

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

Hector Bahamonde ¹ Andrea Canales ²

¹University of Turku, Finland

²O'Higgins University, Chile

August 25th., 2022

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



Vote-Buying Literature Builds on the Wrong Framework

- Lets say you're a clientelist political party

Vote-Buying Literature Builds on the Wrong Framework

- Lets say you're a clientelist political party:
 1. When do you buy votes? Winning/losing an election?
 2. Who do you target? Your own supporters or the ones who are more likely to flip?
 3. When making these decisions, do prior losses matter?

Vote-Buying Literature Builds on the Wrong Framework

- Lets say you're a clientelist political party:
 1. When do you buy votes? Winning/losing an election?
 2. Who do you target? Your own supporters or the ones who are more likely to flip?
 3. When making these decisions, do prior losses matter?
- If we follow what the literature says...the answers are mixed:
 - ✓ When losing an election.
 - ✓ Core *or* swing voters.
 - ✓ They shouldn't: **"sunk costs"** should *not* affect current decisions.

Vote-Buying Literature Builds on the Wrong Framework

- Lets say you're a clientelist political party:
 1. When do you buy votes? Winning/losing an election?
 2. Who do you target? Your own supporters or the ones who are more likely to flip?
 3. When making these decisions, do prior losses matter?
- If we follow what the literature says...the answers are mixed:
 - ✓ When losing an election.
 - ✓ Core *or* swing voters.
 - ✓ They shouldn't: "**sunk costs**" should *not* affect current decisions.
- And yet...:
 - ? Incumbents buy votes when they're **winning** (Gonzalez-Ocantos, 2012).
 - ? Why targeting core voters isn't a **waste**?
 - ? Past losses completely overlooked ("sunk cost **fallacy**").

This Talk

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

As a consequence, there are too many important loose ends.

This Talk

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

As a consequence, there are too many important loose ends.

- **Propose** to re-think about how parties make decisions under risk (Prospect Theory).

This Talk

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

As a consequence, there are too many important loose ends.

- **Propose** to re-think about how parties make decisions under risk (Prospect Theory).
- **Empirics:** we designed an economic lab experiment of vote buying.

This Talk

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

As a consequence, there are too many important loose ends.

- **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...

- 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).

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.
- **The problem.** This approach assumes:

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.
- **The problem.** This approach assumes:
 1. Losses and gains affect a party's decision-making process in a **comparable** way.
Winning elections feels just as good as losing one hurts.

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.
- **The problem.** This approach assumes:
 1. Losses and gains affect a party's decision-making process in a **comparable** way.
Winning elections feels just as good as losing one hurts.
 2. Parties focus on **absolute** levels of utilities.
Overlooking "sunk costs."

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.
- **The problem.** This approach assumes:
 1. Losses and gains affect a party's decision-making process in a **comparable** way.
Winning elections feels just as good as losing one hurts.
 2. Parties focus on **absolute** levels of utilities.
Overlooking "sunk costs."
- These assumptions lead to several inconsistencies.

Clientelism and the Expected Utility Theory

- EUT has *dominated* political science as a way to explain decision making under risk.
- **The problem.** This approach assumes:
 1. Losses and gains affect a party's decision-making process in a **comparable** way.
Winning elections feels just as good as losing one hurts.
 2. 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.

Not Clear Who Clientelist Parties Target

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

Cox and McCubbins (1986).

Not Clear Who Clientelist Parties Target

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

Cox and McCubbins (1986).

- 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).

Not Clear Who Clientelist Parties Target

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

Cox and McCubbins (1986).

- 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—*unfortunately*—does *not* provide a straight answer.

Carlin and Moseley (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).

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).

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

Gonzalez-Ocantos, Jonge, et al. (2012).

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).

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

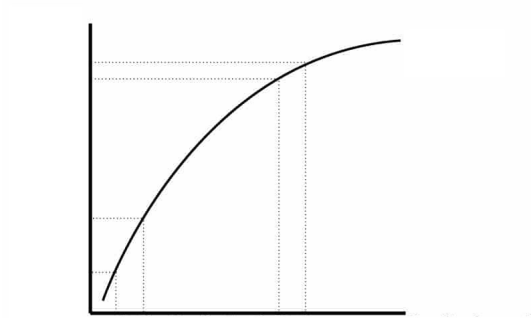
Gonzalez-Ocantos, Jonge, et al. (2012).

- Again, the literature does *not* provide a straight answer.

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

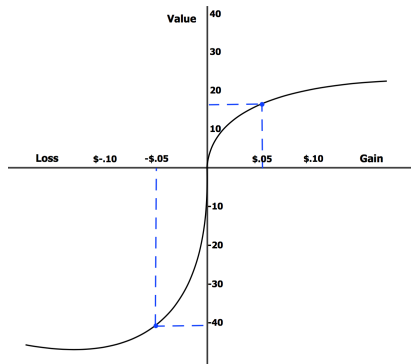
Change from EUT:

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

To Prospect Theory:

Kahneman and Tversky (1979)

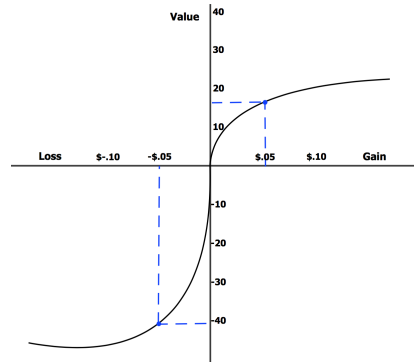
1. Reference dependence.
2. Value function.



Prospect Theory

1. Reference dependence. Elements that influence decisions:

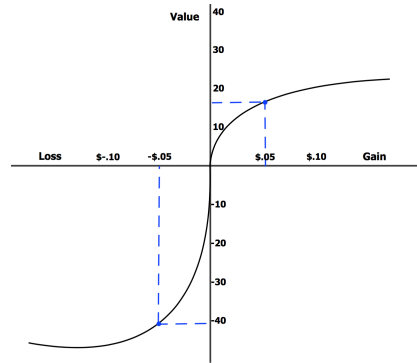
- ✓ *context* in which the decision-making processes take place.
- ✓ *changes of wealth*, rather than *final* asset positions.



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

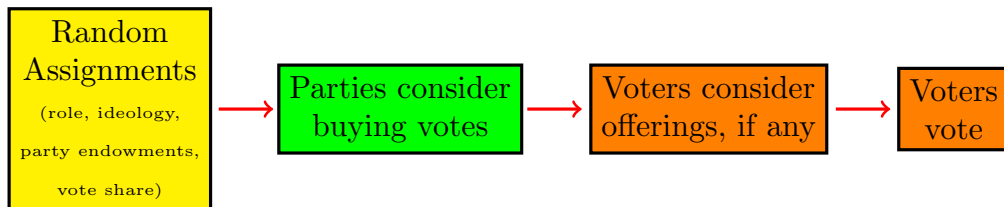
1. Parties will feel huge aversion to lose what they “own.”
 - ✓ Are probable winners.
 - ✓ When dealing with own supporters.

Prospect Theory: Implications for Vote Buying

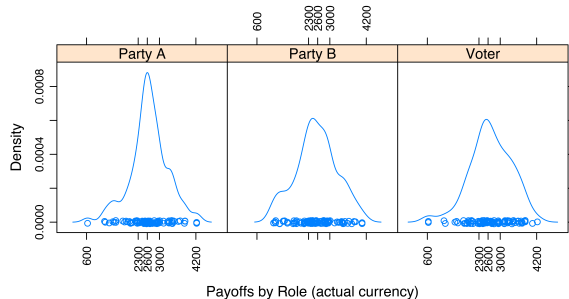
1. Parties will feel huge **aversion to lose what they “own.”**
 - ✓ Are probable **winners**.
 - ✓ When dealing with **own supporters**.
2. Past losses alter the reference point.
 - ✓ **Sunk costs** are high.

- Designed an experiment in 0-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.

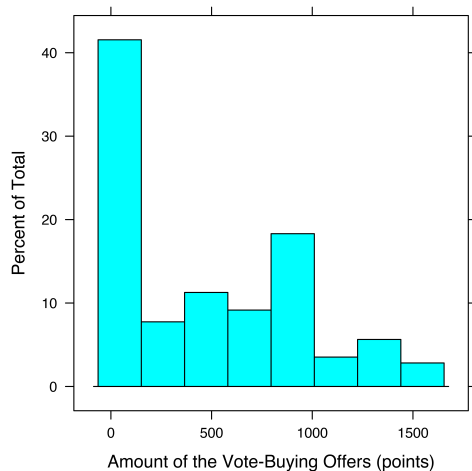
1. **Role:** *party A, party B or voter.*
 2. **Voters:** “ideological position” (points depending on whether party A or B wins the election). Points reflect “spatial” distance between the voter and both parties (continuum 1–100).
 3. **Parties:** endowments (points to buy votes, if any).
But both parties 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.



- **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."*
 - Wining** the election.
 - From **core** supporters.
 - When **sunk costs** are high.



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

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

- Dependent variable described.

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

- Number of votes each party received.

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

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

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

- Distance between the party and the voter (points).

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

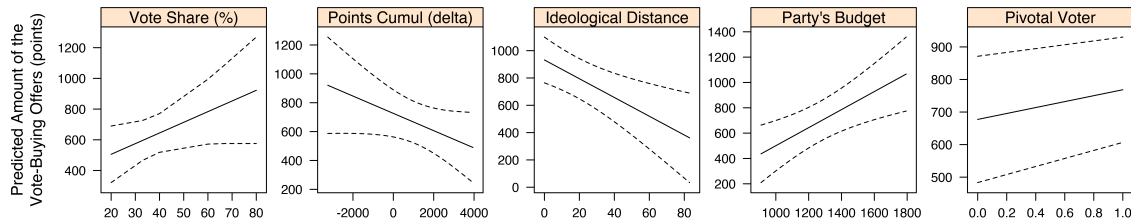
- Party's budget (points).

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

- Voter is pivotal.

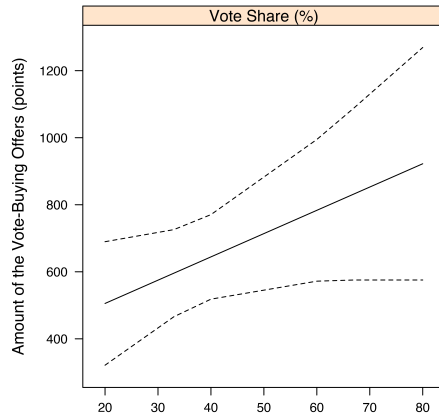
$$\begin{aligned}\text{Offer}_i = & \beta_0 + \\ & \beta_1 \text{Vote Share}_i + \\ & \beta_2 \Delta \text{Points Accumulated}_i + \\ & \beta_3 \text{Spatial Distance}_i + \\ & \beta_4 \text{Party Budget}_i + \\ & \beta_5 \text{Pivotal Voter}_i + \\ & \alpha_n + \epsilon_i\end{aligned}$$

- Participant fixed effects.

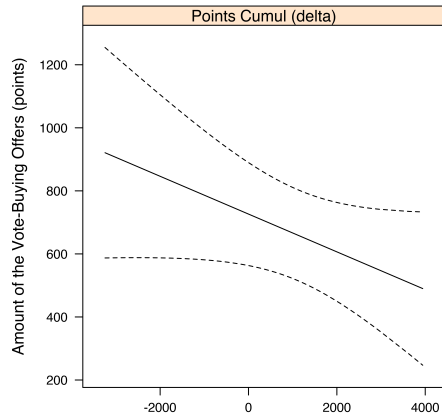


Overall, results conform with Prospect Theory.

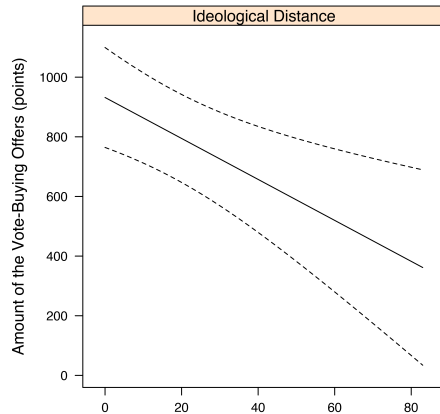
- Due to **loss aversion**, parties buy more votes when they're **winning**—*not* losing—the election.



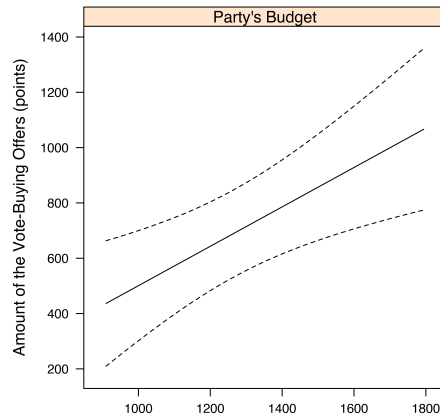
- Unlike EUT, parties *do* consider sunk costs, and **buy more votes to compensate for past losses.**



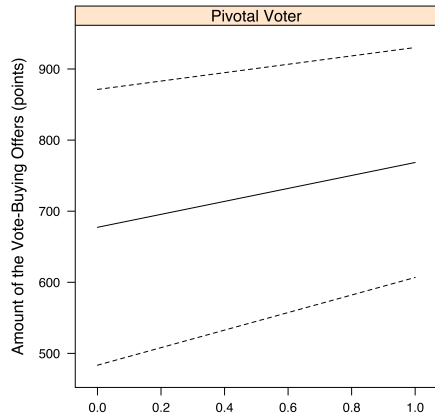
- Parties buy votes—at higher, *not* lower prices—from **core voters**.



- Larger party budgets cause more 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**.

- 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**.
- We think these gaps can be explained changing the focus from **EUT** to **prospect theory**.

- 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**.
- We think these gaps can be explained changing the focus from **EUT** to **prospect theory**.
- To test this theory we designed an economic experiment of vote buying.

- 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**.
- We think these gaps can be explained changing the focus from **EUT** to **prospect theory**.
- 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	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	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.