

# Vote-Selling and Vote-Buying: Does the House Always Win? Gambling Votes in the Lab

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## Abstract

The clientelism literature has produced substantial insights into how parties target voters, but it remains heavily unbalanced toward the demand side of the exchange. Much less is known about the strategic behavior of vote sellers. This paper brings voters back into the analysis by integrating vote buying and vote selling within a common theoretical and empirical framework. We develop a simple formal model that contrasts party-initiated and voter-initiated exchanges and derives distinct core—swing voter predictions for each case. When parties initiate the transaction, they minimize costs by buying votes from ideologically proximate (core) supporters. When voters initiate the exchange, incentive structures reverse: voters anticipate which party has the highest electoral stake and strategically sell their votes to the opponent expected to win. To evaluate these predictions, we implement an economic laboratory experiment that mirrors the formal model’s structure. The results provide strong empirical support for both mechanisms, suggesting that initiative shapes utilities: voters consistently earn higher payoffs when parties initiate vote buying, whereas parties fare at least as well when voters initiate vote selling. These findings highlight the importance of modeling the supply side of clientelism to understand how the distribution of surplus varies across institutional settings.

**Abstract length:** 197 words.

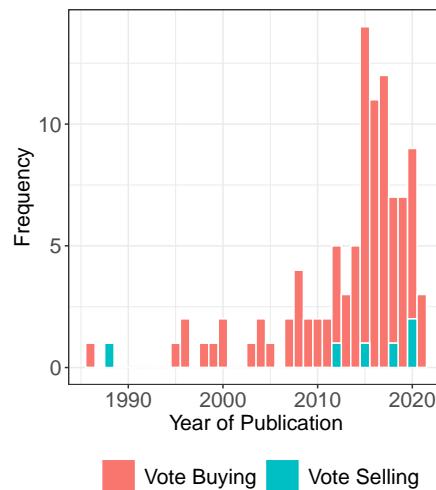
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**Keywords**— Clientelism; Vote buying; Vote selling; Experimental methods; Formal models

## I. THE NEGLECTED VOTER IN CLIENTELISM RESEARCH

Non-programmatic linkages (Kitschelt 2000) are reciprocal (Auyero 2000; Finan and Schechter 2012). That is, the clientelist exchange usually happens between parties *and* voters, where the former provide particularistic benefits and the latter provide electoral support (Nichter 2008; Nichter 2014). Yet most quantitative scholars have overlooked voters' preferences, thus failing to describe the available strategies of vote sellers. We believe the literature often focuses mostly on parties and how they target individuals. As we note in this paper, the clientelism literature is somewhat unbalanced, showing a huge interest in vote buying relative to vote selling (Figure 1). Hence, while the literature has advanced a number of important questions (see Hicken 2011 for an excellent review), most accounts of clientelism tackle the issue from the party's side. In fact, most of what we know about core-swing dynamics in clientelism therefore comes from settings where parties initiate the exchange and decide whom to target (e.g., Cox and McCubbins 1986; Stokes 2005). *But what if the logic of clientelism reverses when initiative shifts? Do voters, acting as strategic sellers, exploit parties' electoral vulnerabilities in ways that invert core-swing targeting predictions? And how does the distribution of surplus change when voters—not parties—set the terms of exchange?* In this paper we take this complementary perspective and ask how these dynamics look when voters initiate the exchange and strategically decide to whom to sell.



**Figure 1:** Annual frequency of Web of Science publications whose abstracts include the terms “vote buying” and “vote selling.”

This imbalance has substantive consequences. Because quantitative work has overwhelmingly examined party-initiated vote buying, we have comparatively little systematic evidence on vote selling and on how voters behave when they can initiate the exchange. Only a small number of quantitative studies analyze vote selling directly—for example, Hicken, Leider, et al. (2015) and Hicken, Leider, et al. (2018) in the Philippines and Bahamonde (2022) in the United States—leaving basic questions about voter-initiated clientelism underexplored. As a result, we lack clear comparative answers about whether the dynamics of vote selling and vote buying are systematically different.

One important consequence of this deficit is that we do not know whether the dynamics of vote selling and vote buying are systematically different. A simple question has gone largely unanswered: *Which setting—vote buying or vote selling—is more convenient for either side (parties and voters)?* Ethnographers have raised similar issues. For example, Hagene (2015, p. 152) notes that many clientelist relationships are “client-initiated.” Tosoni (2007, pp. 55–57) explores instances where slum dwellers in México strategically approach brokers to solve collective needs, while Gay (1999) describes how neighborhood associations in Brazilian *favelas* attract resources in exchange for electoral support. These ethnographic accounts suggest that voters and community leaders play an active role in initiating and structuring exchanges. Yet we still know little about *what strategies voters and parties follow in these different settings, and whether these strategies lead to systematic differences in utilities.*

At the same time, many studies that do include voters are still embedded in a vote-buying framework. For instance, González-Ocantos, Jonge, et al. (2012), González-Ocantos, Kiewiet de Jonge, and Nickerson (2014), and Kiewiet de Jonge (2015) find that *voters* systematically lie when asked directly about vote *buying*. These contributions clarify a number of important problems, but they do not tell us much about preferences, dynamics, or strategies that are *specific* to vote sellers. Implicitly, voters are often treated as passive receivers of clientelism. That said, recent quantitative work has begun to foreground voters’ agency by showing that they are motivated actors who adjust their participation in clientelistic exchanges based on party competitiveness and their own political orientations (Saikkonen 2021; Gherghina and Saikkonen 2023). Building on this line of research, we push the voter-centered perspective one step further by modeling and measuring voters not only as respondents to offers, but also as strategic initiators who set prices and choose whom to approach.

Conceptually, clientelism is not so different from any other market: there is an arena (campaigns),

buyers (parties), and sellers (voters).<sup>1</sup> Classic demand and supply arguments then suggest that we must understand both sides of the exchange. However, most of the literature has concentrated on the demand side—party targeting, resource allocation, and monitoring—while forgetting about the supplier. Our starting point is that a full account of clientelism requires modeling and measuring the supply side as well: when voters choose to sell, to whom, and at what price.

This perspective also reframes long-standing debates about targeting. One canonical question is whether parties target core constituencies or swing voters (Carlin and Moseley 2015). On the one hand, Cox and Mccubbins (1986) and Zarazaga (2016, p. 7) argue that constituencies that are well known to clientelist parties receive more resources. On the other hand, Lindbeck and Weibull (1987), Dixit and Londregan (1996), Daglberg and Johansson (2002), and Stokes (2005) contend that allocating resources to voters who would support the party anyway is wasteful, so parties should instead focus on swing voters. Yet both sides of this debate are typically framed from the party’s perspective. We know less about how different kinds of voters position themselves in clientelistic markets, who initiates exchanges, and how that interacts with partisan targeting.

Taken together, the literature provides a detailed picture of how parties target core and swing voters, but it remains somewhat silent about how core and swing vote sellers behave when they can initiate exchanges. Core-swing distinctions are usually derived from the party’s optimization problem, leaving the supplier side under-theorized. Yet prior research shows that voters’ collective characteristics can meaningfully shift the logic of targeting (Bahamonde 2018), we believe that once voters’ pricing decisions are modeled directly, the familiar core–swing logic changes. In this paper we suggest that instead of only asking which voters parties can buy at minimal cost, we also ask which parties voters can most profitably sell to. This shift in perspective reveals how core and swing *vote sellers* position themselves in the clientelistic market and how their strategic choices differ from the patterns implied by party-initiated exchanges. Finally, there is a growing methodological consensus that experimental methods are particularly well suited to address such questions. Following Aldrich and Lupia (2011) and McDermott (2002), and in line with the view that experiments are a promising tool for the study of democracy and development (De La O and Wantchekon 2011), we use an economic experiment to place voters and parties on equal analytical footing.

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<sup>1</sup>Other arenas beyond campaigns clearly exist. Hagene (2015) provides an excellent discussion of the differences between “vote buying” and “clientelism.” The former is short term (elections), while the latter may be sustained in the long term and accompanied by affective, personal, and problem-solving elements. For simplicity, we focus on the short-term, electoral aspect here.

This paper proceeds as follows. **Section II** develops a theoretical framework that treats vote buying and vote selling as two institutional variants of the same clientelistic exchange and derives three hypotheses grounded in two core equilibrium propositions. **Section III** formalizes these intuitions in a simple spatial model that clarifies when parties buy core voters and when voters sell to electorally strong opponents. **Proposition 1** characterizes party-initiated vote buying and directly motivates **Hypothesis H<sub>1</sub>**; **Proposition 2** characterizes voter-initiated vote selling and motivates **Hypothesis H<sub>2</sub>**; and together, these propositions jointly imply **Hypothesis H<sub>3</sub>** on how initiative shapes surplus extraction. **Section IV** describes the experimental design that implements these institutional variants in the laboratory. **Section V** outlines our econometric strategy for evaluating each hypothesis and presents the empirical results, showing that initiative systematically reverses core-swing patterns and redistributes surplus between voters and parties. **Section VI** discusses the broader implications of our findings, acknowledges the limitations of our laboratory setting, and identifies avenues for future research.

## II. BRINGING VOTERS BACK IN

Clientelistic exchanges are best understood as strategic interactions in a market-like environment in which parties and voters negotiate over private benefits during electoral campaigns. Yet most existing work focuses on the demand side of this market: how parties decide whether to buy votes, whom they target, and how electoral risk shapes their decisions. The supply side—voters’ incentives to sell, whom they approach, and how they strategically price their votes—remains comparatively understudied.

We draw on the institutional literature (North 1981; North 1990) to conceptualize clientelism as a rule-governed exchange in which outcomes depend critically on who moves first and what choices are available at each stage. Under this view, vote buying and vote selling are two institutional variants of the same underlying transaction that differ only in their sequencing rule—specifically, in whether parties or voters initiate the exchange. This difference in initiative reshapes constraints, bargaining positions, and the timing of commitment, even though preferences, payoffs, and the traded good are identical. Classic core-swing targeting arguments implicitly assume that parties initiate and voters respond. Our framework retains this logic but adds the mirror case in which voters can initiate and parties respond, allowing us to compare targeting and surplus allocation

from both sides of the clientelistic market.

Building on applications of prospect theory to clientelism (Bahamonde and Canales 2022), we argue that initiative matters not because it mechanically changes parties' willingness to pay, but because it determines whether loss-averse behavior is activated at the moment of commitment. When parties initiate vote buying, they must decide *ex ante* whether to insure against electoral defeat. Parties operating under electoral risk tend to overweight prospective losses relative to comparable gains, which leads them to over-insure by offering more than the minimal compensating transfer required to secure pivotal support. This behavioral tendency inflates the material benefits voters receive.

By contrast, when voters initiate vote selling, the strategic environment is inverted. Voters propose prices to parties, but parties evaluate these proposals before committing to insure against defeat. Although loss aversion still characterizes party preferences, the absence of an initial commitment means that rejecting a costly proposal does not activate the same psychologically salient loss frame. As a result, parties can decline high prices without experiencing rejection as a loss, limiting voters' ability to extract surplus.

This logic yields clear implications for targeting. In party-initiated vote buying, parties must choose whom to approach. Because the ideological distance between a voter and her less-preferred party increases the compensating transfer required to overturn partisan preferences, it is cheaper to buy the pivotal vote from a core supporter than from an opponent. This reproduces the classic core-targeting intuition: minimal-cost vote buying directs transfers toward ideologically proximate voters (Cox and McCubbins 1986; Zarazaga 2016).

Reversing the order of moves changes how voters position themselves in the clientelistic market. Building on prospect theory (Tversky and Kahneman 1992), we posit that electorally advantaged parties evaluate even small risks of defeat as losses and overweight them. Low-probability defeats are therefore treated as potentially catastrophic, triggering strong insurance motives (Levy 1992, p. 184). From the voter's perspective, this makes electorally strong parties particularly attractive counterparts. Importantly, this is not because initiative increases willingness to pay *per se*, but because voters can strategically exploit pre-existing loss aversion when they are allowed to set prices.

Initiative also shapes utilities by determining who captures the surplus generated by loss-averse behavior. When parties initiate vote buying, loss aversion operates at the moment of commitment, leading parties to overspend and allowing voters to capture a larger share of the surplus. When voters

initiate vote selling, by contrast, parties can screen and reject costly proposals before committing to insure against defeat, leaving some voters with only ideological payoffs. Together, these patterns imply that voters earn higher expected payoffs when parties move first, whereas parties fare at least as well—and often better—when voters initiate the exchange.

The three hypotheses below make these contrasts explicit by pairing the party-initiated logic of core targeting with a voter-initiated logic of selling to electorally strong opponents, and by comparing payoffs across the two institutional variants.

**Hypothesis H<sub>1</sub>** (Core Targeting Under Party Initiative): When parties initiate the exchange, transfers concentrate on ideologically proximate voters. Parties primarily buy votes from their core constituencies rather than from ideologically distant opponents.

**Hypothesis H<sub>2</sub>** (Selling to the Opponent Winning Party): When voters initiate the exchange, they are more likely to sell their votes to the party expected to win the election, even if that party is ideologically distant.

**Hypothesis H<sub>3</sub>** (Higher Voter Payoffs Under Party Initiative): Because parties systematically overweight prospective electoral losses, initiating vote buying places them in a loss frame that induces them to insure against defeat by overspending on pivotal support, even in electorally favorable contexts. When voters initiate vote selling, by contrast, parties evaluate proposed prices before committing to buying insurance and can reject costly offers without activating the same loss-averse response. As a result, voters capture higher expected payoffs under party-initiated vote buying than under voter-initiated vote selling.

### III. A FORMAL MODEL OF VOTE BUYING AND VOTE SELLING

To formalize the mechanisms outlined above, we develop a simple spatial model of clientelistic exchange that admits two institutional variants: a party-initiated vote-buying game and a voter-initiated vote-selling game. The structure closely parallels the experimental design.<sup>2</sup>

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<sup>2</sup>The experimental implementation mirrors the structure of the formal model with one minor difference in how pivotality is operationalized. In the model, a party's electoral stake is captured by  $R_i = \pi W_i$ , the expected value of winning under pivotal probability  $\pi$ . In the experiment, the same quantity is implemented through deterministic vote shares that determine whether the real participant is pivotal. Parties with larger fictional vote shares correspond to higher  $R_i$ , while ties or near-ties generate the pivotal-voter condition. Because ideological utility, budget constraints, transfer decisions, and the sequencing of moves are implemented exactly as in the model, the experimental game is strategically equivalent to the formal environment up to an affine transformation of pivotality.

**Players, preferences, and electoral stakes.** There are two parties,  $i \in \{A, B\}$ , and a single pivotal voter  $j$ . The policy space is one-dimensional,  $\gamma \in \Gamma = \{1, \dots, 100\}$ , with  $\gamma_A < \gamma_B$ . The voter has an ideal point  $x_j$  drawn independently from the same distribution. If party  $i$  wins, the voter receives ideological utility

$$u_j(\gamma_i) = D - |x_j - \gamma_i|, \quad (1)$$

with  $D$  large enough to keep utilities non-negative. Let

$$i^* = \arg \max_{i \in \{A, B\}} u_j(\gamma_i) \quad (2)$$

denote the voter's preferred (core) party.

The voter is pivotal with probability  $\pi > 0$ . Party  $i$  values winning at  $W_i > 0$ , so the expected benefit of securing the pivotal vote is:

$$R_i = \pi W_i. \quad (3)$$

We interpret  $R_i$  as party  $i$ 's electoral stake or risk.

Transfers consist of non-negative private benefits. Transfers offered by parties in the vote-buying game are denoted  $s_i$ , and minimum acceptable transfers requested by the voter in the vote-selling game are denoted  $a_i$ .

The voter's total utility from voting for party  $i$  and receiving transfer  $t_i$  is:

$$U_j(i, t_i) = u_j(\gamma_i) + t_i. \quad (4)$$

### Game 1: Party-Initiated Vote Buying

1. Nature draws  $(x_j, \gamma_A, \gamma_B)$  and  $(R_A, R_B)$  and reveals them to all players.
2. Each party  $i$  simultaneously chooses a transfer offer  $s_i \in [0, \bar{B}]$ .
3. The voter observes  $(s_A, s_B)$  and chooses which party to support.

If the voter selects party  $i$ , she receives  $s_i$ , and party  $i$  receives net payoff  $R_i - s_i$ . The losing party receives zero.

Define the ideological advantage of the core party as:

$$\Delta = u_j(\gamma_{i^*}) - u_j(\gamma_{-i^*}) > 0. \quad (5)$$

This is the minimal compensating transfer needed to overturn the voter's ideological preference.

In symmetric environments with  $R_A = R_B = R$  and  $R > \Delta$ , standard undercutting arguments imply:

$$s_{i^*}^{VB} = \Delta, \quad s_{-i^*}^{VB} = 0. \quad (6)$$

Thus the core party buys the vote at minimal cost.

**Proposition 1** (Core Targeting in Vote Buying). *In the party-initiated vote-buying game, whenever purchasing the pivotal vote is profitable, there exists an equilibrium in which the ideologically preferred party  $i^*$  buys the vote with the minimal compensating transfer  $\Delta$ , while the opponent does not buy. Transfers therefore concentrate on core voters.*

### Game 2: Voter-Initiated Vote Selling

1. Nature draws  $(x_j, \gamma_A, \gamma_B)$  and  $(R_A, R_B)$  and reveals them.
2. The voter proposes a pair of minimum acceptable transfers  $(a_A, a_B)$ .
3. Each party  $i$  accepts ( $b_i = 1$ ) or rejects ( $b_i = 0$ ).

Party  $i$  accepts if and only if

$$a_i < R_i, \quad (7)$$

so  $R_i$  is party  $i$ 's maximum willingness to pay. Equivalently, the voter can set requests arbitrarily close to each party's willingness to pay by choosing  $a_i = R_i - \varepsilon$  for some  $\varepsilon > 0$ .

Let  $k \in \{A, B\}$  denote the electorally stronger party, so  $R_k > R_{-k}$ , and consider the empirically relevant case where  $k \neq i^*$ . (Here,  $W_i$  denotes party  $i$ 's utility of winning, whereas  $k$  indexes the party with higher electoral stakes  $R_i$ .)

If both parties accept, the voter chooses  $k$  whenever

$$u_j(\gamma_k) + a_k \geq u_j(\gamma_{i^*}) + a_{i^*} \iff a_k - a_{i^*} \geq \Delta. \quad (8)$$

There exists a band of prices satisfying

$$\Delta \leq a_k - a_{i^*} \leq R_k - R_{i^*}, \quad (9)$$

within which both parties accept but the vote is sold to  $k$ .

The voter maximizes her material payoff by setting

$$a_k^{VS} = R_k - \varepsilon, \quad \varepsilon > 0, \quad (10)$$

with  $a_{i^*}$  chosen low enough to satisfy the inequality above.

**Proposition 2** (Selling to the Opponent Winning Party). *If the electorally stronger party  $k$  is ideologically distant ( $k \neq i^*$  and  $R_k > R_{i^*}$ ), then in the vote-selling game there exists an equilibrium in which both parties accept the voter's proposals but the vote is sold to  $k$ . Vote selling thus directs transfers toward the opponent expected to win the election.*

#### IV. EXPERIMENTAL DESIGN AND PROCEDURES

The experiment implements these two institutional perspectives in a common strategic environment. In both games, the informational structure, ideological positions, budgets, and electoral risks are identical; only the timing of moves differs. This design lets us compare core-swing targeting behavior and payoffs when parties initiate the exchange, as in the existing literature, and when *voters* initiate it, which is the focus of our contribution.

#### I. Subjects, implementation, and incentives

The experiment was implemented using oTree in a laboratory. A total of 102 adult participants were recruited.<sup>3</sup> Each subject played the game three times, for a total sample size of 306. At the start of each session, subjects completed two practice rounds to ensure comprehension; practice-round data were excluded from the analysis. Throughout the experiment, participants interacted with the

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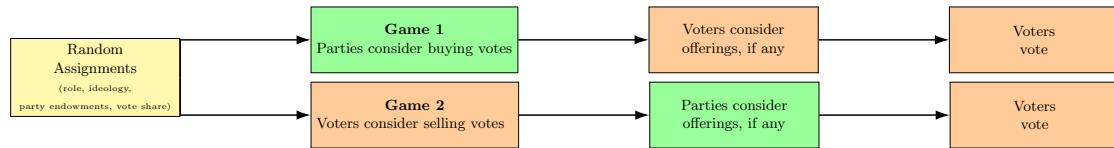
<sup>3</sup>The study was carried out in Chile, at a laboratory located in Santiago administered jointly by the University of Santiago and Nuffield College, Oxford. Participants were recruited in the university district, received a show-up fee of 2,000 CLP (approximately 2.1 euros), and earned additional performance-based payments. All payoffs during the games were denominated in experimental points, which were converted into Chilean pesos at a fixed exchange rate announced in advance. Sessions took place between April 20 and May 28, 2021.

interface using neutral labels (e.g., “Party A” and “Party B”; see below), and accumulated payoffs in experimental “points” that were later converted into real monetary earnings.

Each subject played three independent games. For every new game we reran the full randomization: roles, ideological positions, party budgets, and initial vote shares were independently drawn afresh. Thus, while subjects could play multiple games, the strategic environment in each round was independent and unfamiliar *ex ante*.

## II. Roles, ideology, and electoral risk

At the beginning of every game, participants were randomly assigned to one of three roles—“Party A,” “Party B,” or “Voter”—and each round was played among exactly three players, one in each role. The experiment implements two institutional variants of the same clientelistic exchange, identical in every dimension except the sequencing of moves. [Figure 2](#) shows the flow of the experiment. In the party-initiated vote-buying game, the two parties simultaneously decide how many points to offer before the voter chooses which party to support; in the voter-initiated vote-selling game, the voter first proposes a pair of minimum acceptable transfers and the parties then simultaneously decide whether to accept. All other elements of the strategic environment—ideological positions, budgets, fictional vote shares, pivotality, and payoff consequences—are held constant across the two variants. Thus, this design isolates the effect of initiative on targeting, pricing, and equilibrium utilities while preserving a common informational structure that matches the formal model.



**Figure 2:** Flow of the Experimental Games

Voters were assigned an “ideological” position by being told how many points they would earn if party A or party B won the election. For example, a voter might earn 2,400 points if party A won but only 200 points if party B won, which makes party A their “ideologically” preferred (core) party. Parties also received ideological positions that made them closer or farther from the voter

in this payoff space.<sup>4</sup> Next, both parties received identical budgets, randomly drawn from a set of possible endowments.<sup>5</sup> Parties accumulated or lost wealth depending on whether they won the election and on how much they spent on transfers, thus incentivizing optimization over how much to invest in buying votes. Voters similarly gained or lost points depending on which party won, plus any transfers received, thereby creating incentives for optimization in their vote-selling decisions.

To introduce electoral risk and pivotality, we displayed a fictional electorate: each party was assigned an initial vote share, expressed as the number of (hypothetical) voters already committed to supporting that party. The total number of fictional voters varied across games (three or five), and the initial allocation of those voters between A and B implied either a safe seat or a close race. The real experimental subject voter in our study could therefore be either pivotal or nonpivotal in this hypothetical electorate.<sup>6</sup> All of this information (ideology, budgets, contestation, and pivotality) was public knowledge to all participants.

### III. Institutional variants: vote buying and vote selling

**Game 1: party-initiated vote buying.** In the first variant, parties initiate the transaction. After observing the ideological positions, budgets, and initial vote shares, each party simultaneously decides how many points to offer the voter, choosing any non-negative amount up to its budget. Both parties make their offers without observing the other's choice. Offering zero points is equivalent to not buying votes in that round. The voter then observes both offers (if any) and chooses which party to support. If at least one party makes an offer, voting for that party yields the corresponding transfer plus the ideological payoff associated with that party's victory. If both parties make offers, the voter chooses one (or none). If no party makes an offer, the voter, in expectation, simply votes for the party that gives them higher ideological payoff. After the vote is cast, an hypothetical election is resolved and payoffs are realized.

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<sup>4</sup>This feature reproduces the one-dimensional spatial structure in our formal model: the difference in points across parties for the voter corresponds to the ideological utility difference  $u_j(\gamma_{i^*}) - u_j(\gamma_{-i^*})$ .

<sup>5</sup>These budgets represent the resources  $R_i$  that parties can invest in buying or acquiring votes.

<sup>6</sup>In the experiment, the pivotal indicator equals 1 only in minimal-winning configurations: specifically, when the fictional electorate consists of three voters with a 2–1 split, or five voters with a 3–2 split, in favor of the voter's initially preferred party. In all other configurations the voter is nonpivotal (pivotal = 0), including 3–0, 1–2, 0–3 in three-voter electorates, and 4–1, 1–4, 5–0, or 0–5 in five-voter electorates. Consequently, pivotal = 0 corresponds to multiple distinct vote shares, whereas pivotal = 1 is restricted to a narrow set of knife-edge cases.

**Game 2: voter-initiated vote selling.** In the second variant, the order of moves is reversed while holding fixed the information structure and payoffs. After observing ideology, budgets, and vote shares, the voter proposes a pair of minimum acceptable transfers, one for each party. Each party submits its decision without observing the other party’s decision. These requested prices,<sup>7</sup> represent the minimum amount the voter is willing to accept from each party in exchange for their vote. Parties then simultaneously decide whether to accept or reject the requested price. A party pays the requested amount only if it accepts the offer and the voter ultimately chooses it. If at least one party accepts, the voter chooses which party to support, taking into account both the requested transfer and their ideological preferences. If no party accepts, the voter again votes solely (and in expectation) on ideology. As before, after the vote is cast the election is resolved and material payoffs are realized.

## V. ECONOMETRIC STRATEGY

This section links the theoretical predictions in [Proposition 1](#) and [Proposition 2](#) to the experimental data by testing the three hypotheses outlined above. We proceed in four steps. First, we describe the empirical distributions of vote-buying offers and vote-selling requests to motivate our modeling choices ([Figure 3](#)). Second, we test core targeting under party initiative ([Hypothesis H<sub>1</sub>](#)) by modeling parties’ offers in the vote-buying game ([Figure 4](#)). Third, we analyze how voters price their pivotal vote under voter-initiated exchange ([Hypothesis H<sub>2</sub>](#)) using the vote-selling model with an interaction between ideological distance and electoral strength ([Figure 5](#)). Finally, we compare observed payoffs across institutional variants to assess how initiative redistributes surplus between voters and parties ([Hypothesis H<sub>3</sub>](#); [Figure 6](#)).

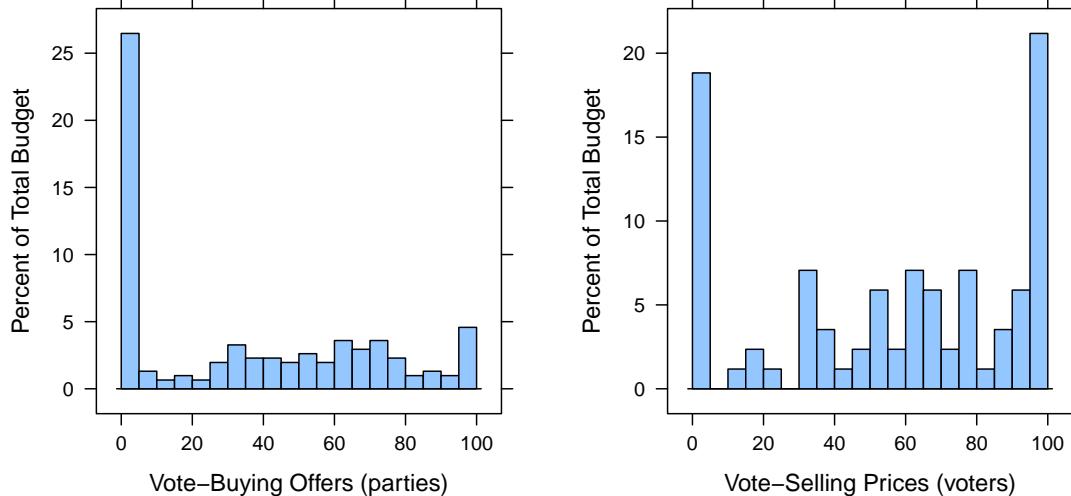
### I. Distributions of vote-buying offers and vote-selling requests

[Figure 3](#) displays the empirical distributions of the dependent variables in both games: the offers made by parties in the vote-buying game (left panel) and the minimum acceptable transfers that voters request in the vote-selling game (right panel). The two distributions differ sharply in ways that reflect the strategic logic of each environment.

Vote-buying offers cluster heavily at two points: zero (opting not to buy) and a small interior

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<sup>7</sup>Denoted  $a_A$  and  $a_B$  in the formal model.



**Figure 3:** Distributions of vote-buying offers (left panel) and vote-selling prices (right panel), expressed as a percentage of each party's total budget (public information in all games).

value corresponding to the minimal compensating transfer implied by the ideological distance between the voter and the party. This pattern is consistent with the equilibrium derived in [Proposition 1](#), where the core party typically offers exactly the compensating transfer  $\Delta$  and the opponent often offers nothing.

By contrast, vote-selling requests are more dispersed. Many voters request close to zero from at least one party, indicating that ideological benefits alone sometimes suffice to secure their support. At the same time, a substantial share of requests approach or reach the full party budget (especially when bargaining with electorally strong parties, as Figure 5 suggests). This variation makes the vote-selling environment particularly well suited for testing how ideological distance and electoral stakes jointly shape pricing behavior.

## II. Core targeting under party initiative

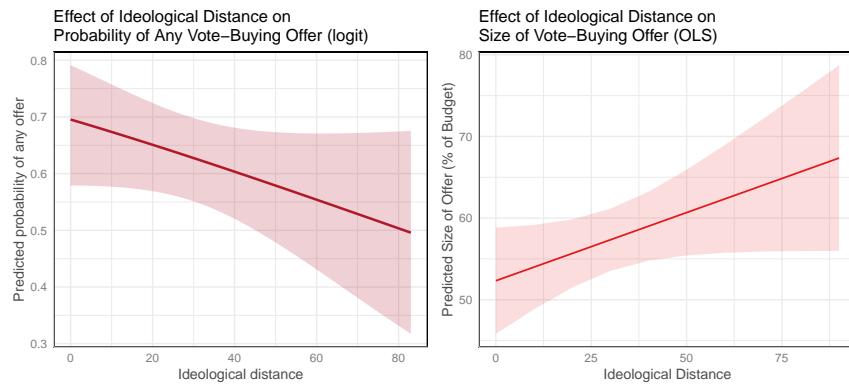
To test **Hypothesis H<sub>1</sub>**, we estimate two models of party behavior in the vote-buying game: one predicting the *size* of positive offers (**Equation 11**) and another predicting whether a party makes

any offer.<sup>8</sup> Both specifications include ideological distance, vote share, and pivotality as predictors. The results of both models are summarized in Figure 4.

For the continuous specification, we model the size of the offer that party  $i$  makes to the voter in dyad  $d$  as a function of ideological distance, electoral strength, and pivotality:

$$\text{Offer}_{di} = \gamma_0 + \gamma_1 \text{Ideology}_{di} + \gamma_2 \text{VoteShare}_{di} + \gamma_3 \text{Pivotal}_d + u_{di}. \quad (11)$$

Here,  $\text{Offer}_{di}$  is the (strictly positive) transfer the party proposes;  $\text{Ideology}_{di}$  is the ideological distance between the party and the voter;  $\text{VoteShare}_{di}$  is the party's initial vote share in the fictional electorate; and  $\text{Pivotal}_d$  is an indicator for whether the real voter is pivotal in that dyad. Standard errors are clustered by party participant level.



**Figure 4:** Predicted size of vote-buying offers conditional on a positive offer (left panel) and probability of making any offer (right panel) as a function of ideological distance. Predictions obtained from Equation 11 and the corresponding logit model for any offer (see Table A1). Shaded regions show 95% cluster-robust confidence intervals.

The two models capture distinct margins of party behavior. As ideological distance increases, parties become less likely to make any offer at all (right panel). Conditional on making an offer, however, parties pay larger transfers to ideologically more distant voters (left panel), reflecting the higher compensation required to overturn ideological preferences. This provides direct empirical support for H<sub>1</sub>: when parties initiate the exchange, transfers concentrate on ideologically proximate (core) voters, primarily through the extensive margin of whether parties choose to buy votes at all.

<sup>8</sup>For this specification, we estimate a logit model for the probability that a party makes any offer. Both models suggest the same results. See Table A1.

### III. Who pays how much? Ideology, electoral strength, and the price of a vote

The vote-selling environment is where core-swing behavior can be studied from the seller's perspective—which is the core of our contribution—and it therefore becomes the focus of our identification strategy. This setting allows us to test one of the key comparative statics implied by [Proposition 2](#): that voters should demand higher prices from electorally strong parties, especially when those parties are ideologically distant. The dependent variable in the vote-selling model is the price that the voter requests from party  $i$  in dyad  $d$ , expressed as a percentage of party  $i$ 's budget.<sup>9</sup>

In [Equation 12](#), the main explanatory variables are the ideological distance between the voter and party  $i$  and the party's electoral strength, measured as its initial vote share in the fictional electorate. Ideological distance is defined as the absolute difference between the voter's ideological payoff and the party's ideological payoff, and vote share captures how likely a party is to win and is proportional to its electoral stake in the formal model. The specification also includes an indicator for whether the real voter is pivotal in the election, which accounts for the fact that pivotal voters may request systematically higher transfers, and a constant term that captures the baseline level of requested prices when all covariates are at zero.

The theoretical logic of vote selling further implies that the effect of ideology on requested prices depends on how much each party stands to gain from securing the pivotal vote—that is, ideological distance should matter differently for electorally weak versus electorally strong parties. To capture this heterogeneity, we include an interaction between ideological distance and electoral strength (see [Table A1](#)).<sup>10</sup> This interaction term allows the slope of ideological distance to vary across different levels of vote share, which is essential for recovering the heterogeneous pricing incentives predicted by [Proposition 2](#).

We therefore estimate the following linear model:

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<sup>9</sup>Formally,

$$Y_{di} \equiv \frac{a_{di}}{B_{di}} \times 100,$$

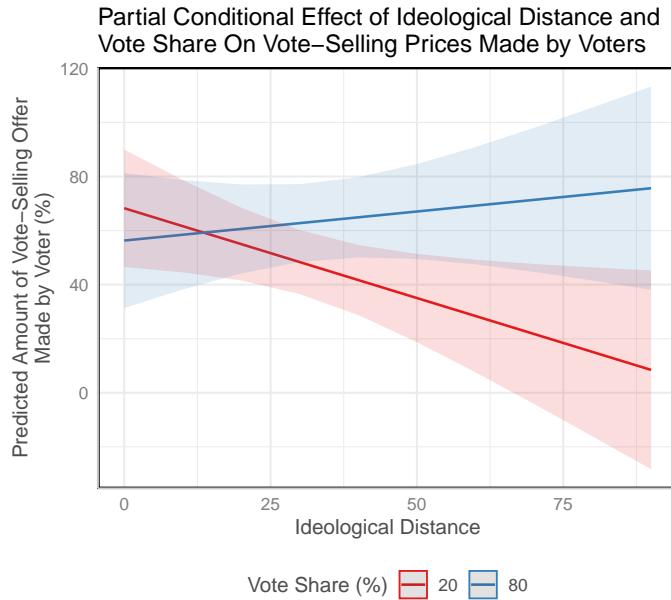
where  $a_{di}$  is the minimum acceptable transfer requested from party  $i$  and  $B_{di}$  is that party's budget. This transformation makes prices comparable across rounds with different budgets and corresponds directly to the theoretical interpretation of transfers as fractions of parties' electoral stakes  $R_i$ .  $Y_{di}$  is therefore the share of a party's available resources that the voter demands in order to sell her vote.

<sup>10</sup>Following Brambor, Clark, and Golder (2006, p. 77), we do not interpret the coefficients of the constitutive terms in [Table A1](#) as they lack substantive meaning.

$$Y_{di} = \beta_0 + \beta_1 \text{Ideology}_{di} + \beta_2 \text{VoteShare}_{di} + \beta_3 \text{Ideology}_{di} \times \text{VoteShare}_{di} + \beta_4 \text{Pivotal}_d + \varepsilon_{di}. \quad (12)$$

Standard errors are clustered by voter participant to account for repeated observations from the same voter across rounds (see [Table A1](#)).

[Figure 5](#) presents the marginal effects obtained after fitting [Equation 12](#). The figure plots predicted requested prices as a function of ideological distance for electorally weak parties (20 percent initial vote share) and electorally strong parties (80 percent initial vote share).



**Figure 5:** Predicted vote-selling prices as a function of ideological distance and electoral strength. Shaded regions show 90% cluster-robust confidence intervals. Predictions from [Equation 12](#).

Two findings emerge. First, when bargaining with electorally weak parties, requested prices decline as ideological distance increases. When the weak party is ideologically close, voters demand relatively high transfers to insure against the risk that the weak party might lose the election. As ideological distance grows, the ideological payoff from supporting that party falls, and voters request lower prices; for large distances, the predicted request approaches zero. Second, when bargaining with electorally strong parties, the relationship reverses: requested prices increase with ideological

distance. When the strong party is ideologically proximate, voters request moderate transfers. But as ideological distance widens, voters sharply escalate their demands, often approaching the maximum amount the party can afford. This reflects the fact that strong parties have a higher stake in securing the pivotal vote and therefore a higher maximum willingness to pay (Bahamonde and Canales 2022).<sup>11</sup>

The point estimate on the pivotal-voter indicator is positive but highly imprecise, and we do not find clear evidence that pivotal voters systematically request higher transfers (Table A1). Taken together, these results provide empirical support for Hypothesis H<sub>2</sub>. When voters initiate the exchange, they strategically exploit variation in parties' electoral stakes, requesting higher prices from electorally strong (and often ideologically distant) parties. Vote selling therefore reallocates transfers toward the opponent winning party, as predicted in the formal model.

#### IV. Who benefits when the rules change? Payoffs across institutional variants

Finally, we examine how initiative shapes the distribution of surplus between voters and parties across the two institutional variants (Hypothesis H<sub>3</sub>). For each round, we compute the total payoff earned by voters and by parties under vote buying and vote selling.<sup>12</sup> We then calculate design-based mean payoffs and non-parametric 90 percent confidence intervals for the mean in each institutional setting. Because subjects can appear in multiple rounds, we also conduct a one-sided difference-in-means test for voter payoffs across games. Random assignment of institutional variants across rounds ensures that differences in mean payoffs identify the causal effect of initiative on surplus allocation.

Figure 6 compares average payoffs for voters and parties across the two institutional variants. The left panel shows that parties earn similar or slightly higher payoffs in the voter-initiated vote-selling game relative to the party-initiated vote-buying game. The confidence intervals overlap substantially, indicating that parties do not lose from shifting initiative to voters.

The right panel shows a different pattern for voters. Average voter payoffs are higher when parties initiate the exchange. This difference is statistically significant: voters earn more under party-initiated vote buying than under voter-initiated vote selling ( $p = 0.057$ , one-sided). Substantively, these results are consistent with the model's prediction that voters capture more surplus when parties initiate the exchange (Hypothesis H<sub>3</sub>).

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<sup>11</sup>As captured by  $R_i$  in Section III.

<sup>12</sup>Party A and Party B roles are pooled because they are symmetric in the design.



**Figure 6:** Observed payoffs for voter and party roles under party-initiated vote buying and voter-initiated vote selling, computed as design-based means across experimental rounds with non-parametric 90% confidence intervals for the mean.

These payoff differences match the strategic logic of the games. When parties initiate vote buying, they often overspend relative to the minimal compensating transfer,<sup>13</sup> particularly under electoral risk. Voters therefore capture a substantial portion of the surplus created in the exchange. When voters initiate vote selling, they frequently request prices that electorally weak parties cannot afford or choose not to pay. Some voter proposals were extremely high relative to parties' randomly assigned budgets. When requested prices exceeded what a party could afford, that party simply rejected the offer, leaving the voter with only the ideological payoff. This increases party payoffs and reduces average voter payoffs. Overall, the results reinforce the central theoretical insight: initiative shapes both the direction of transfers and the distribution of surplus. When parties move first, transfers concentrate on core voters and voters capture more of the surplus. When voters move first, they demand higher prices from electorally strong opponents, but the incidence of rejected offers lowers their average utilities while leaving party utilities stable or higher. Initiative is therefore a crucial institutional determinant of who benefits from clientelistic exchange.

## VI. DISCUSSION

This paper revisits a classic question in the clientelism literature by shifting attention from parties as buyers to voters as strategic sellers. We argued that vote buying and vote selling are best understood

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<sup>13</sup> $\Delta$  in the formal model.

as two institutional variants of the same clientelistic exchange, highlighting who moves first and how this sequencing rule structures bargaining power, targeting, and surplus extraction. Building on this institutional perspective, we developed a formal model that links core-swing targeting to initiative, derived comparative statics for party- and voter-initiated exchange, and implemented a laboratory experiment that mirrors the model’s structure.

Empirically, we find that when parties initiate the exchange, transfers concentrate on core voters and voters capture higher payoffs. When voters initiate, however, they tend to sell to electorally strong opponents, request higher prices from those parties, and ultimately leave more surplus on the party side. Taken together, these patterns underscore that initiative is not a procedural detail but a central institutional feature that shapes who benefits from clientelism.

At the same time, our approach has several important limitations. The experiment relies on a stylized, one-shot interaction among anonymous participants, with a single pivotal voter, simplified information, and short-term payoffs denominated in points. Real-world clientelism unfolds in dense social networks with repeated interactions, reputation, sanctions, and organizational intermediaries, often in settings marked by poverty, uncertainty, and long time horizons. Our design also abstracts from richer strategic dynamics: while our games implement move order in an extensive-form setting, they do not constitute fully dynamic sequential games with multiple stages, repeated play, off-path beliefs, or forward-looking incentives of the kind studied in repeated or stochastic games. These features help enforce agreements in practice but lie outside our experimental framework.

A further limitation concerns clientelist defection. In reality, many clients accept transfers but either vote differently or fail to mobilize as promised. To maintain experimental control, our design deterministically ties acceptance to delivery: accepting an offer or a price always results in a corresponding vote. This removes a central real-world uncertainty. Future experiments could incorporate probabilistic compliance, moral-hazard structures, noisy or manipulable monitoring technologies, or repeated-play incentives that generate endogenous reputation and strategic retaliation. Designs that let the probability of defection vary with ideological distance, transfer size, or network monitoring.

Another limitation is the two-party, one-voter structure, which creates a bilateral-monopoly environment: two (potential) buyers bargain with a single (potential) seller. This produces a clean strategic environment but abstracts from richer clientelistic ecosystems where parties face multiple voters, and voters face multiple competing brokers. Extending this framework to two parties and

multiple voters would introduce congestion, coordination problems, and competition among sellers. Similarly, introducing more than two parties would turn the vote-selling stage into a multilateral bargaining environment: voters could play parties against each other, and parties could strategically coordinate or differentiate offers. Some extensions resemble ultimatum-like bargaining (when one actor proposes terms to multiple counterparts), while others resemble Bertrand competition or contest models with multiple buyers and heterogeneous stakes. These richer designs would illuminate whether the logic of selling to the electorally strong opponent persists when parties can form expectations about how other buyers will behave, or when voters can strategically sort, coordinate, or defect in groups.

Given these limitations, we caution against strong claims about external validity: our findings identify mechanisms about initiative and bargaining in clientelistic markets, not real-world effect magnitudes, long-run equilibria, or the dynamics of multi-round negotiation. Future research should examine whether the patterns we document extend to field and survey experiments that better approximate real campaigns; incorporate multiple voters, brokers, and networked interactions; and allow for repeated play, trust, monitoring, and reputation. Experimental work using richer extensive-form or multi-stage games could explore how sequential bargaining, dynamic incentives, and off-path beliefs affect targeting and surplus extraction. Cross-national laboratory and lab-in-the-field studies could assess how institutional context, poverty, or risk preferences shape the logic of selling to the electorally strong opponent. Finally, combining our institutional framework with observational data and ethnographic work on broker strategies would help clarify how often party- versus voter-initiated exchanges occur in practice and to what extent the “house” really wins when voters attempt to cash in on their pivotal power.

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## VII. APPENDIX

**Table A1:** *Vote-buying offers and vote-selling prices*

	Offer size (OLS)	Any offer (logit)	Requested price (OLS)
Constant	66.226*** (8.564)	-0.008 (0.475)	72.250*** (20.335)
Ideological distance	0.167 (0.103)	-0.010 (0.007)	-0.958+ (0.533)
Vote share	-0.239+ (0.133)	0.007 (0.008)	-0.199 (0.394)
Pivotal voter	-3.210 (4.654)	1.142*** (0.312)	6.195 (9.976)
Ideology × vote share			0.015 (0.010)
Num.Obs.	125	204	85
R2	0.051		0.074
R2 Adj.	0.027		0.028
Log.Lik.	-581.028	-127.482	-421.652
Std.Errors	Clustered	Clustered	Clustered