costly voting is only slightly higher, but difference is not statistically significant.

- The act of voting is rewarded – on average, abstainers receive $2.54 but those who voted receive $4.27.

- Voters who vote for the losing candidate receive $3.09 but the voters who vote for the winning candidate $4.52.

- “Identity” doesn’t matter. Average amounts received by the citizens with the same type and the citizens with the different type as the leader are not significantly different.

What Induces Reciprocity? Main Results

- Amount received increases to $5.15 if their vote is pivotal. A voter whose vote was not pivotal but votes for the winner on average receives $4.01

- Importance of being pivotal is reinforced by looking at what elected candidate keeps depending on the number of votes she receives. She keeps $20.49 if she received all three votes (no voter was decisive) and $16.49 if she received 2 votes

- An interesting question is what happens when voters know explicitly (rather than implicitly) whether they may be pivotal

Kindness to Candidates Means Being Pivotal

- Voters are rewarded not simply for voting for the winner (a gift exchange result) but more so when it matters for the outcome

- Are we surprised?
  - The person who gives me his seat on the bus gets more thanks if he's the only one who offered
  - We're especially grateful for close calls

- Schlesinger (1991) relates a case where when a candidate won by an extremely narrow margin:

> "Individual voters and campaign workers came forth to claim credit for the electoral victory. ... [They] therefore felt entitled to press on the candidate some special claim."

Do Re-election Concerns Limit Reciprocity?

- A critique of results on leader reciprocity is that they are different from you and me (at least in their role as politicians)
  - success in political life requires "hard-headed" calculations rather than sentimentality
  - when non-instrumental kindness conflicts with reelection motives, won't politicians choose the latter?

- We designed an experiment to try to test this

- **Do reciprocity to past voters and re-election concerns conflict, when a different group of voters are key to re-election?**

Experiment Set-Up

- Two sequential elections – candidate **C**, two voters **V1** and **V2**
- Only **V1** participates in the first election
  - If he votes (at cost *k*), **C** is elected; if he abstains game ends
- If **C** is elected, he splits $15 between **V1** and **V2**: $d_1 + d_2 = \$15$
- **C** can be of two **policy types** as far as *material* payoffs – type 1 gets direct value only from giving to **V1**; type 2 only from giving to **V2**
  - A reciprocal candidate also gets a psychological payoff from giving to voter who elected her value
- After post-election 1 distribution, only **V2** participates in second election
  - If he votes (at cost *k*), **C** is re-elected; if he abstains game ends
  - If C was re-elected, she divides $10 between **V1** and **V2**
- Voters are never directly informed of **C**'s policy type

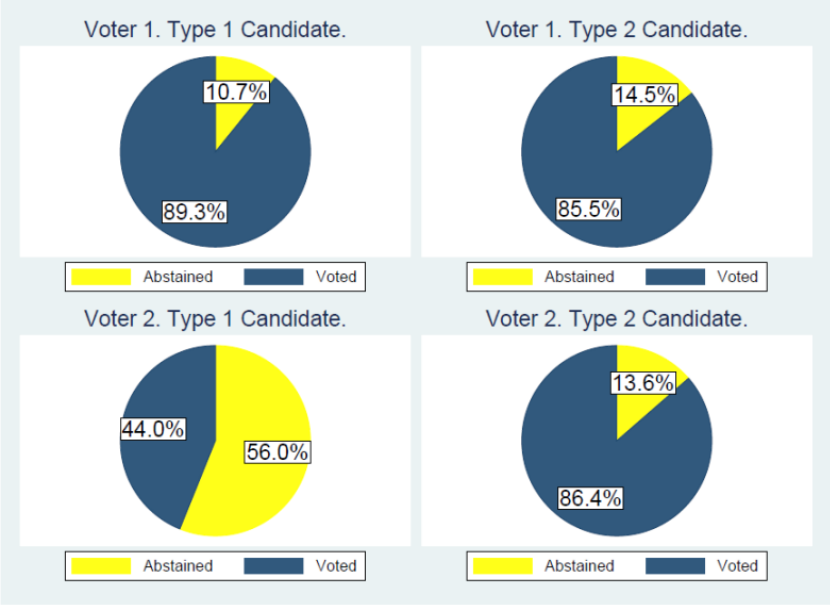
A Signaling Game

- Voters can try to infer **C**'s policy type from distribution after election 1
- **V2** would not vote if voting cost *k* is high if he thought **C** is of type 1
- Hence, if **C** is of type 2 she wants to signal this, by not giving too much to **V1** after election 1, i.e., not making d_1 too high
  - Otherwise, she will be perceived as type 1
  - If she is a reciprocal person, she has a problem – "I want to reward **V1** for voting for me, but I don't want to be seen as candidate whose preferences (and hence, post-election policy) favor **V1**, for I won't get re-elected!"
  - Type 1 candidate might want to mimic her to get reelected
- What does **C** do?
  - Do voters "read the tea leaves" when they observe d_1
  - If **V2** couldn't observe d_1, there would be no opportunity to signal and **C** could reward **V1** as she wished

Comparing Behavior Via 4 "Treatments"

- Treatments 1 and 2: V2 observes d_1 after election 1
- Treatments 3 and 4: V2 does not observe d_1 after election 1
- Cost of voting k is \$1 in Treatments 1 and 3 and \$6 in Treatments 2 and 4

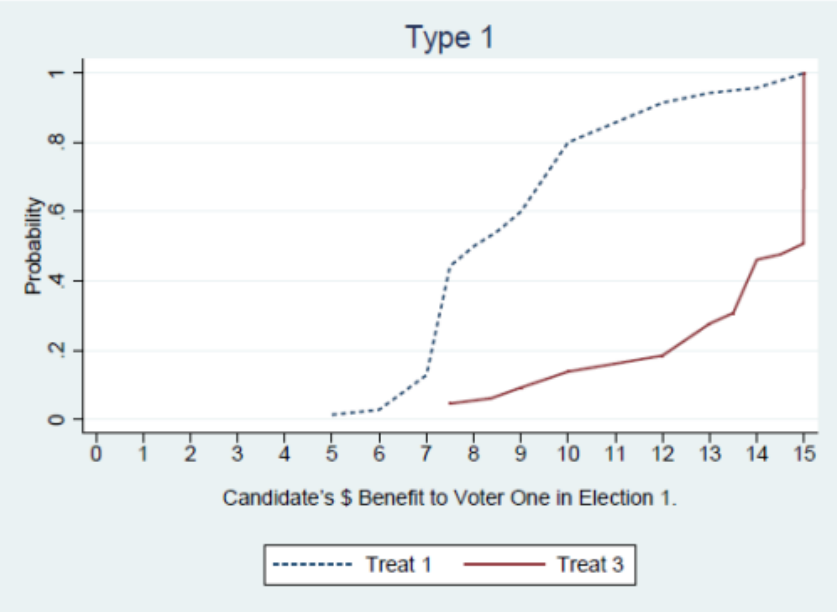
Treatment 2: Possibility of signaling, high cost of voting

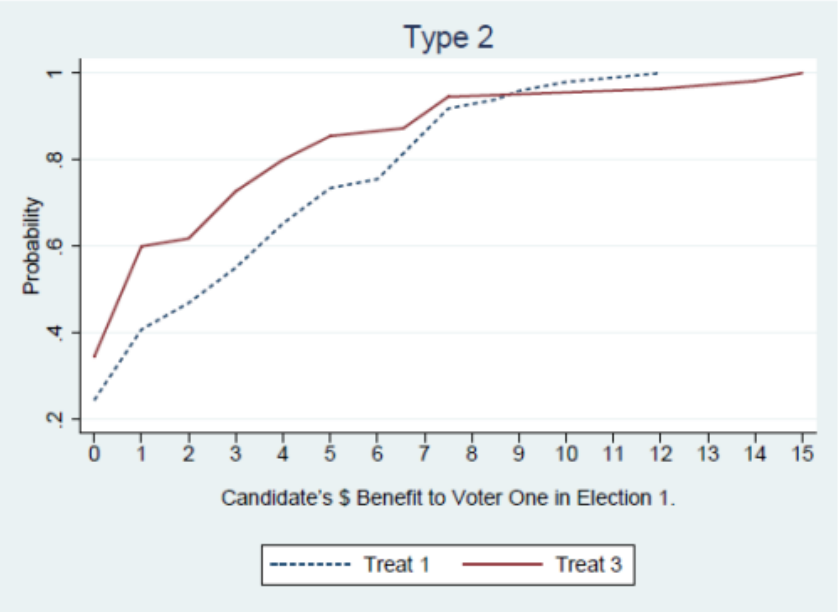


How Do Candidates Behave?

When *k is low* – **V2** will vote even without a signal that **C** is type 2

Reciprocity and Reelection don't conflict



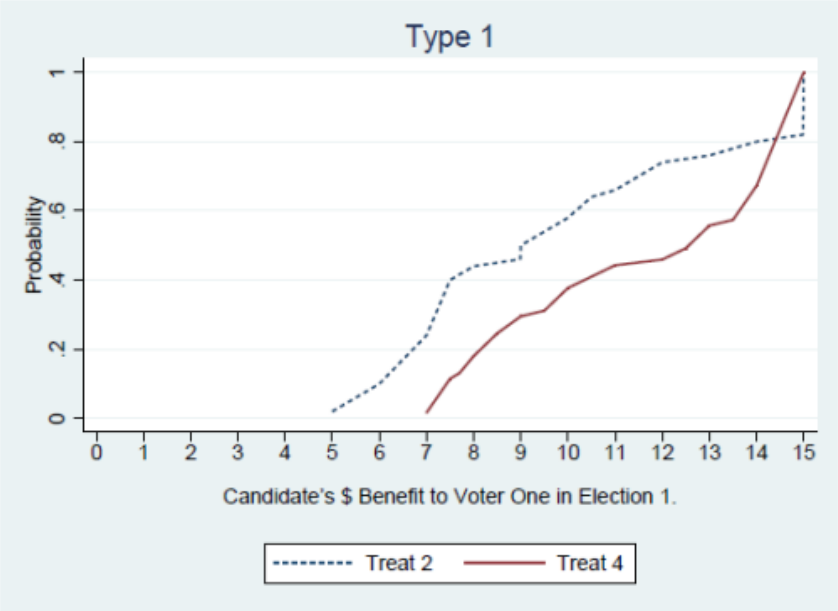


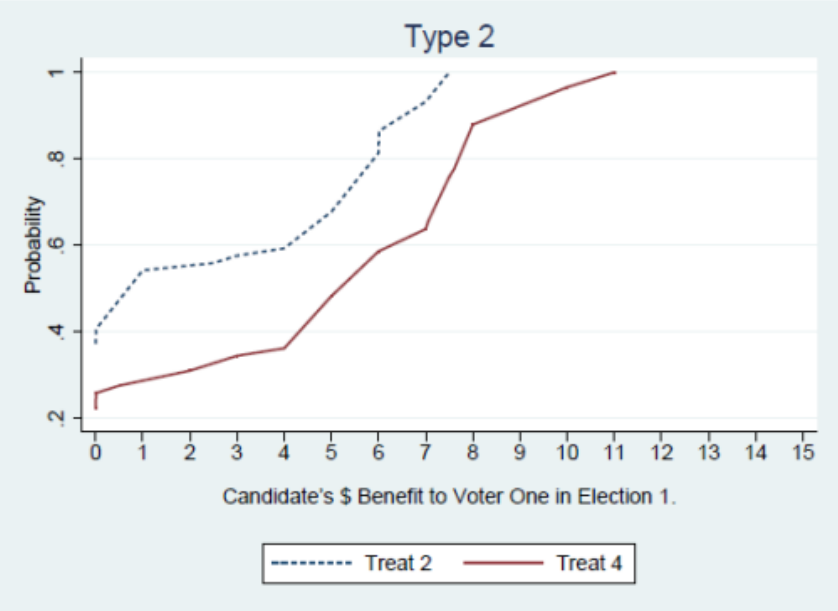
How Do Candidates Behave?

Reduce d_1 when *k is high* – *Type 2 needs to signal type to get reelected*

V2 will only vote if there is a high probability that **C** is type 2

Reciprocity and Reelection conflict





Distribution of Benefits After an Election

- Newly elected leaders need to decide how to allocate the “spoils” of newly won office – positions, jobs, government spending etc.

On what criteria do they make these decisions?

- Social welfare maximization or merit?
- Forward-looking coalition building (instrumental political reciprocity)
- Re-election concerns
- Fulfilling pre-election promises?

- In this research, it is suggested that distributive politics may also reflect gratitude to those who put the newly elected leader in office

- After all, the rest of us reciprocate to kindness -- why not politicians (or at least some of them)?

Merci de votre attention