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

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June 22, 2022

First things first...

ne problem 00 neory 00 Experimental Design

atistical Analyses

Discussion

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



Introduction

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Motivation

### Vote-Buying Literature Builds on the Wrong Framework

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  - 1. When do you buy votes? Winning/losing an election?

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- ? Why targeting core voters isn't a waste?
- ? Past losses completely overlooked ("sunk cost *fallacy*").

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#### This Talk

• 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.

- Risk-aversion in the domain of gains:
  - ✓ Are wining the election.
  - ✓ Deal with core voters.
- Risk-seeking in the domain of losses.
  - √ Have experienced losses in the past (sunk costs).

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  - Losses and gains affect a party's decision-making process in a comparable way.
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   Winning elections feels just as good as losing one hurts.
- Parties focus on absolute levels of utilities. Overlooking "sunk costs."
- These assumptions lead to several inconsistencies.
  - 1. The conflicting mechanics of **clientelist targeting**.
  - 2. The unclear role of **political contestation** on vote buying.

The Problem: Clientelist Targeting

### Not Clear Who Clientelist Parties Target

 Since constituencies are well known to clientelist parties, they target core voters.

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• Since targeting voters who are already voting for the party is a waste, parties should target **swing voters** instead.

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

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 Since targeting voters who are already voting for the party is a waste, parties should target **swing voters** instead.

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

All in all, the literature—unfortunatelu—does not provide a straight answer.

Carlin and Moseleu (2015).

### Not Clear The Role of Political Contestation on Vote Buying

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

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

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However, some find very high levels of vote-buying in uncontested elections.

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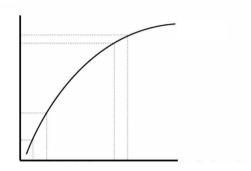
Again, the literature does not provide a straight answer.

Changing the starting point

### Wrong Understanding of Decision-Making Process under Risk

#### Change from EUT:

- Losses and gains affect in a comparable way.
- Parties focus only on absolute levels of utilities.



# Wrong Understanding of Decision-Making Process under Risk

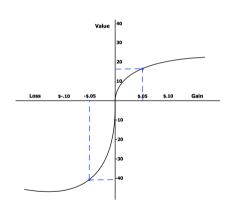
#### Change from EUT:

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#### To Prospect Theory:

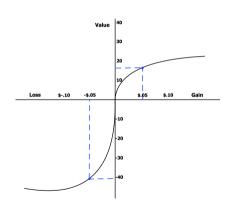
Kahneman and Tversky (1979)

- 1. Reference dependence.
- 2. Value function.



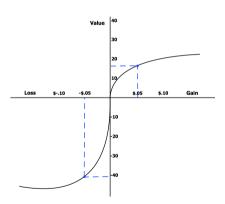
### Prospect Theory

- Reference dependence. Elements that influence decisions:
  - ✓ context in which the decision-making processes take place.
  - √ changes of wealth, rather than final asset positions.



### **Prospect Theory**

- 2. Value function. The asymmetrical curvature of the value function influences decisions.
  - ✓ Individuals are risk-averse in the domain of gains.
  - ✓ Individuals are risk-acceptant in the domain of losses.



# Prospect Theory: Implications for Vote Buying

- 1. Parties will feel huge aversion to lose what they "own."
  - ✓ Are probable winners.
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- 1. Parties will feel huge aversion to lose what they "own."
  - ✓ Are probable winners.
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- 2. Past loses alter the reference point.
  - √ Sunk costs are high.

Setup

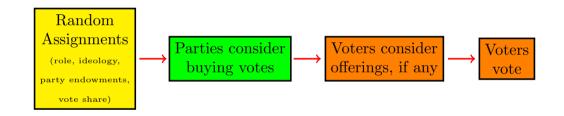
- Designed an experiment in O-tree (Z-tree). Fischbacher (2007).
- All participants were required to successfully complete two **practice rounds**.
- Every game was played between **three people**: two parties and one voter.
- All transactions were performed exchanging experimental "points." 1 point = \$0.42.
- 102 subjects were recruited.
- Each subject played the game three times (N = 306).
- We follow a 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).

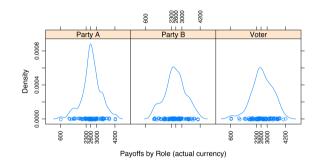
But both parties receive the same endowment in the same game.

- 4. Parties: vote shares (number of votes each party *will* receive, excluding the "voter" participant.
- ✓ Every randomization was common knowledge.

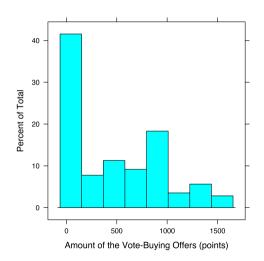
Experimental Flow



- 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.



- Parties want to avoid loses, not maximize wins. "Hold on to what they own."
  - 1. Wining the election.
  - 2. From **core** supporters.
  - 3. When **sunk costs** are high.



Offer<sub>i</sub> = 
$$\beta_0$$
+  
 $\beta_1$ Vote Share<sub>i</sub>+  
 $\beta_2\Delta$ Points Accumulated<sub>i</sub>+  
 $\beta_3$ Spatial Distance<sub>i</sub>+  
 $\beta_4$ Party Budget<sub>i</sub>+  
 $\beta_5$ Pivotal Voter<sub>i</sub>+  
 $\alpha_n + \epsilon_i$ 

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• Dependent variable described.

Offer<sub>i</sub> = 
$$\beta_0$$
+
$$\beta_1 \text{Vote Share}_i +$$

$$\beta_2 \Delta \text{Points Accumulated}_i +$$

$$\beta_3 \text{Spatial Distance}_i +$$

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$$\alpha_n + \epsilon_i$$

• Number of certain votes each party.

Offer<sub>i</sub> = 
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+  
 $\beta_1$ Vote Share<sub>i</sub>+  
 $\beta_2$  $\Delta$ Points Accumulated<sub>i</sub>+  
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• Change in points respect to t-1 (prior round).

Offer<sub>i</sub> = 
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• Distance between the party and the voter (points).

Offer<sub>i</sub> = 
$$\beta_0$$
+  
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• Party's budget (points).

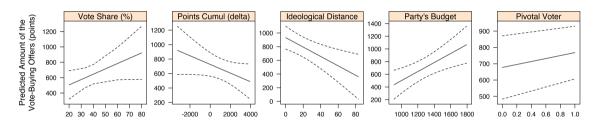
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• Voter is pivotal.

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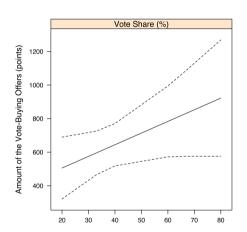
• Participant fixed effects.

Results



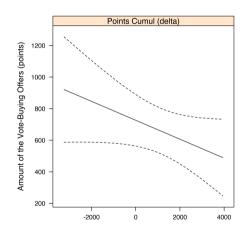
Overall, results conform with Prospect Theory.

 Due to loss aversion, parties buy more votes when they're winning—not losing—the election.



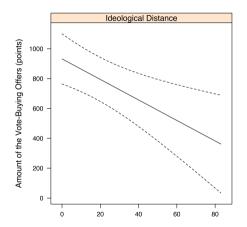
 Unlike EUT, parties do consider sunk costs, and buy more votes to

compensate for past losses.

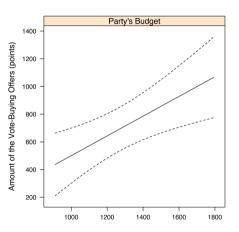


Parties buy votes—at higher, not

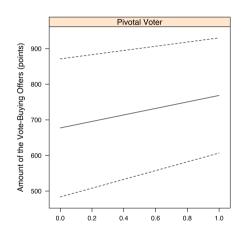
lower prices—from core voters.



 Larger party budgets lead to 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:
  - 1. Parties buy votes when they're winning the election,
  - 2. ... and from core voters.
- ✓ Decision-makers are more concerned with preventing a decline than increasing gains.

- This paper identified three main gaps in the literature:
  - 1. The mechanics of clientelist targeting.

- 2. The role of electoral contestation on vote buying.
- 3. The literature has overlooked the role of sunk costs.

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- To test this theory we designed an economic experiment of vote buying.
- PT explained better the gaps in the literature.

# Thank you



- Abstract available: www.HectorBahamonde.com.
- All feedback is welcomed!

Role	Variable	Ν	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.

	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*
-	(2.00)

OLS 

> 0.71\*(0.34)

91.16 (124.46)

0.66

142

(3.26)

Party Budget

Fixed effects parameteres omitted in table.

 $R^2$ 

Num. obs.

Pivotal Voter

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

Robust standard errors in parentheses.