Electoral Risk and Vote Buying, Introducing Prospect Theory in the Experimental Study of Clientelism

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Vote buying: distribution of private rewards to individuals or small groups during elections in contingent exchange for vote choices (Nichter, 2014).

Vote-Buying Literature Builds on the Wrong Framework

- **Say you're a clientelist political party campaigning**:
  1. When do you buy votes? Winning/losing the elections?
  2. Who do you target? Your own supporters ("core") or the ones who are more likely to flip ("swing")?
  3. Should your past haunt you? Do prior losses matter?
- **Intuitively, these questions seem easy to answer**:
  - ✓ When losing the elections: **risk**.
  - ✓ To the ones who are more likely to flip ("swing"): **waste**.
  - ✓ It shouldn't: prior losses should not matter: **"sunk costs."**
- **They are not**. Starting point: traditional clientelism research has failed to answer these questions because it has a wrong understanding about the decision-making process of clientelist parties.

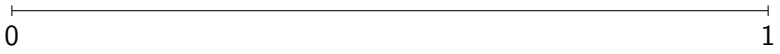
Plan for Today

1. **Motivate the problem**: vote buying literature is based solely on the Expected Utility Theory (EUT).
2. **Explain why we should care**: as a consequence, there are too many important loose ends.
3. **Propose a possible solution**: re-think how parties make decisions under risk (Prospect Theory).
4. **Empirics**: following the precepts of EUT, we formalized a vote buying game, and then test it in an economic experiment.
5. **Results**: we find strong support in favor of prospect theory.
6. **Feedback wanted!**

Plan for Today

1. TEST

Downs (1957)



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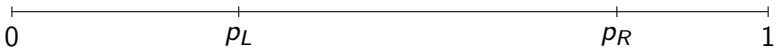

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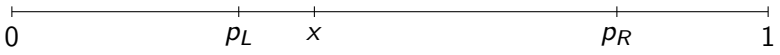

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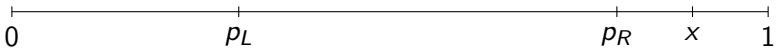

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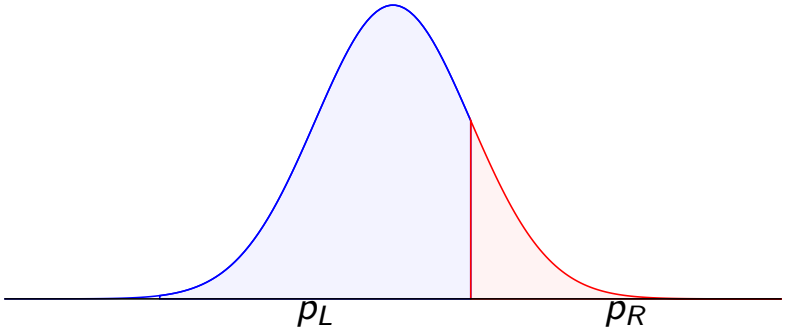


The Model

- n voters, each citizen i has an ideal point x_i which is an *iid* draw from an uniform distribution $\Gamma = \{1, 2, ..., 100\}$.
- When policy γ is implemented, payoffs of citizen i are given by $u(D, x_i, \gamma) = D - |x_i - \gamma|$.
- Two candidates ("left-wing" and "right-wing"). Each represents a policy which is an *iid* draw from an uniform distribution over $\gamma_L \in \{1, ..., 50\}$ ($\gamma_R \in \{51, ..., 100\}$).
- There are n_L voters.
- Both parties negotiate with only one of these n voters who are randomly selected from the total population.

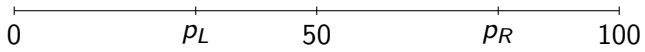
The Model

- Each candidate has a budget (B) that they can use to buy votes.
- Profits of party i are given by,

$$\pi_i(W, e_i, s_i) = W \cdot e_i + (1 - s_i \cdot a_j) \cdot B$$

where W ($W \geq B$) is a constant that represents how much each party values winning the election, $e_i = 1$ if party i wins the election, 0 otherwise, s_i is the fraction of B that the party offers to voter j who can accept the offer ($a_j = 1$) or not ($a_j = 0$).

The Model



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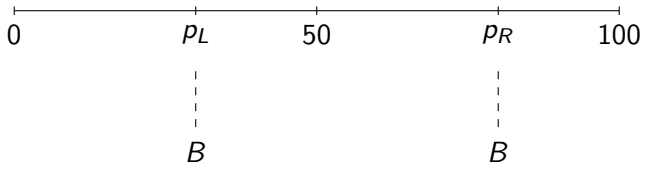

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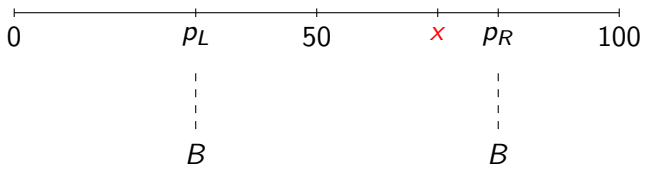

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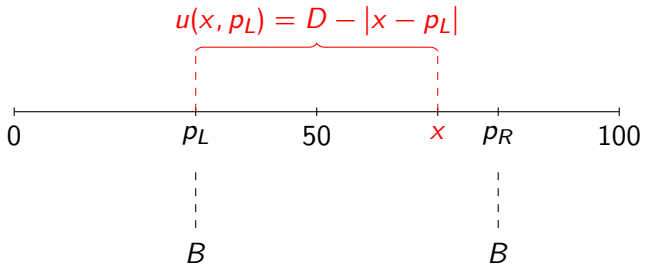

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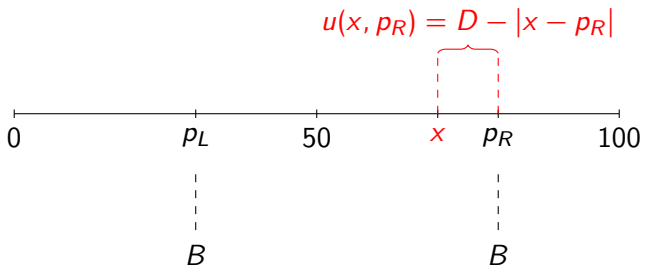

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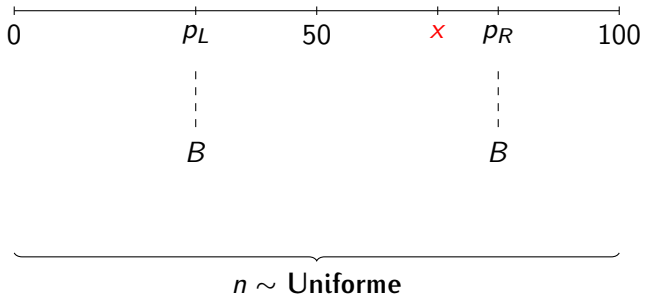

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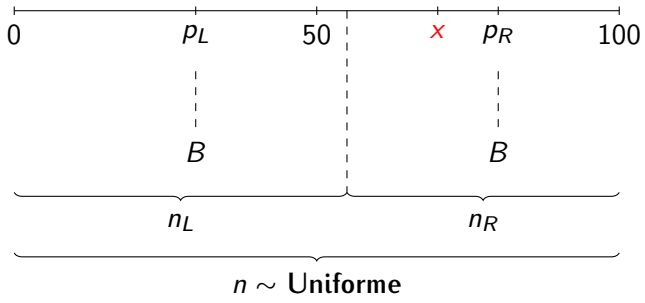

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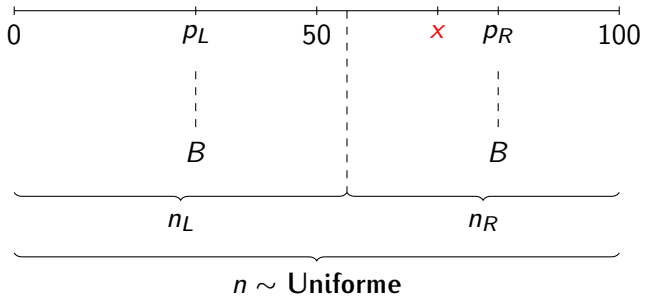

Timing

- At the beginning of the game n voters and two political parties are randomly located on their respective ideal points: voters along Γ, and payoff relevant information is revealed.
- **Vote-buying Case**
  - Each party simultaneously decides if making an offer to the voter.
  - The voter decides if to take the offer (or which one, if there are two offers).
  - Voter casts a ballot; if the voter accepts a party's offer, he should vote for that party.
- **Vote-selling Case**
  - Voter may privately proposes a certain amount to each party in exchange for his vote.
  - Parties decide if to pay or not the offer.
  - Voter decides which one to accept, if any.
  - Voter casts a ballot; if the voter accepts a party's offer, he should vote for that party.

Equilibrium in Vote-Buying Case

- Parties only have incentives to negotiate with a voter i if he is the pivotal voter, this means:

$$|n_L - n_R| \leq 1 \qquad\qquad i \in max\{n_L, n_R\}$$

- Notation: $i^* \in \{L, R\}$ the preferred party of the voter, and $-i^*$ the other party.
- If the voter is pivotal, the less preferred party ($-i^*$) has incentives to offer him a certain amount m_{-i^*} such that:

$$\begin{aligned} m_{-i^*} &\geq u(D, x_i, \gamma_{i^*}) - u(D, x_i, \gamma_{-i^*}) \\ &= (D - |x_{i^*} - \gamma_{i^*}|) - (D - |x_{i^*} - \gamma_{-i^*}|) \\ &= |x_{i^*} - \gamma_{-i^*}| - |x_{i^*} - \gamma_{i^*}|. \end{aligned}$$

Equilibrium in Vote-Buying Case

- Parties want to win the election at a minimum cost, in equilibrium $m^*_{i^*} = 0$ and $m^*_{-i^*} = |x_{i^*} - \gamma_{-i^*}| - |x_{i^*} - \gamma_{i^*}|$.
- The pivotal voter is indifferent between both political parties.
- Two Nash Equilibria,
  - $\{(m^*_{i^*}, m^*_{-i^*}), \text{Accept offer} - i^*\}$
  - $\{(m^*_{i^*}, m^*_{-i^*}), \text{Reject offer} - i^*\}$

Equilibrium in Vote-Selling Case

- The voter has incentives to set the highest price each party can pay (this is given by B).
- The voter may swing towards party $-i^*$ only if budget is large enough to compensate for looses if voting for his less prefer policy ($B > |x_{i^*} - \gamma_{-i^*}| - |x_{i^*} - \gamma_{i^*}|$).
- Note that if both parties accept to pay B to the voter, he will accept the offer of i^*.

Equilibrium in Vote-Selling Case

- Then the parties,

		$-i^*$	
		Accept	Reject
i^*	Accept	W , B	W , B
	Reject	B , W	$W+B$, B

- Nash Equilibria: $\{(B, B), (\text{Accept}, \text{Accept}), \text{Accept offer } i^*\}$

Experimental Design

Parts:

1. **Vote-buying**: **parties** are first players (get out and buy votes, if needed).
2. **Vote-selling**: **voters** are first players (get out and sell votes, if needed).

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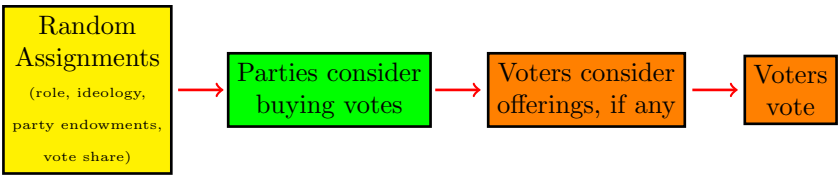
For both parts, the following **stages**:

1. Random assignments: role (P_a, P_b, $V_{\frac{1}{3}}$, $V_{\frac{1}{5}}$), "ideology," "party endowments." **Games are played among three subjects *always*: two parties, one voter**.
2. buying/selling **offers**.
3. buying/selling **choices**.
4. Election: [**V**: if her party wins, she wins $], [**P**: if he wins the election, he wins $].

Experimental Flow



Caveats

1. **Ideology**: voters "lean" towards a party based on the amount of points received if party wins the election. **Not really "ideology."**
2. **Party endowments**: fixed. *Parties face different relative vote-buying costs depending on party-voter distance*. Proxy of "randomized" party endowment.
3. **Relative importance of voter is randomized**. Voters are told they represent $\frac{1}{3}$ or $\frac{1}{5}$ of voters (randomized & public knowledge).

Comparative Statics: Ideology

- Downsian paradigm is unidimensional: left-right continuum (policy-oriented).
- We add some more complexity: a non-policy factor (vote-selling is *not* policy-oriented, Kitschelt 2007).
- Research question: **What's the tipping point at which voters stop caring about ideology, and start selling their votes?**

⋆ Ideology given by party-voter spatial distance (randomized).

Comparative Statics: Competitiveness

- Competitive authoritarian regimes survive not due to electoral fraud (Levitsky and Way 2010).
- They survive because of the incumbent's capacity to mobilize a large mass of supporters, discouraging likely opposers (Magaloni 2008).
- Research questions:
  1. **At which point do parties feel encouraged and start buying votes?**
  2. **At which point do parties feel discouraged and abandon the electoral race, not even buying votes?**
  - ⋆ Competitiveness given by $[\frac{1}{3}, \frac{1}{5}]$ voter types (randomized).

Comparative Statics: Endowments

- Literature won't give a definitive answer: Parties with more resources buy votes at higher prices (Bahamonde, 2018) or not (Szwarcberg, 2013).
- **Ultimately**, the question is: Does *expensive clientelism* exist?
- Research question: **Do wealthier parties buy more votes?**
- *Remember caveat: not "really" randomized. Proxy.*

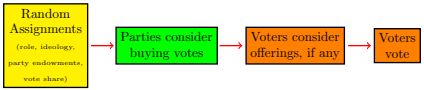
⋆ Relative party purchasing power varies according to party-voter spatial distance.

Comparative Statics: Targeting

- Literature won't give a definitive answer:
  - *Do parties target* **own supporters** *(since it's* **cheaper***)*?
    (Cox and McCubbins)
  - *Do parties target* **unlikely voters** *(otherwise it's a* **waste***)*?
    (Stokes).
- Research question: **Who do political parties target? Own? Unlikely?**

⋆ Own/Unlikely are given at random.

Comparative Statics: Sequence



- Research question: Does being the first one in making an offer matter? When? How?

Feedback Wanted