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

June 23, 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

•••

Motivation

Vote-Buying Literature Builds on the Wrong Framework

• Say you're a <u>clientelist</u> political party

Vote-Buying Literature Builds on the Wrong Framework

- Say you're a <u>clientelist</u> political party:
 - 1. When do you buy votes? Winning/losing an election?

Introduction
●●○
Motivation

• 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?

Introduction

•••

Motivation

- Say you're a <u>clientelist</u> 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?

Introduction

Output

- Say you're a <u>clientelist</u> 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:

Introduction

Output

- 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.

Introduction

Output

Vote-Buying Literature Builds on the Wrong Framework

- Say you're a <u>clientelist</u> 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.

- 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.

Introduction Motivation

They shouldn't: "sunk costs" should not affect current decisions.

Vote-Buying Literature Builds on the Wrong Framework

• Say you're a <u>clientelist</u> 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...:

Introduction

•••

Motivation

? Incumbents buy votes when they're winning (Gonzalez-Ocantos, 2012).

Vote-Buying Literature Builds on the Wrong Framework

• Say you're a <u>clientelist</u> 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?

Introduction

•••

Motivation

Vote-Buying Literature Builds on the Wrong Framework

• Say you're a <u>clientelist</u> 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*").

Motivation

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.

Motivation

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). Motivation

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.

Introduction

•••

Motivation

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 parties...

- 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:

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

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

- Losses and gains affect a party's decision-making process in a comparable way.
 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.

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).

The problem

• 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).

The problem

 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).

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-Caueros (2008), Corstange (2018).

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

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

The Problem: Political Contestation

The problem

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-Caueros (2008), Corstange (2018).

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

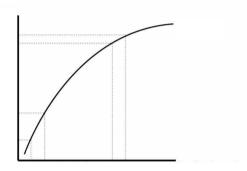
Gonzalez-Ocantos, Jonge, et al. (2012).

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.



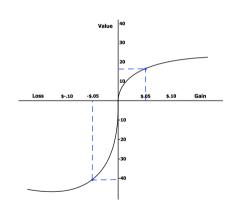
Change from EUT:

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

To Prospect Theory:

Kahneman and Tversky (1979)

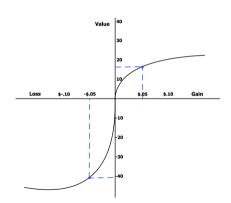
- 1. Reference dependence.
- 2. Value function.



Theory

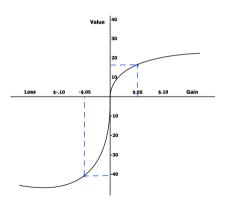
Prospect Theory

- 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 loses alter the reference point.
 - √ Sunk costs are high.

Setup

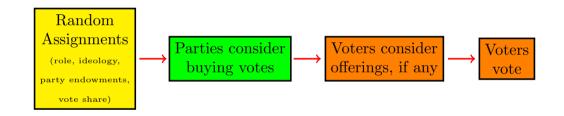
- Designed an experiment in O-tree (Z-tree). Fischbacher (2007).
- All participants were required to successfully complete two **practice rounds**.
- Every game was played between **three people**: two parties and one voter.
- All transactions were performed exchanging experimental "points." 1 point = \$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).

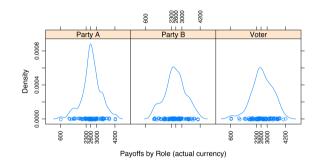
But both parties receive the same endowment in the same game.

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

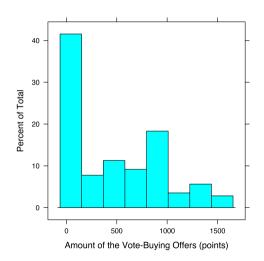
Experimental Flow



- 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_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

• Dependent variable described.

Offer_i =
$$\beta_0$$
+
$$\beta_1 \text{Vote Share}_i +$$

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

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

$$\beta_4 \text{Party Budget}_i +$$

$$\beta_5 \text{Pivotal Voter}_i +$$

$$\alpha_n + \epsilon_i$$

• Number of certain votes each party.

Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 β_2 Δ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

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

Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

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

Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

• Party's budget (points).

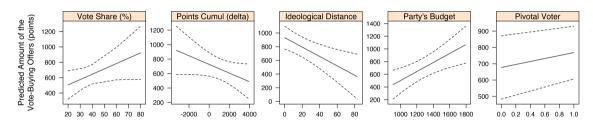
Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

• Voter is pivotal.

Offer_i =
$$\beta_0$$
+
 β_1 Vote Share_i+
 $\beta_2\Delta$ Points Accumulated_i+
 β_3 Spatial Distance_i+
 β_4 Party Budget_i+
 β_5 Pivotal Voter_i+
 $\alpha_n + \epsilon_i$

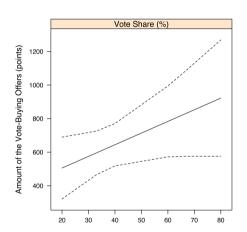
• Participant fixed effects.

Results

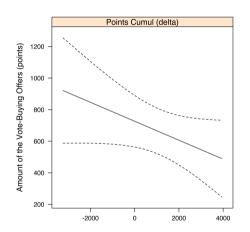


Overall, results conform with Prospect Theory.

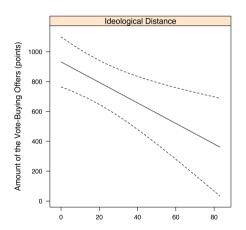
 Due to loss aversion, parties buy more votes when they're winning—not losing—the election.



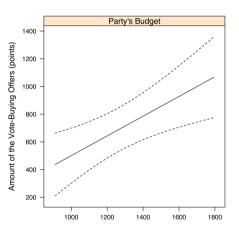
 Unlike EUT, parties do consider sunk costs, and buy more votes to compensate for past losses.



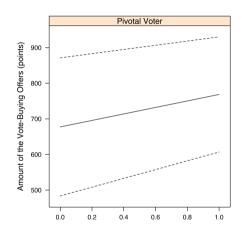
 Parties buy votes—at higher, not lower prices—from core voters.



 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.

- 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	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^*
	(3.26)

Party Budget

(0.34)91.16

(124.46)0.66

0.71*

OLS

142

Num. obs. ***p < 0.001; **p < 0.01; *p < 0.05. Robust standard errors in parentheses. Fixed effects parameteres omitted in table.

Pivotal Voter

 R^2