Vote-Selling and Vote-Buying: Does The House Always Win? Gambling Votes in the Lab

Hector Bahamonde [1] Andrea Canales [2]

[1]University of Turku, Finland

[2]O'Higgins University, Chile

10 minute talk

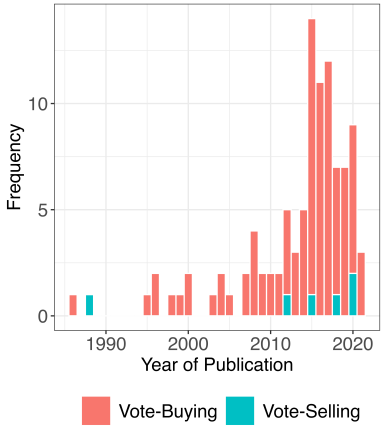
Why sequencing matters

- Think of two familiar situations:
  - A buyer walks up to you on the street: "I will give you 50 euros for that concert ticket."
  - You post the same ticket online and say: "I will sell it for 80 euros; take it or leave it."
- Same good, same buyer, same seller, same environment.
- But who moves first changes:
  - Who has bargaining power.
  - Who gets more surplus.
  - Which transactions actually happen.
- In clientelism, we almost always assume **parties move first** (vote buying).
- This paper asks: **what happens when voters move first and sell?**

Clientelism research has a lopsided market view

- Classic view: clientelism as **party-initiated demand** for votes.
  - Who do parties buy from? Core vs swing?
  - Do they buy more when elections are close or safe?
- But real clientelist exchanges are **reciprocal**:
  - Ethnographers show voters, neighborhood leaders, and brokers often initiate exchanges.
  - Many relationships are explicitly described as **client-initiated**.
- Yet quantitative work:
  - Heavily focused on vote buying.
  - Almost no systematic modeling of **vote sellers** and their strategies.
- We argue: to understand clientelism, we must put **voters as strategic sellers** on equal footing with parties.

The imbalance in the literature



Annual frequency of Web of Science publications whose abstracts include the terms “vote buying” and “vote selling”

What we do

- Conceptual move:
  - Treat **vote buying** and **vote selling** as two institutional variants of the same market.
  - The key institutional rule is **who moves first**.
- Theory:
  - Simple spatial model with one voter and two parties.
  - Institutional variant 1: **party-initiated vote buying**.
  - Institutional variant 2: **voter-initiated vote selling**.
- Experiment:
  - Laboratory game that mirrors the model.
  - Same ideology, budgets, and electoral stakes; only sequencing changes.
- Focus today:
  - Intuition and key notation from the model.
  - Experimental design and empirical results.
  - What we learn about **who benefits** from clientelism when voters sell.

Two institutional variants of the same exchange

Game 1: Party-initiated vote buying (VB)

↓

Parties A, B choose offers s_A, s_B

↓

Voter observes (s_A, s_B) and votes

Game 2: Voter-initiated vote selling (VS)

↓

Voter chooses minimum prices (a_A, a_B)

↓

Parties accept or reject, then voter chooses

- **Same**: one pivotal voter, two parties, payoffs, budgets, electoral stakes.

Players, preferences, and stakes

- Two parties $i \in \{A, B\}$ and one pivotal voter j.
- One-dimensional policy space: $\gamma \in \{1, \ldots, 100\}$ with $\gamma_A < \gamma_B$.
- Voter has ideal point x_j; ideological utility if party i wins:

$$u_j(\gamma_i) = D - |x_j - \gamma_i|,$$

  where D keeps payoffs positive.
- Voter prefers party

$$i^* = \arg \max_{i \in \{A,B\}} u_j(\gamma_i).$$

- Ideological advantage of the core party:

$$\Delta = u_j(\gamma_{i^*}) - u_j(\gamma_{-i^*}) > 0.$$

  This is the **minimum compensating transfer** needed to flip the vote.

Electoral risk and transfers

- Voter is pivotal with probability $\pi > 0$.
- Party i values winning at W_i, so its electoral stake is

$$R_i = \pi W_i.$$

- Think of R_i as how much the party is willing to pay for the pivotal vote.
- Transfers:
  - Vote buying: parties offer $s_i \geq 0$.
  - Vote selling: voter requests $a_i \geq 0$.
- Voter total utility from voting for i and receiving transfer t_i:

$$U_j(i, t_i) = u_j(\gamma_i) + t_i.$$

Game 1: Party-initiated vote buying

- Parties observe ideology and stakes $(x_j, \gamma_A, \gamma_B, R_A, R_B)$.
- Each chooses offer s_i simultaneously.
- Voter sees (s_A, s_B) and chooses a party.
- In the symmetric benchmark with $R_A = R_B = R$ and $R > \Delta$:

$$s_{i^*}^{VB} = \Delta, \quad s_{-i^*}^{VB} = 0.$$

- So:
  - The ideologically preferred party i^* buys the vote.
  - The opponent does not buy.
  - Transfers concentrate on **core** voters.
- This recovers the familiar **core targeting** result when parties move first.

Game 2: Voter-initiated vote selling

- Voter proposes minimum acceptable prices (a_A, a_B).
- Party i accepts only if $a_i \leq R_i$.
- Let W be the **electorally stronger party** with $R_W > R_{-W}$.
- When W is ideologically distant (not the core party):

$$\text{Voter can set } a_W \approx R_W, \text{ and a lower } a_{i^*},$$

  so that both parties accept but the vote is sold to W.
- Intuition:
  - Strong party has more at stake and a higher maximum willingness to pay.
  - Voter exploits that stake to **sell to the opponent expected to win**.

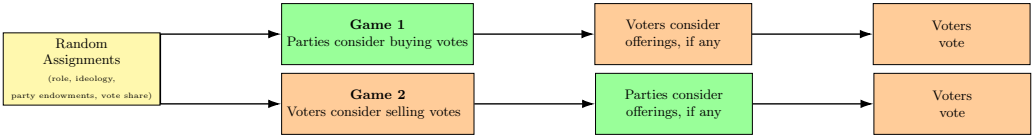
Hypotheses

- **H1 (Core targeting under party initiative):**
  - When parties move first, transfers concentrate on ideologically close voters.
- **H2 (Selling to the winning opponent):**
  - When voters move first, they are more likely to sell to the party expected to win, even if that party is ideologically distant.
- **H3 (Higher voter payoffs when parties initiate):**
  - Because parties tend to overspend when they initiate vote buying, voters should earn higher expected payoffs in VB than in VS.

Laboratory implementation

- **Subjects and implementation**
  - 102 adult participants in a Chilean lab, implemented in `oTree`.
  - Show-up fee plus performance-based earnings in experimental points.
- **Roles**
  - Each game has three real players: Party A, Party B, Voter.
  - Each subject plays three independent games; full re-randomization each time.
- **Information**
  - Ideological payoffs for the voter under A and B.
  - Party budgets (identical within a game).
  - Fictional vote shares determining whether the real voter is pivotal.
  - All information is common knowledge.

Experimental flow

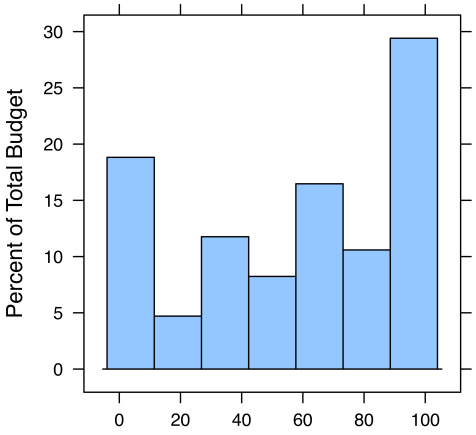


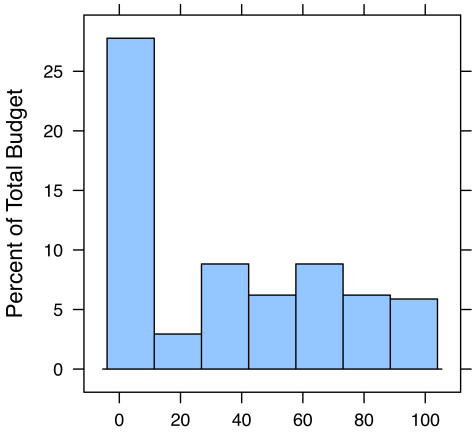
- Two variants implemented in identical environments:
  - Game 1: parties offer, voter chooses.
  - Game 2: voter requests, parties accept or reject, voter chooses.

Ideology, budgets, and pivotality

- **Ideological positions**
  - For each game, the voter sees: points if A wins, points if B wins.
  - This implements $u_j(\gamma_A)$ and $u_j(\gamma_B)$ and the ideological gap Δ.
- **Party budgets**
  - Randomly drawn, identical for both parties in a given game.
  - Constrain feasible offers or acceptable requested prices.
- **Electoral risk**
  - Fictional electorate with 3 or 5 additional voters.
  - Vote shares assigned to A and B imply either a close or safe race.
  - Real subject voter can be pivotal or not.

Vote buying offers vs vote selling requests





What we learn from the distributions

- **Vote buying (VB):**
  - Offers cluster at zero and at a small interior value that matches the compensating transfer Δ.
  - Behavior tracks the theoretical core-targeting equilibrium: core party buys, opponent often offers zero.
- **Vote selling (VS):**
  - Requested prices are widely dispersed.
  - Many voters ask for very small transfers from at least one party.
  - Many also ask for prices close to the party budget, especially from electorally strong parties.
- This motivates modeling **requested prices** in VS as our main empirical window on seller behavior.

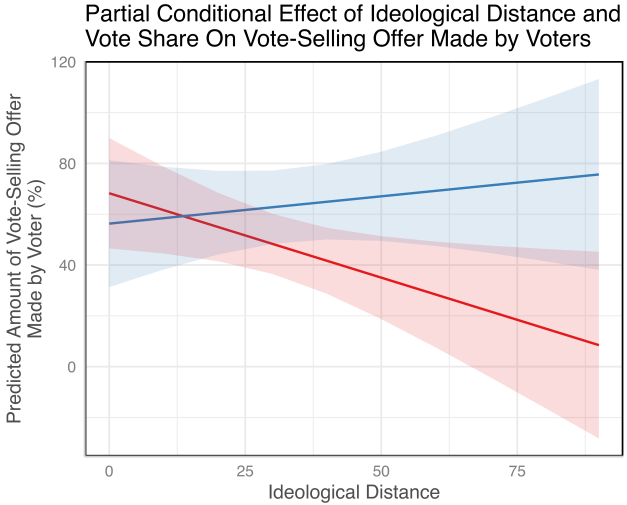
Modeling requested prices

- Unit of analysis: voter–party dyads in the vote-selling game.
- Dependent variable:

$$Y_{di} = \frac{a_{di}}{B_{di}} \times 100,$$

  requested price as percentage of party i budget.
- Key predictors:
  - Ideological distance between voter and party.
  - Party vote share in the fictional electorate (electoral strength).
  - Interaction: ideology $\times$ vote share.
  - Indicator for whether the real voter is pivotal.
- Method:
  - Linear model with clustered standard errors at the voter level.

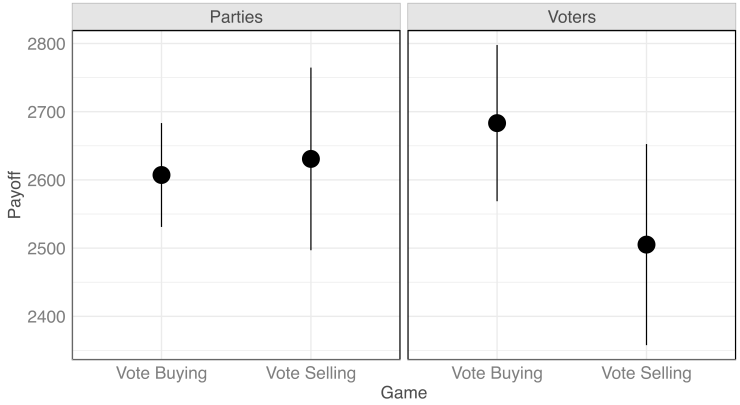
Selling to the electorally strong opponent



Interpreting the pricing patterns

- For **electorally weak** parties:
  - Requested prices **decrease** with ideological distance.
  - When the weak party is close, voters ask for higher transfers to insure against its likely loss.
  - When it is far, requested prices approach zero.
- For **electorally strong** parties:
  - Requested prices **increase** with ideological distance.
  - When the strong party is distant, voters escalate demands up to its budget.
  - Voters exploit the higher stake R_i of strong parties.
- This matches **H2**: when voters initiate, they strategically sell to the opponent expected to win and charge that party more.

Payoffs by role and by game



Mean payoffs for voters and parties under vote buying (VB) and vote selling (VS) with non-parametric confidence intervals.

Does initiative change who wins the game?

- **Parties:**
  - Party payoffs are similar or slightly higher in VS relative to VB.
  - Moving initiative to voters does not reduce parties utilities.
- **Voters:**
  - Voters earn systematically **higher payoffs** when parties move first (VB).
  - In VS, high requested prices are often rejected; some voters end up with only ideological payoffs.
- This matches **H3**: the house (parties) does at least as well or better when voters try to sell; voters actually do better when parties initiate the exchange.

Main takeaways

- **Institutional rule**: who moves first matters for:
  - Who is targeted (core vs strong opponent).
  - How much is paid.
  - How surplus is split between parties and voters.
- When **parties initiate** (vote buying):
  - Transfers concentrate on **core** voters.
  - Parties often overspend under electoral risk.
  - Voters capture a larger share of surplus.
- When **voters initiate** (vote selling):
  - Voters charge higher prices to electorally strong, ideologically distant parties.
  - Many expensive demands are rejected, lowering average voter payoffs.
  - Parties are at least as well off as in vote buying.

Implications and next steps

- Conceptually:
  - Clientelism is best viewed as a **market** where both demand and supply matter.
  - "Vote buying" and "vote selling" are two institutional faces of the same exchange.
- Empirically:
  - Initiative helps explain puzzles in core–swing targeting and surplus allocation.
  - It is not enough to ask *who parties buy*; we must also ask *who voters can most profitably sell to*.
- Limitations and extensions:
  - One-shot lab game, no brokers, no repeated interactions or sanctions.
  - Next steps: multi-voter and multi-party environments, networked brokers, field and survey experiments that vary who initiates.

Thank you

- Paper and abstract: www.HectorBahamonde.com
- Feedback very welcome.