Recreating Market Conditions for Vote-Selling and Vote-Buying in the Lab: The Chilean Case

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Motivation: Vote-Buying Literature Forgets About Vote-Sellers

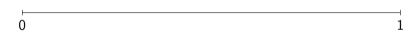
Clientelism: "the distribution of rewards to individuals or small groups during elections in contingent exchange for vote choices" (Nichter, 2014).

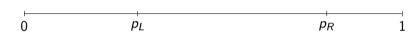
- The clientelism literature has focused primarily on vote-buying (parties buying votes in exchange of electoral support).
- Unfortunately, we are rather ignorants about vote-sellers.
- * **Supply and demand story**: Do parties target likely voters? Why? At what price? Under what conditions sellers their votes?

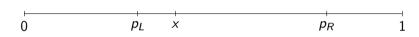
Motivation

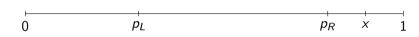
Plan for Today

- 1. Formalize our theory and mechanisms.
- 2. Explain experimental design.
- 3. Feedback!









- 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 y is implemented, payoffs of citizen i are given by $u(D, x_i, y) = D - |x_i - y|.$
- 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_i voters.

The Model

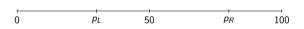
• Both parties negotiate with only one of these *n* voters who are randomly selected from the total population.

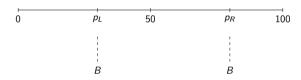
- Each candidate has a budget (B) that they can use to buy votes.
- Profits of party i are given by,

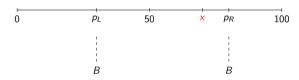
The Model

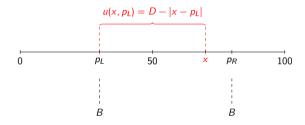
$$\pi_i(W, e_i, s_i) = W \cdot e_i + (1 - s_i \cdot a_j) \cdot B$$

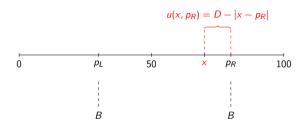
where W ($W \ge B$) is a constant that represents how much each party values winning the election, $e_i = 1$ if party i wins the election, 0 otherwise, s_i is the fraction of B that the party offers to voter j who can accept the offer ($a_j = 1$) or not ($a_j = 0$).

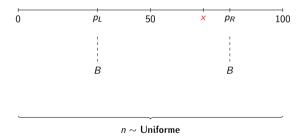


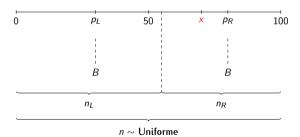


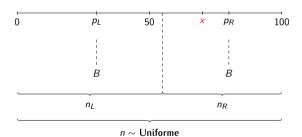












$$\pi_i(W, e_i, s_i) = W \cdot e_i + (1 - s_i \cdot a_j) \cdot B$$

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

The Model

- 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:

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

- 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:

$$m_{-i^*} \ge u(D, x_i, \gamma_{i^*}) - u(D, x_i, \gamma_{-i^*})$$

$$= (D - |x_{i^*} - \gamma_{i^*}|) - (D - |x_{i^*} - \gamma_{-i^*}|)$$

$$= |x_{i^*} - \gamma_{-i^*}| - |x_{i^*} - \gamma_{i^*}|.$$

Equilibrium in Vote-Buying Case

- Parties want to win the election at a minimum cost, in equilibrium $m_{i^*}^* = 0$ and $m_{-i^*}^* = |x_{i^*} y_{-i^*}| |x_{i^*} y_{i^*}|$.
- The pivotal voter is indifferent between both political parties.
- Two Nash Equilibria,

- $\{(m_{i^*}^*, m_{-i^*}^*), Accept offer i^*\}$
- $\{(m_{i^*}^*, m_{-i^*}^*), \text{Reject offer } -i^*\}$

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 $(B > |x_{i*} - \mathbf{v}_{-i*}| - |x_{i*} - \mathbf{v}_{i*}|).$
- 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,

The Model

$$i^* \begin{array}{c|c} & -i^* \\ & Accept & Reject \\ \hline W, B & W, B \\ \hline B, W & W+B, B \\ \hline \end{array}$$

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

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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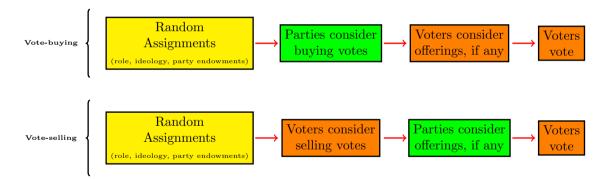
Experimental Design

- 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).

For both parts, the following stages:

- 1. Random assignments: role (P_a , P_b , $V_{\frac{1}{3}}$, $V_{\frac{1}{k}}$), "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 $\frac{1}{2}$ or $\frac{1}{\epsilon}$ of voters (randomized & public knowledge).

- 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).

- Competitive authoritarian regimes survive not due to electoral fraud (Levitsky and Wau 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 $\overline{\text{discouraged}}$ and abandon the electoral race, not even buying votes?
- ★ Competitiveness given by $\left[\frac{1}{3}, \frac{1}{5}\right]$ 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).
- 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

