

# 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 during elections in exchange for electoral support (Nichter, 2014).



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  - ? 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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- **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,  
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- ✓ **Are probable winners**—risk-averse in the domain of gains.
  - ✓ **Have experienced losses in the past (sunk costs)**—risk-seeking in the domain of losses.

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- These assumptions have led to several empirical inconsistencies.
  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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- We contend that this is a *very* important question, yet one that the literature has failed to clarify.

# Not Clear The Role of Political Contestation on Vote Buying

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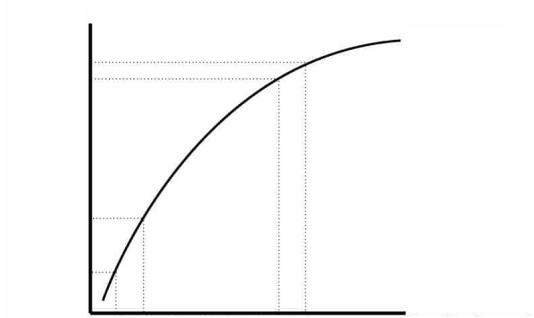
- Why would a party buy such a massive amount of votes in a safe and uncontested election?



# Wrong Understanding of Decision-Making Process under Risk

## Change from EUT:

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



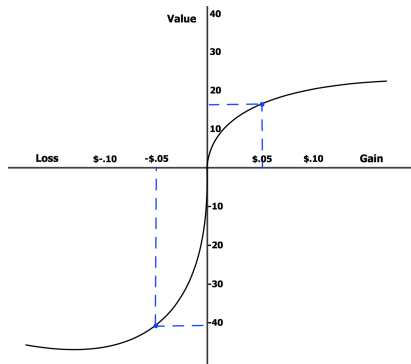
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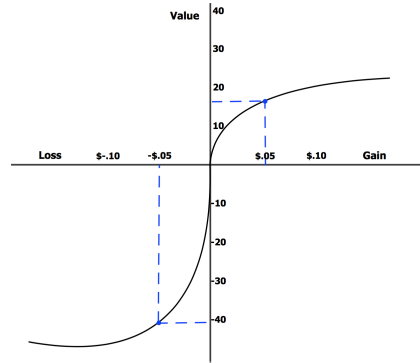
To Prospect Theory (Kahneman and Tversky, 1979):

1. Reference dependence.
2. Value function.



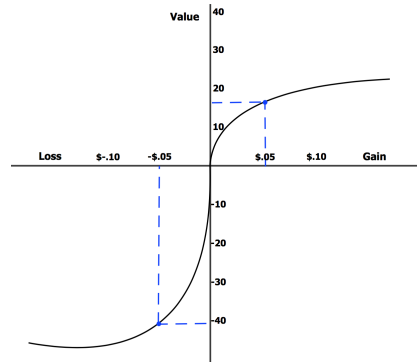
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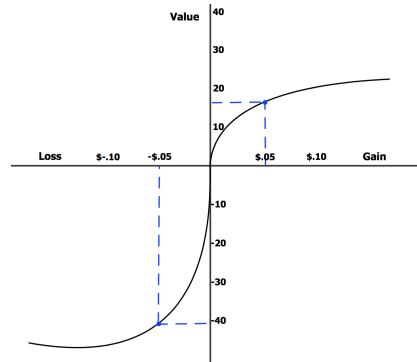
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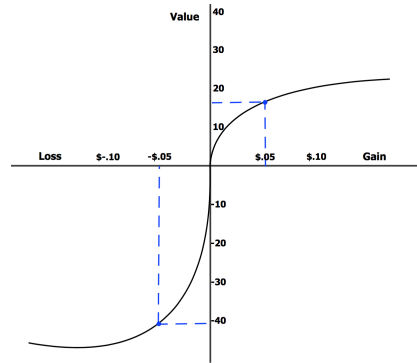
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  - ✓ **context** in which the decision-making processes take place.
  - ✓ **changes of wealth**, rather than final asset positions.



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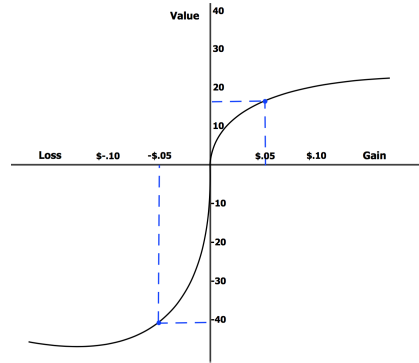
## 1. Reference dependence. Elements that influence decisions,

- ✓ 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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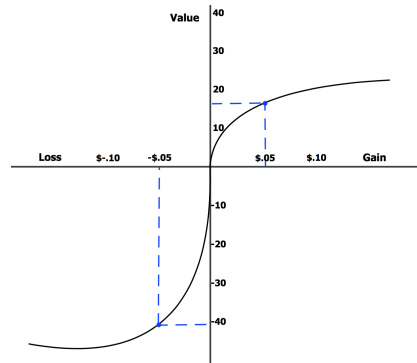
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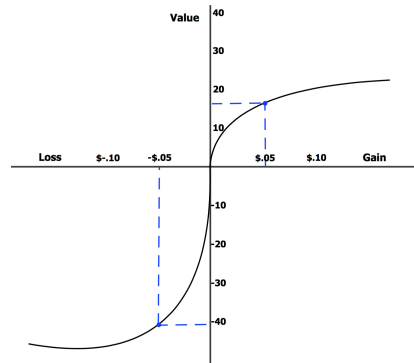




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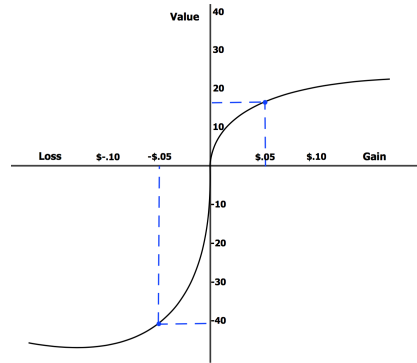
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- ✓ Individuals are **risk-averse** in the domain of **gains**.
- ✓ Individuals are **risk-acceptant** in the domain of **losses**.
- ✓ In simple, **losses loom larger than gains**.



## Prospect Theory: Implications for Vote-Buying

Vote-buying will be higher when parties,

1. **Are probable winners:** due to **loss aversion**, parties will find **intolerable** the idea of **losing the supporter base they already have** (decision-makers are more concerned with preventing a decline than increasing gains; risk-aversion).

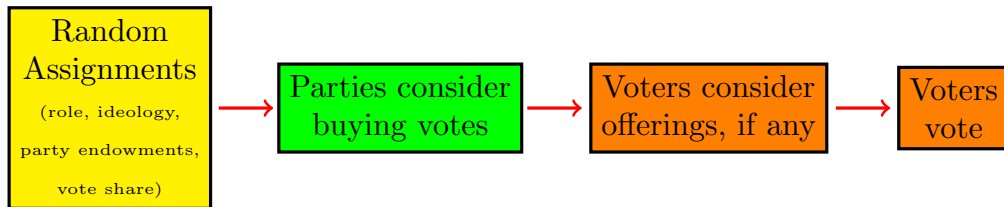
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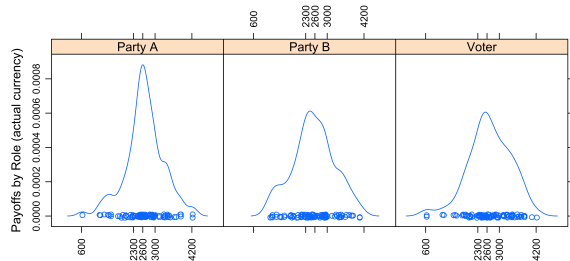
1. **Are probable winners:** due to **loss aversion**, parties will find **intolerable** the idea of **losing the supporter base they already have** (decision-makers are more concerned with preventing a decline than increasing gains; risk-aversion).
2. **Have experienced losses in the past** (sunk costs): alter the reference point, making vote-buying an attractive strategy (**risk-seeking**).

- 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.

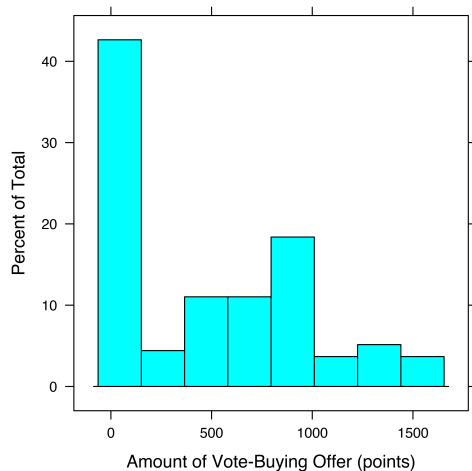


- **Parties:** payoffs depend on whether they are elected. If they spend points buying votes, that amount is discounted.
- **Voters:** payoffs depend on whether their party is elected, and on whether they sell their vote.





- 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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- 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).

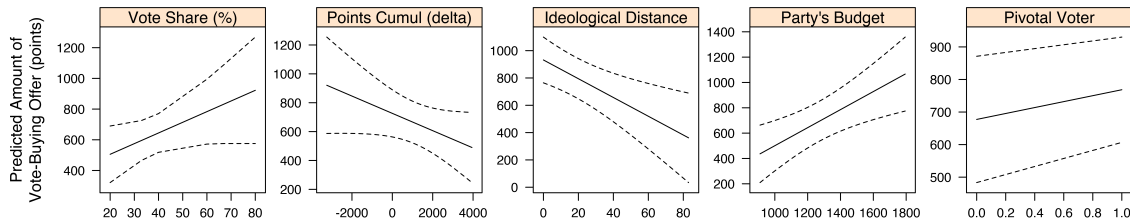
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- Voter is pivotal.



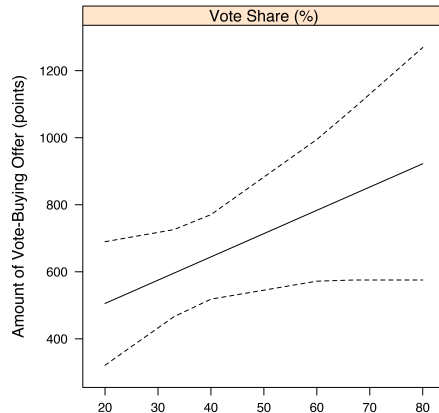
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- Participant fixed effects.

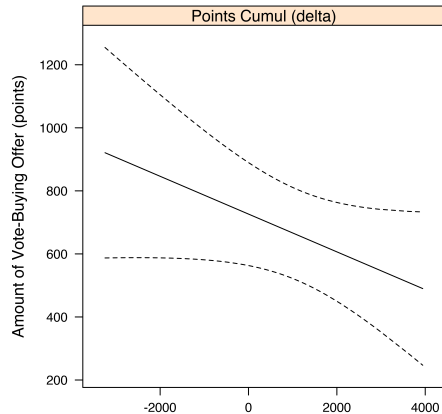


Overall, results conform with Prospect Theory.

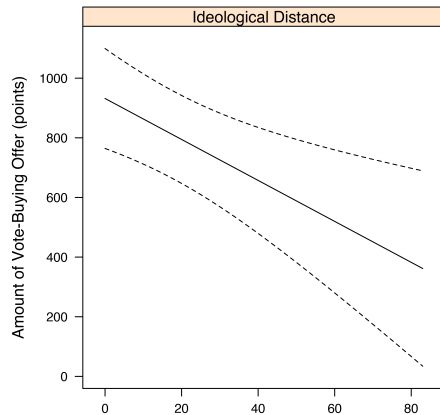
- **Parties are risk-averse in the domain of gains:** due to loss aversion, parties buy more votes when they're likely winners (not losers).  
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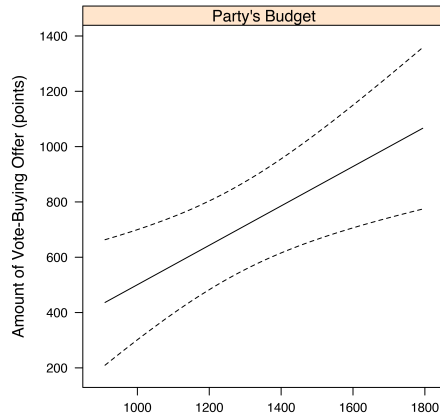
- **Parties are risk-seeking in the domain of losses:** unlike EUT, parties do consider sunk costs, buying more votes to compensate for past losses.  
Decision-makers try to break-even.



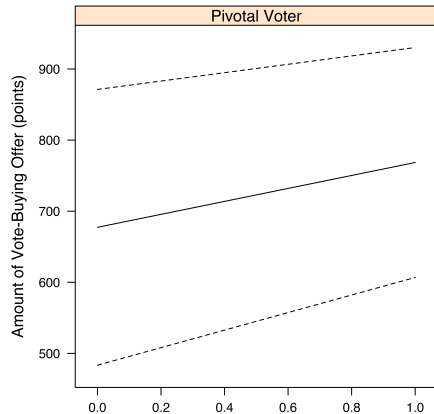
- **Core/swing voters:** Parties buy more votes at higher (not lower) prices from closest supporters.  
Unlike spatial theories of voting, core voters cost more (not less).



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



- **Pivotal voters:** don't cost more (against most of spatial theories of voting).  
This implies that parties don't see vote buying in the typical "insurance" sense: they don't buy more votes in tighter electoral races.



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- We introduced **Prospect Theory** in the vote-buying literature as an **alternative way to understand decision-making under risk**.
- 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](http://www.HectorBahamonde.com).
- All feedback is welcomed!

	role	variable	n	min	max	median	iqr	mean	sd	se	ci
1	Party A	left.right	66	1	10	3	4	4	2	0	1
2	Party B	left.right	66	1	10	4	3	4	2	0	1
3	Voter	left.right	68	1	10	3	3	4	2	0	1
4	Party A	male	66	0	1	0	1	0	0	0	0
5	Party B	male	66	0	1	0	1	0	0	0	0
6	Voter	male	68	0	1	0	1	0	0	0	0
7	Party A	party.id	66	2	9	9	0	8	2	0	0
8	Party B	party.id	66	1	9	9	0	9	1	0	0
9	Voter	party.id	68	1	9	9	0	8	2	0	0
10	Party A	party.like	66	0	1	0	1	0	0	0	0
11	Party B	party.like	66	0	1	0	0	0	0	0	0
12	Voter	party.like	68	0	1	0	0	0	0	0	0
13	Party A	payoff	73	633	4224	2630	674	2621	670	78	156
14	Party B	payoff	72	1148	4062	2592	710	2607	665	78	156
15	Voter	payoff	75	633	4224	2674	836	2664	697	80	160
16	Party A	salary.enough	66	1	4	2	0	2	1	0	0
17	Party B	salary.enough	66	1	4	2	1	2	1	0	0
18	Voter	salary.enough	68	1	3	2	0	2	1	0	0
19	Party A	vote.last.election	66	0	1	1	0	1	0	0	0
20	Party B	vote.last.election	66	0	1	1	0	1	0	0	0
21	Voter	vote.last.election	68	0	1	1	0	1	0	0	0
22	Party A	vote.next.election	66	0	1	1	0	1	0	0	0
23	Party B	vote.next.election	66	0	1	1	0	1	0	0	0
24	Voter	vote.next.election	68	0	1	1	0	1	0	0	0

Table: Summary Statistics.

	OLS
	Amount of Vote-Buying Offer
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 <sup>2</sup>	0.66
Num. obs.	142

\*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ ;  $^{cdot} p < 0.1$ .

Robust standard errors in parentheses.

Fixed effects parameteres omitted in table.