

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

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Vote buying: distribution of private rewards to individuals during elections in exchange for electoral support (Nichter, 2014).



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 - ? Incumbents also buy votes when they're **winning** the election.
 - ? It's not clear why targeting core voters is not a **waste**
 - ? The role of past losses has been completely overlooked (**"sunk cost fallacy"**)

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- **Motivate the problem:** vote buying literature is mostly based on the Expected Utility Theory (EUT) (von Neumann and Morgenstern).

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- **Propose** to re-think about how parties make decisions under risk (Prospect Theory).
- **Empirics:** we designed an economic lab experiment of vote buying.
- **Results:** Prospect Theory explains better parties' decision-making process in risky contexts.

Argument

Vote-buying will be higher when parties...

- Risk-aversion in the domain of **gains**:
 - ✓ Are **wining** the election.
 - ✓ Deal with their own supporters (parties would hate to lose already **acquired assets**)

Argument

Vote-buying will be higher when parties...

- Risk-aversion in the domain of **gains**:
 - ✓ Are **wining** the election.
 - ✓ Deal with their own supporters (parties would hate to lose already **acquired assets**)
- Risk-seeking in the domain of **losses**.
 - ✓ Have experienced **losses** in the past (sunk costs).

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 1. Clientelist Targeting.
 2. Political Contestation.

Not Clear Who Clientelist Parties Target

- Since constituencies are well known to clientelist parties, they allocate resources to **core voters**.

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Dixit and Londregan (1996) and Stokes (2005).

- This is a *very* important question, yet the literature has failed to answer it.

Carlin and Moseley (2015).

Not Clear The Role of Political Contestation on Vote Buying

- The more contested an election, the more risks of losing the election, the more vote buying.

Scott (1972), Shefter (1977), Diaz-Cayeros (2008), Corstange (2018).

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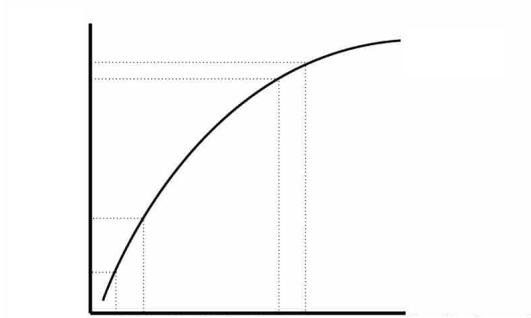
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- Why would a party buy such a massive amount of votes in a safe and uncontested election?

Wrong Understanding of Decision-Making Process under Risk

Change from EUT:

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- Parties focus only on **absolute** levels of utilities.



Wrong Understanding of Decision-Making Process under Risk

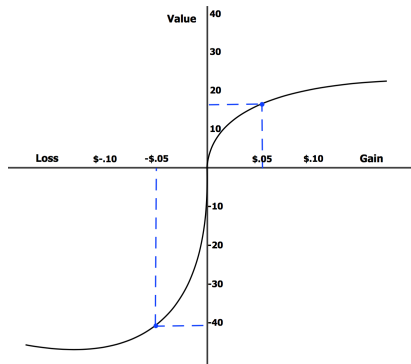
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To Prospect Theory:

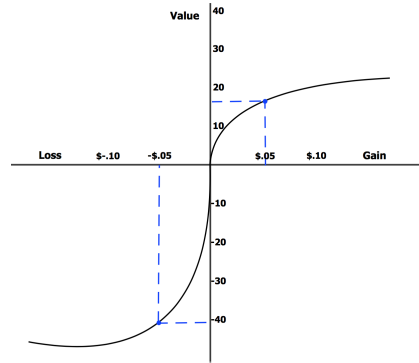
Kahneman and Tversky (1979)

1. Reference dependence.
2. Value function.



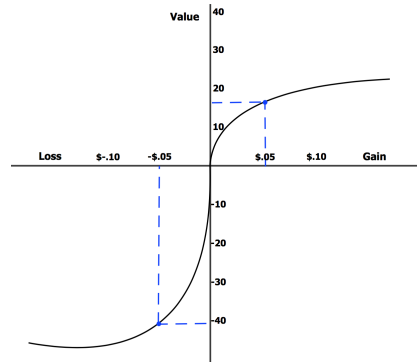
Prospect Theory

1. **Reference dependence.** Elements that influence decisions:



Prospect Theory

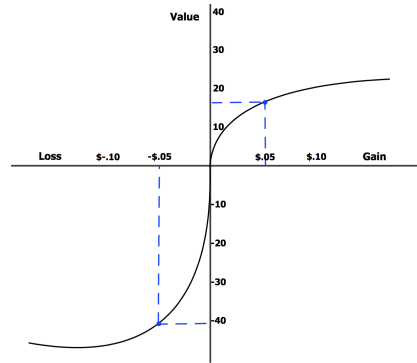
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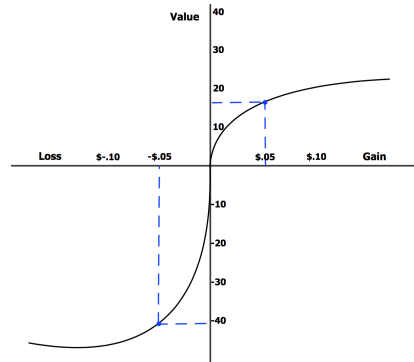
- ✓ context in which the decision-making processes take place.
- ✓ changes of wealth, rather than final asset positions.



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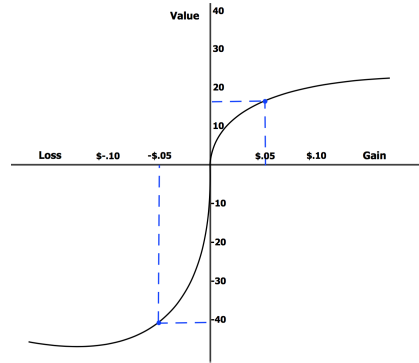
1. Reference dependence. Elements that influence decisions:

- ✓ context in which the decision-making processes take place.
- ✓ changes of wealth, rather than final asset positions.
- ✓ sunk costs do matter: losses are harder to accept.



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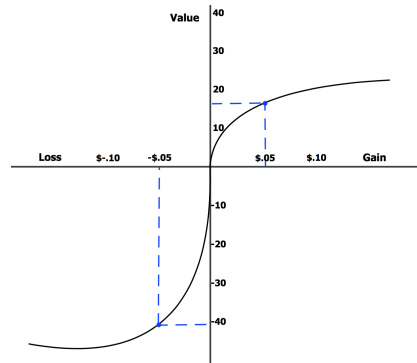
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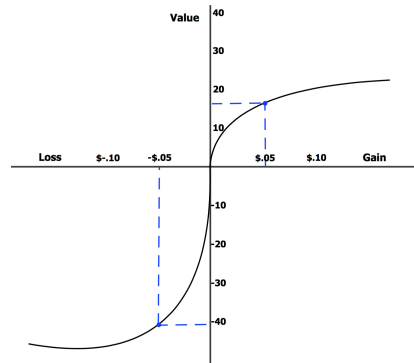
- ✓ Individuals are **risk-averse** in the domain of **gains**.



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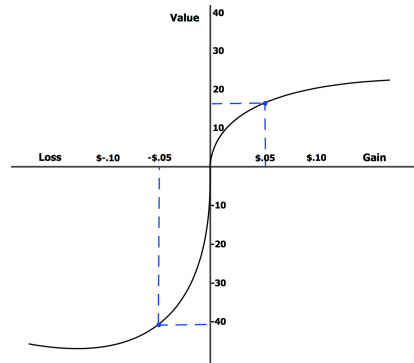
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2. **Value function.** The asymmetrical curvature of the value function does influence decisions:

- ✓ Individuals are **risk-averse** in the domain of **gains**.
- ✓ Individuals are **risk-acceptant** in the domain of **losses**.
- ✓ In simple, **losses loom larger than gains**.



Prospect Theory: Implications for Vote-Buying

1. Due to **loss aversion** parties will find **intolerable** the idea of **losing** the **supporter base** they **already** have.
 - ✓ Are probable winners.
 - ✓ When dealing with own supporters.

Prospect Theory: Implications for Vote-Buying

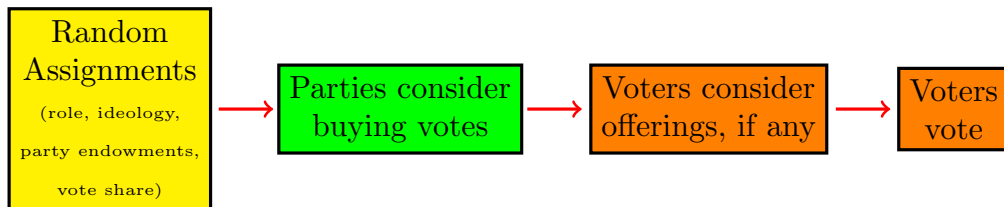
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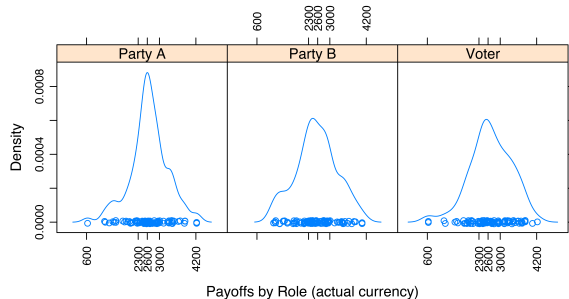
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- The experiment was conducted in Chile (April/May 2021).
- 0-tree (Z-tree). Fischbacher (2007).
- All participants were required to successfully complete two practice rounds.
- Show-up fee of \$2,000 CLP ($\approx 2.1\text{€}$).
- Every game was played between three people: two parties and one voter.
- All transactions were performed exchanging experimental “points.” 1 point = \$0.42.
- 102 subjects were recruited.
- Each subject played the game three times ($N = 306$).
- In-between subjects experimental design.

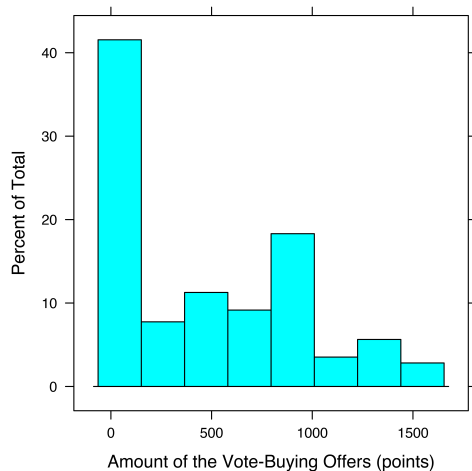
1. **Role:** *party A, party B* or *voter*.
2. **Voters:** “**ideological position**” (points depending on whether party A or B wins the election). Points reflect “spatial” distance between the voter and both parties (continuum 1–100).
3. **Parties:** **endowments** (points to buy votes, if any).
But both parties receive the same endowment in the same game.
4. **Parties:** **vote shares** (number of votes each party *will* receive, excluding the “voter” participant).
 - Every randomization was common knowledge.



- **Parties:** payoffs depend on whether they are elected. If they spend points buying votes, that amount is discounted.
- **Voters:** payoffs depend on whether their party is elected, and on whether they sell their vote.



- EUT: offers go up when parties are **losing the election** (parties focus on **wins**).
- PT: parties focus on **loses** (hold on to what they “own”).
 1. Buy more votes when the parties are **wining** the election.
 2. Buy more votes from **core** supporters (hurts more to lose **closest** voters).
 3. Buy more votes when yesterday's costs are high (need to spend more to “*break even*”).



$$\begin{aligned}\text{Offer}_i = & \beta_0 + \\ & \beta_1 \text{Vote Share}_i + \\ & \beta_2 \Delta \text{Points Accumulated}_i + \\ & \beta_3 \text{Spatial Distance}_i + \\ & \beta_4 \text{Party Budget}_i + \\ & \beta_5 \text{Pivotal Voter}_i + \\ & \alpha_n + \epsilon_i\end{aligned}$$

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- Dependent variable described.

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- Number of certain votes each party.

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- Change in points respect to $t - 1$ (prior round).

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- Distance from the voter (points).

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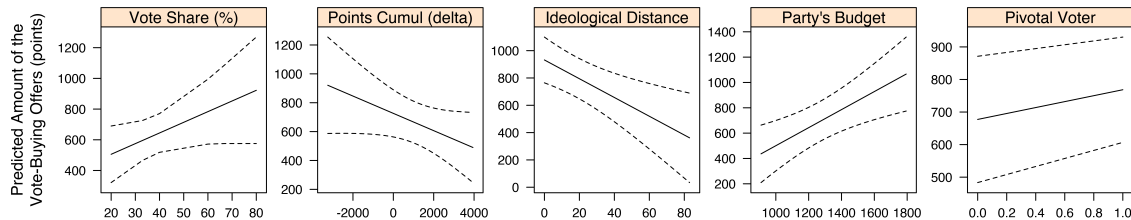
- Party's budget (points).

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- Voter is pivotal.

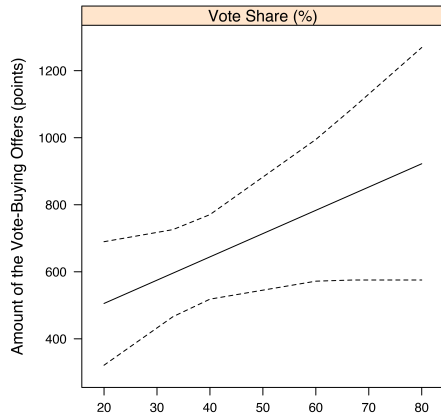
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- Participant fixed effects.

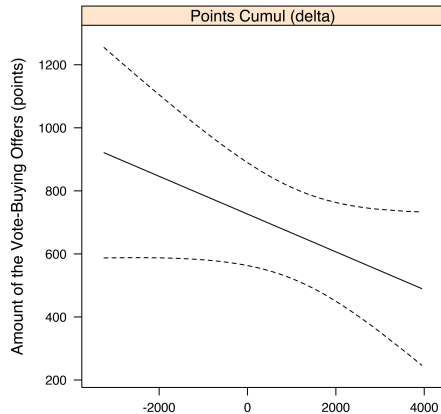


Overall, results conform with Prospect Theory.

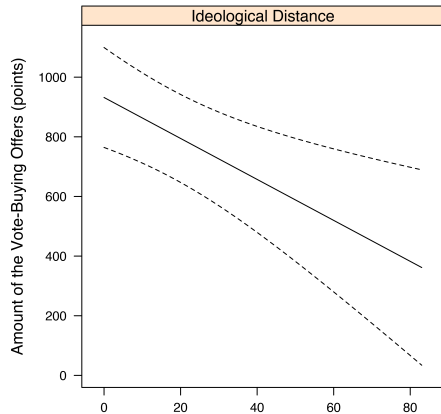
- **Parties are risk-averse in the domain of gains:** due to loss aversion, parties buy more votes when they're likely winners (not losers).
Incumbents buy more votes to prevent a decline than to increasing gains.



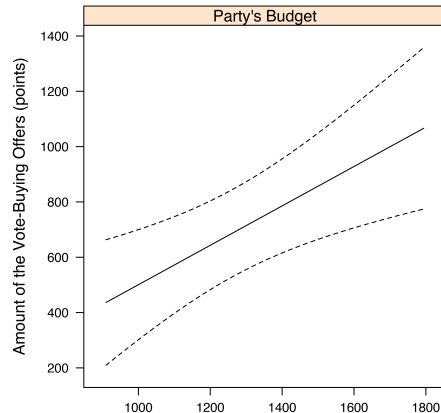
- **Parties are risk-seeking in the domain of losses:** unlike EUT, parties do consider sunk costs, buying more votes to compensate for past losses.



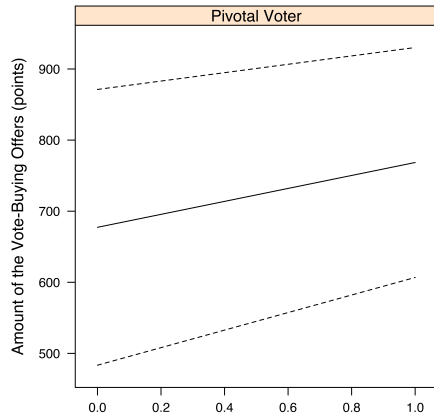
- **Core/swing voters:** Parties buy more votes at higher (not lower) prices from closest supporters.
Risk aversion: It hurts more to lose **closest** supporters.



- **Party budgets:** Parties with larger budgets spend more on vote buying.



- **Pivotal voters:** don't cost more (against most of spatial theories of voting).



Main Takeaway

- Parties don't see vote buying in the typical “insurance” sense: parties don't buy more votes in tighter electoral races.
- Decision-makers are more concerned with preventing a decline than increasing gains.

- This paper identified **three main gaps** in the literature. We don't know,
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- To test this theory we designed an economic experiment of vote buying.
- PT explains better the gaps in the literature.

Thank you



- Paper (draft) available at www.HectorBahamonde.com.
- All feedback is welcomed!

Role	Variable	N	Min.	Max.	Median	Interquartile Range	Mean	Std. Dev.	Std. Error	Conf. Int.
Party A	Feel close to a political party	66	0	1	0	1	0	0	0	0
Party B	Feel close to a political party	66	0	1	0	0	0	0	0	0
Voter	Feel close to a political party	68	0	1	0	0	0	0	0	0
Party A	Left - Right	66	1	10	3	4	4	2	0	1
Party B	Left - Right	66	1	10	4	3	4	2	0	1
Voter	Left - Right	68	1	10	3	3	4	2	0	1
Party A	Male	66	0	1	0	1	0	0	0	0
Party B	Male	66	0	1	0	1	0	0	0	0
Voter	Male	68	0	1	0	1	0	0	0	0
Party A	Party identification	66	2	9	9	0	8	2	0	0
Party B	Party identification	66	1	9	9	0	9	1	0	0
Voter	Party identification	68	1	9	9	0	8	2	0	0
Party A	Payoff	73	633	4224	2630	674	2621	670	78	156
Party B	Payoff	72	1148	4062	2592	710	2607	665	78	156
Voter	Payoff	75	633	4224	2674	836	2664	697	80	160
Party A	Salary is enough	66	1	4	2	0	2	1	0	0
Party B	Salary is enough	66	1	4	2	1	2	1	0	0
Voter	Salary is enough	68	1	3	2	0	2	1	0	0
Party A	Vote in the next election	66	0	1	1	0	1	0	0	0
Party B	Vote in the next election	66	0	1	1	0	1	0	0	0
Voter	Vote in the next election	68	0	1	1	0	1	0	0	0
Party A	Voted in the last election	66	0	1	1	0	1	0	0	0
Party B	Voted in the last election	66	0	1	1	0	1	0	0	0
Voter	Voted in the last election	68	0	1	1	0	1	0	0	0

Table: Summary Statistics.

	OLS
	Amount of the Vote-Buying Offers
Intercept	−380.54 (568.66)
Vote Share (%)	6.95 (5.55)
Points Accumulated (delta)	−0.06 (0.05)
Ideological Distance	−6.87* (3.26)
Party Budget	0.71* (0.34)
Pivotal Voter	91.16 (124.46)
R ²	0.66
Num. obs.	142

*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.

Robust standard errors in parentheses.

Fixed effects parameteres omitted in table.